

Sustainable Finance: Primary barriers, drivers and opportunities for banking institutes to finance sustainability-linked loans for small and medium-sized enterprises

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Abstract

This study investigates the primary barriers, drivers, and opportunities for banking institutions to finance sustainability-linked loans (SLL) for small and medium-sized enterprises (SME). These companies are crucial to the sustainable transition, but they are often excluded from sustainable finance instruments, such as SLLs. Using a qualitative research design, data were collected through six semi-structured expert interviews with banking professionals in Austria and the Netherlands, bringing insights from an emerging (Austria) and mature sustainable finance markets (The Netherlands). The findings reveal that major barriers include the lack of reliable sustainability data from SMEs, limited resources for ESG reporting, complex KPI-setting processes, low financial incentives, and concerns about greenwashing. Additionally, regulatory uncertainty and insufficient client demand, especially in the Austrian market, were identified. On the other hand, key drivers include growing regulatory and investor pressure, internal institutional motivation, and the interest from stakeholders on the banking institutes sustainability improvements. The study also identifies opportunities such as the adoption of standardized ESG ratings (e.g. EcoVadis) for SMEs and the development of SME-specific SLL guidelines from institutions such as the LMA. To sum up, the research highlights the urgent need for regulatory clarity, practical tools, and targeted incentives to expand the accessibility and effectiveness of SLLs in the SME sector.

Key Words: Sustainability-Linked Loans, ESG-Linked Loans, Sustainable Finance, Small and Medium-Sized Enterprises, Corporate Sustainability Reporting Directive, Austria, The Netherlands

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1. INTRODUCTION

Global temperatures are rising, and the impact of climate change is increasingly recognized as human-induced. The devastating consequences for our planet can no longer be ignored. (NASA Science, 2024)

The IPCC's reports emphasize that behavioural change is required across all sectors. The financial industry, in particular, plays a crucial role in facilitating this transition. It directs investments that can fund the shift toward sustainability in business, consequently, accelerating the move to a low-carbon, circular economy (NASA Science, 2024; Schoenmaker, 2018).

While much research has focused on the barriers to "Green Finance" (which centres on environmental goals), this study will focus on "Sustainable Finance." According to the European Parliamentary Research Service (2021), sustainable finance integrates a broader set of objectives, including environmental concerns, social inclusion, labor rights, and governance standards. Its goal is to foster long-term investments in sustainable economic activities and projects (Cheung et al., 2022; Kharb et al., 2024; Mustaffa et al., 2021; Spinaci, 2020, 2021).

The adoption of sustainable finance in the commercial banking sector is particularly critical, as banks are considered the backbone of the European financial industry. Additionally, literature suggests that public funds alone are insufficient to support the sustainable transition to a climate-neutral economy. The banking sector, therefore, must be part of the solution, but there are further reasons for its importance; First, sustainable finance strengthens the resilience of the financial sector by addressing long-term risks related to climate change and environmental degradation by diversifying their asset portfolios through sustainable products (Câmara & Morais, 2022; European

Commission, 2018; NGFS, 2019; Oesterreichische Nationalbank, 2020; Schoenmaker, 2018). Second, as consumer preferences shift toward more responsible purchasing and investment, banks must account for the sustainability impacts of their product portfolios. Moreover, a company's ability to meet financial obligations like loan repayments, is increasingly influenced by how it addresses climate risks. Financing sustainable companies, therefore, reduces the risk of loan defaults (Carney, 2017; Chien et al., 2021; Klapper, 2017).

Banks also support the transition by collecting and providing data on sustainable investments, offering insights into their economic implications. Furthermore, banks, which have a lot of experience with international sustainability standards, can act as knowledge providers and hold SMEs accountable for their ESG (Environmental, Social, Governance) goals, which can directly affect the interest rates applied to their loans (Schoenmaker, 2018).

Such financial products are SLLs, which have emerged as a major source of sustainable debt, reaching an issuance volume of USD 735 billion. In comparison, the green and social bond markets amounted to USD 517 billion and USD 193 billion in 2021. Despite its relative size, sustainable financing remains largely inaccessible - particularly to SMEs. Although considerable research has explored SLLs for larger companies, there is a notable lack of focus on SMEs, despite them playing a vital role in the European economy, representing over 99% of all businesses and accounting for approximately 60% of business-related greenhouse gas emissions (Cheung et al., 2022; Chien et al., 2021; European Commission, 2023; Kaave, 2023)

Regarding the effect of SLLs on SMEs, literature suggests that the competitiveness of an SME improves when taking up SLLs as a financing option. Additionally, Oyewole et al. (2024) argued that SLLs for an SME could have the positive effect of a reduction of operational costs, resource

efficiency and an overall reduction of sustainability related risk, since SLLs would support the process of aligning the business operations with ESG criteria. It is further discussed that SLLs can positively influence the brand reputation, customer loyalty and the attractiveness from other social-responsible investors for SMEs. However, in general it is still open for discussion if the adoption of SLLs positively influences the environmental and social impact of small companies (Oyewole et al., 2024; Rink, 2024). Though there are presumably a lot of positive effects from SLLs on SMEs, they often face significant challenges in accessing finance due to high costs, communication barriers around sustainability goals, and limited funding. As a result, many turn to the informal financial sector, which tends to be more expensive and still often insufficient to meet their needs (Cheung et al., 2022; Kaave, 2023).

While the financial industry has responded to the growing demand with products like Green Bonds, Sustainable Funds, Green Loans, and Sustainability-Linked Loans, these offerings are still emerging and niche (Liang & Renneboog, 2020). Despite the extensive literature on the definitions of Sustainable Finance, Green Finance, and Responsible Impact Investing, there is a lack of guidance on how banks can successfully incorporate sustainable products into their portfolios (Cheung et al., 2022; Kharb et al., 2024; Mustaffa et al., 2021).

Considering these gaps, the central research question of this study is:

What are the primary barriers, drivers, and opportunities for banking institutions to finance sustainability-linked loans (SLLs) for small and medium-sized enterprises (SMEs)?

This research draws on insights from experts in the Austrian and Dutch financial markets. Austria's green finance sector has grown significantly since the 2008 financial crisis. According to Ziolo et al. (2019), Austria ranks highly among EU countries in terms of sustainable development and

finance. However, the Austrian market remains underdeveloped compared to international standards, relying heavily on mutual funds supported by institutional- rather than private investors. It also faces challenges such as low customer awareness and an urgent need for greater transparency and standardization to prevent greenwashing (Oesterreichische Nationalbank, 2020; Ozili, 2022; Ziolo et al., 2020).

The Netherlands, also classified in the same category by Ziolo et al. (2019), offers more opportunities for individuals to invest in green projects. According to the European SRI Study (2018), the Netherlands was one of the two leading countries in sustainability-themed investments in 2016. Dutch financial institutions have increasingly adopted ESG and SRI policies, reflecting a more mature market (European Commission, 2018; Ozili, 2022).

The contrast between Austria's developing and the Netherlands' more advanced sustainable finance market provides a compelling context for this study. By including expert perspectives from both countries, the research benefits from insights into both emerging and mature markets, which provides the possibility of answering the research question in a more comprehensive way.

To further clarify the scope, the following sub-research questions guide this study:

- 1. What are the main barriers preventing banks from providing more sustainability-linked loans to SMEs, even when such products are already part of their offerings?
- 2. What are the key drivers encouraging banks to expand their provision of sustainability-linked loans to SMEs?
- 3. What previously unidentified opportunities exist for banks in offering sustainability-linked loans to SMEs?

The purpose of this study is to firstly fill the knowledge gap identified through the literature review regarding the practical deployment of SLLs for SME. Secondly, it is to inform and inspire banking institutions to integrate SLLs into their portfolios or adapt their credit approval processes accordingly.

2. THEORY

This chapter is structured into three different segments: introduction to SLL, the definition of SMEs, and the examined barriers and drivers in the existing literature. This provides the foundation for a structured analysis and forms the basis for the interview framework and data analysis.

2.1 Introduction to the Sustainability-Linked Loans (SLL)

As previously discussed, the financial industry can act as a catalyst for sustainable development. A financial tool that supports this is SLLs, which are designed to engage borrowers in achieving sustainability goals by linking loan terms, such as the interest rates, to the borrower's performance on predetermined ESG indicators. The first SLL was introduced in 2017 by ING for companies such as Philips (Mees, 2022; Oesterreichische Nationalbank, 2020; Schoenmaker, 2018).

Since then, SLLs have grown to become a significant component of the sustainable debt market. Although SLLs offer a more flexible alternative to green loans, since they are not limited to financing green projects but can be used for general corporate purposes, the overall accessibility of sustainable finance remains limited, particularly for SMEs. Further, this product requires high transparency from the borrower in order of being able to set material-specific key performance indicators (KPIs) and follow the stipulated reporting duties (Câmara & Morais, 2022; Du et al., 2022; Kaave, 2023; Pohl et al., 2023).

Given the high risk of greenwashing, borrowers must make substantive contributions toward the goals of the Paris Agreement through material KPIs. To assure the integrity of the product, the Loan Market Association (LMA) has issued voluntary guidelines outlining the essential characteristics of SLLs. These include clear sustainability objectives, which are stipulated by

contracts between the lender and the borrower. Secondly, the guidelines also state that the goals must be ambitious and linked to the loan terms. However, aims can be set internally or externally by independent providers with external rating criteria. The third step includes reporting and keeping data about the sustainability performance targets (SPTs) up to date. Lastly, SLLs include a review process, where the lender evaluates if the borrower reached its SPTs (International Capital Market Association, 2019; Mees, 2022)

Notably, the LMA updated its standards in March 2025—during the research process for this study. The revised guidelines introduce stricter requirements: data provided by the borrower must be verified by an auditor with an assurance statement, and the selection process for KPIs and SPTs must ensure that they are quantifiable, benchmarked, relevant, and well-defined. SPTs must also reference scientific benchmarks or peer comparisons and go beyond "business as usual" and regulatory compliance (International Capital Market Association, 2025).

Typically, SLLs pricing includes a standard interest rate and a discounted rate, if ESG targets are met. A penalty may be applied if targets are missed. However, literature shows that while 99% of SLLs include interest reductions upon successful performance, only 57% include penalties for underperformance, indicating a relatively weak reward–penalty mechanism. Studies show the average credit spread reduction ranges from 2 to 25 basis points (Dursun-de Neef et al., 2023; Carrizosa & Ghosh, 2023; Hsu et al., 2024; Pohl et al., 2023).

2.2 Definition of Small and Medium Sized Enterprises (SMEs)

Since this study focuses on SMEs in the European market, the definition used during this research is the following: The European Commission defines SMEs as enterprises with fewer than 250

employees, an annual turnover of less than €50 million, or a balance sheet total not exceeding €43 million (European Commission; 2003).

A key issue for SMEs to obtain SLLs is the lack of reliable sustainability data that banking institutes need for the KPI setting process - often due to resource constraints and limited expertise. Even though ESG performance measures could be a useful tool to collect data, these ESG performance ratings by agencies are inconsistent and vary depending on methodology, limiting comparability. For listed companies, banks may rely on ratings such as those from Sustainable Morningstar or Moody's ESG. However, the criteria banks use to select KPIs for SLLs remain opaque (Edmans & Kacperczyk, 2022; Kaave, 2023; Liang & Renneboog, 2020).

The implementation of the Corporate Sustainability Reporting Directive (CSRD) may address this issue, especially as larger companies increasingly require supply chain transparency, indirectly affecting SMEs. However, the final scope of CSRD remains uncertain due to pending omnibus legislative packages, which still must go through the European Parliament and the Council of the European Union. This would consequently reduce the scope of the CSRD drastically. On the other hand, the European Commission emphasizes that ESG reporting will become a necessary element of future financial transactions (Accountancy Europe, 2025; Holsen Meier & Rosland Elseth, 2023; Kaave, 2023; Liang & Renneboog, 2020)

All in all, SMEs currently try to satisfy their financing needs by using the informal financing sector, which makes it very costly, and the funding is still often not sufficient. Furthermore, there is conflicting data within academia if companies with higher environmental and social concerns typically face higher interest rates on loans compared to those without such concerns, or if they have lower interest rates than comparable loans. Loumioti and Serafeim (2002) argue that SLLs

have on average up to 20% lower interest rates. Banks normally price risk, meaning higher interest rates are applied when perceived risks are greater. It could therefore be argued that companies addressing climate change through sustainable practices may represent lower long-term risk, as they are already accounting for climate-related challenges within their business models, which makes sustainability-transitioning SMEs customers with lower risk for banking institutes (Hossain et al., 2023; Schoenmaker, 2018; Liang & Renneboog, 2020; Loumioti & Serafeim, 2022).

2.3 Barriers and Drivers for the adoption of SLLs for SMEs

The provision of SLLs for SMEs is influenced by various barriers and drivers, which require a systematic approach to address these different factors. Drawing from the frameworks of Cheung et al. (2022) and Chien et al. (2021), a conceptual model was developed to analyse these factors. While these frameworks primarily address the adoption of green finance by SMEs and the climate-related influencing factors on financial institutions, their categories were adapted and validated with SLL-specific literature. For the literature research, terms were used including *Sustainable Finance*, *SMEs*, *Sustainability-Linked Loans*, and *ESG-linked Loans*. Sources included not only academic papers but also policy documents to understand the broader context of the topic.

Consequently, the identified literature was allocated to the different categories following these definitions:

The *Economic Market aspects* include the structural and practical considerations of the market influencing the provision of SLLs, such as the costs of SLLs, market failures (e.g., imperfect or asymmetric information), financial incentives, risks (e.g. reputational risk, transition risk,...) and the general demand for the product. In the literature this category has already been thoroughly

discussed, however, a further validation of the already identified insights might confirm robustness across different contexts or might identify limitations or errors.

The *Organisational/Management category* encompass considerations related to internal organizational processes, governance, and management practices. Consequently, this includes barriers and drivers occurring internally of a banking institute, such as those related to the credit risk analysis process. Researchers have already identified this category as significant, making it a validated area for further exploration and refinement of existing insights. Since previous studies have uncovered more barriers than drivers, it would be particularly interesting to see whether additional drivers emerge during this research.

The *Behavioural category* entails the relevance of mindsets, values or attitudes of individuals for the SLL uptake. This includes the interest from bank employees, and the trust in the product by bank employees. The literature has not explored these aspects in the context of the SLL process. Therefore, uncovering barriers and drivers that fall within this category would constitute entirely novel insights.

The *Economic Non-Market category* covers internal economic limitations not caused by external market dynamics. It includes considerations such as the availability of resources within a banking institution, independent of market forces. Previous research has not identified any specific drivers in this area. Overall, this category could benefit from dedicated research, as it remains underexplored in the existing literature.

The *Political-Institutional group* is defined by summarizing aspects such policies influencing the provision of sustainable finance, policy gaps and the influence of other regulators interacting with

banking institutes. While previous research has provided some insights into this area, the constantly evolving political landscape makes it essential to analyze how new developments are shaping the behavior of banking institutions.

Lastly, the *Socio-Cultural aspects* describe public attitudes, cultural norms and climate scepticism. In some markets, being a first mover on climate initiatives is seen as risky, further discouraging action. Another category that has been neglected from previous research and needs further exploration.

The following table (Figure 1) maps the identified barriers and drivers from the literature under these categories. This conceptual model serves as a guide rather than a rigid framework, allowing for additional findings outside predefined categories.

Table 1:

Identified barriers and drivers in the literature structured along the categories from Cheung et al. (2022) and Chien et al. (2021):

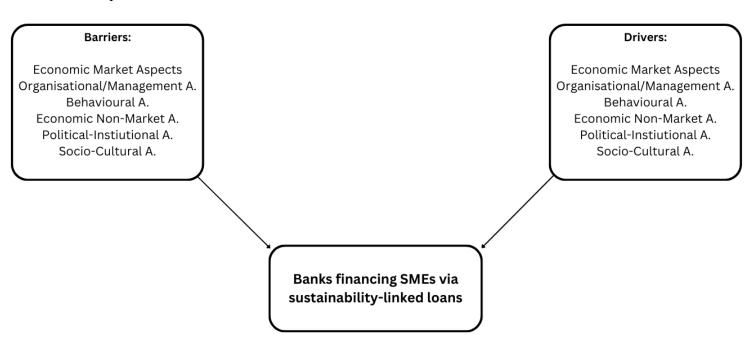
	Sub-Categories	References				
Economic Market Aspects						
Barriers:	Data-availability about sustainability of SMEs	(Câmara & Morais, 2022)				
	SMEs lacking sustainability resources	(Auzepy et al., 2022)				
	Loose KPIs can damage the reputation of the financial institute → risk of Greenwashing	(Carrizosa et al., 2023)				
	Reward for borrowers relatively small	(Auzepy et al., 2023)				
	Spread ("Greenium") between SLL and Conventional Loans do not differ	(Carrizosa et al., 2023)				
Drivers:	Addressing environmental risks strengthen banking sector stability	(Pinto et al., 2024; Murè et al., 2025)				
	SLL strengthen corporate financial resilience	(Kern, 2015; Câmara & Morais, 2022)				
	SLLs signals to stakeholders, investors, and customers, commitment to ESG objectives and practices \rightarrow increase in company's reputation	(Pop & Atanasov, 2021; Kaave, 2023)				
	Customer surveys suggest that demand for sustainable finance products will grow	(Oesterreichische Nationalbank, 2020)				
Organisational/ Management Aspects						
Barriers:	Methodological challenges/ Credit risk analysis	(Câmara & Morais, 2022; Hossain <i>et</i> al., 2023)				
	Difficulties in incorporating ESG factors into risk management frameworks	(Murè et al., 2025)				
	Sustainability adjustments might not be sufficient enough to promote sustainable performance	(Carrizosa et al., 2023)				

Drivers:	SLL improves ESG performance	(Dursun-de Neef et al., 2023)
Behavioural Asp	pects	'
Barriers:	No identified barriers in the literature	
Drivers:	No identified drivers in the literature	
Economic Non-N	Market Aspects	
Barriers:	Proceeds from SLL too expensive	(Pinto et al., 2024)
Drivers:	No identified drivers in the literature	
Politicial-Institu	tional Aspects	
Barriers:	Lack of comprehensive regulation for the use and issuance of SLLs	(Murè et al., 2025)
Drivers:	Basel III requires to assess environmental risks	(Kern, 2015)
	Regulatory pressures banks to assess climate risks	(Pinto et al., 2024)
	Central banks and financial supervisors focus on risks of the climate-finance nexus	(Oesterreichische Nationalbank, 2020)
Socio-Cultural A	Aspects	
Barriers:	Financial industry pays little attention to climate risks in balance sheets	(Oesterreichische Nationalbank, 2020)
Drivers:	Increasing sustainability awareness of companies	(Dursun-de Neef et al., 2023)
	Pressure increasing to consider the natural environment the financial sector	(Ziolo et al., 2019)

By analysing these factors through the conceptual model, this study aims to generate practical insights on how to enhance the adoption of SLLs among SMEs. Figure 1 presents a visual representation of the applied framework synthesized from existing literature.

Figure 1:

Conceptual Framework



Adapted from Cheung et al. (2022) and Chien et al. (2021)

3. METHODS

To explore perspectives, motivations, and challenges in financing SMEs through SLLs, a qualitative research approach is used. Moreover, as implementing SLLs may require a shift in mindset within financial institutions, the research must delve beyond surface-level information to explore motivational drivers. A qualitative approach is therefore appropriate, as it allows for the capture of nuanced insights from various perspectives within banking institutions (Edmondson & Mcmanus, 2007; Graebner et al., 2012; Markvart, 2009).

3.1 Data Collection

The data for this research was collected through semi-structured interviews between March and April 2025 with experts from different banking institutes from the Austrian and Dutch market.

The semi-structured interview format provides the necessary flexibility needed for this type of research but also ensures that key topics are being discussed. Although main questions were prepared in advance, the order was flexible, and follow-up questions were asked to clarify or dig deeper into specific topics. The interview guide can be found in Appendix B. Except for one, all interviews were conducted online and all of them were recorded so that it was easier to transcribe and code afterwards.

The study employed expert sampling, targeting specific roles within banks that could provide relevant insights. This non-random technique assumes that certain individuals are best positioned to offer information aligned with the research objectives. Further, Appendix A outlines the interviewees' roles, interview dates, and durations.

However, expert sampling introduces a risk of researcher and observer bias. To mitigate this, a standardized protocol was followed to ensure consistency in how interviews were conducted and data recorded (Bhandari, 2021).

Another potential limitation is social desirability bias, where respondents might provide answers they believe are favorable or expected to possibly portray their institutions as more sustainable than they actually are (Nikolopoulou, 2022). So, the interviewee might give different answers compared to the real situation, ensuring that their firm is not blamed for unsustainable behavior after the interview. To reduce this bias, participants were asked to sign a consent form outlining the purpose of the research, ensuring anonymity, and confirming there were no associated risks. The form also emphasized that participation was voluntary and that participants could withdraw at any time. Signed consent forms are included in Appendix C.

3.2 Data Analysis

Once interviews were transcribed (see Appendix C), data analysis began using a grounded theory approach. Interviews 3 and 6 were conducted in German and then first transcribed and translated in English. This method, commonly used in qualitative research, helps identify themes and derive meaning from data. Coding was performed manually using ATLAS.ti.

The analysing process consists of three coding phases: open, axial, and selective coding. The first phase is characterized by creating first categories of information and it enables the identification of first patterns and emerging sub-categories. The axial phase requires the application of the conceptual framework since the predefined codes from phase one are being refined and grouped into corresponding categories from the adopted conceptual framework.: Economic Market Aspects,

Organisational/Management A., Behavioural A., Political Institutional A., Socio-Cultural and Economic Non-Market A.. Lastly, the selective coding phase is being used to identify the main thematic categories to create an approach to data framing, which aligns with the research goal. The output of this process is a constructed narrative that links findings to the research aims (Creswell, 2009; Khalil, 2014).

The coding structure can be found in Appendix C with the listed codes, their definitions, their allocated themes and some quotation examples.

3.3 Ethical Considerations

Before conducting the interviews, the stated research design was assessed along the Ethics Guidelines of RUG so that the attendees' values are being respected. The "CF Research Ethics Checklist for MSc Student Projects" was completed and approved by the research supervisor. The checklist is included in Appendix D.

Each interviewee received an information sheet and a consent form before doing the interview. To make sure that the interviewees knew before conducting the interviewees what the research is about, its purpose, risks and that their answers will be anonymized.

Confidentiality have been ensured, consequently, all the audio recordings were deleted after transcription, and the transcriptions are stored in a Google Drive folder of University of Groningen, which is accessible to the researcher and the assessors of this research paper.

4. RESULTS

Based on six expert interviews several barriers and drivers influencing the adoption of SLLs for SMEs were identified. These aspects were categorized based on the conceptual model.

4.1. Barriers

While the literature emphasizes SLLs as a promising tool to finance companies in their transition to sustainable business models, SMEs in particular face numerous barriers that must be addressed to make these financing options more accessible.

4.1.1. Economic Market Aspects

The barrier that has been mentioned the most by the experts is the *insufficient sustainability data*, which the SMEs would need for the KPI setting process. 5 out of 6 interviewees explained that this is definitely an issue that they are facing (I2, I3, I4, I5, I6). As Interviewee 2 stated: "So as I said, the smaller companies as the SMEs have huge difficulties in getting the reporting in place" (I2).

Interviewee 3, 4 and 6 even explained that this is one of the main reasons, why they do not have SLLs in their product portfolio for SMEs. Interviewee 6 also noted that beyond this factor, the risk of *greenwashing* and potential backlash is too great for the company to offer SLLs. They said: "And you can get there very quickly. The danger of greenwashing because such a green electricity quota is nice. But that doesnt necessarily have a massive impact" (I6).

Interestingly, Interviewee 3, 5, and 6 acknowledged the *CSRD* as a significant incentive for SMEs to improve data availability and allocate resources toward sustainability reporting. As Interviewee 6 explained the data, they would have received, would have been quite reliable. However, the

postponement through the omnibus package hampered this development. As Interviewee 3 sums up: "but this stop and go and yes and no and we do and do nothing, so they [European Union] have now destroyed it [the willingness for more climate protection] all together" (I3).

Contradicting this perspective, is Interviewee 2 with the statement that SMEs will report to larger companies anyways and that they should simply "go with the flow" (I2) and that it is just politics.

Another aspect, which has been mentioned by half of the interviewees, is the *lack of demand for SLLs*. However, all participants who cited this barrier were based in Austria, raising the question of whether it stems from the underdevelopment of sustainable finance in the Austrian market.

Even if the SMEs would be willing to report on sustainability reporting, they often face the issue of a *lack of resources* to allocate to the preparation of the company for the SLL. Interviewee 3 explained: "do they even have the resources to set up valid reporting, both in terms of money and people, at least to the extent that it is suitable for a sustainability linked loan, because of course it's not something that I do on the side and then maybe someone takes care of it." (I3). Furthermore, even with sufficient willingness and resources, Participants 2, 5, and 6 noted that the economic benefit for SMEs remains too small to justify the additional data effort.

4.1.2. Organisational/Management Aspects

First of all, the *KPI setting process* is difficult, since the KPIs must be science-based, benchmarked, material, and ambitious, otherwise they would not follow the LMA regulations (I2, I4). Interviewee 2 explained that an ESG rating might be the right path for SLL addressing SMEs, since not specific KPIs but rather the company as a whole would be analysed according to an ESG rating such as EcoVaris, which could make the reporting process easier. Contrary to that, Interviewee 4 argued

that an ESG rating is risky for some companies, since the firm has less power over the overall improvement of this one figure. Additionally, they mentioned that the methodology could also change, which would cause uncertainty for the enterprise. As Interviewee 3 stated: "when it comes, for example, to their methodology changing, that's not something you can really track in [...] on the documentation. So yeah, there was I think the last few years big shift towards KPIs" (I3).

Another barrier mentioned relates to the initial assumption that adopting SLLs would positively influence an *SME's ESG performance*. The rationale behind offering SLLs can be to encourage clients to become more sustainable borrowers. However, as Interviewee 2 points out: "So the verdict is out there, whether SLLs have any impact, it is undecided" (I2).

Also addressing the importance of ESG performance is Interviewee 6 by saying this: "we don't know the level of ambition that the company has set itself, so we can't judge it. Are the company now making a suggestion in the social area that they would have implemented anyway or that has perhaps already been fulfilled." (I6) This statement highlights a key challenge related to the LMA standards, which require KPIs to be ambitious and go beyond business-as-usual. The resulting uncertainty regarding the authenticity and ambition of set goals can raise concerns about greenwashing, especially when there is insufficient data from the borrower to verify impact.

4.1.3. Behavioural Aspects

The behavioural barrier is primarily characterised by a *lack of trust in the SLL product* among borrowers. Interviewee 4 explained this scepticism by noting that the process of obtaining such a loan initially appears overwhelming. Additionally, sustainability managers often need to explain the SLL process to various stakeholders within their companies, making it challenging to build

early confidence in the product. Interviewee 5 noted that their role often involves extensive communication with potential clients to clarify not only the requirements of SLLs but also the broader implications of adopting it: "So they really do it from a financial perspective. They view it and I always try to encourage them to look at it from a more holistic view and the strategic view" (15).

4.1.4. Economic Non-Market Aspects

The cost and effort that comes with providing SLLs for SMEs, as explained by Interviewee 3 and 4, is not economically sustainable enough for banks, since the creation of KPIs can be lengthy, and the development process of SLLs requires a lot of effort and entails a lot of bureaucracy. Interviewee 4 noted, the number of financial resources and needed time would not be worth spending on smaller volumes of SLLs, since the interest rate the banking institute would receive for it would not cover the effort spent on SLL for SMEs. Interviewee 3 explains: "But I believe that the potential would be too small for us, so to speak, in the sense that it would of course mean too much effort." (13)

4.1.5. Political-Institutional Aspects

In terms of *national regulatory conditions*, Interviewee 1 discussed that in the Netherlands, it is becoming increasingly difficult to offer sustainable finance products, as the government is gradually withdrawing its support for sustainable initiatives.

On the other hand, Interviewee 1 noted that the European Union is generally supportive of sustainable finance. However, Interviewee 2 argued that the *EU taxonomy* is often too complex to apply in practice, particularly because the Do-No-Significant-Harm criteria are difficult to fulfil.

Furthermore, 5 out of 6 interviewees agreed that the *Green Asset Ratio* (GAR) is not an effective incentive for banks to increase their sustainable assets. This is primarily because GAR requirements do not align well with their business models, and expectations are that GAR values will remain very low, because the loans would have to meet an extensive number of criteria to qualify for inclusion, something seen as unfeasible by most institutions. Interviewee 2 states regarding the motivation of improving the GAR: "If it all stays at very low percentages, you know you better stop with it because then then it's not motivating at all" (I2).

Additionally, the *CSRD* as an EU regulation has already been discussed under the chapter "Economic Market Aspects", in regard to the data availability of SMEs.

Another barrier is *regulatory uncertainty* that is influencing the behaviour of banking institutes. For example, there was no consensus among interviewees on whether SLLs can be included in GAR calculations. While Interviewee 5 confirmed that their institution includes SLLs in the GAR, Interviewee 4 explained that, since they issue general-purpose loans, it is not allowed to include them under GAR. Interviewee 2 summarized the situation by stating that there are still a lot of conversations needed within the EU to refine the GAR, so that it is actually useful for banks.

Interviewees 1 and 5 would hope for *clearer regulations* on how to structure SLLs so that all banking institutions apply the same standards. Interviewee 5 especially emphasized the need for specific guidance on SLLs targeted at SMEs. It is important to note that the updated LMA standards, released on 26 March 2025, had not yet been addressed in these interviews. Interviewee 5 justified this need for clearer standards by stating: "And we had the feeling that other banks are a little bit more loose on assessing SLLs and that of course leads to tough discussions because we

want to be supportive to the clients. But then sometimes they experience us as being difficult to to deal with." (I5)

4.1.6. Socio-Cultural Aspects

The interview partners 2 and 4 argued that SLLs are, in general, more attractive to people who already have a general interest in sustainability, rather than ones who are simply motivated by financial benefits, which are, as already mentioned, currently fairly small. As Interviewee 2 says: "Of course it depends all on the motivation of the entrepreneur or the the. Let's say the directors of that company, whether sustainability means anything to them." (I2)

4.2. Drivers

Although the provision of SLLs to SMEs faces many barriers, several key drivers are also encouraging banking institutions to offer this product. These drivers include, for example, the growing pressure from various stakeholders and regulators urging banks to shift toward more sustainable financial products.

4.2.1. Economic Market Aspects

As mentioned earlier, the profit margin on SLLs is generally small. However, Interviewee 1 noted, contrary to the views expressed by other interviewees earlier, that many clients still choose SLLs primarily for the *financial benefit*. Interviewee 5 added that there is a clear opportunity to introduce of larger incentives. which could further enhance the attractiveness SLLs. Interviewee 2 emphasized the need to move beyond early adopters who are motivated by moral or ethical values, arguing that the next step is to create financial incentives tailored to extrinsically motivated clients who may not be driven by sustainability considerations alone. Interviewees 2 and 5 said that they are perceiving an increase in the interest in SLL: "Over the last few years, there has been increasing traction. So to give you some numbers, I mean I did 7 deals last year, which is in the Dutch market and the year before it was 3." (I5)

Another driver highlighted by Interviewees 1 and 2 is the *increasing time pressure* to make the financial sector more sustainable. They noted that companies failing to align with sustainability goals risk losing access to funding in the future. Currently, banks are still willing to finance the sustainable transition of companies, but this support is time-sensitive, as banks themselves must meet their net-zero targets. As Interviewee 1 explained: "But eventually we tell them yes, it will get harder and harder and then maybe even we will say goodbye because you're no longer within what we need as well as a bank to have a a good portfolio." (II)

A further incentive for lenders to offer SLLs is *access to sustainability-related data*, which supports banks in meeting their own reporting obligations (I1, I6).

4.2.2. Organisational/Management Aspects

Investor pressure is another significant factor influencing banking institutions to offer SLLs. Four out of six interviewees noted that investments in sustainable initiatives plays an important role, as investors often have their own sustainability targets to meet (I4), or aim to secure a large green asset pool to support their refinancing efforts (I6, I1). Interviewee 5 discussed that their bank's investors view sustainability investments from a strategic perspective, particularly because the institution is a member of the Net-Zero Banking Alliance.

4.2.3. Behavioural Aspects

4 out 6 interviewees noted that *employees within their banks are willing and motivated* to integrate more sustainable products and practices into their institutions. As Interviewee 1 put it: "*most of the bankers I talked within the Bank or even other banks are very keen on where we should go, very enthusiastic when it comes to new products*" (II) Consequently, it could be argued that the workforce within the banking institutes are willing to participate in sustainable initiatives and promote sustainable products such as SLLs. However, as Interviewee 3 explains is that even though the motivation and support of employees is here, their bank is still currently struggling to leverage this motivation, since they view that the market demand is not there yet to provide products like SLLs. As they put it: "the majority are really, really keen, which is a bit of a problem for us. How can we transfer this motivation into practice, they are aware of it, they know what to do. But we don't yet have any sustainable products in that sense" (I3). All in all, even though the sustainability motivated workforce could have a positive effect on the provision of SLLs, the pressure they could build up is currently not strong enough for banking institutes to introduce SLLs in their product portfolio.

4.2.4. Economic Non-Market Aspects

As this category includes all considerations about available resources within a banking institute, 3 out of 6 interviewees explained regarding this group that there are *incentives for promoting more SLLs*. For example, Interviewee 5 stated: "*Indirectly, yes. We have targets on sustainable finance*." (I5)

The approach at Interviewee 6's institution differs slightly. There, each branch office receives a bonus to offset the lower margins associated with SLLs to consequently prevent people from not promoting the product.

4.2.5. Political-Institutional Aspects

4 out of 6 interviewees highlighted that *EU regulations* serve as a key driver for sustainable finance products. As Interviewee 5 discussed: "Or we were able to lean on CSRD. So we were especially with the double materiality, this was a very good kickstart for discussions on SLLs but also provided a structure for companies to get material topics to get data but also use CSRD audit as an audit also for the SLL." (I5)

In addition to the EU Taxonomy, the *CSRD* was specifically highlighted as playing a significant role. For example, Interviewee 1 explained that their institution uses the CSRD to assess a company's current sustainability status. They added: "And we're bringing out reports to show them, like, well, maybe you're perfectly fine. And you definitely know, you know all that's at stake, but at some point, maybe the the, the, the entrepreneur is not really ready for reporting on that level that we can help them. And that first goes just by inside the report and then we can help them also. We tried to look at investments that are necessary to get to the certain goal." (1)

Furthermore, as Interviewees 5 and 6 pointed out, even though SMEs are no longer directly required to report under the CSRD, banks still face pressure to provide sustainability data for their own reporting obligations. As a result, there remains a strong incentive to collect sustainability data from SMEs, regardless of their formal reporting requirements.

Additionally, the role of the *European Central Bank (ECB)* was highlighted by Interviewees 2 and 3. They explained that the ECB is expected to intensify its regulatory pressure in the future, since it is responsible for managing systemic risk in the financial sector, of which sustainable finance is an increasingly important component. Interviewee 3 highlights that they are already facing a lot of pressure from them, since they analyse "every other week the smallest detail". (I3)

The *pressure from other stakeholders* besides the investors is also influencing banking institutions, which has been confirmed by 4 out of 6 participants. NGOs, banking supervisors, rating agencies, and the media are increasingly asking for information regarding sustainability from banks. As Interviewee 2 sums it up: "*But you only need to show what you're doing, and that itself for the outside world is becoming more important*" (I2).

4.2.6. Socio-Cultural Aspects

Under this chapter, no drivers were identified in this research. However, that does not mean that there are none; it was just not possible to identify them during this research.

5. DISCUSSION

In the following chapter, the discovered insights through the interviews are getting aligned with the preexisting literature to address unique insights explored through this study.

5.1. Theoretical Implications

The study's results reveal both similarities and differences with the pre-existing literature on the identified barriers and drivers in the provision of SLLs for SMEs from the perspective of banking institutions. Additionally, it provides practical insights from the Austrian and Dutch markets, which may diverge from those found in the literature. Consequently, this comparison offers nuanced understanding of the unique challenges and opportunities that banking institutions face in these two markets.

The barrier group *Economic market aspects* is well-explored in the existing literature. Câmara and Morais (2022) highlight the lack of data on the sustainability performance of SMEs, which complicates the SLL process. Furthermore, several studies note that SMEs often lack sustainable resources, and that the sustainability adjustments required by SLLs may not result in genuine improvements. This creates a risk of greenwashing by both banking institutions and borrower companies. Carrizosa et al. (2023) also observe that the financial rewards for borrowers are relatively small. Additionally, Auzepy et al. (2022) emphasize that overly weak KPIs can damage the reputation of lending institutions.

All of these barriers were also identified in the present study, with particular emphasis on the issue of insufficient sustainability-related data. However, while the literature often mentions a lack of expertise and competencies within SMEs, the current study primarily found that financial and time

constraints are the main causes of limited data collection. The fear of potential greenwashing associated with SLLs was also a recurring concern in the interviews.

Moreover, the study confirms that the margin on SLLs remains relatively low, further limiting their attractiveness. A unique finding in this barrier category is the observed lack of demand from borrowers. Interview participants reported a significant need to educate their customers, noting that pressure to offer SLLs is not currently being driven by client demand. This contrasts with existing literature, which suggests that the demand for sustainable finance products is expected to grow (Oesterreichische Nationalbank, 2020).

What previous research suggests regarding the *organizational barrier* is that the credit risk analysis and methodological challenges are especially adverse for SMEs. Furthermore, one frequently mentioned concern is that SLLs may not lead to actual improvements in ESG performance, despite being designed for this purpose (Câmara & Morais, 2022; Carrizosa et al., 2023; Hossain et al., 2023).

This study supports these findings and highlights a specific challenge in SLL structuring process. In particular, the KPI-setting phase was found to be especially difficult for SMEs due to a lack of available data required to define and measure relevant performance indicators. Additionally, interviewees expressed uncertainty about whether SLLs truly enhance the ESG performance of borrowing companies, supporting the doubts raised in previous literature.

The *behavioural barrier* is less discussed in the literature. Consequently, this study has unique contributions to this category. It is the lack of trust in the product, that is causing issues in selling the product to possible clients.

Another barrier, which is under researched in academia is the *aspect of economic non-market*. However one paper suggests that the SLL process is too expensive for banking institutes (Pinto et al., 2024), which was also confirmed by this study.

In the *political-institutional category*, previous research has identified the lack of comprehensive regulation surrounding the issuance and use of SLLs as a key barrier (Murè et al., 2025). This study supports that finding and further reveals that banking institutions often struggle to apply the EU Taxonomy in practice. Additionally, the CSRD Omnibus package was identified as an obstacle, as it may hinder the development of high-quality sustainability data for SMEs. As noted in the literature, there is also a lack of specific regulatory guidance, particularly regarding the proper structuring of SLLs, which further complicates their implementation.

In the *socio-cultural barrier* category, this research contributes novel insights to the existing literature. While SLLs are intended to target non-sustainable entrepreneurs and support their transition toward more sustainable business models, the findings of this study suggest otherwise. In practice, the clients who engage with SLLs are typically those already demonstrating a degree of commitment to sustainability. This raises questions about the actual reach and effectiveness of SLLs in influencing less sustainability-oriented businesses. Additionally, the banking industry has been slow to incorporate climate-related risks into their balance sheets, this study presents a contrasting perspective. Interviewees reported that banks are increasingly communicating to companies that failure to transition toward more sustainable business models may result in the eventual loss of financing. In other words, banks are beginning to emphasize that firms unwilling to adopt sustainable practices may no longer be viable to retain on their balance sheets (Oesterreichische Nationalbank, 2020).

The *economic market* drivers are discussed in the literature, for example by Kern (2015) and Câmara & Morais (2022), who argue that addressing environmental risks through the issuance of SLLs can enhance the stability of the banking sector and improve corporate financial resilience. Furthermore, Kaave (2023) highlights the reputational benefits that SLLs can provide among stakeholders.

However, none of these drivers were supported by the findings of this study. Instead, a notable insight was that the participants perceived a pressure to change their banking business model to a more sustainable one. SLLs are thus viewed not primarily as a reputational or financial driver, but as a strategic tool to facilitate this transition, allowing clients to adapt before they potentially become ineligible for financing under stricter sustainability criteria.

The *organizational driver* identified in the literature was the assumption that SLLs could improve the ESG performance of companies (Dursun-de Neef et al., 2023). Although the previously discussed drivers are based on this claim, no direct evidence supporting it was found during this study. A different research design, such as a quantitative approach, might be more effective in examining this. What this study did identify as a key organizational driver, however, is the pressure exerted by investors on banking institutions to offer more sustainable financial products.

In the *behavioural category*, there is limited literature available on relevant drivers. However, this study found that the majority of employees within the interviewed institutions were highly motivated to engage in sustainable initiatives.

The *economic non-market driver* was not specifically addressed in the preexisting literature. In this research, it was discovered that promoting SLLs to clients was supported by special rewards, such as bonuses for the relationship managers or the individual branches.

Literature on *political-institutional drivers* addresses that frameworks such as Basel III place pressure on banking institutions to assess environmental risks. In addition, regulatory requirements more broadly are pushing banks to integrate climate risk assessments into their operations (Kern, 2015; Pinto et al., 2024). The findings of this study confirm that EU regulations are a significant source of pressure on banks to offer more sustainable financial products. Particular emphasis was placed on the CSRD and the EU Taxonomy. However, with the recent publication of the CSRD Omnibus Package, it is expected that the reporting burden on SMEs will decrease, which may reduce the overall pressure on banks to expand their SLL offerings. Interestingly, the ECB was also identified as a key actor in encouraging the adoption of sustainable finance, reinforcing regulatory expectations for greater climate-related accountability within the financial sector.

Under the category of *socio-cultural drivers*, Dursun-de Neef et al. (2023) identified that an increase in corporate sustainability awareness could positively influence the adoption of SLLs. However, this finding was not supported by the present research. Instead, the results suggest that the provision of SLLs is primarily driven by banks, rather than by demand or initiative from the companies themselves.

5.2. Transdisciplinary Dimension

This experience highlighted the importance of trans-disciplinarity regarding the diverse perspectives of knowledge. A solid theoretical background helped guide meaningful questions during interviews, but flexibility was key, as practitioners often introduced new, practice-based perspectives. For instance, while the literature highlights benefits of SLLs for SMEs, some interviewees saw them as nearly unfeasible in practice.

Overall, the researcher had to bridge academic concepts with real-world insights and learn through the interview process how to break down complex ideas in a concise way for a non-academic audience. One example was the explanation of the definition of SLLs in contrast to green loans at the beginning of the interviews. Although both are commonly grouped together in sustainable finance discussions, they differ significantly in theory, particularly regarding the use-of-proceeds requirement.

Moreover, while the literature often presents SLLs as mechanisms to drive sustainable business transformation, this perspective was less prominent in the interviews. Practitioners focused more on the operational aspects of loan provision and KPI-setting than on whether such loans truly encourage sustainability. This divergence further reinforced the need for transdisciplinary thinking: it encouraged the researcher to question assumptions in the literature and recognize the pragmatic constraints that influence decision-making in practice. This argument is also important to discuss regarding the development of a research question and design, as this research was solely based on assumptions from the theoretical literature. However, it can also be valuable to develop a study with insights from practitioners to possibly make it more valuable for the practical world.

5.3. Conclusion and Recommendations

To increase the adoption of the SLL for SMEs, it is important to address the identified barriers by this study and also emphasize the positive effects of this product. Especially crucial to consider is the lack of sustainability data of these small companies, since this seemed to be one of the most pressing obstacles. One solution for this issue was proposed by an interview partner, explaining that a simple ESG Rating system, such as "EcoVaris," could be a great opportunity for SMEs to also collect the necessary data. Even though one of the concerns identified during the study was the unreliability of the methodology behind such rating systems, the expert clarified that EcoVaris Methods are very transparent. However, it is important to keep in mind that they still have the power to change their methodology from one day to another, which introduces uncertainty for the involved parties.

The issue of data availability could also be addressed by regulators such as LMA, which recently released a new general standard. The LMA could take up this opportunity to develop a dedicated standard for SMEs, reflecting the need to tailor requirements to the proportionality of the reporting burden faced by smaller companies. This is also a necessity already emphasized by researchers such as Kaave (2023).

Furthermore, the narrow margin associated with SLLs remains a barrier to their widespread adoption and represents a missed opportunity for banking institutions to mitigate sustainability-related risks, while supporting companies in their transition. One of the key findings of this study is that banks are not yet utilizing SLLs as a mechanism to assess sustainability risk, nor are they using this information to adjust loan pricing accordingly.

Increasing the "greenium" between SLLs and standard credit products could potentially enhance the attractiveness of SLLs and drive greater adoption. Additionally, enhancing customer education could help banks overcome socio-cultural barriers, particularly the limited uptake of SLLs among entrepreneurs who are not yet fully engaged with sustainability topics.

The regulator could also create a directive addressing SLLs for SMEs to make the adoption of this product easier for these companies, while reducing banking institutions' fear of possible greenwashing. In addition to this, banks could increase the systematic assessment of the sustainability risk and incorporate it into loan pricing strategies, creating more meaningful incentives for companies to engage with sustainable finance products.

In summary, this research investigates the key barriers, drivers, and opportunities for banks to provide SLLs to SMEs. The applied conceptual model, filled with the empirical evidence from this study, can be found in Appendix E. The main barriers identified through the study are the lack of reliable sustainability data from SMEs, limited internal resources for reporting, complex KPI-setting processes, low financial incentives, and fears of greenwashing. Additionally, regulatory uncertainty and minimal market demand, particularly in Austria, hinder adoption. Despite these challenges, drivers include rising investor and regulatory pressure, banks' strategic shifts toward sustainable portfolios, and growing internal motivation among bank employees. The study also reveals opportunities such as tailoring ESG ratings for SMEs, leveraging regulatory tools like the CSRD for better data alignment, and increasing client education to stimulate demand. Overall, while SLLs are currently more attractive to already sustainable entrepreneurs, clearer SME-specific standards and greater financial incentives could make them more accessible and impactful across a broader range of enterprises.

5.4. Limitations and Future Research

Despite this study having valuable contributions to the research field of SLLs, it has several limitations. First, the sample size of 6 interviewees might not cover the full diversity of insights on this topic within the industry. Consequently, a bigger sample size might be beneficial for future

research to get a more comprehensive understanding of the research question. Also, the inclusion of a broader range of stakeholders, such as SMEs and regulators, would be beneficial to assess a broader range of views and experiences with the research topic. Additionally, this research is based on qualitative data from interviews, which comes with biases, such as the respondent bias. This could lead to the issue of not being able to assess all aspects in answering the research question comprehensively. Furthermore, the geographical focus only on Austria and the Netherlands makes the transferability of the results limited, since the legal, social, or economic conditions might differ. Future studies could benefit from a more extensive comparative approach that examines countries with even more differing levels of sustainable finance development. Finally, since the lack of sustainability data of SMEs has been identified as especially problematic, further research should be conducted on this to identify which measures must be taken by politicians or banks to support SMEs in this regard.

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List of Abbreviations

Abbreviation	Definition
SLL	Sustainability-Linked Loan
SME	Small and Medium-Sized Enterprises
ESG	Environmental, Social, Governance
KPI	Key Performance Indicators
LMA	Loan Market Association
IPCC	Intergovernmental Panel on Climate Change
CSRD	Corporate Sustainability Reporting Directive
GAR	Green Asset Ratio
SPTs	Sustainability Performance Targets
ECB	European Central Bank

Appendix

Appendix A: List of interviews

Interview	Job	Location	Date	Duration
	description			
Interviewee 1	Transition	In person,	07.03.2025	30:41
	Manager	Leeuwarden		
Interviewee 2	Director	Online	19.03.2025	53:42
	Sustainable			
	Finance			
Interviewee 3	Chief	Online	04.04.2025	30:22
	Sustainability			
	Officer			
Interviewee 4	Junior	Online	04.04.2025	38:11
	Sustainable			
	Finance			
	Structuring			
	Manager			
Interviewee 5	Coordinator	Online	09.04.2025	48:21
	Sustainability-			
	Linked Loans			
Interviewee 6	Sustainable	Online	11.04.2025	51:49
	Finance			
	Manager			

Appendix B: Interview Framework



Interview Framework

Estimated Time 30-60 minutes

INTRODUCTION:

Thank the participant for their involvement and reassure them about confidentiality.

Quick introduction of yourself

Provide a brief overview of the research goals, emphasizing the importance of their insights in understanding barriers, drivers, and opportunities for financing sustainability-linked loans (SLLs) for SMEs. (Mention the difference between Green and Sustainability-Linked loans)

BACKGROUND INFORMATION:

- Could you please introduce yourself and describe your role within your company?
- 2. Does your company have SLLs for SMEs in their product portfolio?
 - 1. If so, how are the KPIs determined?
 - From your perspective, how would you assess the ambitiousness of the KPIs in relation to interest rate rewards/penalties?
 - 3. Do you believe these KPIs effectively drive ambitious sustainability changes?

ECONOMIC MARKET FAILURE:

- 3. How do you perceive the economic benefits of SLLs to the banking institute?
- 4. How does the market demand from SMEs influence the provision of SLL's?

BEHAVIOURAL:

5. Do you think SME clients understand and trust sustainability-linked loans, or do they perceive them as complex and burdensome?

SOCIO-CULTURAL:

How does pressure from different stakeholders (e.g. investor pressure,...) influence the provision of SLL's?

ORGANISATIONAL/MANAGEMENT:

7. How do bank employees perceive sustainability-linked loans? Are they seen as a business opportunity or a risk?

ECONOMIC NON-MARKET FAILURE (MARKETING BARRIERS, INFORMATION BARRIERS, TECHNICAL BARRIERS):

- 8. Do you think banks have adequate tools, processes and methodologies to evaluate the sustainability risks and opportunities of SMEs? Why or why not?
- How does the availability (or lack) of sustainability data influence loan approval for SMEs? (for the risk assessment)
- 10. How do banks educate SMEs about sustainability-linked financing options?

POLITICIAL-INSITUTIONAL:

11. Do policies and regulations support or hinder the creation of SLLs as financial product for SMEs?

FUTURE OPPORTUNITIES ENDING:

- 12. Do you see SLLs as a financially viable product in the long term? Why or why not?
- 13. Is there anything else you'd like to add that was not covered in this interview yet?

Thank the participant for their time and valuable contributions to the research. Reassure them about the confidentiality of their responses and provide contact information for any future queries or updates on the research.

Appendix C: Link to consent forms, interview transcripts and coding structure

Consent Forms:

https://drive.google.com/drive/folders/1s9rhCua4ZKcVfWRQzm-5oJxKBs70TZO3?usp=sharing

Interview Transcripts:

 $\underline{https://drive.google.com/drive/folders/15EHCNmeW3TqkoPSrqsBKt5yrzkzGFHPq?usp=sharing}$

Coding Structure:

 $\frac{https://docs.google.com/spreadsheets/d/1dpMxh9HRgHYCu7nVX0PQfmcOsjzahqXg/edit?p=sharing\&ouid=107220302300615389291\&rtpof=true\&sd=true$

Appendix D: Research ethics checklist

CF Research Ethics Checklist for MSc student projects (Signed 07.02.2025):

https://drive.google.com/file/d/1FFlORxQiPMSLA2LnjNUb_sQ5nIDnXqPU/view?usp=sharing

Appendix E: Conceptual model based on empirical evidence

	Socio-cultural	Political-institutional	Economic non-market failure	Behavioural	Organisational/Management:	Economic market aspects:	Barrier:
	Sustainability Awareness of Companies	CSRD Regulatory uncertainty Regulatory Disincentive	Cost of SLL process	Trust in SLLs	KPI setting Influence on ESG performance of SME	Margin of SLL Data availability Demand of SLLs Greenwashing Resource of SMEs	
Banks financing SMEs via sustainability-linked loans							
ng SMEs via linked loans							
ng SMEs via linked loans	Socio-cultural	Political-institutional	Economic non-market failure	DEIIAVIOUIAL	Organisational/Management:	Economic market aspects:	Driver: