



Impact of External Environmental Factors on Sustainable Commercial Development in the Jordan: The Case of Legal Aspect of the Eco-Business

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ABSTRACT

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The purpose of the research presented in the article is to identify and analyze the most significant and influential environmental factors that influence sustainable development. To do this, we take the system of sustainable development of eco-business in Jordan as the object of study. The scientific task is to determine the level of influence of environmental factors affecting the sustainable development of business in the region. The research methodology involves the use of SWOT analysis, Saaty's hierarchical analysis and the method of paired comparison and expert research. As a result, we presented a methodological approach that allows us to determine the level of influence of environmental factors affecting the sustainable development of business in Jordan and to model in detail ways to optimize the most important of them. We emphasize that, as an innovation, we have proposed a new approach to identifying and organizing a number of environmental factors that influence sustainable development. At the same time, we emphasize that the limitations in the article are present in the form of accounting for the eco-business of the country of Jordan. At the same time, further research will be aimed at building a mechanism for responding to those factors.

1. INTRODUCTION

Environmental legislation and policies emerging at the international and national levels are creating new challenges and opportunities for businesses. The implementation of green standards and practices is becoming not only an element of corporate ethics, but also a strategic necessity, paving the way for innovation and providing competitive advantage.

At the same time, the dynamics of the external environment force companies to be flexible and quickly adapt to changes. This means not only revising production processes, but also developing new products and services that meet environmental standards and consumer expectations.

Involving stakeholders, particularly communities and government agencies, in the production and development of sustainable products is a key element to successful business adaptation. This not only promotes environmental responsibility, but also builds customer trust and loyalty.

Environmental risks and their impact on business operations require companies to develop effective risk management strategies. This includes investments in research and development, environmental insurance and the development of emergency response plans.

Enhancing commercial law is crucial for fostering a thriving and dynamic business landscape. This endeavor is significant as it influences the efficiency, stability, and fairness within the realm of business operations. With the global economy continuously evolving and technological advancements shaping our world, the urgency to revise and adjust business laws is more pronounced than ever. The primary aim of

refining commercial law at its initial phase is to guarantee transparency and predictability for business enterprises. The establishment of clear and concise legal guidelines is vital for business management, as it diminishes risks and aids in dispute resolution. This contributes to the creation of a stable backdrop, enabling businesses to plan and expand their operations with increased assurance. Continuing to improve business law is important to ensure fairness and equality in the business environment. It helps balance the interests of various groups of market participants, including large corporations and small businesses. Ensuring that all parties have equal access to legal resources and protections promotes a fair competitive environment. Improving business law is also of great importance in the context of globalization. In a world where business transactions often cross national borders, the need for harmonization of legal regulations becomes especially important. This helps create uniform standards and facilitates international trade and investment.

The purpose of the research presented in the article is to identify and analyze the most significant and influential environmental factors that influence sustainable development. To do this, we take the system of sustainable development of eco-business in Jordan as the object of study. This means that those factors need to be identified and a number of effective methods have been used to do this.

2. LITERATURE REVIEW

It should be carefully reflected what active researches and works exist in modern literature today. It should be carefully

reflected what active researches and works exist in modern literature today. So, for example, Alazzam, et.al. and Saleh, et.al. explore the legal aspect as well as how such external environmental factors as the pandemic affect sustainable development. At the same time, we are already trying to conduct our own research in a more post-pandemic environment [1, 2].

Zachosova [3] in her research turns to an innovative approach to assessing the economic security of financial institutions, considering the possibilities of using this approach in management and regulatory activities. This analysis provides insight into how innovation can contribute to financial sustainability in the face of environmental challenges.

Baesu and Bejinaru [4] discuss knowledge management strategies for leadership in a digital business environment, pointing to the importance of integrating digital technologies to improve business performance. This study focuses on the importance of information technology in solving environmental problems and maintaining sustainable development.

Marsh et al. [5] examine different aspects of trust in the context of people, processes, and place, providing valuable insights into the importance of building trust in developing effective environmental strategies.

Rushchyshyn et al. [6] analyze the regulatory and legal component in ensuring the financial security of the state, which is directly related to the impact of environmental policies on economic sustainability and sustainable development.

Finally, the studies by Bazyliuk et al. [7] focus on comparing the institutional dynamics of regional development in the publishing and printing sectors in Ukraine, pointing out the importance of understanding regional characteristics in adapting to environmental challenges.

Borras' research [8] examines learning processes and the development of organizational capabilities in the context of innovation policies. By analyzing how knowledge and experience influence the formation and implementation of innovation policies, the author draws attention to the ability of organizations to adapt and learn in the face of change, which is important for developing effective strategies in response to environmental challenges.

The study by Ufua et al. [9] examines how government support systems can be reimagined to counter the challenges posed by the COVID-19 lockdown in Lagos, Nigeria. Considering the issues of lockdown and its impact on society, the authors point to the need to develop flexible approaches to government support to ensure an effective response to pandemic challenges, including environmental aspects and sustainable development.

Sylkin et al. [10] in their study focus on assessing the financial security of engineering enterprises as a prerequisite for the use of crisis management. Analyzing the practical aspect of financial security, the authors note the importance of ensuring the resilience of enterprises to crisis events, which includes adaptation to environmental challenges and changes in the environment.

Schwarz's [11] analysis calls for a rethinking of the uncertain boundaries of commercial law. Considering the complexity and dynamics of modern commercial law, the author offers a new perspective on its role in regulating business relations, which has a direct impact on the

development of legal mechanisms for business adaptation to environmental changes and challenges.

Each of these studies makes important contributions to understanding the complex relationships between business, government policy, environmental challenges, and regulation. They emphasize the importance of innovation, flexibility, financial security and legal certainty in ensuring business sustainability in a changing environment.

Despite the significant amount of existing research covering the impact of external environmental factors on sustainable business development, there are still significant gaps in this topic today (Figure 1). This concerns, in particular, the dynamic nature of environmental challenges, constantly evolving due to climate change, technological progress and globalization processes. Many studies focus on general aspects of environmental impacts, leaving out specific sectoral or regional characteristics. Also understudied are adaptation mechanisms and innovative strategies that could help businesses respond more effectively to environmental changes. In addition, further analysis is required on the issue of integrating environmental sustainability into core business models and corporate strategy, as well as the role and impact of policy and legal reforms on environmental adaptation of businesses. These gaps highlight the need for further research aimed at developing a comprehensive approach to addressing the environmental challenges facing modern businesses.

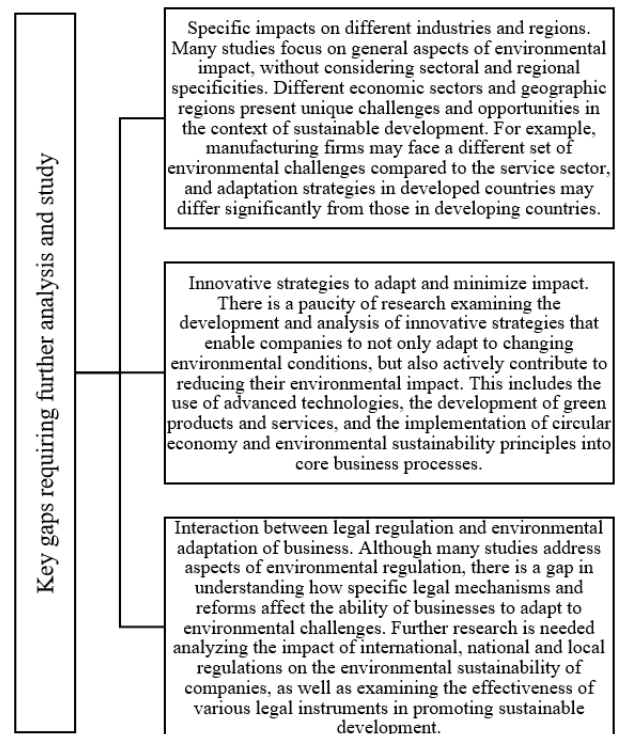


Figure 1. The main gaps in the literature according to the issues of the article

It should be noted that based on the results of the study and review of scientific and practical literature, we formed a scientific task - to determine the level of influence of environmental factors affecting the sustainable development of eco-business in the region.

3. METHODOLOGY

As part of the methodological approach to studying the influence of external environmental factors on the sustainable

development of business in the region, we have integrated several methods, each of which plays an important role in a comprehensive analysis of the challenges and opportunities facing regional business in the context of environmental sustainability. This implies that we propose a combination of various methods to achieve the key goal of identifying the most important factors of the external environment.

In the first stage of our research, we used SWOT analysis, which was necessary for us in the context of identifying the internal strengths and weaknesses of eco-businesses, as well as external opportunities and threats arising from the environment. This method allows us to identify key environmental issues, as well as identify key opportunities for environmental innovation and green business development. The advantage of SWOT analysis is its versatility and ability to provide a clear picture of the internal and external business environment. However, its disadvantage may be the very subjectivity in determining each of the criteria. To conduct a SWOT analysis, we began by gathering environmental experts with varying understandings of the organization or project and collecting relevant data and resources. Next, each component of SWOT was discovered through assessment and personal experience living in Jordan.

Further, Saaty’s hierarchical analysis helps in structuring complex decisions by breaking down the overall problem into smaller, easier-to-analyze parts. In the context of our topic, this allows us to assess the relative importance of various environmental factors and their impact on business. The essence of this method is to build a hierarchy of criteria and alternatives, which facilitates informed decision making. Its advantage is the ability to quantify impacts and prioritize actions. However, the method requires significant effort to collect data and may be sensitive to the subjective assessment of experts.

The paired comparison method is used to evaluate and rank environmental impacts by comparing them. This allows you to analyze in detail which factors have a greater impact on the sustainable development of a business, thereby helping in making decisions on the allocation of resources and efforts. It should be noted that our research involves the involvement and consideration of leading eco-experts. This will improve the comparison process itself.

To ensure the objectivity and specificity of our research, the choice was made in favor of a specific region – Jordan. This choice is not accidental and is due to close cooperation with experts in the field under study working specifically in Jordan. This focus allows us to dive into the specifics of regional environmental challenges and opportunities for sustainable business development, taking into account the unique climatic, economic and social conditions of the country. Collaborating with local experts not only enriches our research with relevant data and deep local understanding, but also helps develop targeted recommendations that can be applied to improve environmental sustainability and promote sustainable development in the region. This selection process was grounded on the profound local knowledge and expertise of these Jordanian experts, who possess an intimate understanding of the region’s unique environmental, economic, and social landscapes.

4. RESULTS OF RESEARCH

First of all, let’s do a SWOT analysis. This SWOT analysis of environmental factors influencing sustainable business development in the region was conducted to gain a deeper understanding of the key factors influencing the economic prospects and sustainable development of the region. SWOT analysis was used in our study to comprehensively identify and assess the external environmental factors affecting the sustainable development of business in the region. This methodological approach allowed us to systematize the analysis of strengths and weaknesses, as well as to identify opportunities and threats emanating from environmental, economic, social and technological aspects of the external environment. The use of SWOT analysis contributed to a deep understanding of the impact of these factors on the activities of enterprises, identifying key environmental challenges and forming strategies for adaptation and improvement of business processes taking into account the principles of sustainable development. This approach not only provided a comprehensive analysis of the situation, but also identified region-specific features that are critical for the development of effective and targeted strategies for environmental sustainability and innovative business development.

Table 1. SWOT analysis of the environmental factors influencing sustainable business development in the region

S	W
<ol style="list-style-type: none"> 1. Strategic Geographic Location. Central Jordan’s location at the crossroads provides strategic access to neighboring markets 2. Cultural and Historical Heritage. The region’s rich cultural and historical attractions can boost tourism and related industries 3. Growing IT Sector. There’s a burgeoning information technology sector, driven by a young and educated workforce 4. Government Support for SMEs. Government initiatives to support enterprises can foster entrepreneurship 	<ol style="list-style-type: none"> 1. Ineffective Commercial Law. This makes business operations challenging, leading to issues in contract enforcement and property rights 2. Bureaucratic Hurdles. Extensive bureaucracy and red tape can delay business processes 3. Limited Natural Resources. Dependence on imports for energy and other key resources can be a constraint 4. Infrastructure Challenges. While improving, infrastructure in certain areas might still lag behind, impacting logistics and supply chains
O	T
<ol style="list-style-type: none"> 1. Renewable Energy Projects. Investment in solar and wind energy, given the region’s climate, can be lucrative 2. Tourism Development. Leveraging historical sites like Petra and Amman for tourism can provide substantial economic benefits 3. Regional Trade Agreements. Utilizing Jordan’s free trade agreements can open up markets and boost exports 4. Educational Development. Investing in higher education can foster a skilled workforce, attracting more high-tech and service industries 	<ol style="list-style-type: none"> 1. Regional Instability. Political and economic instability in neighboring regions can impact trade and investment 2. Water Scarcity. This environmental challenge poses a risk to agriculture and human resources 3. Global Economic Trends. Fluctuations in the global economy can affect export-driven sectors 4. Competition from Neighboring Countries. Neighbors with more established infrastructures and business environments can overshadow Jordan’s appeal to investors

The results of the SWOT analysis are presented in Table 1. It should further be noted that after completing the SWOT analysis, we moved on to the next phase of our research, which was to use expert assessment methods to identify key factors influencing the direction of sustainable business development in Jordan. The use of specialized experts provided detailed and impartial assessments regarding the impact of these areas on local businesses. It should be emphasized that our expert study was organized in compliance with strict ethical standards, which ensured the high quality and reliability of the information collected, and also guaranteed objectivity and responsibility in the analysis and interpretation of the data obtained (For this purpose, the Delphi Method was used and applied).

Thus, below are six most influential environmental factors that determine the direction of sustainable business development specifically in the central region of Jordan. For convenience, we designated each of the queues with a mnemonic name.

E1. Environmental legislation and regulation. Environmental legislation sets the rules and standards that businesses must adhere to in order to reduce their negative impact on the environment. This may include air emission restrictions, wastewater treatment requirements, restrictions on the use of certain materials, or waste disposal requirements. The severity of environmental regulation can vary significantly by region, affecting the cost of doing business and opportunities for innovation.

E2. Physical climate changes. Climate change impacts businesses through physical risks such as extreme weather (storms, floods, droughts) that can damage infrastructure, reduce productivity, or even make some regions unsuitable for traditional activities. This is forcing businesses to adapt, looking for new ways of doing business and investing in climate resilience.

E3. Availability of natural resources and dynamics of costs for their maintenance. It should be understood that the availability factor and price of natural resources themselves, including water, minerals and forests, are key elements for businesses dependent on these assets. Increased demand and reduced availability of these resources can lead to increased costs and reduced profits, especially in areas of extensive exploitation.

E4. Environmental consciousness of consumers. Growing environmental awareness among consumers is influencing demand for more established products and services. Businesses that adapt their products, packaging and processes to environmental standards can gain competitive advantages, increase their market share and improve brand reputation.

E5. Technological innovation. Innovation and technological development play a key role in minimizing the impact of business on the environment and increasing its sustainability. Using advanced technologies such as renewable energy, more efficient use of resources, and waste recycling can help reduce costs while reducing environmental impact.

E6. Easing commercial regulations to promote green business growth. The weakening of commercial regulation to encourage green business for Jordan, in our opinion and the opinion of experts, is the most important external element affecting the sustainability of eco-business. This aspect entails adjusting and reforming existing legal structures to facilitate the expansion of businesses involved in the creation and offering of environmentally friendly products and services. Possible mitigation strategies may include various actions,

such as providing tax incentives, streamlining licensing and permitting processes for environmentally friendly businesses, and providing government support and incentives for investment in sustainable technologies.

Such changes in commercial law not only help to increase the competitiveness of environmentally oriented companies, but also play an important role in shaping the sustainable economic development of the region. They motivate businesses to invest in the development of environmentally friendly products and processes, thus helping to reduce the negative impact on the environment and improve the quality of life of the population.

In the context of our chosen methodology of hierarchical analysis and pairwise comparison, we will determine the weight of each factor relative to the others.

In the even comparison method, each factor is compared with every other and based on this comparison, a weight is assigned to each factor. The first step of the hierarchical analysis method is to create an even comparison matrix. The purpose of this step is to determine the relative importance of each factor compared to the others. In our case, we have six factors that influence business in Jordan. Each factor is compared to every other, and this comparison is made by assigning values from 1 to 9, where 1 means that both factors have equal influence and 9 means that one factor is significantly more important than the other.

The formula for the elements of the matrix A_{ij} is as follows: A_{ij} represents the importance of factor i compared to factor j . If factor i is more important than factor j then $A_{ij} > 1$; if the factors i have equal importance, then $A_{ij} = 1$; and if factor i is less important, then $A_{ij} < 1$.

Based on these equalities, we will form a pairwise comparison matrix (Table 2).

Table 2. Pairwise comparison matrix

W	W ₁	W ₂	W ₃	W ₄	W ₅	W ₆
W ₁	1	2	1/3	4	1/2	1/3
W ₂	1/2	1	1/4	3	1/3	1/4
W ₃	3	4	1	5	2	1.2
W ₄	1/4	1/3	1/5	1	1/5	1/4
W ₅	2	3	1/2	5	1	2
W ₆	3	4	2	4	2	1

Explaining comparison specifically, let's note that this kind of process involves assigning a numerical value to each pair based on a predetermined scale (for example, from 1 to 9, where 1 indicates equal importance and 9 indicates extreme importance of one compared to the other). Comparisons are made systematically across all pairs of factors, resulting in a matrix in which each cell reflects the result of one comparison.

The next stage of the study is the stage of matrix normalization and calculation of weighting coefficients, which are key to determining the relative importance of each factor. Matrix normalization consists of transforming the primary even comparison matrix so that the sum of the elements in each column becomes equal to 1. This is achieved by dividing each element in a column by the sum of all elements in that column. Normalization of the matrix will occur according to the following Eq. (1):

$$S_{ij}^{norm} = \frac{A_{ij}}{\sum_{k=1}^n A_{kj}} \quad (1)$$

where, A_{ij} is a standardized element, n - number of elements.

After normalization, the weights of each factor are calculated as the arithmetic mean in the corresponding rows of the normalized matrix (Table 3).

Table 3. The standardized matrix

W	W ₁	W ₂	W ₃	W ₄	W ₅	W ₆
W ₁	0.10	0.14	0.07	0.18	0.08	0.11
W ₂	0.05	0.07	0.05	0.13	0.05	0.08
W ₃	0.30	0.27	0.23	0.22	0.33	0.17
W ₄	0.26	0.02	0.04	0.04	0.03	0.08
W ₅	0.20	0.21	0.11	0.22	0.16	0.17
W ₆	0.30	0.28	0.46	0.18	0.30	0.35

After normalizing the matrix, the weighting coefficients for each factor are calculated as the arithmetic mean of the elements in the corresponding row of the normalized matrix:

$$W_i = \frac{1}{n} \sum_{j=1}^n S_{ij} \quad (2)$$

where,

W_i – weight (or priority) of the i-th criterion.

S_{ij} is the standardized value of the element in the i-th row and j-th column.

The results of the calculation of the weighting coefficient are shown in Table 4.

Table 4. Weighting coefficients results

Weighting Coefficients	
W ₁	0.117
W ₂	0.077
W ₃	0.259
W ₄	0.044
W ₅	0.183
W ₆	0.320

These ratios reflect the relative importance of each environmental factor influencing sustainable business development in the central region of Jordan. According to these results, “Relaxation of commercial law for eco-business development” has the highest importance.

The next step is consistency checking. In the method of hierarchical analysis and pairwise comparison, it is critical to ensure the reliability and objectivity of the results obtained. During this stage, two indicators are determined: the consistency index and the consistency ratio. For this, calculations were carried out according to the methodology.

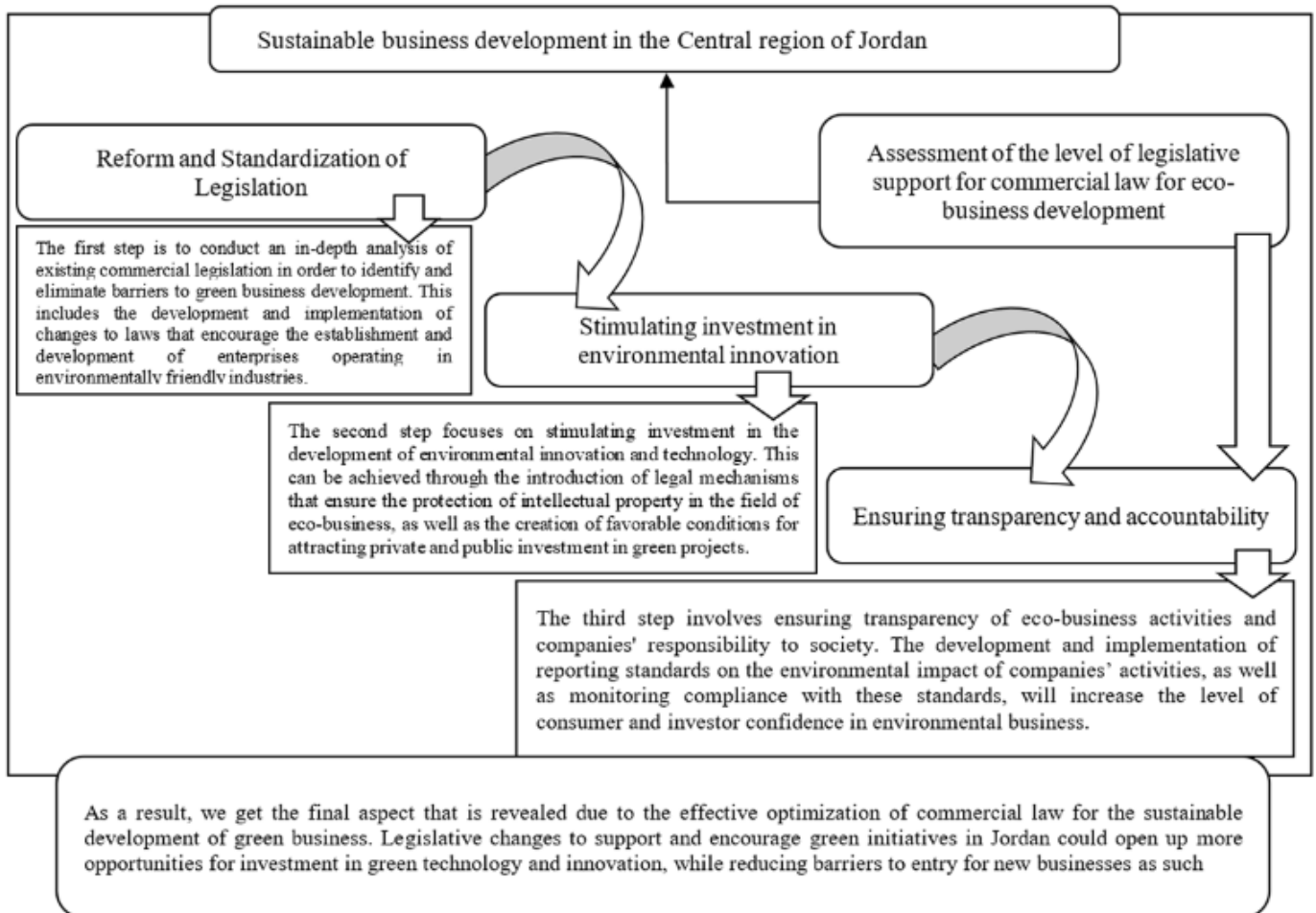


Figure 2. An optimization model of most influential environmental factor that determine the direction of sustainable business development in the Central region of Jordan

As a result, we obtained the following results

- Consistency Index (CI): 0.05297
- Consistency Ratio (CR): 0.04272

Since the CR is less than 0.1, the consistency of the scores in the modified matrix is considered acceptable.

After we confirmed that the consistency performed was

acceptable and reliable, we obtained the following results on the importance of most influential environmental factors that determine the direction of sustainable business development specifically in the Central region of Jordan:

1. Environmental legislation and regulation (Weight: 0.117): This factor is of moderate importance. Setting the necessary framework and standards for environmentally responsible business activities that contribute to sustainable development.

2. Physical climate changes (Weight: 0.077): Has less importance compared to other factors. Affect the operational activities and strategic planning of companies, requiring adaptation to new conditions.

3. Availability and price of natural resources (Weight: 0.259): The second most important factor. Critical to natural resource-dependent businesses, affecting production costs and price competitiveness.

4. Environmental consciousness of consumers (Weight: 0.044): It the least importance among the factors considered. Determines consumption trends and influences market demand for “green” goods and services.

5. Technological innovation (Weight: 0.183): This factor is of significant importance. Promotes the development of more efficient and environmentally friendly production processes, reducing the negative impact on the environment.

6. Relaxation of commercial law for eco-business development (Weight: 0.320): The second most important factor. The most important factor. Stimulates the growth and development of enterprises engaged in the field of environmentally friendly technologies, thus promoting environmental innovative development.

Having identified the most influential factor - relaxation of commercial law for eco-business development, we will form an optimization model of most influential environmental factor that determine the direction of sustainable business development in the Central region of Jordan (Figure 2).

It should be noted that legal innovation to promote environmental sustainability is important for other regions, but we work within the framework of Jordan and its specificities.

Through our comprehensive research, including SWOT analysis, expert research, Saaty’s hierarchical analysis method and paired comparison method, we identified the key external factors influencing sustainable business development in the region, with a particular focus on commercial law and environmental requirements. The analysis found that business law plays a critical role in shaping the environment for business sustainability, setting the legal framework for environmentally responsible corporate activities and facilitating the development of green innovation.

It has been established that the integration of environmental standards into commercial legislation and practice can significantly impact the sustainable development of business, forcing enterprises to adapt to new requirements and look for innovative ways to minimize negative impacts on the environment.

5. DISCUSSIONS

In general, after the results that we have reflected above in the text, we should compare their significance in the context of similar ones in the scientific and practical literature. Thus, in a study by Alazzam et al. [12] examines the legal issues and challenges facing e-commerce and suggests ways to overcome them in Jordanian and comparative law. Our study differs from this in that we focus not only on legal aspects, but also on a

wide range of external factors, including environmental, technological and social factors affecting business in the region.

Berghoff and Spiekermann’s research [13] explores a history of white collar and corporate crime that differs from our work, which focuses on contemporary challenges and sustainability strategies. Our research offers specific solutions to optimize the impact of external factors on business.

The study by Nwankpa and Merhout [14] analyzes the impact of digitalization investments on IT innovation. Although this study addresses the technological aspect of business, our study includes a broader analysis of external factors and proposes a model for their optimization, making our approach universal for addressing environmental challenges.

Pahlow and Teupe [15] and Sylkin et al. [16] focus on the interaction between business and legislation, as well as on modeling crisis management processes. Our study complements these approaches by offering an embedded model that takes into account various external factors and their impact on sustainable development, thereby expanding the scope of analysis and strategy development.

In a study by Sylkin et al. [17], the focus is on developing an anti-crisis strategy to ensure the financial security of an engineering enterprise. Our work expands this approach, focusing on greening as a strategic element in crisis management, which allows enterprises not only to survive in crisis conditions, but also to ensure sustainable development in the long term.

Pihlajamäki’s study [18] dives into the history of the development of commercial law in Sweden, providing in-depth historical context. Our study complements this work by demonstrating how modern approaches to business law and its adaptation to environmental standards can influence business practices, specifically in the context of a region like Jordan.

Bogers et al. [19] study the concept of open innovation, emphasizing its importance for the development and implementation of innovative solutions. Our work extends this analysis by highlighting the importance of integrating open innovation into business greening processes, allowing companies to effectively respond to environmental challenges.

Finally, Mallat’s research [20] focuses on commercial law in the Middle East, analyzing its impact on classic and modern business transactions. Our work adds a new dimension to this analysis by demonstrating how adapting business law to environmental requirements can contribute to sustainable business development in the region. Alazzam et al. [21] in their study on developing an information model for E-commerce platforms emphasize the importance of modern socio-economic systems adapting to global digitalization and legal compliance. This aligns with our identification of the need for legal frameworks to evolve in response to technological advancements and environmental considerations. While Alazzam et al. [21] focus on E-commerce, our research broadens the scope to eco-businesses, proposing a framework for assessing and optimizing environmental factors, underscoring the interconnectedness of legal compliance, digitalization, and sustainable development. Similarly, the work by Yesimov and Borovikova [22] on the administrative and legal implementation of the rights of business entities provides a foundation for understanding how legal frameworks can either support or hinder business operations. Our study takes this further by specifically focusing on the eco-business sector in Jordan, demonstrating

how legal adjustments can facilitate sustainable growth and development. In other hand, Kronivets et al. [23] explore the legal foundations for the utilization of artificial intelligence in educational processes, highlighting the critical role of legal infrastructure in integrating advanced technologies. This underscores our findings regarding the importance of legal adaptability in fostering innovation within sustainable development sectors, including eco-business.

Having compared our research with existing work in this area, we can argue that it not only remains relevant, but brings significant scientific novelty to the issue of greening business in the region. Our approach to analyzing the impact of external environmental factors on sustainable business development, with an emphasis on the specific conditions and challenges faced by Jordan, allows us to better understand the dynamics and specifics of regional business adaptation to environmental requirements. This study highlights important aspects of environmental sustainability and the proposed model for optimizing influential factors opens new perspectives for developing effective business greening strategies. Thus, our contribution makes a significant contribution to the scientific community and the practice of managing sustainable business development in the face of environmental change.

6. CONCLUSIONS

We emphasize that, as an innovation, we have proposed a new approach to identifying and organizing a number of environmental factors that influence sustainable development. The study's findings highlight that identifying and measuring the impact of external environmental factors on sustainable business development, as well as the role of commercial law, present significant challenges for researchers, policymakers, and business leaders. The complexity of the environment and their interactions with economic systems requires a deep understanding of environmental, social and economic processes. Adapting to changing environmental conditions, managing resources, regulating business impact on nature, and ensuring sustainability and competitiveness amid global environmental challenges have all become increasingly important.

The importance of commercial law in this context cannot be underestimated. It acts as a tool for regulating relations between business, state and society in terms of environmental obligations and responsibilities. Updating the legislative framework and introducing standards of sustainable development and environmental responsibility into corporate governance have become key elements in responding effectively to environmental challenges.

However, there are difficulties in reconciling economic interests with environmental goals. The gap between short-term economic benefits and long-term benefits of sustainable development often acts as a barrier to the implementation of effective environmental adaptation and integration strategies. In this context, the development of mechanisms to stimulate sustainable development, investment in green technologies and increased environmental education become priority areas.

Determining the impact of external environmental factors on a business is a complex task that requires an integrated approach, including economic analysis, environmental modeling and social research. It is also important to develop and implement effective monitoring and evaluation tools to measure progress and adapt strategies to changing conditions.

In general, determining the impact of external environmental factors on sustainable business development in a region requires a balanced approach that combines environmental responsibility, economic efficiency and social justice. Commercial law, in turn, should serve as the basis for creating a sustainable and environmentally responsible business environment.

One of the main limitations of our study is its dependence on the availability and relevance of data on external environmental factors and their impact on business in a particular region. Dynamic environmental conditions and rapid changes in legislation may render some data out of date until the results are published. In addition, the difficulty of integrating various environmental, economic and social factors may limit the accuracy of forecasts. To overcome these limitations, we suggest focusing on continuous updating of data through collaboration with local environmental agencies, scientific institutions and business associations. Also important is the use of flexible analytical models that can adapt to new information, and the expansion of an interdisciplinary approach to research, which will include expertise in ecology, economics and social sciences to comprehensively analyze the impact of external factors on sustainable business development.

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