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BRIDGING THE ESG GAP: THE ROLE OF BANKS IN SUPPORTING SMES' GREEN TRANSITION IN SMALL OPEN ECONOMIES

Premošćavanje ESG jaza - Uloga banaka u podršci zelenoj tranziciji MMSP-ova na tržištima u malim otvorenim ekonomijama

Abstract

Small and medium-sized enterprises (SMEs) in emerging and small open economies are significantly lagging in the adoption of Environmental, Social, and Governance (ESG) principles. This gap is further exacerbated by the reluctance and hesitation of banks to incorporate ESG considerations into their financing approaches, particularly in supporting the green transition of SMEs. This study explores the implementation of ESG principles by Serbian banks in their dealings with SMEs, focusing on how financial institutions are strategically positioning themselves in their business relationships with these enterprises, regardless of industry. Using data collected through a detailed questionnaire completed by banks, and verified through a focus group that provided additional insights and recommendations, we analyze the extent to which ESG principles influence the banking sector's interactions with SMEs. Our findings identify key barriers and opportunities for enhancing ESG integration in this crucial segment of the economic ecosystem and offer potential pathways for aligning financial strategies with sustainable development goals in the context of SMEs.

Keywords: *ESG, banking sector, small and medium enterprises, green financing, small open economies*

Sažetak

Mikro, mala i srednja preduzeća (MMSP) u zemljama u razvoju i malim otvorenim ekonomijama značajno zaostaju u primeni principa životne sredine, društvene odgovornosti i korporativnog upravljanja (ESG). Ovaj jaz dodatno je pogoršan oklevanjem banaka da uključe ESG razmatranja u svoje pristupe finansiranju, posebno u podršci zelenoj tranziciji MMSP-ova. Ova studija istražuje primenu ESG principa od strane srpskih banaka u njihovom poslovanju sa MMSP-ovima, sa fokusom na to kako se finansijske institucije strateški pozicioniraju u svojim poslovnim odnosima sa ovim preduzećima, bez obzira na industriju u kojoj MMSP-ovi posluju. Koristeći podatke prikupljene putem detaljnog upitnika popunjenog od strane banaka, a verifikovane kroz fokus grupu koja je pružila dodatne uvide i preporuke, analiziramo u kojoj meri ESG principi utiču na interakcije bankarskog sektora sa MMSP-ovima. Naši nalazi identifikuju ključne prepreke i mogućnosti za unapređenje integracije ESG principa u ovom ključnom segmentu ekonomskog ekosistema i nude potencijalne puteve za usklađivanje finansijskih strategija sa ciljevima održivog razvoja u kontekstu MMSP-ova.

Ključne reči: *ESG, bankarski sektor, mikro mala i srednja preduzeća (MMSP), zeleno finansiranje, male otvorene ekonomije*

Introduction

As the global focus on sustainability intensifies, Environmental, Social, and Governance (ESG) principles have emerged as critical components for fostering sustainable growth across all sectors, particularly within the financial industry. The integration of ESG principles into banking operations not only responds to increasing regulatory pressures but also aligns with the broader societal demand for corporate responsibility and sustainable development. Banks, as key players in financial ecosystems, are uniquely positioned to drive sustainability by incorporating ESG considerations into their lending practices, investment strategies, and governance frameworks. The objective of this paper is to assess the current state of ESG integration within the Serbian banking sector, with a specific focus on how banks engage with small and medium-sized enterprises (SMEs), which form the backbone of the national economy.

Globally, ESG criteria are becoming essential metrics for evaluating corporate performance. They encompass three key pillars: environmental factors, which address a company's impact on natural ecosystems; social factors, which focus on relationships with employees, customers, and communities; and governance factors, which pertain to the internal management structures that ensure accountability and transparency [14]. In recent years, the rise of responsible investing has increased the importance of ESG metrics, as institutional investors and stakeholders are increasingly favoring companies that demonstrate sustainable practices [9]. For banks, this trend translates into the need to develop ESG-aligned financial products, improve risk management practices, and ensure compliance with evolving regulations.

Serbia, as an emerging economy [11] faces unique challenges in the adoption of ESG principles within its financial sector. The banking sector in Serbia consists of a mix of domestic and foreign banks, many of which are subsidiaries of international financial institutions. These international connections can serve as channels for the diffusion of global ESG standards into the national banking system. However, the adoption of these standards has been uneven, with systemic banks generally leading the way in ESG policy development, while smaller banks and domestic institutions are slower to integrate these practices [4].

The role of small and medium-sized enterprises (SMEs) in Serbia is particularly relevant to the discussion of ESG in banking. SMEs account for a significant portion of employment and economic activity in the country, yet they face numerous challenges in accessing finance, particularly when it comes to funding that aligns with sustainability objectives [26]. The integration of ESG principles in SME financing is therefore crucial, not only for fostering the growth of these enterprises but also for ensuring that Serbia's economic development is aligned with the global sustainability agenda. Given that SMEs typically lack the resources and knowledge to implement complex ESG practices on their own, the role of banks in providing guidance, financing, and risk management becomes even more critical [20].

The importance of integrating ESG into the banking sector is not only driven by ethical considerations but also by economic and regulatory factors. Research has shown that companies that adopt strong ESG practices tend to outperform their peers financially, with improved risk management, higher employee satisfaction, and stronger reputations [5]. In the financial sector, incorporating ESG criteria into lending and investment decisions can help mitigate long-term risks associated with environmental degradation, social unrest, and governance failures. For example, climate change poses significant risks to financial stability, particularly for banks with exposure to high-carbon industries [3]. By shifting their portfolios towards more sustainable investments, banks can not only reduce their risk exposure but also tap into growing markets for green finance.

In Serbia, the regulatory framework for ESG integration is still evolving, but there are signs of increasing government support for sustainability initiatives. For instance, the Serbian government has adopted several strategies to promote green growth, including initiatives to improve energy efficiency and reduce greenhouse gas emissions. Additionally, Serbia's alignment with European Union (EU) accession processes brings with it the expectation that the country will gradually harmonize its regulatory frameworks with EU ESG standards, particularly those related to climate action and corporate governance [11].

Thus, the main research question guiding this study is: *"To what extent are Serbian banks incorporating ESG principles into their SME financing, and what are the key challenges and opportunities in advancing sustainable finance within the Serbian banking sector?"* This inquiry seeks to reveal the current level of ESG integration, highlight existing gaps, and offer insights into how Serbian banks can strengthen their contribution to sustainable development.

This paper aims to provide a comprehensive analysis of how banks in Serbia are currently integrating ESG principles into their operations, with a particular focus on their engagement with SMEs. The research adopts a two-fold methodological approach, combining a structured questionnaire distributed to banks with a focus group discussion that includes representatives from the banking sector, SMEs, academia, the public sector, and civil society. The questionnaire is designed to capture the breadth and depth of ESG adoption in banking practices, while the focus group aims to validate the findings and provide additional insights into the challenges and opportunities for ESG integration.

The analysis is structured around the three key pillars of ESG - environmental, social, and governance. For the environmental component, the paper examines the extent to which banks offer green financial products and assess environmental risks when financing SMEs. The social dimension focuses on how banks incorporate social responsibility into their financing decisions, including labor rights and community engagement. Finally, the governance section explores how banks ensure transparency, accountability, and ethical practices, both within their own operations and in their relationships with SME clients.

By exploring these dimensions, the paper seeks to highlight both the progress that has been made in ESG integration and the gaps that remain. Ultimately, the findings will contribute to a better understanding of how banks in Serbia can enhance their role in promoting sustainable development, particularly in the SME sector. The study also offers recommendations for improving ESG practices, including the development of more tailored financial products, greater transparency in reporting, and increased collaboration between banks, SMEs, and other stakeholders.

In conclusion, the integration of ESG principles into the Serbian banking sector is a critical step towards ensuring long-term financial stability and sustainable economic growth. As global and regional pressures for sustainable finance continue to rise, Serbian banks must adapt their strategies and practices to align with these emerging trends. By doing so, they can not only mitigate risks but also unlock new opportunities for growth and innovation in a rapidly changing financial landscape [24], [6].

Literature review

Small open economies are countries that rely heavily on international trade and capital flows due to their limited domestic markets. These economies are typically characterized by high degrees of openness, meaning they are exposed to global economic shifts, changes in commodity prices, and external shocks [13]. Examples of small open economies include countries in Eastern Europe, like Serbia, Croatia, the Baltic states, Ireland and others [23]. Due to their size and openness, these economies often face challenges in maintaining economic stability and ensuring sustainable growth. The influence of global markets means that small open economies are more vulnerable to external pressures such as trade disruptions, currency fluctuations, and capital flight.

In small open economies, banking systems play a pivotal role in fostering economic development by providing capital and facilitating international trade. However, these economies must contend with limited domestic resources and financial instruments, making them particularly susceptible to global financial crises [1], [21]. For small open economies to achieve sustainable economic development, they must balance the opportunities presented by global integration with the need to mitigate the risks associated with external volatility. One way this can be accomplished is through the incorporation of Environmental, Social, and Governance (ESG) principles, which promote stability, resilience, and long-term growth [15].

The Relevance and Implications of ESG at the Global Level

ESG factors have emerged as critical components for assessing the sustainability and ethical impact of businesses globally. These factors are now central to investment decisions, corporate governance, and operational practices. The growing focus on ESG is driven by increased awareness of climate change, social inequality, and the need for transparent governance practices. Globally, institutions and investors are increasingly prioritizing companies that adhere to ESG principles due to the recognized long-term benefits, including risk mitigation, improved financial performance, and enhanced corporate reputation [10].

Environmental concerns such as climate change, carbon emissions, and resource scarcity have pushed businesses to adopt sustainable practices. International agreements, such as the Paris Climate Agreement, have created a regulatory framework that encourages companies to focus on reducing their environmental impact. Social factors, such as diversity, labor rights, and community engagement, are becoming equally important, as consumers and investors demand ethical and inclusive business practices. Governance factors, including board structure, executive compensation, and corporate ethics, are crucial for ensuring transparency and accountability [14].

The global adoption of ESG principles is transforming industries. For example, in the energy sector, companies are increasingly moving away from fossil fuels and investing in renewable energy solutions. In finance, ESG criteria are becoming critical for assessing investment risk and opportunities, with funds that incorporate ESG factors consistently outperforming traditional portfolios [4]. This trend is particularly important for small open economies that are reliant on global financial markets. By adopting ESG standards, businesses in these economies can attract foreign investment and enhance their competitiveness on the global stage. In addition, the growing relevance of ESG principles is also recognized in fostering circular economy practices [17], as banks play a pivotal role in financing SMEs that are transitioning towards more sustainable and resource-efficient business models.

Financing ESG and SMEs

Small and medium-sized enterprises (SMEs) play a fundamental role in both developed and developing economies, contributing significantly to employment and GDP. However, integrating ESG principles into SMEs presents unique challenges. SMEs typically lack the resources, expertise, and capital to implement comprehensive ESG strategies compared to larger corporations [22]. Nevertheless, the potential benefits of adopting ESG practices are significant for SMEs. These include improved operational efficiency, better access to finance, enhanced reputation, and resilience against market and environmental shocks [19].

One of the primary barriers SMEs face in integrating ESG practices is access to finance. Many SMEs struggle to secure capital for sustainability projects due to the high costs associated with implementing ESG initiatives, such as transitioning to energy-efficient processes or meeting labor standards [2]. Banks and financial institutions can play a pivotal role in bridging this gap by offering financial products specifically tailored for SMEs to support their ESG transitions. However, evidence suggests that SMEs often lack awareness of available green financing options, further limiting their engagement with ESG practices [4].

Despite these challenges, SMEs are increasingly recognizing the value of ESG integration. For example, sustainable practices can help SMEs reduce operational costs by improving energy efficiency and waste management. Additionally, customers and larger corporations are placing greater emphasis on sustainable supply chains, prompting SMEs to adopt ESG principles to remain competitive. Governments and financial institutions are also starting to support SMEs through subsidies, grants, and green loans aimed at promoting sustainability [20].

In Serbia, banks play a crucial role in financing SMEs, which form the backbone of the national economy. The SME sector faces significant challenges in accessing finance [7], with banks often perceiving SMEs as high-risk clients due to their limited credit histories and collateral. Despite these challenges some Serbian banks have begun to tailor financial products specifically for SMEs, recognizing their potential for driving economic growth [8].

Banks, ESG, and Financing: Differentiation Across Industries

Banks and financial institutions play a critical role in facilitating the transition to a more sustainable economy by offering financing solutions that align with ESG principles. The integration of ESG into banking operations involves assessing the environmental, social, and governance risks associated with lending and investment decisions. By incorporating ESG factors into their risk models, banks can mitigate long-term risks and contribute to broader societal goals [25].

Different industries pose varying levels of ESG risk, leading banks to adopt differentiated approaches when providing financing. For example, industries like energy, mining, and agriculture are more exposed to environmental risks due to their impact on natural resources and greenhouse gas emissions [16]. Banks financing these industries are increasingly applying strict environmental standards and requiring clients to comply with sustainability guidelines. In contrast, sectors like technology and healthcare may face fewer environmental risks but more social or governance concerns, such as data privacy or ethical labor practices. As a result, banks must tailor their ESG financing strategies to the specific risks and opportunities presented by different industries.

The availability of green and social finance products has expanded rapidly in recent years, driven by both regulatory pressures and market demand. Green bonds, for instance, have become a popular instrument for funding environmentally sustainable projects, such as renewable energy infrastructure and energy-efficient buildings [12]. Social impact bonds, which focus on financing projects that deliver positive social outcomes, are another example of how banks are innovating to meet ESG criteria [18].

However, the adoption of ESG financing products is uneven across regions and industries. In Europe, where regulatory frameworks and consumer demand for sustainability are strong, banks are leading the way in offering ESG-related financial products. In contrast, banks in emerging markets, including many small open economies, are still in the early stages of ESG integration [4]. While some banks have started offering green loans and sustainability-linked financing, the overall market remains underdeveloped due to limited regulatory frameworks, lack of demand from SMEs, and challenges in assessing ESG risks.

In terms of governance, banks have a significant role in promoting transparency and ethical business practices. Strong governance frameworks ensure that banks not only comply with ESG regulations but also lead by example in fostering a culture of accountability. This is particularly important in industries with high governance risks, such as finance and construction, where corruption and unethical practices can undermine sustainable development goals [16].

Research question and methodology

Given the growing importance of Environmental, Social, and Governance (ESG) principles in global finance, and the unique challenges faced by small open economies like Serbia in integrating these principles into their banking systems, this paper seeks to explore how Serbian banks are incorporating ESG into their financing practices, particularly with respect to small and medium-sized enterprises (SMEs). Specifically, the research focuses on understanding the extent to which Serbian banks have adopted ESG policies, the types of ESG-related financial products available to SMEs, and the challenges and opportunities associated with integrating ESG into lending decisions.

Therefore, the central research question of this study is: *"How are Serbian banks integrating ESG principles into their financing of SMEs, and what are the key challenges and opportunities in advancing sustainable finance in the Serbian banking sector?"* This question aims to uncover the current state of ESG integration, identify gaps, and provide insights into how Serbian banks can enhance their role in promoting sustainable development.

In this study, a two-fold approach combining a questionnaire and a focus group was utilized to gather comprehensive data from key stakeholders in the banking sector. This mixed-methods approach aimed to examine and validate the role of environmental, social, and governance (ESG) practices across banks operating with SMEs within the national ecosystem. The combination of quantitative data from the questionnaire and qualitative insights from the focus group ensures a robust understanding of the perspectives and practices related to ESG within the banking sector.

Questionnaire - sampling and Distribution

The questionnaire was distributed by NALED1 to a comprehensive pool of all banks operating within the national ecosystem, ensuring that every institution had the opportunity to participate in the study. A total of 31 banks responded to the questionnaire, providing initial data for analysis. However, in order to ensure the relevance and accuracy of the results, only those banks that fully completed the questionnaire were included in the final analysis. This criterion narrowed the dataset down to 17 banks, 10 of which were classified as systemic banks due to their size and influence within the financial system. The responses from these systemic banks were crucial for understanding the broader implications of ESG practices across the banking industry.

Questionnaire - Structure

The questionnaire consisted of 40 questions, divided into various sections to capture different dimensions of the banks' ESG practices and strategies. These sections were as follows:

- *Control Section:* This section collected basic information about the bank, including size, market share, and whether it was classified as systemic.
- *ESG Practices Section:* This core section focused on the bank's current practices related to environmental, social, and governance issues. Questions were designed to assess the extent to which ESG factors are integrated into decision-making processes, and how banks measure and report on ESG performance.
- *Industries Section:* This section examined the industries and sectors in which the banks are most active, with particular attention paid to sectors that are high-risk from an ESG perspective (e.g., manufacturing, energy, agriculture, mining, etc.).
- *Strategies Section:* The final section explored the banks' strategic responses to ESG pressures, including whether they have adopted specific ESG strategies, the role of ESG in risk management, and how ESG is incorporated into long-term planning.

To analyze the data collected through the questionnaire descriptive statistics will be employed to provide a clear understanding of the distribution and trends in the responses. The use of descriptive statistics, including measures such as frequencies, percentages, means, will allow for the summarization of the banks' ESG practices and their engagement with SMEs. These statistics will help in identifying patterns in the adoption of ESG policies, the availability of green financial products, and the extent of social and governance practices across the sample of banks. By presenting the data in this structured manner, the study aims to highlight key areas of progress and gaps, facilitating a clearer interpretation of the results. This quantitative analysis will be complemented by qualitative insights gathered from the focus group discussion to provide a comprehensive overview of ESG integration within the Serbian banking sector.

Questionnaire - Target Respondents

The questionnaire was targeted at senior executives within the banks, specifically individuals holding C-level positions (e.g., CEOs, CFOs, and COOs). This approach ensured that the responses were reflective of strategic decision-making processes within the banks. Engaging with the highest level of management allowed the study to gain insights into how ESG policies are incorporated into overall corporate strategy, risk management, and operational activities.

Focus Group to Validate Results - Composition and Scope

The second phase of the methodology aimed to validate the results obtained from the questionnaire and gather additional insights. For this purpose, a two-hour moderated focus group discussion was organized by NALED, with over 20 participants from various sectors, including representatives from the banking sector, small and medium-sized enterprises (SMEs), academia, the public sector, and civil society. While the focus group featured a diverse group of participants from different industries, including banks and financial institutions, the discussions

1 National Alliance for Local Economic Development (NALED) is an independent, non-profit and non-partisan association advocating better business environment in Serbia and the region, https://naled.rs/en/upoznajte-naled

were highly relevant to the banking sector, particularly in the context of ESG engagement with SMEs. The insights gained can be transposed to the banking sector, ensuring their applicability to SMEs' needs and challenges.

The focus group began with a presentation of the preliminary results derived from the questionnaire. This served as a foundation for the subsequent discussion, ensuring that all participants had a clear understanding of the key findings and issues at hand. Alongside the presentation, a semi-structured questionnaire was distributed to the participants to prompt deeper reflection on the results and encourage them to provide their own insights and perspectives on the issues discussed.

The discussion was structured around several key themes:

- *Validation of Findings:* Participants were asked to comment on the findings presented, focusing on confirming or challenging the responses from the questionnaire. This allowed for the identification of any discrepancies or inconsistencies between the quantitative data and the practical experiences of the focus group members.
- *ESG Challenges and Opportunities:* Participants explored the practical challenges and opportunities associated with implementing ESG principles, particularly within the banking sector and its interactions with SMEs. Discussions addressed how financial institutions could improve their strategies to support the green transition of SMEs.
- *Sectoral Strategies:* Although the participants represented various industries, the conversation centered around how the banking sector, specifically, could better align its financing practices with ESG goals. Insights from other industries helped contextualize sector-specific challenges, but the recommendations remained applicable to banking operations with a focus on SMEs.
- *Recommendations:* The group generated recommendations to enhance the integration of ESG considerations into the banking ecosystem, particularly in SME financing. These recommendations were noted for further analysis in the results and discussion sections of this paper.

This two-phase methodological approach, combining a structured questionnaire with a focus group discussion, allowed for both a broad quantitative analysis and a more detailed qualitative exploration. The focus group validated and contextualized the findings from the questionnaire, providing a robust understanding of how ESG principles could be better integrated into the banking sector, particularly in its dealings with SMEs. The recommendations generated during the session will serve as a valuable input for the policy-oriented aspects of this research, ensuring the relevance of the findings to current banking practices and ESG considerations.

Results and discussion

The structured questionnaire revealed significant variations in the adoption and implementation of Environmental, Social, and Governance (ESG) practices across banks in Serbia, with key differences between systemic and other banks.

Sample Composition and Respondent Overview

Of the 31 banks approached, 17 fully completed the questionnaire, with 10 classified as systemic banks operating in Serbia. This sample provides a comprehensive overview of ESG practices within the Serbian banking sector. The majority of respondents were from banks that play a systemic role in the economy, making their responses particularly valuable for understanding the current landscape of sustainable finance.

Among the 17 banks that completed the questionnaire, 71% reported having a defined ESG policy, though most of these policies are internal and not publicly available. Systemic banks were more likely to have comprehensive ESG policies in place, often integrated into broader corporate strategies like sustainable development goals (SDGs) or environmental risk management procedures. These policies focus on climate risk, environmental sustainability, and responsible finance.

However, while a majority have such policies, the implementation and transparency of these strategies remain limited. Many banks do not publicly disclose their ESG strategies, indicating a gap between internal governance and public accountability. Only a small percentage of banks, primarily those under multinational ownership, make their ESG policies available on their websites.

Environmental (E) Practices and Products

When examining the environmental dimension of ESG, the results highlight that a limited number of banks (47%) offer specific financial products aimed at promoting environmental sustainability among SMEs, such as green loans and energy efficiency financing. Systemic banks are more likely to provide these products, often in collaboration with international financial institutions or through grant programs. (Figure 1.)

Notably, 35% of banks do not offer any environmentally focused products for SMEs, underscoring a significant gap in the market.

While some banks offer training or advisory services to SMEs to support green practices, the majority do not provide such additional services (Figure 2.).This indicates that while financial products are available, broader support for SMEs to adopt sustainable practices is still lacking.

Furthermore, 47% of the banks reported not using specific environmental criteria when assessing loan applications from SMEs, and only 35% conduct continuous monitoring of environmental impacts. This lack of robust environmental risk assessments suggests that banks are not fully incorporating environmental considerations into their credit risk models.

The graph on Figure 3. shows how banks apply specific policies or criteria to assess the environmental impact of SMEs they finance. Notably, a significant percentage of banks (around 45%) do not apply specific criteria to

Figure 1. Types of products the bank offers to SMEs for introducing environmentally friendly practices

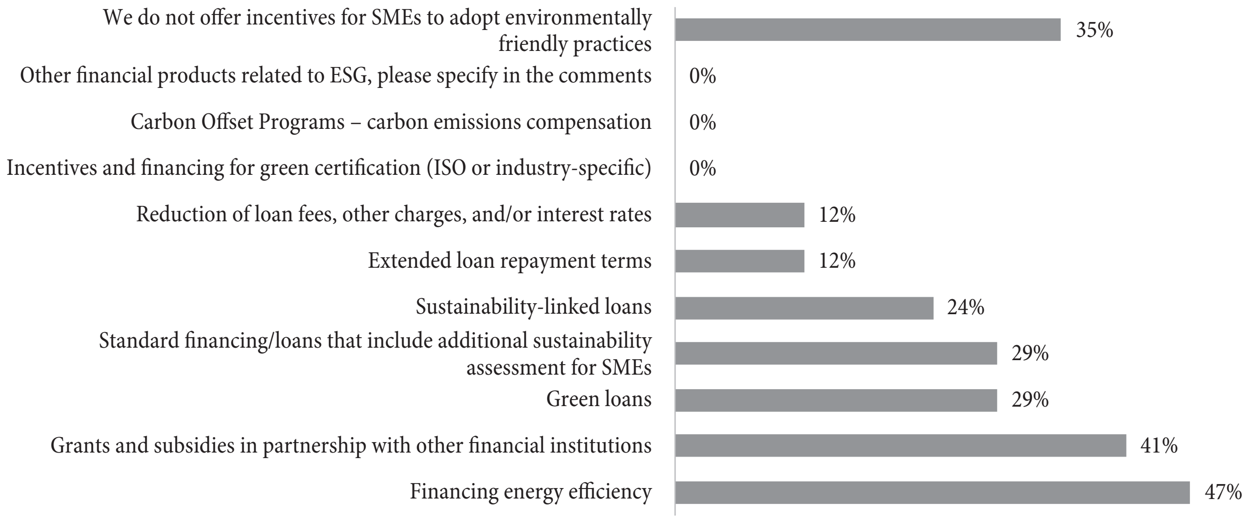
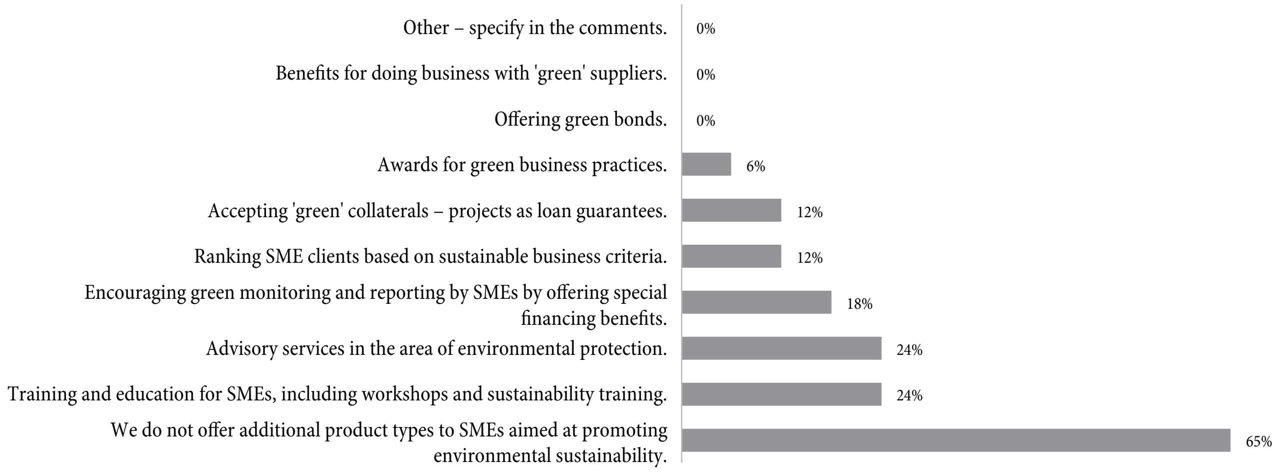


Figure 2. Additional types of products that banks offer to SMEs with the goal of actively promoting environmental sustainability



assess the environmental impact when approving SME financing, highlighting a gap in ESG risk assessment. While some banks engage third-party sustainability assessments and request sustainability self-assessments from SMEs (approximately 20% for both), there is still limited monitoring and certification efforts (about 25%). Continuous monitoring and green financing measures are slightly more common but still not widely adopted, which indicates room for improvement in banks' ESG strategies for SME financing. The lack of widespread implementation of environmental criteria underscores the need for stronger regulatory or market-driven incentives for banks to better integrate ESG assessments into their financing decisions.

The graph on Figure 4. highlights how banks assess environmental and environmental protection risks related to financing SMEs. A notable percentage of banks (around 40%) do not assess environmental risks or environmental protection risks associated with the products they offer to SMEs, indicating a significant gap in ESG implementation. However, many banks (around 50%) have categorized SMEs by industry and environmental footprint, suggesting that there is a focus on understanding the environmental impacts of different sectors. Additionally, some banks (around 20-25%) have developed models to assess environmental risks and conduct environmental due diligence for SMEs before approving loans, reflecting the need for more structured approaches to integrating environmental considerations into financing decisions. Regular data collection and reporting from clients, while present, remains limited, indicating room for improvement in how banks monitor environmental compliance and

Figure 3. How banks apply specific policies/criteria to assess the environmental impact of SMEs they finance

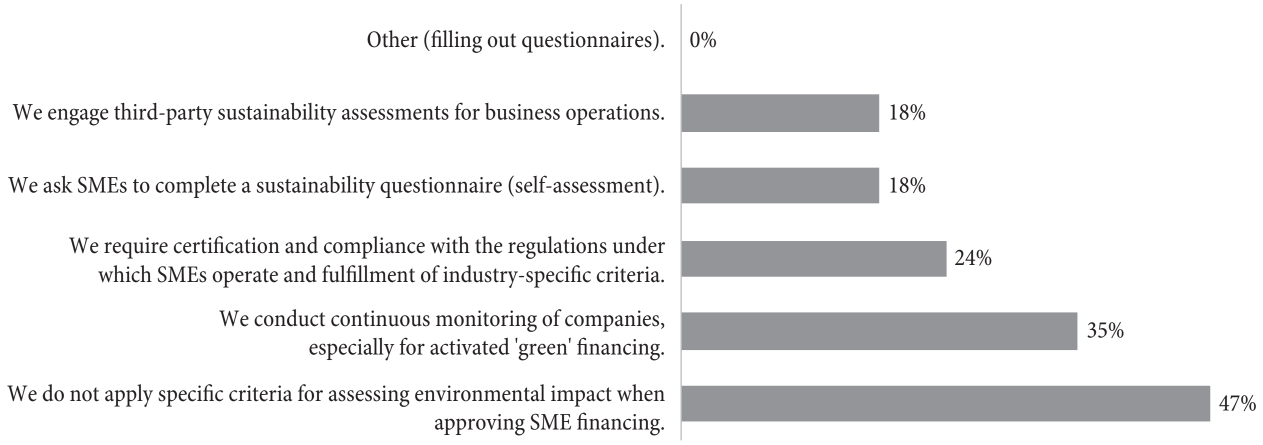
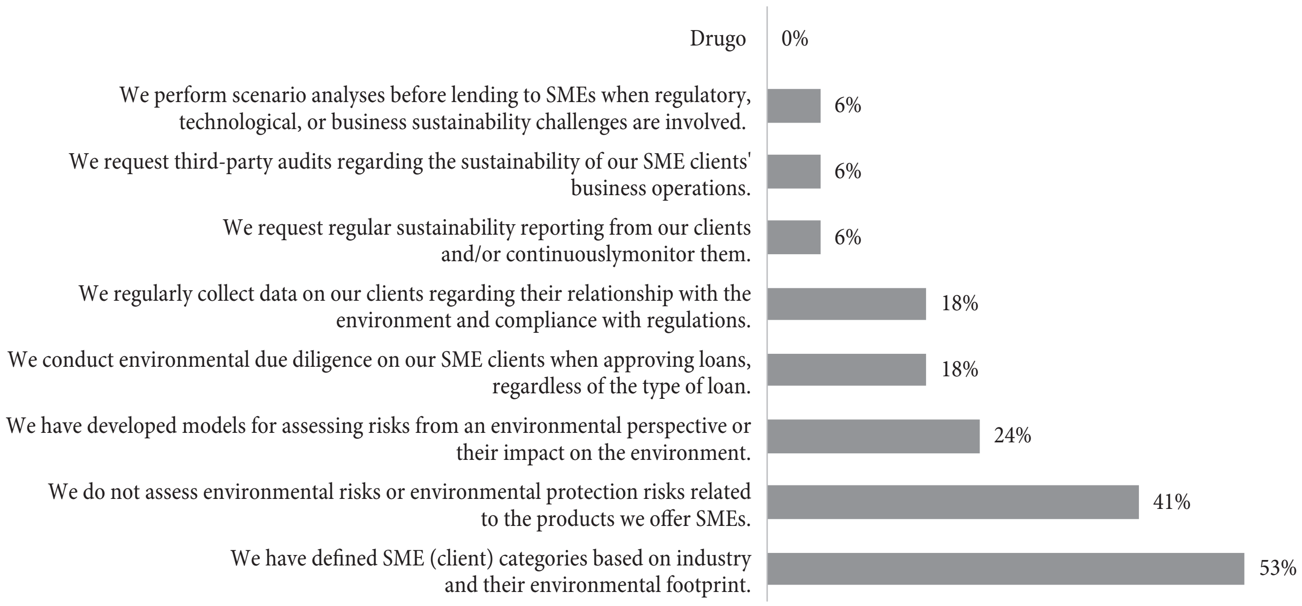


Figure 4. Ways banks assess environmental and environmental protection risks related to financing SMEs



sustainability practices over time. This suggests a growing but still inconsistent application of environmental risk assessment in SME financing.

Social (S) Practices: Gaps in Inclusivity and Community Engagement

In terms of social responsibility, the findings reveal even greater disparities. A large proportion (59%) of banks do not have a defined policy for promoting social responsibility when financing SMEs. Even among systemic banks, many lack clear social inclusion policies or measures to ensure compliance with labor laws and social protections. Most banks (94%) do not have policies to ensure inclusive working environments for SMEs they finance, and 59% do not check for compliance with national or international labor laws.

Moreover, the banks rarely assess the social risks within their SME clients' supply chains, with 88% reporting no measures in place for this type of evaluation. Additionally, 82% of banks do not engage with local communities to understand their needs before making financing decisions. These findings highlight a substantial gap in the social dimension of ESG integration, particularly in terms of ensuring socially responsible banking practices and fostering community development.

Governance (G) Practices: Focus on Transparency but Gaps in Data Protection

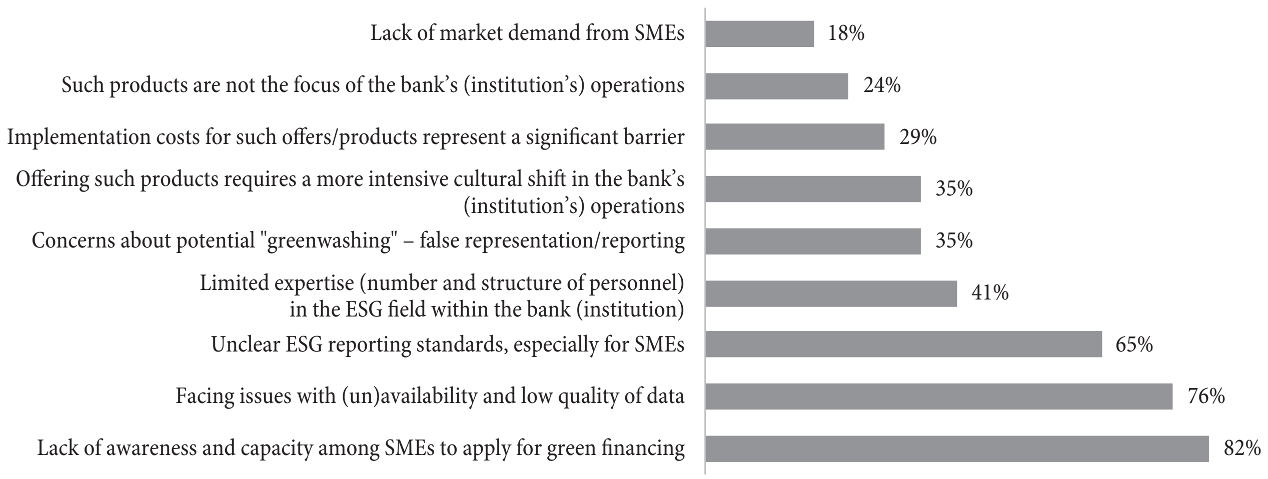
Governance practices within banks appear stronger compared to environmental and social dimensions. Approximately 53% of banks have policies in place to assess the governance structures of SMEs during the financing process, and 59% monitor transparency in their clients' operations. These practices are particularly prevalent among systemic banks, which tend to have more rigorous governance standards.

However, only 35% of banks ensure that SMEs implement personal data protection procedures, a critical component of governance in the digital age. Furthermore, 76% of banks do not have clear guidelines for ongoing monitoring of governance risks among their SME clients, revealing another area for improvement in governance practices. On a positive note, 71% of banks have measures in place to prevent corruption and unethical practices in SME financing.

Business practices and innovations

As per business practices the graph on Figure 5. highlights the challenges banks face in implementing ESG practices in financing SMEs. The most prominent issue (around 80%) is the lack of awareness and capacity among SMEs to apply for green financing, suggesting that SMEs are not fully prepared or informed about the opportunities that ESG products offer. Another significant challenge (around 70%) is the availability and quality of data, which hinders banks' ability to assess and track ESG criteria effectively. Many banks also face unclear ESG reporting standards, particularly for SMEs (about 60%), and the lack of internal expertise within the banks (around 50%) further complicates the implementation of ESG practices. Concerns about "greenwashing" and cultural resistance

Figure 5. Challenges banks face in implementing ESG practices in financing SMEs



within institutions also pose barriers to offering these products, underscoring the need for clearer frameworks and better capacity building, both within banks and among SMEs. Overall, these challenges reflect a combination of internal capacity issues and external market readiness.

Graph on Figure 6. highlights the business opportunities for growth and innovation in banks' operations as a result of their commitment to sustainability and the introduction of ESG criteria. The most significant opportunity (around 80%) lies in innovation within financial products, showing that banks see substantial potential in creating new ESG-focused offerings. Improving the institution's reputation and brand is another key opportunity (around 70%), underscoring how sustainability can enhance a bank's image. Additionally, developing new partnerships and collaborations, as well as advisory services in ESG for SMEs, are seen as valuable (around 60%). Access to co-financing with other investors and compliance with regulations also present strong opportunities (around 50%). A smaller proportion of banks (less than 10%) do not recognize any business opportunities in this domain, indicating that most institutions see ESG as a strategic area for growth and development.

Next graph on Figure 7. illustrates the development and innovation of new financial products focused on ESG in the SME segment. The most significant product banks are focusing on is credit lines related to ESG or green projects, with around 100% of respondents indicating this as a priority. Green leasing and advisory services related to ESG for SMEs follow with moderate interest (about 40% each), reflecting a growing emphasis on tailored financial products and support services for sustainability. ESG cards and metrics also show a moderate level of development (around 30%). On the other hand, products such as

Figure 6. Business opportunities for growth and innovation in bank's operations as a result of commitment to sustainability and the introduction of ESG criteria concerning products and/or services

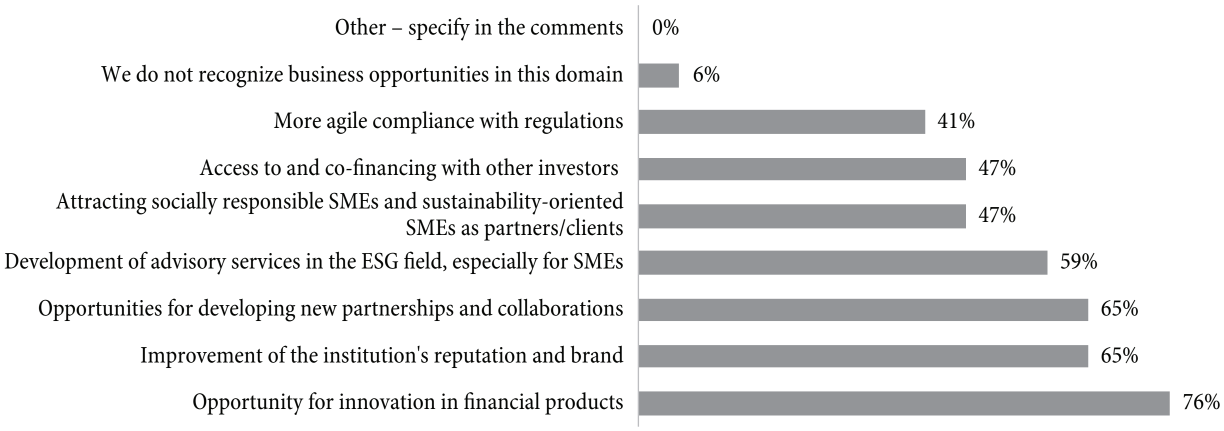
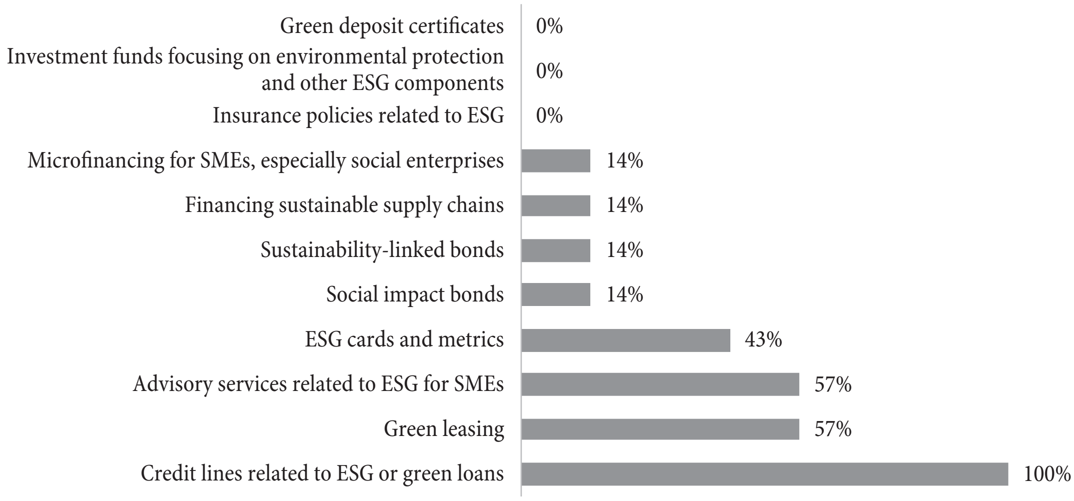


Figure 7. Development and innovation of new financial products focused on ESG in the SME segment



sustainability-related bonds, social impact bonds, and microfinancing for SMEs (especially for green projects) have less attention from banks, indicating that these more niche products have not yet become mainstream. This distribution reflects the broader trend of focusing on established products like credit lines, while emerging products still require further development.

Industries differentiation

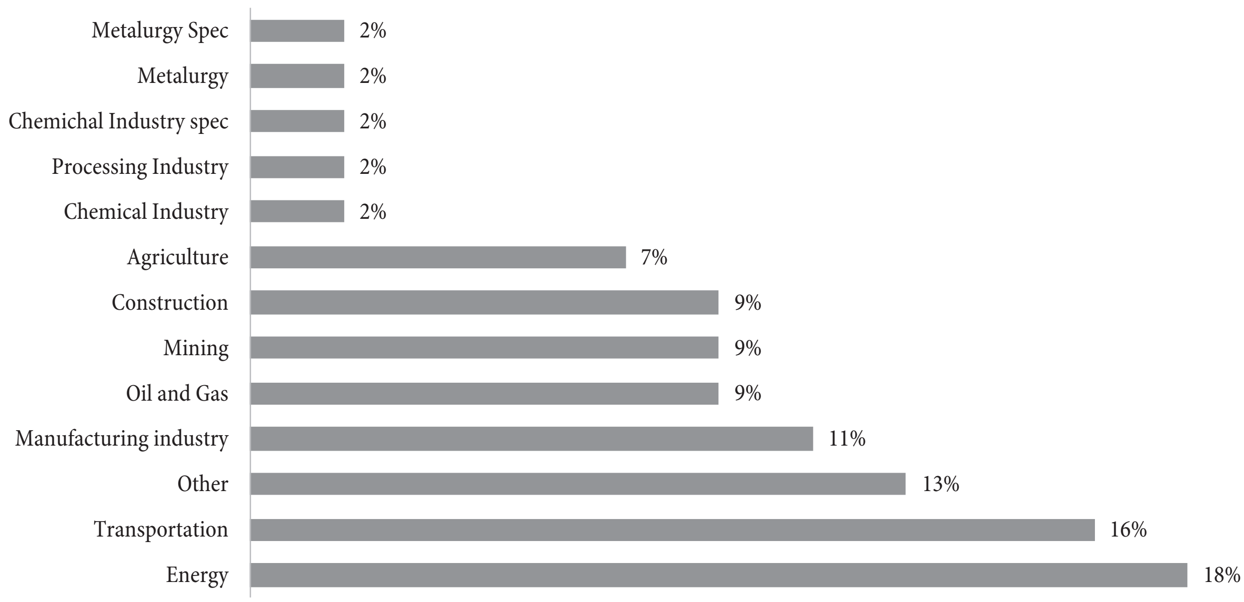
This questionnaire is primarily focused on SMEs; however, due to the complexity and variety within industries, some of the responses may be influenced by the broader context and may also apply to non-SME companies. As such, interpretations should consider the potential for bias in certain answers related to larger enterprises.

In the context of ESG (Environmental, Social, and Governance) financing, different industries face varying levels of exposure to environmental and social risks, which influences the way banks allocate funding. Industries such as energy, construction, manufacturing, and agriculture are often at the forefront of ESG-related financial considerations due to their significant environmental impact and high carbon emissions. As a result, banks are increasingly offering green loans and energy efficiency financing targeted at these sectors, which helps mitigate environmental risks while supporting the transition to more sustainable practices. For instance, energy efficiency financing (offered by 47% of banks) and grants for sustainability projects (41%) are common products directed at industries that are responsible for substantial resource consumption and emissions, such as the energy and manufacturing sectors.

Conversely, industries with lower direct environmental impacts, like financial services and information technology, may not have as many specific ESG financing products available but still face governance and social challenges, such as ethical labor practices or data privacy issues. The differentiation in ESG financing across industries reflects the distinct risks and opportunities each sector presents. High-risk industries like mining or heavy manufacturing are likely to see stricter ESG-related credit assessments and more targeted financing solutions aimed at reducing their negative environmental impacts. As ESG principles become further embedded into financial decision-making, banks will need to tailor their financing strategies to address the unique sustainability challenges of each industry, balancing both risk mitigation and opportunities for green growth.

The graph on Figure 8. shows that banks are currently financing SMEs the most in the manufacturing and processing industry, which represents the highest proportion, followed by commerce and agriculture. Other significant sectors include hospitality and tourism, transport, and energy, which all receive considerable financial support from banks. On the lower end of the spectrum, telecommunications,

Figure 8. Industries and segments that banks are currently financing SMEs
the most



construction, and the automotive industry receive less financing, indicating that banks may prioritize industries more directly connected with essential goods and services or those with strong growth potential.

When the bank's perception of the industry is in question, the graph on Figure 9. indicates that energy, transport and oil and gas are the industries most likely to have significant problems with greenhouse gas emissions, with energy being the highest at nearly 18%. Other sectors, including manufacturing and processing, mining, and construction, also exhibit substantial emission concerns, indicating their impact on the environment. On the lower end, industries like metallurgy and the chemical industry show lesser but still notable risks, reflecting the overall trend of emissions-heavy industries being under scrutiny for their environmental footprint.

The graph on Figure 10. illustrates industries that banks are reluctant to finance, regardless of ESG considerations. Energy tops the list, with banks showing the highest reluctance to finance this sector, likely due to its environmental impact. Other highly avoided industries include gambling, tobacco, and the arms industry, reflecting ethical and social concerns. Financial industries, media, and alcohol are also sectors where banks exhibit hesitation, although to a lesser extent. Lower down the scale, industries like consulting, automotive, and commerce face relatively fewer restrictions but are still under consideration when it comes to financing decisions.

Figure 9. Industries that may have significant problems with greenhouse gas emissions

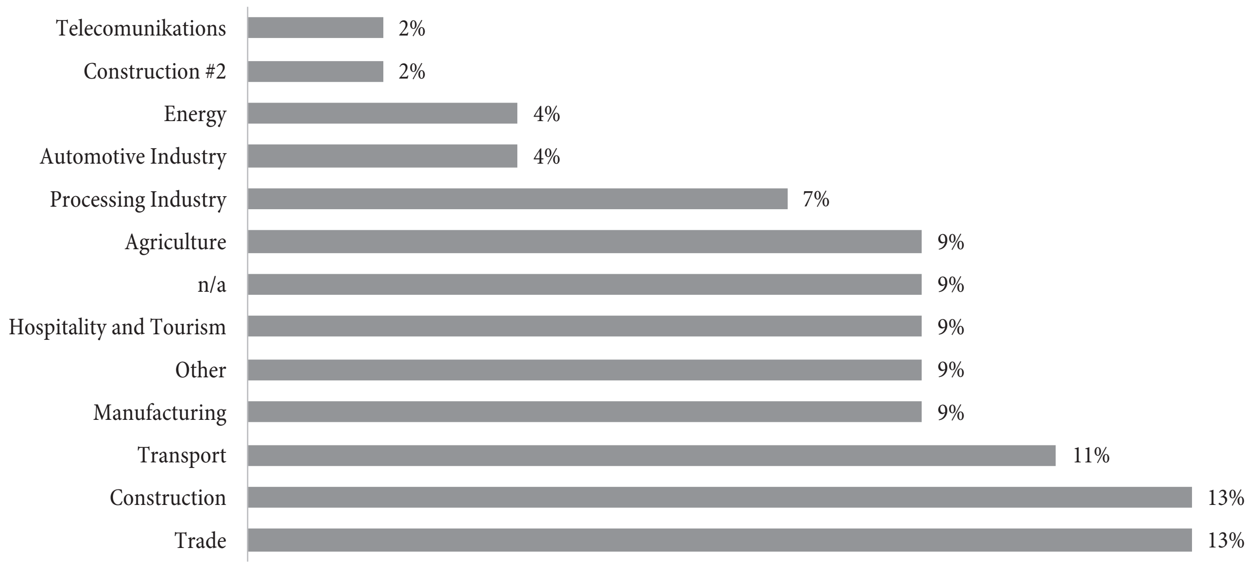


Figure 10. Industries that banks are reluctant to finance (regardless of ESG)

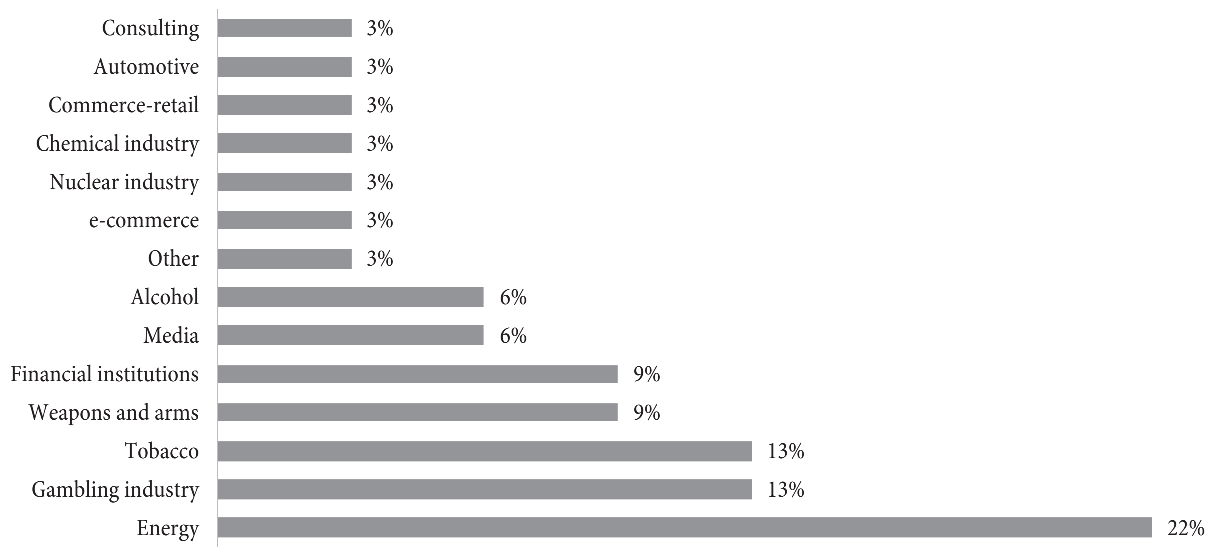
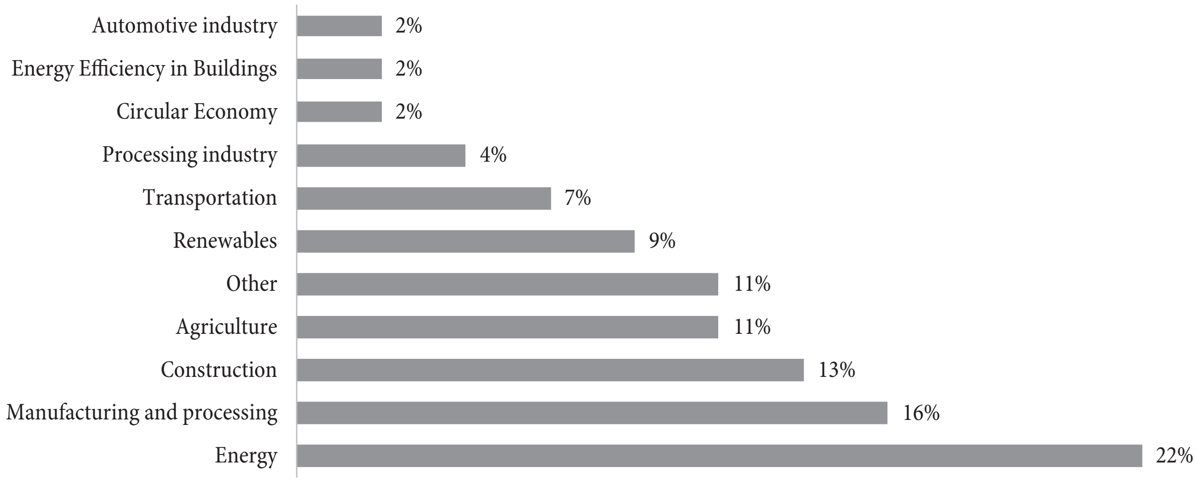


Figure 11. Industries where banks would invest more in the future for providing ESG products



The graph on Figure 11. highlights the industries and segments that banks are currently financing the most for SMEs. Manufacturing and processing lead as the most financed sector, reflecting a significant focus on this industry. Other important sectors receiving substantial financial support include commerce, agriculture, hospitality and tourism, and transport. These industries represent core areas where banks see potential for growth or stable returns in their SME lending portfolios. Meanwhile, sectors like energy, construction, and the automotive industry receive comparatively less attention, indicating that banks might prioritize more traditional or higher-demand industries in their current SME financing strategies.

Focus Group Discussion: Validating the Findings and Expanding Perspectives

A moderated focus group, involving over 20 participants from banking, SMEs, academia, the public sector, and civil society, was conducted to validate and expand on the questionnaire findings. This session provided deeper insights into the challenges and opportunities associated with ESG integration in the Serbian banking sector. The focus group broadly confirmed the results of the questionnaire. Participants from the banking sector acknowledged the uneven integration of ESG practices, particularly in the environmental and social dimensions. Systemic banks were recognized for being more advanced in adopting ESG policies, though these efforts were often limited to internal procedures without broader external accountability or transparency.

The participants also emphasized the need for more substantial support for SMEs, particularly in terms of access to green finance and advisory services. The lack of awareness and capacity among SMEs to apply for ESG-related products was highlighted as a critical barrier, reflecting the banks' own assessment from the questionnaire.

Challenges in ESG Implementation

Several key challenges were discussed during the focus group, aligning with the questionnaire's findings as follows:

- *Lack of SME Capacity* - SMEs in Serbia often lack the knowledge and resources to engage with ESG financing options. This issue was identified as a major barrier to expanding green finance and improving environmental performance in the sector.
- *Data and Reporting Gaps* - The availability and quality of data on ESG performance, particularly in the SME segment, remain significant challenges. Banks noted that without clear reporting standards, it is difficult to assess and monitor ESG risks effectively.
- *Regulatory Uncertainty* - While there is growing recognition of the importance of ESG, the lack of clear regulatory frameworks, especially regarding ESG reporting for SMEs, was seen as a barrier to progress.

Opportunities for Growth and Innovation

Despite the challenges, the focus group identified several opportunities for banks to innovate and expand their ESG offerings:

- *Green and Social Finance Products* - Participants highlighted the potential for banks to develop new financial products that address both environmental and social challenges, such as loans for renewable energy projects or social impact bonds.
- *Partnerships and Collaborations* - The focus group also emphasized the importance of collaboration between banks, the public sector, and civil society to create a supportive ecosystem for ESG finance. Partnerships with international institutions were seen as particularly valuable for expanding access to green finance.
- *Reputation and Brand Development* - Improving ESG performance was seen as a way for banks to enhance their reputation and brand value, particularly in a market that is increasingly conscious of sustainability issues.

Recommendations for Enhancing ESG Integration

The discussion generated several recommendations for improving ESG practices within the Serbian banking sector, particularly in relation to SME financing:

- *Expand Green Finance Offerings* - Banks should develop more targeted financial products that support energy efficiency, renewable energy, and other environmentally sustainable practices among SMEs.
- *Strengthen Social Responsibility Policies* - Banks need to enhance their social responsibility frameworks, ensuring that they promote inclusive and equitable financing practices that align with labor laws and social protections.
- *Improve ESG Data Collection and Reporting* - There is a need for standardized ESG reporting practices, particularly for SMEs, to ensure that banks can accurately assess and manage ESG risks.
- *Foster SME Education and Capacity Building* - Banks should play a more active role in educating SMEs about ESG principles and providing advisory services to help them improve their sustainability practices.

Conclusions and recommendations

The integration of ESG principles across industries and in banking practices is increasingly seen as essential for achieving sustainable economic growth. Small open economies, which are vulnerable to external shocks, have a unique opportunity to leverage ESG to build resilience and attract foreign investment. For SMEs, ESG integration can be challenging due to resource constraints, but the long-term benefits, including better access to finance and improved competitiveness, are significant. Banks are central to driving this transition, with the ability to offer financing solutions tailored to the ESG risks and opportunities of different industries. However, the adoption of ESG principles varies widely across regions and sectors, and there remains significant work to be done in developing standardized frameworks and products to meet the growing demand for sustainable finance.

Thus, in this paper, utilizing a combination of methodologies, authors aimed to address the research question: *"How are Serbian banks integrating ESG principles into their financing of SMEs, and what are the key challenges and opportunities in advancing sustainable finance within the Serbian banking sector?"*. Through a structured approach, we have explored the current level of ESG integration in bank-SME relations, identified barriers to the adoption of sustainable finance practices, and highlighted the opportunities for enhancing ESG-driven financial products. The analysis provides valuable insights into how Serbian banks are navigating the complexities of sustainable finance and the critical role SMEs play in this evolving financial landscape.

The integration of ESG practices in the Serbian banking sector remains at an early stage, particularly in relation to SME financing. While systemic banks have made progress in developing internal ESG policies, there are significant gaps in transparency, product offerings, and the social and environmental dimensions of sustainability. The results of the questionnaire and the focus group discussion suggest that there is substantial room for improvement, particularly in supporting SMEs to engage with ESG finance. Through the development of innovative products, stronger social responsibility frameworks, and enhanced data collection and reporting, banks can play a critical role in advancing sustainable finance in Serbia.

The integration of Environmental, Social, and Governance (ESG) principles into the banking sector is becoming increasingly essential, particularly as financial institutions face rising pressure to contribute to sustainable development. This study focused on examining the current state of ESG practices within the Serbian banking sector, with a specific emphasis on banks' interactions with SMEs. By utilizing both a structured questionnaire and a moderated focus group, the research aimed to uncover the depth of ESG policy implementation, the availability of sustainable financial products, and the challenges faced by both banks and SMEs in adopting these practices.

The findings from this study demonstrate that while there has been some progress in the adoption of ESG principles, particularly among systemic banks, significant gaps remain in both the breadth and depth of ESG integration. Of the 17 banks surveyed, 71% reported having ESG policies, yet many of these policies are internal and not publicly accessible, suggesting a lack of transparency in how banks are addressing sustainability challenges. Furthermore, the environmental component of ESG is weakly represented, with only 47% of banks offering financial products such as green loans or energy efficiency financing to SMEs. This is compounded by the fact that 35% of banks offer no environmentally oriented products at all, highlighting a considerable gap in market offerings for SMEs striving to adopt sustainable practices.

The social dimension of ESG presents even greater challenges. A notable majority of banks (59%) do not have policies in place to promote social responsibility in their financing of SMEs. Issues such as labor rights, compliance with employment laws, and social risk management are often overlooked, with many banks not evaluating these factors when making lending decisions. Similarly, community engagement is limited, with 82% of banks not consulting local communities before making financing decisions that could impact them. These findings highlight the need for a stronger focus on social inclusivity and responsibility within the banking sector.

Governance practices, while somewhat stronger, still reveal areas for improvement. While 59% of banks reported assessing the transparency of their SME clients' operations, only 35% ensure that SMEs implement necessary data protection procedures. This gap in governance poses risks, particularly as regulatory demands around data privacy and security continue to increase globally. The study also found that 76% of banks do not have clear guidelines for ongoing risk management of SMEs, underscoring the need for more robust governance frameworks.

The focus group discussion provided additional validation of these findings and brought to light several key challenges. A lack of SME capacity and awareness regarding ESG principles emerged as a critical barrier, alongside data quality and reporting challenges that complicate the banks' ability to assess and manage ESG risks effectively. Furthermore, regulatory uncertainty, particularly around ESG reporting for SMEs, continues to hinder progress.

Despite these challenges, the study identified several opportunities for growth and innovation in ESG finance. Banks, particularly systemic institutions, have the potential to lead by example through the development of new green and social financial products. Partnerships between banks, the public sector, and civil society were highlighted as key drivers of future progress. Moreover, enhancing ESG reporting, improving transparency, and offering capacity-building initiatives for SMEs could significantly improve the overall impact of ESG integration within the banking sector.

In wrapping it all, while the Serbian banking sector has made strides in incorporating ESG principles, particularly in the governance dimension, the environmental and social aspects remain underdeveloped. The study underscores the need for banks to expand their offerings of green financial products, enhance their social responsibility policies, and adopt more transparent and accountable ESG practices. By addressing these gaps and leveraging the opportunities identified, Serbian banks can not only improve their own sustainability performance but also support the broader economy in transitioning to a more sustainable and responsible future.

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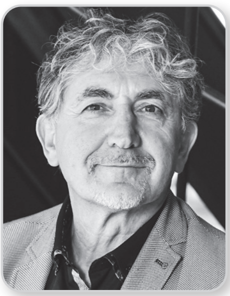

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