

ENHANCING SUSTAINABLE DEVELOPMENT IN THE TIMBER INDUSTRY THROUGH CORPORATE GOVERNANCE AND INTERNAL AUDIT PRACTICES

Florin Boghean*

„Ștefan cel Mare” University, Suceava, Romania

Abstract

The purpose of the article is evaluative in nature; it is intended to be an analysis of the impact of the measures taken in the supply of raw materials following the assessment of the main risks, as well as an analysis of the appropriate control mechanisms. The analysis we propose also aims to highlight the role of audit reports in the effective management of risks in the timber industry. These are important for some relevant areas and directions: risk identification and assessment, compliance and governance, supply chain integrity, environmental impact and sustainability, financial and operational risks, stakeholder confidence and reputation management, continuous improvement. The importance of internal audit and corporate governance for a sustainable approach to business is stressed. In this respect we have identified and analysed the risks affecting the supply chain and the measures to improve the procurement process, we have analysed the reports presented to the public with the caveat that we wanted to use a realistic rather than an optimistic approach. Observation, used to identify the essential elements of the internal audit reports, combined with the study of the legislation specific to the timber industry as well as the literature review for the theoretical foundation formed the basis for the elaboration of the work research. Audit reports play an important role in managing risks specific to the timber industry. They foster transparency, ensure regulatory compliance, improve sustainability practices, and protect against financial, operational, and reputational risks. This analysis enables timber companies to implement proactive risk management strategies, improving the industry's long-term viability and sustainability.

Keywords

corporate governance, internal audit, risk, timber industry.

JEL Classification

M41

* Corresponding author, **Florin Boghean** - florinboghean@usm.ro

1. Review of the scientific literature

Discussions around the concept of corporate governance originated long before our times, being initiated by Adam Smith around 1776 (Short et al., 1999). In recent years the above-mentioned concept has become a source of intense debate due to the bankruptcies of many companies, especially in developed countries.

Based on the theories developed by the specialized literature, (Agency theory, Legitimacy theory, Stewardship theory) accounting disclosure has been observed as a necessity in order to achieve corporate governance objectives (Whittington, 1993) and as a result of this several studies have been undertaken that have focused on the choices that companies make in disclosing information related to the economic activity carried out (Meek et al., 1995).

In a similar vein, previous studies have addressed the corporate governance code corporate governance structure and company performance (Boghean, 2009). We also recall studies addressing corporate governance structure and benchmarking.

Shleifer & Vishny (1996) highlight the financial aspects of corporate governance in their work and define "corporate governance as the way in which a company's financial providers ensure that they receive their due return on investment". Hofstetter (2002) defines "corporate governance as the totality of organisational, structural issues of the entity that directly or indirectly protect shareholders. At the same time, corporate governance is concerned with organisational and management control issues."

Organisations should transform their organisational culture from one based solely on risk control to one that enables greater risk awareness. In the article, "Black swans turn grey. The transformation of risk" (Mohammed & Sykes, 2012), the authors reconfirm that in the current context of increased uncertainty; we cannot predict future events and their effect if we only use retrospective analysis of existing data (forecasting). In line with this consideration we have highlighted in the paper how entities integrate risk management into their business strategy. In this respect we show that for many categories of decisions risk is, together with efficiency, a major criterion for evaluating decision options. Descriptive approaches in decision theory have revealed some peculiarities of how managers act under uncertainty. Faced with risks, they not only assess them, but also take active steps to mitigate potential losses (Nocco & Stulz, 2006).

Our research goal was the sustainability of supply chains in the timber industry and the role of corporate governance in achieving it as well as in achieving integrated reporting; in this regard, we conducted a review using bibliometrics of the specialized literature. In the scientific approach, we used the information made available by the Web of Science database, which is currently one of the most widely used platforms of scientific papers worldwide (Mates & Pordea, 2021). In our analysis we generated information for a period of five years, namely 2019-2023. The key words that were the basis of the analysis are: corporate governance, sustainability and Integrated reporting. The resulting statistical sample comprises 20,000 scientific papers.

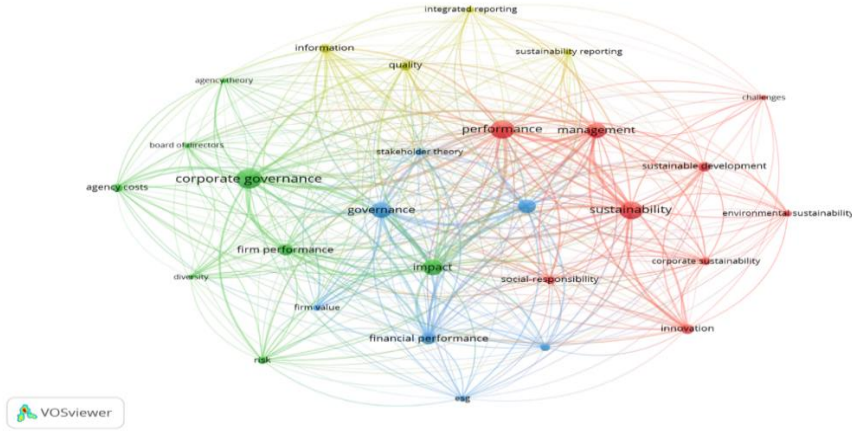


Figure no. 1: The network of keyword links

Source: Own processing, VOSviewer

After processing the database using VOSviewer, we obtained the above graph, which represents the relationships between the selected keywords. We can see that there are four clusters, which are distinctly highlighted with a different colour. In each group, the keywords with the highest relevance are the words whose nodes are the largest in size, so the larger the node, the stronger its relevance in the sample. The links that appear between nodes are plotted by curves showing the frequency with which the two interconnected keywords appear, so the thicker the curve, the more frequently the two keywords appear simultaneously. In the chart below, we have highlighted the link that corporate governance has with sustainability and integrated reporting. We see the importance of corporate governance in achieving company performance and the role of effective management in good corporate governance. Sustainability reporting has been appearing more and more in the literature lately, but the concept is not widely implemented. At the core of the sustainable enterprise, we find that the role of corporate governance is vital, as it enables openness to sustainable development and makes it possible to implement strategies to achieve the title of sustainable enterprise.

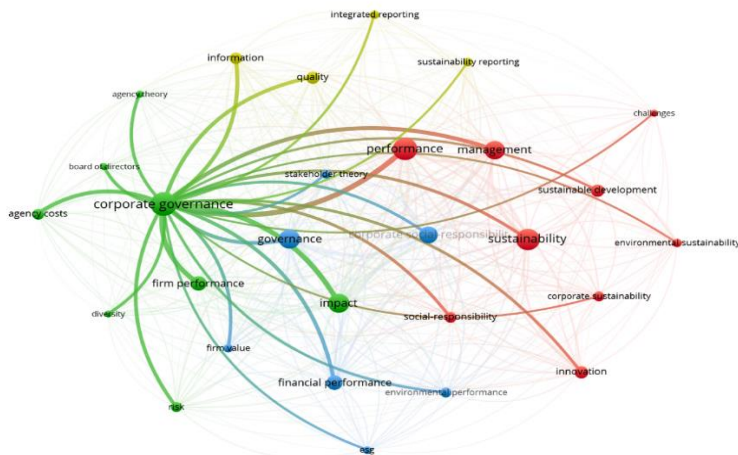


Figure no. 2: The relationship between corporate governance and keywords

Source: Own processing, VOSviewer

The literature makes it possible to highlight other keywords used by the authors in their scientific approach. The first group, in red, is made up of 9 keywords, the second group in green contains 7 keywords, the yellow group also contains 7 keywords and the last group in yellow is made up of 4 keywords.

Table no. 1. Keywords used in the bibliometric analysis

Group 1- Red	Group 2 - Green	Group 3 – Blue	Group 4 – yellow
Challenges	Agency cost	Corporate Social – Responsibility	Information
Corporate sustainability	Agency Theory	Environmental performance	Integrated reporting
Inovation	Board of directors	ESG	Quality
Environmental sustainability	Corporate governance	Financial performance	Sustainability reporting
Management	Diversity	Firm value	
Performance	Firm performance	Governance	
Social-Responsibility	Impact	Stakeholder theory	
Sustainability	risk		
Sustainable development			

Source: Own processing

The results of the analysis highlight the strong link between corporate governance and business performance. At the same time, it increases the role that sustainability and social responsibility play in achieving effective corporate governance.

Sustainability reporting is a relatively new concept in practice, which is evidenced by its weak link to corporate governance. This link is evidence of the fact that there are

currently few companies in the business environment that produce a single, integrated report. However, the concept is gaining momentum around the world and is becoming an essential criterion for those companies seeking a position in the Global 100.

Table no. 2. Meta-analysis on the concept of corporate governance

Authors	Concepts
Andrei Shleifer, Russian-American economist and professor of economics at Harvard University, awarded in 1999 for his work.	"how investors get managers to give them their money back."
Christine Mallin, Professor of Corporate Governance at the University of East Anglia and leader of the Accounting, Finance and Governance Group (AFG).	"Corporate governance is an emerging phenomenon and its development is based on complex disciplines, not limited to legal, cultural or structural differences."
Sir George Adrian Hayhurst Cadbury, former English businessman, former chairman of Cadbury Schweppes and leader in corporate governance best practice.	"The system by which companies are run and controlled"
Bob Tricker, corporate governance expert, founder-editor of the research journal "Corporate Governance: An International Review"	"Corporate governance describes how trust is visible, power is exercised and accountability is achieved within entities for the benefit of its members other stakeholders and society."
Dr. Richard W. Lebland, Professor of Corporate Governance, Law and Ethics at Harvard University, member of the Academic Advisor Board in Canada	"Corporate governance is the control of management in the best interests of the company, including accountability to shareholders who elect directors, auditors and vote on compensation."
Marc Goergen, profesor de finanțe la IE Business School din Madrid, specializat în guvernarea corporativă și finanțare corporativă	"Corporate governance deals with conflicts of interest between funders and directors; shareholders and stakeholders; different types of shareholders and preventing or mitigating these conflicts of interest."
Sarah Teslik, assistant to private and public sector companies on corporate governance, ESG, social responsibility, risk management and sustainability, founder and president of Value(s) Management and Investing.	"...It's almost funny to suggest that corporate governance is a new, complex or scary idea. Corporate governance is simply about taking care of ownership within the corporate framework"
Nell Minow, American writer and film reviewer, is named one of the 20 most influential people in corporate governance.	"...It is the relationship between various stakeholders, executives, management, shareholders, even employees in determining the direction and performance of corporations"

Source: own processing

According to the meta-analysis carried out through the literature review, we identify different views on the concept of corporate governance. Some authors state that the concept is complex and requires continuous and careful development, and are at the opposite pole to those authors who state that corporate governance is nothing more than a simple process that has always existed as a foundation, as Sarah Teslik argues. The trilogy of audit, corporate governance and corporate social responsibility will increasingly mark the evolution of the audit profession (Boghean, 2022). Moreover, auditing through the trilateral approach - internal auditors, external auditors, audit

committees - can be a key element in ensuring proper corporate governance and corporate accountability to the public (Dobroţeanu et al., 2011).

There are numerous studies in the literature exploring the relationship between sustainability and integrated reporting. For example, the works of Adams & Larrinaga-González (2016) and GRI (Global Reporting Initiative) (2021) examine the evolution and impact of integrated reporting in the context of sustainability. Also, the works of Schaltegger & Burritt (2018) and Elkington (1998) explore various aspects of sustainability and the importance of integrating them into organizational reporting. Thus, the synthesis between sustainability and integrated reporting is a particularly topical and important research topic theme in the current context of environmental and societal concerns, providing organisations with tools and frameworks to demonstrate their commitment to sustainability and improve their transparency and accountability to stakeholders. In recent decades, the focus on sustainability and integrated reporting has increased significantly, reflecting global concerns about climate change, natural resource depletion and the social impact of economic activities. Organisations are under increasing pressure to improve their governance practices and take responsibility for their impact on the environment and society.

Our paper addresses a paradox regarding risk management practices specific to decision-making processes: even though the prevailing view among both academics and practitioners is that risk management practices in informing decisions are beneficial, their use is far from widespread. Outsourcing arrangements provides a context of contemporary interest in which to study risk management practice. As Shi (2007) noted, "Although academia has long warned about these strategic risks, it is not fully understood why outsourcing managers, especially those at client companies, pay less attention to them or are less active in managing them."

2. Research methodology

Analyzing the significance of audit reports in the management of risks unique to the timber industry is part of the methodology. We have chosen a few pertinent and crucial elements for this purpose: The timber industry's operational, financial, and regulatory risks are elucidated by audit reports. Potential hazards including unlawful logging, environmental infractions, problems with the supply chain, and disregard for sustainability standards can be found and evaluated with the help of these reports. To effectively develop risk management strategies, it is essential to comprehend these risks. Legal requirements, industry regulations, and environmental standards are all helped to ensure by audit reports. Respect for international trade regulations (such as CITES), sustainable harvesting methods, and forestry laws is essential for the timber industry. Audit reports identify non-compliance areas so that corrective action can be implemented. Timber supply chains can be complex and prone to risks such as fraud, misrepresentation, or unethical practices (e.g., using illegally harvested timber). Audit reports provide transparency into the entire supply chain, from forest management to manufacturing and distribution. This transparency helps in verifying the integrity of the supply chain and identifying vulnerabilities that could lead to reputational damage or legal consequences. The timber industry faces scrutiny due to its environmental impact, including deforestation, habitat destruction, and biodiversity loss. Audit reports assess the industry's environmental practices and sustainability initiatives. By understanding

environmental risks highlighted in audit reports, companies can implement measures to mitigate these risks, adopt sustainable practices, and demonstrate accountability to stakeholders. Audit reports also shed light on financial and operational risks specific to the timber industry, such as cost inefficiencies, revenue leakage, inventory management issues, and operational vulnerabilities. Addressing these risks can optimize operational efficiency, reduce costs, and improve financial performance. Stakeholders, including investors, customers, and the general public, increasingly demand transparency and ethical practices from the timber industry. Audit reports play a vital role in building stakeholder confidence by demonstrating a commitment to responsible business practices. Conversely, failure to address risks identified in audit reports can damage reputation and lead to loss of trust. Regular audit reports contribute to a culture of continuous improvement within timber companies. By monitoring risks and implementing corrective actions based on audit findings, companies can enhance risk management processes, strengthen compliance, and drive overall performance improvements.

Viewed as a whole, all creation resides in the hatching of a synthetic idea - formed by the new combination of elements already existing, at least in part, in the mind. The basic methodological principle consisted in studying as accurately and comprehensively as possible the field that constitutes the object of the research, in order to extract the facts that by their significance allowed us to make theoretical generalizations. The main criterion for accepting the research results was their objectivity. Knowledge that distorts reality is not only useless but even dangerous. We conducted our study in the complex of natural interrelationships and the evolutionary dynamism of phenomena. The narrow front of the research did not allow us to approach exhaustively in one time, but only fragments of knowledge, in the perspective of the development of science. By the fact that research is guided by a predetermined idea, the collection operation becomes selective. It is the way to penetrate and decipher causal links. Operating in this way out of objective necessity, we have encountered a number of difficulties in selecting the facts that are truly interesting. The data obtained was subjected to statistical processing and was logically organised and transformed into systematic material.

The role of internal audit in ensuring a sustainable supply chain

Today, the internal audit function plays a very important role in increasing the performance of companies, due to the rapid pace of change in the economy, the speed of decision-making and not least in order to gain a competitive advantage in the market. The internal auditor's responsibility is to document, explain and evaluate activities related to risk, control and governance, which leads to increased company performance. While in the past the internal audit function was seen as a support to external audit, today there is an increasing emphasis on the role of assisting management.

In the current legislative context, the "Company Law no. 31/1990, republished, with subsequent amendments and additions", provides in Art. 160 para. 2 that "Companies whose annual financial statements are subject to financial audit, according to the law or the shareholders' resolution, shall organize the internal audit according to the rules developed by the Chamber of Financial Auditors of Romania". The rules drawn up by the Chamber of Financial Auditors of Romania also establish the method and procedure for reporting by internal auditors.

"Law No. 162/2017 on statutory audit of annual financial statements and annual consolidated financial statements and amending some normative acts", provides in Art. 65 para. 7 that "Entities whose annual financial statements are subject, (according to the Accounting Law no. 82/1991, republished, as amended and supplemented), to statutory audit, are obliged to organize and ensure the exercise of internal audit activity, according to the legal framework". Government Emergency Ordinance No. 75/1999 on financial auditing, approved by Law 133/2002, republished, with subsequent amendments and additions, in Article 3(3), paragraph 1, of the Act, states that 3 states that: "Financial auditing shall be carried out by financial auditors or audit firms that are authorised/authorised under the law and are members of the Chamber of Financial Auditors of Romania". The Chamber of Financial Auditors of Romania is responsible for developing standards, aligned with the international context, in order to ensure quality and support the internal audit activity.

According to the IIA (Institute of Internal Auditors) "Internal auditing is an independent, objective assurance and/or advisory activity designed to add value and improve an organization's operations. It assists an organisation in achieving its objectives through a systematic and methodical approach that assesses and improves the effectiveness of risk management, control and governance processes." The role of the internal auditor is to bring value to the organisation by helping to improve its operations. As such, he should not assume any managerial or operational responsibility, but should be independent, objective and accountable for the quality of the action taken. The internal auditor ensures the improvement of the management system to achieve the entity's objectives, with management focusing on the efficiency and effectiveness of governance processes and risk assessment and control.

The "three lines of defence" model improves the understanding and application of risk management and control by separating responsibilities and roles within the company. Both effective risk management and control require the orientation of management into three distinct groups each with corresponding responsibilities. The first line of defence, operational management, focuses on ownership and risk management and internal control. The role of the first line is to deliver products/services to customers as well as risk management activity. This means that all staff must comply with company procedures, policies and processes, and are obliged to communicate issues of non-compliance and identified risks to the higher level. The second line of defence includes the supervisory functions and monitors risk management and the functioning of the internal control system, fulfilling its role of expertise, support and monitoring of risks related to the entity's activities. The main challenge of the second line of defence is to address identified problems. The third line contributes to providing confirmation of the effectiveness of the risk management and control systems, its main role being to provide objective and independent assurance and advice on issues related to the achievement of objectives. Each line plays an important role in managing the organisation, and successfully fulfilling these responsibilities increases the organisation's ability to achieve its goals. If the organisation properly constructs the structure of the three lines this will ensure that vulnerabilities are limited and unnecessary duplication of actions is avoided.

Results and discussion

The sustainability reports reviewed for the companies analysed (companies in the wood processing industry both in Romania and in Europe) are presented in accordance with the Global Reporting Initiative (GRI) standards, basic option. The GRI standards allow companies to communicate their economic, social and environmental impacts, as well as their positive or negative contribution, to achieving sustainable goals. The aim of this international organisation is to develop guidelines for sustainability reporting, thus ensuring transparency and comparability (Ecologos, "GRI Standards"). Relevant areas for action on corporate sustainability were developed based on an online survey involving 78 stakeholders who assessed current activities and identified key issues of interest. The topics of interest are presented in the materiality matrix and are regularly updated following dialogues with stakeholders: customers, suppliers, business partners, NGOs, employees and other interest groups and representatives of regional political administrations. On the basis of the survey results, relevant topics were discussed and prioritised.

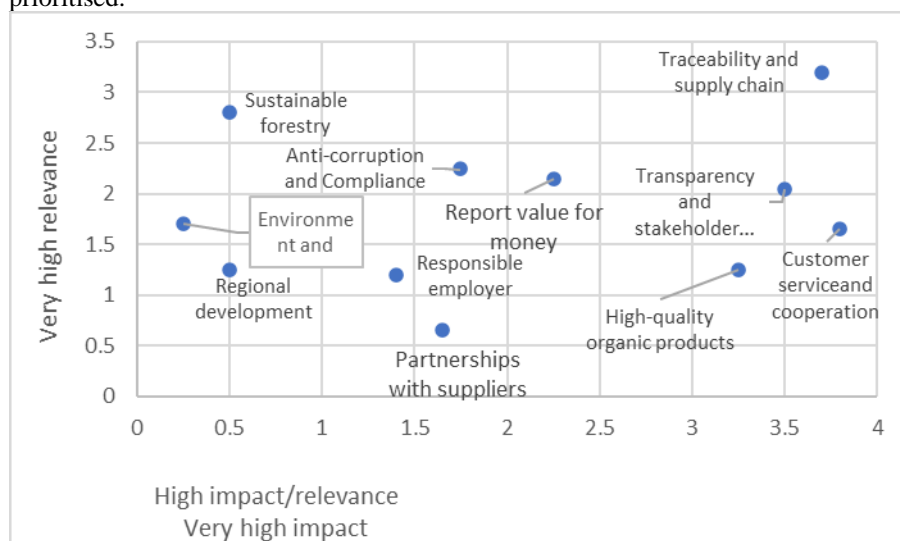


Figure no. 3: Materiality matrix of main areas of interest

Source: processing based on Sustainability Reports of wood industry companies, 2022

The materiality matrix shows the importance of each theme for stakeholders (on the vertical axis) and the extent of social and environmental impact (on the horizontal axis). Sustainability is a continuous process. In its sustainability programme, the company has defined binding targets and actions for its business areas. Sustainability means effective corporate governance, an internal audit department that adds value, a CSR department that ensures transparency by informing stakeholders about economic, social and environmental activity, and last but not least a sustainable supply chain.

The companies analysed have implemented a strict wood procurement policy, which includes a commitment to analyse and report annually on everything related to the supply chain. The Due Diligence System (DDS) aims to reduce risks in the sourcing of wood from controversial sources. The DDS system has been designed and implemented

to reduce the risk of having wood material from uncontrolled or controversial sources in the supply chain, but also to meet the requirements of various regulatory frameworks (EUTR, Lacey Act or Japanese Clean Wood Act) and certification schemes. The DDS measures are put in place to comply with procurement and production requirements in the countries where they operate, as well as with legislation in the countries where companies distribute their finished products.

To identify, analyse and address the risks, we have considered some key questions:

- What are the supply chain risks that influence timber supply security?
- What are the effects of identified supply chain risks on timber supply security?
- What are the risk mitigation strategies aimed at securing timber supply?

The categories of risks identified in the supply chain are determined by internal and external factors, as follows:

Table no. 3. Risks and impacts in the timber supply chain

Category of risk:	Description of risk:	Impact of supply chain risk:
Supply risk: <ul style="list-style-type: none"> • overexploitation of resources; • insufficient supply; • lack of resources; • inadequate quality 	<ul style="list-style-type: none"> • unsustainable use of resources, • illegal logging, • delayed replanting/growing, • trade in uncertified timber, • environmental damage, • poor harvesting practices, • increased market demand, • fragmented forest ownership structure, • labour shortage, • price and market fluctuations, • certification schemes reduce supply volumes, • product perishability. 	<ul style="list-style-type: none"> • soil degradation leads to unproductive land, • resource depletion or resource limitation, • import of timber changes the pressure on foreign forests, • high purchase prices, • dependence on imports, • competition between industry/energy/cellulose, • deterioration in quality.
Operational risk	<ul style="list-style-type: none"> • limited storage, • information deficiency, • dependence on a supplier, • lack of infrastructure, • outdated technologies, • poor practices, • field conditions, • lack of investment. 	<ul style="list-style-type: none"> • logistical complexity in supply networks, • reduced efficiency due to long transport distances, • long delivery times, • industry and labour disruption due to lack of supply.
Risk of demand	<ul style="list-style-type: none"> • seasonal demand, • buying power. 	<ul style="list-style-type: none"> • the impossibility of supply.
Security risk	<ul style="list-style-type: none"> • accidents at work • vandalism, attempted murder, • information leaks 	<ul style="list-style-type: none"> • increasing prices, • increasing prices, • lack of qualified staff, • ignorance of work protection,

		<ul style="list-style-type: none"> • employee insecurity, • financial losses, loss of image.
<p>Macro risk:</p> <ul style="list-style-type: none"> • wood trade risk • financial risk 	<ul style="list-style-type: none"> • the absence of production, trade and consumption statistics, • policy and objectives of importing/exporting countries, • dependence on supplies from other countries, exchange rate fluctuations. 	<ul style="list-style-type: none"> • job opportunities and low income in the field, • limited investment leads to lower production, • supply difficulties due to dependence on other countries.
The risk of politics	<ul style="list-style-type: none"> • influence of the state in curbing/promotion of activity (import/export, bans, taxes), • Timber trade is limited, • country-specific legislation (mandatory certification), • different stakeholder perceptions. 	<ul style="list-style-type: none"> • investment uncertainty, • lack of predictability.
Competitive risk	<ul style="list-style-type: none"> • resource competition, • theft of timber, • illegal logging. 	<ul style="list-style-type: none"> • reduction in the volume of wood mass, • overpricing.
<p>Resource risk:</p> <ul style="list-style-type: none"> • -ecosystem risk • -seasonality risk 	<ul style="list-style-type: none"> • natural disturbances (disease, pests, fires, storms), • unfavourable weather conditions, • cyclical harvesting periods, • seasonal fluctuations in yield and quality. 	<ul style="list-style-type: none"> • fluctuations in timber availability, • decreasing volumes, • accessibility of forest road.
Image risk	<ul style="list-style-type: none"> • non-transparency of procurement activities creates suspicion and mistrust, conflicts 	<ul style="list-style-type: none"> • loss of trust, • financial losses, • labeling "so no".
Risk of human resource	<ul style="list-style-type: none"> • frequent staff changes, • unqualified staff, • corrupt, disinterested staff. 	<ul style="list-style-type: none"> • lack of continuity in activity, • lack of performance, • failure to perform.

Source: processing based on Auer & Rauch, 2021

The risk map is a working tool that reflects the economic, political and social situation of the business. This helps to identify what could affect the business and what action needs to be taken to improve the existing situation. Risk maps are prevention tools that try to locate the situation of a company, taking into account variables such as the economic, social and political situation surrounding the company. In this way, the intention of the map is to identify negative aspects that could affect the company's

activity and allow us to anticipate present and future scenarios. In this way, companies can detect risks and adopt appropriate preventive methods to limit the effects. The main objective of a risk map is to summarise information about the uncertainties facing the company faces. In this way, strategies can be developed to address these sources of uncertainty. The methodology lies in the ability to develop strategies that can mitigate possible damages both present and future, as well as exposure to these risks.

The objectives of a risk map include:

- quantifying the likelihood of a risk occurring.
- to measure the negative potential of each risk.
- to know the company's environment.
- to increase company security.
- to know the risks that could threaten the company.
- quantifying the risks facing the company.
- knowing which mistakes could harm the company.
- ensuring the company's present and future sustainability.

Although it may seem like a simple task, risk mapping is an extensive process. In addition, it requires in-depth knowledge of companies and their environment, as well as knowledge of business strategy. However, with the necessary preparation, a risk map can be produced. Making a risk map can be summarised in the following steps:

- definition and identification of risks
- quantification and qualification of risks
- risk assessment and prioritisation
- completing the risk prioritisation matrix/map
- adoption of strategies

A risk map is an extremely useful tool for business management, as it allows knowing the risks the company faces, both now and in the future. By taking into account a number of factors, such as the political, economic and social situation, one can anticipate the problem and adopt appropriate preventive methods that try to limit possible negative effects that they could unleash.

	Supply risks (insufficient resources, overexploitation, inability of suppliers to ensure the contracted quantities of wood)
	Political risks (gap or interpretable legislation, government regulations, quotas, restrictions, political interests)
	Competitive risks (illegal mining, corruption, bribery, timber mafia)
	Financial risks (price changes, exchange rates, interest rates)
	Image risk (loss of stakeholders' trust, stigmatization of the company's name)
	Risks related to human resources (staff turnover, poorly trained/unqualified staff, lack of seriousness, lack of performance)
	Security risks (security violations – vandalism, attempted murder, work accidents, information leaks)
	Operational risks (infrastructure, logistics, process changes, bad weather)
	Resource Risks (natural disasters: diseases, pests, windfalls)
	Server risk High risk Moderate risk Low risk Note: The color indicates the intensity of the risk. The arrows indicate the outlook for risk in the coming period.

Figure no. 4: Wood supply chain risk map

Source: processing based on Sustainability Reports of timber industry companies, 2022 Risk management includes strategies to reduce the main risk events or mitigate the results of these events and aims to provide a stable and uninterrupted supply (Grigoras-Ichim et al., 2024). Security of wood supply means the purchase of a certain volume at a set price, without interruptions in the supply chain. Risk mitigation strategies correspond to the identified risk category and are grouped as follows: diversification of supply sources, long-term contracting, production optimization, logistics strategies, innovation in processes/technologies, political strategies. Mitigation strategies can be long-term (strategic), medium-term (tactical), or short-term (operational).

In recent years it has become more and more obvious that the lack of a national strategy for the forest field is exacerbating the current state of crisis in which it is. Numerous legislative and administrative measures have influenced the activity by curbing or stimulating exploitations. The lack of coherence and coordination between the Ministry of Agriculture, the Ministry of Water and Forestry and the Ministry of the Environment has led to the current situation on the timber market. The deficit of firewood for the population, as well as that of timber industry, a deficit aggravated since 2016, has as its main cause the radicalization of measures to combat illegal cutting. The ban on the export of logs from Ukraine and measures to reduce exports of raw wood from Russia, Belarus, Bulgaria, Croatia, led to a general increase in the prices of wood pulp. This

affected the competitiveness of the wood industry in Romania. It is noted the need for a balance between the economic, social and environmental function in the management of forests, imbalances leading to crises in the corresponding segments (for example prioritizing the environmental function leads to economic and social crises, ASFOR, "State of the forest sector in Romania")

Table no. 4. Raw material inputs

Materials	Unit	2017	2018	2019	2020	2021	2022
Purchased logs	m ³	2.814.944	3.125.887	3.325.157	3.174.350	3.351.050	3.571.243
Cut logs	m ³	2.473.759	2.923.508	3.044.228	2.948.858	3.200.267	3.594.118
Timber purchased	m ³	43.887	54.256	91.737	241.814	163.751	197.908
Biomass	t. dry metric	143.909	108.932	129.884	187.247	213.116	250.033

Source: processing based on Sustainability Reports of timber industry companies, 2022

From the table and graph of raw material inputs, a constant increase in the purchased volume of logs, timber and biomass can be seen. A slight reduction in the volume of logs purchased in 2018 is compensated by the increase in timber purchases in the same year.

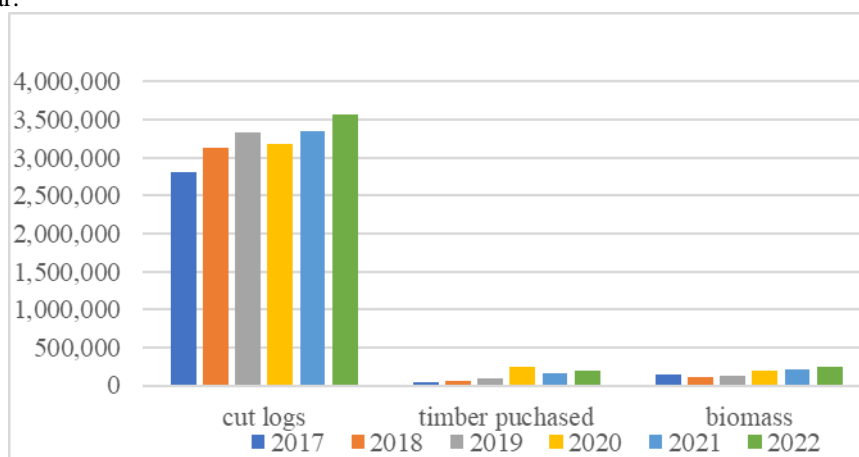


Figure no. 5: Evolution of purchased raw materials in the period 2017-2022

Source: own processing based on data from the Sustainability Reports of timber industry companies

The legislation in Romania by GD 924/04.11.2015 provides that "an economic operator/group of economic operators cannot purchase/process more than 30% of the volume of an industrial assortment of wood of each species, established as the average of the last 3 years on the basis of the valuation documents authorized for exploitation and exploited at the national level, regardless of the form of ownership" (Law no. 46/2008 Forestry Code, republished on August 12, 2015).

Conclusions

The analysis shows a continuous improvement of all the measures taken for a sustainable development of the wood supply chain, and the contribution that the internal audit brings is obvious. CSR through social accounting has a say in the attempt to make the business environment responsible in the process of sustainable development and to somewhat force the leadership of governments to act in this sense.

We believe that forestry specialists are the most appropriate actors best able to answer all the theories related to the annual growth of wood material, the regeneration capacity, the need for afforestation, the cuts that must be made annually (e.g. hygiene cuts), the quantities that can be exploited, without affecting the environment and depriving future generations of the same benefits we enjoy. It is also a personal opinion that the tone must be set by those in charge, because they have the law in their hands and that is the only way they can combat the illegalities that take place. If there is no law, then there is chaos, and if the law is not respected, it is because those in charge are not doing their job and their place is not in the leadership of the country, the ministries, or the autonomous governments. We believe that through our approach we have fulfilled the main goal of the paper, that of identifying the contributions brought mainly by the internal audit to the improvement of the sustainability of the business.

The results can be useful to interested parties, because they provide information regarding the sustainability of the entity, the sustainability of the raw material without which the entity cannot carry out its activity, and at the same time provide an analysis of the activity seen from the outside, thus contributing to the improvement of managerial activity. It's a point of view that companies can take into account. What we wanted to highlight was the role of the CSR and internal audit department, which is of great significance within companies, through the benefit it brings to the entire entity. Management consulting, analysis and risk assessment are particularly important for any entity, and the internal auditor is the right man in the right place, as long as his work is valued and enjoys the support of top management.

A shortcoming of the study is the "rationalized" documentation, once access to inside information is limited we cannot say that the study is complete and one hundred percent relevant. A more extensive research leading to a detailed paper can be done if the documentation is supported from within the analyzed entities. But, being confidential data that the general public does not have access to, we mainly looked at the external factors that have left their mark on supply chain risk management, of which legislative changes are the most important.

A future analysis of the field, with the risks involved and the measures that can be taken to improve the concept of sustainable development could only be done by involving the responsible authorities (Boghean & Chihai, 2022). A better understanding of sustainable development will bring hope that future generations will value economics more, both as a science and as a way to reduce waste of any kind. The direction towards which it tends is that of social accounting, not only the numbers in the financial reports speak. This financial accounting will be automated and digitized, and in the future the focus will be increasingly on the environmental and social side, not just on the financial side. So accounting must integrate both in a new form, and that is integrated reporting. We can say that the future of accounting reporting will be integrated reporting, which is the

newest form of corporate reporting, so such reporting can be done in the future starting from the current study.

References

- [1] Auer, V. & Rauch, P., (2021). Wood supply chain risks and risk mitigation strategies: A systematic review focusing on the Northern hemisphere, *Biomass and Bioenergy*, Volume 148, May 2021, <https://doi.org/10.1016/j.biombioe.2021.106001>.
- [2] Boghean, C. & Moroşan, D.L., (2009). Necessity and various factors of corporative strategies development, *Lucrări ştiinţifice, seria Horticultură*, vol. 52/2009, 315-320.
- [3] Boghean, F. & Chihai, I.D., (2022). [Implementation of internal control systems necessity to reduce the risk of denaturation in audit](#), *The USV Annals of Economics and Public Administration*, vol 21, no 1(33), 2021.
- [4] Boghean, F., (2022). [The influence of internal control and risk management systems on information transparency and business sustainability](#), *The USV Annals of Economics and Public Administration*, vol 21, no 2(34), 2022.
- [5] Boghean, F., Hlaciuc, E. & Morosan, D.L., (2009). Objectives And Particularities Of Decisions In The Context Of Corporate Governance, *Annales Universitatis Apulensis Series Oeconomica*, 11, 1.
- [6] Boţa-Avram, C., (2011). Research directions in the Romanian scientific environment on the relevance of the audit function in the context of corporate governance, *Financial audit*, vol. 9, no. 4/2011.
- [7] Dănescu, T., Călean, I. & Şandru R., (2014). Measuring the activity of internal audit. Case study at the autonomous administrations in forestry, [Procedia Economics and Finance, Vol. 15](#), 2014, [https://doi.org/10.1016/S2212-5671\(14\)00597-8](https://doi.org/10.1016/S2212-5671(14)00597-8)
- [8] Dobroţeanu, C.L., Răileanu, A.S. & Dobroţeanu, L., (2011). The external audit - audit committee - internal audit trinomial in the context of corporate governance regulations, *Financial audit*, No. 4/2011
- [9] Feleagă, N., Feleagă, L., Dragomir, V.D. & Bigioi, A.D. (2011). Corporate governance in emerging economies: the case of Romania, *Theoretical and applied economics*, Vol. XVIII, No. 9 (562).
- [10] Grigoras-Ichim, C.E., Bordeianu, O., & Morosan, D.L., (2024). The Importance Of The Financial Audit In The Identification Of Fraud And Errors Recorded By Companies, *European Journal of Accounting, Finance & Business* 12 (1), 32-47. DOI: 10.4316/EJAFB.2024.12106
- [11] Keasey, K., Thompson S., & Wright, M., (2005). *Corporate Governance, accountability, and international comparisons*, John Wiley & Soon, Ltd, West Sussex, England.
- [12] Luo, L.J., Hehir, J., Regan, M.C., Meng, L., Connor, J.D. & Chow, C.W.K., (2021). An integrated strategic and tactical optimization model for forest supply chain planning, [Forest Policy and Economics, Vol. 131](#), <https://doi.org/10.1016/j.forpol.2021.102571>.
- [13] Mateş, D. & Pordea, D., (2021). Quality of accounting information - a bibliometric analysis, *CECCAR Business Review*, No. 10/2021, <http://dx.doi.org/10.37945/cbr.2021.10.02>.

- [14] Meek, G.K., Roberts, C.B. & Gray S.J., (1995). Factors influencing voluntary annual report, disclosures by US, UK and continental european multinational corporations, *Journal of International Business Studies*, 555–572 (1995). <https://doi.org/10.1057/palgrave.jibs.8490186>.
- [15] Mohammed, A. & Sykes, R., (2012). Black swans turn grey. The transformation of risk, PricewaterhouseCoopers International Limited (PwCIL), January 2012, www.pwc.co.uk/riskresilience.
- [16] Morosan, D.L. & Grigoras-Ichim, C.E., (2023). The Fiscal Approach Of The Entrepreneur In Romania - Between Limited Liability Company And Authorized Natural Person, *European Journal of Accounting, Finance & Business* 11 (3), 46-53. DOI: 10.4316/EJAFB.2023.1136.
- [17] Nocco, B.W., & Stulz, R.M., (2006). Enterprise Risk Management: Theory and Practice, National Bureau of Economic Research (NBER), European Corporate Governance Institute (ECGI), July 2006, <https://doi.org/10.1111/j.1745-6622.2006.00106.x>.
- [18] Rauch, P. & Borz, S.A., (2019). Reengineering the Romanian Timber Supply Chain from a Process Management Perspective, *Croatian Journal of Forest Engineering*, vol. 41, issue1, <https://doi.org/10.5552/crojfe.2020.610>
- [19] Santosa, A., Carvalho, A., Barbosa-Povoa A.P., Marques, A. & Amorim, P., (2019). Assessment and optimization of sustainable forest wood supply chains - A systematic literature review, *Forest Policy and Economics*, vol. 105, <https://doi.org/10.1016/j.forpol.2019.05.026>
- [20] Shi-Ming, H., Wei-Hsi H., David C.Y., Chang, I.C. & Jiang, D., (2011). Building the evaluation model of the IT general control for CPAs under enterprise risk management, *Decision Support Systems* 50, <https://doi.org/10.1016/j.dss.2010.08.015>.
- [21] Shleifer A. & Vishny R. W., (1996). A Survey of Corporate Governance, National Bureau of Economic Research, Cambridge MA 02138, April 1996.
- [22] Soler, R., Lorenzo, C., González, J., Carboni, L., Delgado, J., Díaz, M., Manríquez & Huertas, H.R., (2021). The politics behind scientific knowledge: Sustainable forest management in Latin America, *Forest Policy and Economics*, vol. 131, <https://doi.org/10.1016/j.forpol.2021.102543>.
- [23] Whittington, R., (1993). What is Strategy — and Does it Matter?, London: Routledge, *Organization Studies*, 15(6), 931-933. <https://doi.org/10.1177/017084069401500611>