

Integration of Environmental, Social and Governance (Esg) Criteria in the Credit Risk Analysis of Smes: A Qualitative Study Among Banking Professionals

Sébastien Ristori ¹ & Christophe Storai ²

¹MAST in Corporate Finance, IAE of Corsica, University of Corsica, Financial Analyst, UMR CNRS 6240 LISA 6234

²Professor of Economics, IUT of Corsica, University of Corsica, Director of the University Apprenticeship Training Center in the Corsican region, UMR CNRS 6240 LISA 6234

*Corresponding Author: Sébastien Ristori, MAST in Corporate Finance, IAE of Corsica, University of Corsica, Financial Analyst, UMR CNRS 6240 LISA 6234.

Abstract: *The paper tries to shed light on the following research question: how do credit professionals collectively construct the meaning and place of ESG criteria in their risk assessment practices, and what tensions does this process generate within their daily activity?*

This research aims to make three main contributions.

Firstly, on the empirical level, we document in a detailed manner the themes structuring the discourse of credit analysts on ESG – perceived importance, obstacles encountered, organizational influences, decision-making dilemmas – thus enriching an academic corpus still largely dominated by macroeconomic quantitative approaches. Our qualitative approach attempts to capture the nuances, contradictions and learning processes that escape questionnaire surveys.

Secondly, on the theoretical level, we try to shed light on the mechanisms by which a new institutional logic (the logic of sustainability) tries to institutionalize itself within an organizational field (retail banking) historically structured by a dominant financial logic.

Thirdly, at the managerial level, we seek to identify the organizational, cultural and technical conditions that promote or hinder a sincere (rather than cosmetic) integration of ESG criteria into credit decisions, thus offering concrete courses of action for banking departments, regulators and stakeholders in supporting SMEs.

Keywords: *ESG criteria - Credit risk analysis of SMEs - Extra-financial reporting - Sustainable finance.*

1. INTRODUCTION

Over the past two decades, the rise of environmental, social and governance (ESG) criteria has profoundly redefined how performance and risk are understood in finance. Indeed, as highlighted by Bénabou & Tirole (2010), the "social responsibility" of the company can be both a true moral approach of the leaders or an enlightened long-term strategy. These authors distinguish in particular Corporate Social Responsibility (CSR) by moral conviction from strategic CSR, the latter seeking to reconcile social benefits and financial value creation. Sustainable finance has been institutionalized as an essential analytical framework aimed at aligning financial decisions with climate and societal imperatives while ensuring the stability of the financial system.

This dual ambition – ecological transition and systemic resilience – makes sustainability an issue that is both economic, political and prudential. Behind this obvious fact, however, lies an operational complexity, particularly for the design of ESG loans intended for small and medium-sized enterprises (SMEs). Indeed, the implementation of ESG in banking credit raises significant measurement, governance and regulatory challenges, in a context where most benchmarks have been designed for large listed companies, poorly adapted to the reality of SMEs.

The gradual adoption of environmental, social and governance (ESG) criteria by banking institutions is profoundly transforming credit risk assessment practices. This change is part of a context marked by a double pressure: on the one hand, regulatory requirements are multiplying to guide financial flows towards sustainable economic activities; on the other hand, the stakeholders – investors, civil society,

supervisory authorities – expect banks to integrate sustainability issues into their capital allocation decisions. Academic research in finance has gradually documented the influence of extra-financial factors on borrower creditworthiness.

Several empirical works thus establish that the quality of a company's ESG practices affects its probability of default and its cost of access to credit. For example, firms with significant social responsibility weaknesses bear a risk premium on their bank loans, which can reach 7 to 18 basis points according to the study by Goss & Roberts (2011). Conversely, Attig & al. (2013) observe that companies with higher social performance benefit from more favorable credit ratings, resulting in advantageous financing terms. These convergent findings suggest that the evaluation of extra-financial dimensions constitutes a relevant complement to traditional credit risk analysis, revealing informative signals about the quality of management and resilience of borrowers. However, the operationalization of this integration raises particular challenges in the context of financing small and medium-sized enterprises.

MEs, although essential to the economic fabric, are generally characterized by less information transparency than large listed companies. The lack of standardized extra-financial reporting, combined with the scarcity of external ESG ratings for this segment, complicates the systematic evaluation of their sustainability practices. From the lender's point of view, adapting credit analysis methods to incorporate qualitative dimensions – such as environmental footprint, internal social climate or governance structure – requires rethinking traditional scoring tools, historically calibrated on quantifiable financial indicators.

Medium-sized banking institutions, such as the Banque du Luxembourg which constitutes our field of study, are thus faced with a double challenge: to meet the increasing expectations of European regulators (green taxonomy, extra-financial reporting guidelines, ECB prudential guidelines on climate risks) while developing analysis capabilities adapted to their portfolios composed mainly of SMEs. Existing academic work suggests that this integration remains uneven and incomplete. The pioneering survey of European banks by Weber et al. (2008) already revealed that consideration of environmental risks mainly occurred during the initial assessment, but rarely across the entire credit cycle. More recently, analyses highlight the persistence of practical obstacles: limited or heterogeneous ESG data, lack of standardized tools, difficulties in quantifying extra-financial risks (Weber, 2012; Scholtens, 2009).

Beyond these technical constraints, the emerging literature on sustainable finance suggests that credit professionals themselves may have ambivalent relationships with ESG integration. Some analysts see this as a legitimate enrichment of their assessment palette, making it possible to anticipate long-term risks; others remain skeptical, perceiving these new requirements as regulatory constraints disconnected from the immediate solvency of borrowers. This diversity of attitudes, little explored by the dominant quantitative research, deserves a thorough qualitative investigation to understand the mechanisms of appropriation (or resistance) at work within banking organizations. It is precisely this angle that the present study favours. We adopt an interpretative qualitative approach, based on a series of focus groups conducted with thirty credit professionals from the Banque du Luxembourg, to explore how these practitioners perceive, negotiate and implement (or not) the integration of ESG criteria in the analysis of credit risk of SMEs.

Our central research question is: *how do credit professionals collectively construct the meaning and place of ESG criteria in their risk assessment practices, and what tensions does this process generate within their daily activity?*

This research aims to make three main contributions.

Firstly, on the empirical level, we document in a detailed manner the themes structuring the discourse of credit analysts on ESG – perceived importance, obstacles encountered, organizational influences, decision-making dilemmas – thus enriching an academic corpus still largely dominated by macroeconomic quantitative approaches. Our qualitative approach attempts to capture the nuances, contradictions and learning processes that escape questionnaire surveys.

Secondly, on the theoretical level, we try to shed light on the mechanisms by which a new institutional logic (the logic of sustainability) tries to institutionalize itself within an organizational field (retail banking) historically structured by a dominant financial logic.

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thus offering concrete courses of action for banking departments, regulators and stakeholders in supporting SMEs.

2. METHODOLOGY

2.1. Epistemological Positioning and Research Approach

This research is part of an interpretivist paradigm, considering that the reality of the phenomenon studied (here, the integration of ESG criteria in the analysis of credit risk) is constructed by the actors and makes sense through their perceptions and discourse. In other words, we seek to understand the meanings that credit professionals attribute to ESG criteria in their practice, and how they collectively construct this meaning during exchanges. An interpretative posture is particularly appropriate for studying an emerging and still not very standardized subject like ESG in banking, because it allows taking into account the diversity of views, the institutional context of the bank, as well as the values and experiences specific to each analyst. Moreover, our approach can be qualified as constructivist insofar as the knowledge produced is co-constructed through the interaction between researchers and participants. During the focus group, participants elaborate and nuance their ideas throughout the discussion, which generates rich material with insights on their practices and representations. We assume that the researcher also influences this construction (by the choice of questions, his presence as a moderator, his reactions), hence the importance of explicit reflexivity.

Our research thus adopts a qualitative approach in order to understand in depth the processes and logics at work. Unlike a standardised quantitative survey, the focus group makes it possible to explore a complex phenomenon in an open way and observe how viewpoints are confronted, confirmed or diverged between practitioners. This choice is all the more justified given that the integration of ESG criteria into risk assessment is a multidimensional process, potentially ambiguous, which should be clarified through discourse rather than purely quantified metrics.

2.2. Sampling and data collection by focus group

2.2.1. Field of study

The field selected is the Banque du Luxembourg, a mid-sized banking institution active in SME financing at the regional level. This choice is explained by the desire to study the integration of ESG in a European context where regulations and expectations regarding sustainable finance are increasing, while focusing on a bank with a human dimension where a focus group could easily be organized internally¹.

2.2.3. Participants

The study involved a sample of 30 bank credit professionals. Given the relatively large number of participants, they were divided into three separate focus groups in order to preserve the quality of the exchanges (each group had 10 people, which is compatible with an interactive discussion where everyone can express themselves). The sampling of participants was intentional (non-probabilistic), aiming to obtain a diversity of views while remaining focused on those directly involved in SME risk analysis. We have thus invited credit analysts (responsible for studying the files and scoring SMEs), business managers (in commercial contact with client companies), and risk managers or members of the credit committee.

The sample covered different levels of seniority (from young analysts with 3 years of experience to confirmed executives approaching 20 years in the business) and various sectors followed (industry, services, real estate, etc.), in order to bring out possible sectoral variations in the integration of ESG. The composition of each focus group mixed these profiles in a heterogeneous way – for example, a senior risk manager could work alongside two junior analysts and an SME chargé d'affaires in the same group – with the aim of stimulating exchanges and the confrontation of experiences.

All participants were of Luxembourgish or French nationality and spoke fluently in French (the language used for the sessions). To ensure anonymity, they were assigned codes (P1, P2, ... P30) and

¹ The bank of Luxembourg, given its moderate size, offers a relevant case: its SME credit processes are not fully automated and leave room for the analysts' judgement, which makes their appropriation of ESG criteria all the more critical.

any personal details of the bank or customers were deleted from the transcripts. The focus groups were conducted in a meeting room of the Banque du Luxembourg over a two-week period (from June 3 to 14, 2024). Each session lasted approximately 1 hour 30 minutes. A moderator (one of the researchers, trained in group facilitation techniques) framed the discussions using a semi-directive grid prepared in advance.²

All sessions were audio-recorded with the prior written consent of the participants, in accordance with current ethical principles. The recordings were fully transcribed in verbatims (about 120 transcription pages in total). These transcriptions, anonymized, form the basis of our analysis. The saturation principle guided the size and number of our focus groups.

After four groups (30 participants in total), we found a redundancy of the information collected: the major themes recurred and no new significant theme emerged from the fourth group compared to the previous ones. This criterion of saturation of qualitative data (when additional discussions no longer bring new conceptual elements) led us to judge the sufficient sample with regard to our research question.³

3. DATA ANALYSIS (THEMATIC APPROACH)

To analyze the content of the discussions, we applied the thematic approach of Braun & Clarke (2006) by adapting it to the field: (i) immersion and note-taking; (ii) exploratory coding; (iii) grouping codes into patterns; (iv) iterations to stabilize themes; (v) delimitation and titles; (vi) analytical writing supported by excerpts.

3.1. Immersion and note-taking

The researchers first carefully read and reread all the transcriptions to immerse themselves in the material. This phase noted initial global ideas and *impressions* (e.g. some participants expressed genuine enthusiasm for ESG, while others were visibly sceptical).

3.2. Exploratory coding

Using the NVivo 12 software, we systematically encoded all relevant data. A code is a short label capturing a salient aspect of discourse. For example, we coded segments of text under labels such as « *Lack of ESG data* » (when one participant pointed out the insufficiency of reliable information on the ESG performance of SMEs), « *Regulator pressure* » (when the discourse referred to regulatory incentives), « *Scepticism towards ESG* », « *Sectoral impact* », etc. In total, 58 initial codes were generated inductively (i.e. they came directly from the data rather than from a predefined theoretical grid).

3.3. Grouping codes into patterns

We then examined the codes to group them into sub-themes and then potential themes, observing the correspondences and cross-references between codes. For example, the codes « *Lack of ESG data* », « *ESG difficult to quantify* » and « *Inadequate internal tools* » were brought together under a provisional sub-theme « *Methodological challenges of ESG integration* », itself linked to a broader theme encompassing practical obstacles. At this stage, we have developed an initial mapping comprising 5 candidate themes, each subdivided into 2 to 4 sub-themes.

3.4. Iteration to stabilize the themes

Each candidate theme was refined and validated by checking its internal consistency (do the coded excerpts that make it up form a homogeneous whole?) and its distinction from the other themes (is each

² This interview guide included open-ended questions organized according to a logical progression: general perception of ESG and sustainable development in the banking profession, concrete experiences of integrating (or not) ESG criteria into SME credit files, changes observed in internal practices and policies, obstacles and facilitators, etc. The role of the moderator was to encourage everyone's participation, to relaunch exchanges if necessary, and to ensure that the main themes of the grid were addressed, while leaving the conversation as free as possible. He also ensured that certain statements were clarified and reformulated if necessary, in order to ensure a good mutual understanding within the group.

³ Moreover, the relatively homogeneous composition of the sample (all from the same banking institution and the same profession, sharing a common organisational culture) means that a higher number of focus groups would probably have resulted in very similar responses. Thus, we were able to stop the collection while being confident of having covered the diversity of opinions present in the field studied.

theme clearly conceptually delimited?). We have excluded or merged certain themes deemed redundant or too weak. For example, an initial theme « *Organizational culture of the bank* » was eventually subsumed into a broader theme on internal factors influencing ESG adoption. At the end of this review, we retained four central themes.

3.5. Delimitation and titles

We have formulated a clear definition and an evocative title for each theme. The final themes selected are: (1) *From adherence to resistance: perceived ESG between conviction and skepticism* ; (2) *ESG evaluation and data challenges for SMEs* ; (3) *Organizational and institutional dynamics in ESG integration* ; (4) *Tensions and arbitrations in the decision of sustainable credit*. These headings reflect the essence of each theme, developed in depth in the Results section.

3.6. Analytical writing

Finally, we wrote the analytical narrative presented in this article, selecting illustrative verbatims for each theme. The integration of verbatims aims to anchor analyses in the actual statements of the participants, reinforcing the credibility and liveliness of the report. Each quote is followed by a participant ID (Px) for transparency.

Table 1 below presents a summary of the themes, sub-themes and examples of associated codes.

Table 1. Summary of thematic coding (codes, sub-themes and final themes)

Final themes	Main sub-themes	Code examples (verbatim extracts)
1. ESG : between conviction and skepticism	- Sincere adherence ('believe in it') vs. Cynicism - ESG perceived as an <i>asset</i> vs. <i>constraint</i>	<i>It's a real plus for assessing sustainability" (P17)</i> <i>«We do this for the showcase, let's be honest...» (P5)</i>
2. Practical obstacles to ESG integration	- Insufficient ESG data and indicators - Quantification difficulties - Inadequacy of internal tools	<i>« We lack reliable figures on the climate of SMEs » (P22)</i> <i>« How to grade something qualitative? » (P8)</i>
3. Organizational and institutional dynamics	- Regulatory and headquarters impetus - Culture and internal training - Role of the internal credit moderator (committee)	<i>« The ECB pushes us to integrate these criteria» (P4)</i> <i>« Internally, we don't yet have the ESG culture» (P19)</i>
4. Tensions and trade-offs in the decision	- Profitability vs. sustainability (short term/long term) - Industrial sector vs. tertiary (variable ESG impact) - Customer relationship vs. ESG requirements (dilemmas)	<i>« Refusing a loan to a good SME because it is 'brown', it's hard... » (P11)</i> <i>«Factories, that's where you see the strongest risk E» (P7)</i>

4. RESEARCHER'S REFLEXIVITY

In a qualitative interpretative research, the researcher's reflexivity is essential. The principal investigator held a dual position as moderator of the focus group and as an instrument for collecting and interpreting data. His previous experience of several years as a financial analyst facilitated the understanding of technical jargon and trust with the participants, but also carried a risk of preconceptions about ESG risk management. To limit this bias, he adopted a posture of neutral listening and favored the emergence of practitioners' perspectives rather than imposing a predefined vision. The asymmetry of status between researcher and participants could induce a bias.

We minimized this risk by guaranteeing anonymity, emphasizing the non-evaluative nature of the discussion and adopting a humble attitude. A triangulation of researchers was carried out during the analysis: two colleagues independently examined the transcripts and codes, allowing to nuance some potentially biased initial interpretations and to enrich the analysis by the confrontation of different readings. Finally, we recognize that our a priori favorable stance towards ESG integration may have influenced our questioning. We have therefore redoubled our efforts to fairly present the pro and anti-ESG arguments, including internal contradictions. This transparency allows the reader to assess the credibility and transferability of our conclusions.

5. RESULTS

The thematic analysis of the discussions highlights four major themes structuring the discourse of credit professionals regarding the integration of ESG criteria in the risk assessment of SMEs. These themes, which we detail below, cover respectively: (1) the variety of practitioners' attitudes ranging from conviction to resistance towards ESG, (2) the practical and methodological obstacles encountered in concretely integrating these criteria into credit analysis, (3) the organizational and institutional dynamics that favor or hinder the adoption of ESG internally, and (4) the tensions and trade-offs that bankers must manage between potentially competing objectives (financial profitability, regulatory imperatives, customer relations, etc.).⁴

5.1. From adherence to resistance – ESG between conviction and skepticism

A first striking observation is the disparity in individual attitudes towards the integration of ESG criteria. The focus group reveals a spectrum of opinions ranging from enthusiastic support to open skepticism, and even some passive resistance. This theme therefore covers the *subjective* perceptions of professionals regarding the value and legitimacy of ESG in their profession. On the one hand, several participants say they are convinced that taking ESG criteria into account improves the assessment of credit risk by offering a more holistic view of the sustainability of the borrowing company.

These supporters perceive ESG as an asset to anticipate long-term risks and as a natural extension of prudential analysis. « *Personally, I firmly believe in it. Integrating ESG is adding a piece to the puzzle of risk that was poorly assessed before* » (P17) says a senior analyst, who explains that, in his opinion, neglecting aspects such as the environmental impact or social practices of an SME amounts to omitting latent risks. (for example an environmental liability that could cost later, or a bad ethical buzz that would ruin the client's reputation). In the same sense, a portfolio manager (P9) notes that « *it forces us to look at the sustainability of the company from another angle. An SME can be profitable today but if it completely ignores the climate or social, in 5 years it can be out.* »⁵

On the other hand, other participants express a notable reservation, even cynicism, about the real usefulness of ESG in credit analysis. For these skeptics, ESG criteria are more a matter of « *political correctness* » or marketing than a true risk indicator. « *Frankly, let's be honest, we do this for the showcase more than anything else* » (P5) launches a participant, who believes that the bank communicates a lot about its ESG policy because it is the expectation of the moment, but that in practice « *when one has to decide on a loan, what matters is the balance sheet, the cash flow... The ESG remains nice to have, a bonus if it's well noted, but it doesn't overturn a decision.* »

Several approving nods are heard in the group during this intervention, suggesting that this financial pragmatism is shared. P5 goes so far as to qualify the internal ESG assessments as « *greenwashing* » , without a filter: « *We are asked to check green boxes in the loan file, but even I am not fooled, it doesn't change anything at the bottom of the file.* » (P5). This frank language reveals a dissonance between the official speeches promoting ESG and the feelings of certain experts who only see it as another bureaucratic constraint.

Between these two extreme poles, we also observe mixed positions. For example, P21 (analyst) claims to be personally sensitive to ESG issues « *out of ethics* » but admits having difficulty translating them into their daily work: « *Yes, I am trying to take these criteria into account, because I think it will become more and more important... But finally, to grant credit, we remain very focused on classic financial figures. So it's a bit schizophrenic, I would like to do more ESG, but the reality is that we don't always have the time or the data to do it seriously.* » (P21). This testimony highlights an internal tension between personal convictions and perceived operational constraints, a tension that is apparent among several moderate participants.

The debate is particularly heated around the question: *have ESG criteria already caused a file to be refused or accepted on their own ?* Opinions differ. A risk manager (P4) asserts « *For me, if the file is*

⁴ Each theme is illustrated by anonymized verbatims (identified by P# for the participant) highlighting salient elements, including significant divergences and contradictions.

⁵ This conviction is sometimes based on lived experiences: P9 illustrates its point with the case of a small local industrial company that has seen its insurance costs increase significantly to follow new environmental standards – what an 'ESG scan' more attentive could have predicted according to him.

financially limited but the company is well rated ESG, it can tip the balance positively, especially if there is pressure from headquarters to finance the green. »

Conversely, an experienced project manager (P11) admits having « *never seen a deal rejected just because of bad ESG, as long as it passes at the level of balance sheet and guarantees. »* He adds with a touch of provocation: « *If we started to refuse good profitable files on the pretext that they are brown [N.D.L.R. not very virtuous ecologically], we would close shop!* » (P11). This remark shows the fear of some that ESG will collide with the commercial imperative of the bank (portfolio growth, profitability). We will return to these dilemmas by dealing with managerial tensions (Theme 4).

- This first theme emphasizes that ESG integration is not just a matter of rules or tools: it strongly depends on individual representations. ESG appears as a new object on which the collective has not yet formed a professional consensus: it is alternately defended as an inevitable progress of the profession, minimized as a cosmetic artifact, or welcomed with ambivalence. This diversity of internal membership is in itself an important result, as it can influence how ESG criteria will actually be applied (or bypassed) in credit analyses. The quotations also reveal marked dissonances between the pro-ESG discourse encouraged by the institution and the perception of its relevance « *on the ground* », dissonances likely to hinder the sincere implementation of ESG in certain decisions.

5.2. Practical and methodological barriers to ESG assessment of SMEs

The second major theme focuses on the concrete challenges faced by professionals in integrating ESG criteria into their risk analysis. Even among the most proactive participants regarding ESG, all agree that implementation is fraught with technical and organizational obstacles. These practical obstacles can be grouped into three sub-categories: (a) the lack of reliable and standardised data on SMEs, (b) the difficulty of quantifying and internalising qualitative criteria in credit models and (c) the perceived inadequacy of existing tools or processes to achieve this.

5.2.1. Limited ESG data for SMEs

A unanimous finding is the shortage of actionable ESG information about SMEs. « *We are sorely lacking reliable figures on the ESG performance of our SME clients* » (P22) summarizes an analyst. Unlike large listed companies that publish CSR reports or are rated by non-financial agencies, SMEs in the Banque du Luxembourg universe generally do not have an ESG reporting obligation.

« *A part from what the company wants to tell us itself, we have nothing. No external ESG score, no sustainable development report, nada.*» (P8).

Several participants do mention an internal ESG questionnaire that the bank sends to SME clients when compiling the credit file, but they relativize its scope: « *We have a checklist of 15 ESG questions, but let's be honest, many check the boxes by feeling... It is not audited.* »(P14). In other words, the data collected is based on the borrower's self-declaration, with a significant risk of bias (tendency to present themselves in a better light). A risk highlighted by P2: « *Some SMEs answer what we want to hear, especially on social or environmental issues, because they don't really know what is being done behind it.* »

Participants deplore the lack of precise quantitative indicators. For example, P19 mentions: « *For the financier, we have the turnover, the debt ratio... For ESG, we would need clear indicators of the company's carbon footprint style, staff turnover, etc. But there is nothing systematic* ».⁶ The unavailability of reliable external data is seen as a major obstacle, especially since credit professionals are used to basing their decisions on solid figures. Without a factual basis, ESG can be perceived as too vague to weigh heavily.

⁶ Some elements are sometimes available for certain more structured companies (e.g. an ISO environmental certification, or a local social label) but this remains the exception. A business manager (P7) says he sourced information for an industrial client: « *I had to go on the internet to get the CO rating of their factory sector, because the SME in question knew nothing about it. I ended up using European sectoral averages... We tinker* ». The word « DIY » comes back in the mouths of many, illustrating a sense of approximation in these ESG assessments.

5.2.2. Limited ESG data for SMEs

Directly related, the second obstacle lies in the quantification of qualitative criteria. « *How to assign a grade on something qualitative ?* » (P8) questions an analyst by reminding that the heart of credit scoring is based on algorithms fed with quantified indicators. P8 continues: « *Even if I have a feeling that a box is clean and durable, how do I translate it into the risk model? It's subjective...* ». This remark highlights that the shift from qualitative judgment (for example 'this SME has a good social policy') to quantified impact (e.g. +10 points on the internal rating) is not obvious.

Participants mention that the bank recently added an « *ESG score* » to the internal rating sheet, but many are wary of it. « *They give us an ESG score of 1 to 5, but honestly it relies on too little information to be robust. So, between us, we don't really use it in the granting.* » (P13). A risk manager (P4) confirms: « *If the calculated PD (probability of default) remains good, we will not have fun upgrading it just because the ESG score is average, it would be arbitrary.* »⁷

This quantification difficulty is accentuated by the prospective nature of many ESG risks. P3 points out: « *ESG risk is often a thing with a 5-10-year horizon. Our rating models, however, look at the last 2-3 years. There is a temporal mismatch* ».

Here emerges a fundamental methodological problem: reconciling the time horizon of traditional indicators (past accounts, current ratios) with that of ESG risks that may not yet have materialized. For example, a SME with high CO emissions does not present an alert sign in its accounts today, but could suffer in a few years from carbon regulation costs or a disaffection from customers sensitive to sustainable development. How then to integrate this latent risk into a current credit decision? P3 admits: « *That's complicated. We can mention it in the recommendation note, say caution transition risk, but it remains subjective as long as it hasn't happened.* » We feel a professional frustration here: analysts are trained to rely on tangible facts, and find themselves powerless in the face of hypothetical scenarios related to ESG.

5.2.3. Inadequacy of internal tools and processes

Finally, the participants point to the slow adaptation of the bank's internal tools. The internal scoring software only integrates ESG criteria at the margin, and the granting processes do not explicitly value them. P19 entrusts: « *Honestly, we are late. We have attached word forms for the ESG, but nothing well integrated into our workflows. Result, we do it a bit in parallel, without it being central* ». Several mention the lack of in-depth training: « *We were given a one-hour presentation on why ESG is important, but not how to evaluate it concretely. So everyone does their own thing.* » (P10). The role of the credit committee is also mentioned: according to P30, « *in the committee, we mainly look at financial risk. If I start to say: this company has a bad ESG rating, suspicion, they ask me on what I base myself and there... I don't have a concrete answer. So it doesn't really influence the final decision.* » This testimony illustrates how the lack of solid tools can lead to ESG being implicitly disregarded during collective arbitrations, as it is deemed not objective enough.

Some participants link this lack of tools to a deficit in strategic management. « *It's unclear internally, we know that it needs to be done, but we don't have clear guidelines or quantified objectives like we can for classic credit risk.* » (P14).⁸

- In summary, this theme highlights that the willingness (or pressure) to integrate ESG clashes with the operational reality of the credit analyst profession. The lack of structured data on SMEs, combined with the difficulty of inserting non-financial criteria into models calibrated to the financial sector, creates a gap between the stated ambitions and actual implementation. The verbatims illustrate a shared feeling of « *doing the best with the means at hand* », which can lead to frustration or even discouragement among some (who come to think that « *it serves no purpose* » as seen in theme 1). This technical dimension is essential to consider: without strengthening tools and methods, the integration of ESG risks remaining superficial.

⁷ On the other hand, he admits that "if a file is at the edge of our criteria, then we take a look at the ESG to see if it can help justify a decision." Which suggests that the ESG serves more as a criterion for ex post adjustment in some borderline cases, than as an integrated ingredient in the main calculation of the credit rating.

⁸ Le même participant suggère que la banque pourrait définir par exemple des limites sectorielles (pour éviter d'être trop exposé sur des secteurs ESG à risque) ou des incentives (taux bonifiés pour prêts verts), mais que rien de tel n'est en place.

5.3. Organizational and institutional dynamics of ESG integration

The third theme focuses on the organizational and institutional context within which the ESG integration initiative is taking place, and how this context influences practices. It appears that credit professionals are not the only masters in this evolution: their actions and motivation also depend on external and internal factors such as regulatory incentives, strategic directions of management, the corporate culture and the training received.

5.3.1. External pressures and incentives (regulation, reputation)

Many participants mention the driving role of regulators and authorities. *«Very clearly, if it weren't for the ECB and Europe behind it, we wouldn't be talking about it as much.»* (P4) affirms a manager, referring to recent regulatory developments: European Central Bank guidelines on climate risks, EU green taxonomy, ESG reporting requirements in the Basel framework, etc. P4 continues: *« We know that our supervisors expect us to take these risks into account. So the bank gets involved, and we have to follow. »*

Thus, even skeptics recognize that the institutional environment drives action. This external impulse acts as a normative context that legitimises (or even imposes) the integration of ESG. Another aspect mentioned is the bank's reputation vis-à-vis the public and investors. *« Our brand image is at stake. We want to be seen as a responsible banker.»* (P9) – which implies that the general management communicates on ESG commitments, which reflects on the credit teams who must show that they integrate this dimension. However, this reputational pressure can be double-edged: P9 adds with a smile *« Sometimes I tell myself that we are zealous internally just to be able to say look we are green in the annual report»*, thus joining the cynicism of theme 1. Nevertheless, overall, the top-down dynamic is indeed there: participants and hierarchy are aware that ESG has become an inevitable subject and potentially scrutinized by the external.

5.3.2. Corporate culture and internal leadership

Internally, the exchanges reveal the importance of leadership and organizational culture to instill (or not) change. Several participants felt that at the Banque du Luxembourg, risk culture had hitherto been very anchored on traditional financial aspects and that it took time to incorporate a new dimension. *«We have a classic cautious culture, focused on the balance sheet, the guarantees. So ESG is a bit of an UFO for some of our decision-makers.»* (P19).

This statement, shared by others, highlights a possible generational gap: senior managers of the bank, trained several decades ago, are perhaps less spontaneously sensitive to ESG issues than younger recruits for whom sustainable development is a more present theme. Moreover, P19 nuances right after: *« I noticed that it is often the younger analysts who push for them to be taken into account, while the old ones are more doubtful. »* This observation points to the possible need for an internal cultural evolution, which can be slow.

In terms of leadership, participants discuss the role of top management. P4 notes that the Chief Risk Officer recently gave an internal speech on the importance of ESG, and that a sustainability committee has been created at the bank. *« The message from the hierarchy is that we must all get involved. But we are still waiting for concrete means.»*(P4). There therefore seems to be a willingness displayed at the top, which translates into signals (internal communication, new committees). However, for credit operational staff, it sometimes remains perceived as discourse as long as the tools and processes (see theme 2) do not follow. Nevertheless, knowing that management attaches importance to it has an impact: *«We feel a bit watched over there now. Before, no one ever asked and the ESG rating?. Now it happens. »* (P13). This change of internal strategic priority, even if still embryonic, creates an incentive not to completely neglect ESG in the submitted analyses.

5.3.3. Training and support for analysts

Another organizational factor discussed is the training and support given to teams to build competence on ESG. On this point, the majority of participants express a need not fully satisfied. P10, a young analyst, explains: *« I had a half-day mini training session where we were introduced to ESG issues and some examples of risks. It was interesting but very theoretical. Afterwards, we were left to our own devices. »* Others only had written materials.

Thus, many say to learn « *on the job* », by reading articles, exchanging with colleagues more up to date, or via external webinars. The consensus is that for ESG integration to become natural, a more in-depth educational effort is needed on the part of the bank: sector-specific practical guides, concrete case studies, or even internal mentoring. P22 suggests: « *It would be good to have feedback from experience: for example, an analyst presenting a case where ESG has really made a difference. For now, we are lacking palpable cases.* »

This suggestion underscores the importance of operationalizing ESG for it to be appropriate. Without practical training, analysts can remain in the dark about how to do it, even if they are convinced of why.

5.3.4. Role of the « moderator » in the credit decision

Finally, an interesting aspect mentioned is the role of decision-making bodies – in particular the credit committee, often chaired by officials – who could be seen as an internal moderator of ESG integration. P30 tells how, during committees, some officials now systematically ask the question of ESG to the file holder, which encourages the analyst to prepare an argument. « *When the credit boss asks me and the ESG risk in that? I better have at least a few elements. It forces us to think about it upstream.* » (P30). This simple change in the decision-making ritual (add an ESG question) can gradually normalize the idea that it is a component of the file like any other. Nevertheless, P30 specifies that the expected response remains summary in most cases: « *Often I say something like this: no major ESG risk identified, client in a weakly exposed sector, some CSR actions underway... And it passes.* »

This observation suggests that the depth of the ESG analysis presented remains limited, but at least the subject is put on the agenda. This third theme reveals that the integration of ESG is not just a matter of personal conviction or isolated technique: it is a social process rooted in the organization and its environment. External institutional pressures provide an impetus, the internal culture and leadership influence this impetus, and the degree of support (training, tools, incentives) offered to analysts determines their ability to truly take ownership of the approach. The verbatim accounts underline that at the Banque du Luxembourg, the ESG initiative is still in a learning phase: encouraged from above, driven by those most aware, but requiring consolidation to move from the stage « *it needs to be done* » to « *we know how to do it well* ».

5.4. Tensions and arbitrations in the decision of sustainable credit

The last emerging theme highlights the internal tensions that professionals must manage when trying to reconcile the integration of ESG criteria with other credit decision imperatives. These tensions create delicate trade-offs, sometimes experienced in an uncomfortable way by the participants, and reveal structural contradictions within the profession of banker.

5.4.1. Financial profitability vs sustainability (short term vs long term)

The tension most frequently mentioned is that between the traditional objective of short-term profitability of loans and the objective of longer-term sustainability. Several participants point out that short-term incentives (achieving annual business goals, generating net banking income, minimising the cost of immediate risk) may conflict with ESG considerations whose benefits are measured over a longer horizon. P11 illustrates this dilemma: « *An SME can be very profitable today, we want to finance it. But if we take a step back, maybe its model is not ecologically sustainable. Do we deprive ourselves of a good client right away to avoid a potential problem in 5 years? Honestly, the temptation is to say we'll see in 5 years.* » This cynical remark highlights the perceived commercial pressure: project managers have volume targets, and the bank's risk aversion is often calibrated over a few years (loan duration or less).⁹

This tension is conscious in several case managers, almost like a matter of conscience for some. P21 entrusts: "It happened to me to say: this client is hyper profitable but he has zero environmental policy, it's a total shame... Should I lobby for it to be refused? And then I realize that I don't really have the weapons to justify a refusal on this. So we continue, hoping that it will go well.» (P21). Here, we see an analyst torn between his long-term cautious instinct and the realism of the process (he would in any

⁹ Another participant (P15) nods and adds: « *Our rate grid does not reward the sustainable. Me, if I make a very green but less profitable loan, I am not rewarded. So...* » , suggesting that the arbitrage will logically lean towards profitability.

case lack concrete criteria to support a refusal). This type of undecided arbitration probably fuels the skepticism mentioned in theme 1, because if ESG cannot reverse a decision against the financier, it can be perceived as accessory.

5.4.2. Industrial sector vs. Tertiary sector: unequal ESG issues

Another tension discussed concerns the variation according to the sector of activity of the SME. Participants noted that the importance of ESG issues is very uneven across sectors, creating an imbalance in portfolio analysis. « *Frankly, when I finance a small IT consulting company of 10 people, ESG is almost irrelevant. On the other hand, a chemical plant with 200 employees, there yes we ask ourselves the question.* » (P7).

This remark from P7 highlights that ESG is of a material nature, especially for certain sectors (polluting industries, companies with a strong social footprint) while for others, the impacts are less or more diffuse. This poses a challenge: uniformly applying an ESG grid could heavily penalize the 'at risk' sectors while being almost neutral for others. P7 adds: « *If we were to be consistent, we should probably reduce our exposure to not very green industrial firms. But it's an important part of our SME market... we can't just stop.* » There is therefore a strategic tension: how can the bank reconcile its ESG commitment with its market positioning? Should we give up funding to certain traditional sectors (manufacturing, construction) in favor of more « *clean* » sectors? This question goes beyond the individual level but is measured in concrete cases discussed by the analysts.

Several mention that in practice, the bank has started to impose conditions in certain sectors. P18 cites the example of a client road transport company: « *It was granted credit but asked for a plan to renew its fleet with less polluting trucks over 5 years.* » This kind of trade-off aims to mitigate ESG risk while continuing to fund the client. However, not all sectors lend themselves to it. P16 mentions a case where an SME in the coal sector (industrial coal supplier) was refused funding – « *The headquarters said no, we don't want to have that in our portfolio anymore, too risky at the level of climate and reputation.* »¹⁰

5.4.3. Customer relationship vs. ESG requirements

Finally, a more interpersonal tension is felt by the business managers vis-à-vis their SME clients. They serve as a bridge between the bank's requirements (which now include ESG) and customer expectations/understandings. P11, chargé d'affaires, explains: « *When I start asking some clients ESG questions, they look at me with round eyes. For them, it's off topic, they wonder why the bank gets involved.* » There is therefore a risk that the strengthening of ESG criteria will alter the business relationship if the client takes it badly or does not understand. « *There are SME bosses who took it as a moral judgment or an intrusion. You have to go carefully* » (P11).

His feedback highlights the need for pedagogy towards customers as well. But in the meantime, the business manager finds himself under tension: should he push the client to improve their ESG (at the risk of offending them) or do the minimum to not jeopardize the relationship? Some seem to adopt a low profile. P5 entrusts for example: « *Honestly, if I have a client who is a bit old school and who has nothing in ESG, I will not hold them up. I fill out the checklist in a basic way and I avoid overemphasizing it.* ». This behavior is explained by the paramount importance of the relationship of trust with the SME: for the bank, keeping a good customer is worth more than rushing it on new criteria. But in doing so, ESG integration can remain superficial, especially in the instruction phase where information is collected from the client.

Another source of reported tension is related to the contradictory objectives given to the business managers: « *We are told we need to make more green loans, and at the same time we need to make more numbers. Sometimes the two do not go together, what do we do?* » (P9). This testimonial illustrates the possible inconsistency of certain managerial signals if ESG objectives are not aligned with commercial incentives. If the variable remuneration, for example, does not take ESG aspects into account, the business manager will not have any concrete leverage to arbitrate in favor of a sustainable decision at the expense of volume.

¹⁰ This would be an example where the ESG imperative prevailed (or the reputation/regulatory imperative). For the analyst P16, it was a clear case but he emphasizes that it is rare and that « most of the time, it's more blurry. ».

Another source of reported tension is related to the contradictory objectives given to the business managers: « *We are told we need to make more green loans, and at the same time we need to make more numbers. Sometimes the two do not go together, what do we do?*» (P9). This testimonial illustrates the possible inconsistency of certain managerial signals if ESG objectives are not aligned with commercial incentives. If the variable remuneration, for example, does not take ESG aspects into account, the business manager will not have any concrete leverage to arbitrate in favor of a sustainable decision at the expense of volume.

- Overall, this theme reveals the complex trade-offs faced by professionals in the field: arbitrating between an immediate profit and a future risk, between supporting traditional sectors or gradually withdrawing from them, between satisfying the client and satisfying the regulator. These trade-offs often take place in uncertainty (since ESG risks are inherently uncertain and diffuse) and can generate personal stress or ethical dilemmas. They show that the integration of ESG, beyond a methodology, requires a real *reconciliation* of potentially divergent objectives within the bank.

Some verbatims reveal a willingness to compromise (e.g. setting green conditions instead of refusing, accompanying the client to improve rather than punishing him from the outset), which seems to be the preferred approach for now. However, these compromises require time, expertise and sometimes managerial courage, as they may involve rethinking the bank's risk model in a longer-term perspective.

In conclusion of the section, all these themes offer a nuanced view of the progress made in integrating ESG criteria into credit risk analysis at this bank. We see strong convictions among some, resistance among others, very concrete obstacles to overcome, and institutional forces that push change while creating new constraints. The results highlight that this integration is a complex socio-technical process, always ongoing, where human aspects (perceptions, culture, tensions) are as decisive as technical aspects (data, models, tools).

6. DISCUSSION

This qualitative study sheds light on how bank credit professionals integrate ESG criteria in the evaluation of SMEs and the challenges arising from it. We discuss these results by comparing them with the academic literature, before identifying their theoretical and sectoral implications. The limits and future paths are addressed in conclusion.

Our observations first confirm the materiality of ESG factors on the risk profile and credit quality documented in the financial literature. The perceptions of our convinced participants agree with empirical evidence showing that good ESG performance translates into better creditworthiness (lower default rates, better ratings), while ESG gaps increase debt risk and cost. Attig et al. (2013) suggest that rating agencies already integrate these aspects, which justifies banks taking them into account rationally. Goss & Roberts (2011) observe an average additional cost of bank financing for companies with social controversies; in our article, we use this result as an economic justification for ESG integration, without assuming a causal effect in the SME segment.

These elements economically justify the integration of ESG to refine the prediction of default risk. Our study, however, reveals the gap between this overall economic rationality and the operational reality of a medium-sized bank. While quantitative literature claims that integrating ESG improves risk management (Brogi et al., 2022 show that increased ESG awareness significantly reduces default risk), practitioners face difficulties making this integration incomplete and sometimes cosmetic. This observation refers to qualitative and organizational work: Weber (2012) noted that banks mainly integrated environmental risks in certain phases (rating) but few in others (pricing, monitoring). Our results confirm this partial integration by extending it to social and governance criteria, highlighting that the major obstacle remains the translation of these criteria into internal credit procedures.

A major contribution of our study is to reveal the cognitive and cultural tensions around ESG within a financial institution. Little addressed in the quantitative literature, they are nevertheless necessary: our results reveal the variety of attitudes – from enthusiasm to cynicism – expressed by professionals confronted with the same institutional change. This echoes analyses of organizational change where the introduction of new practices elicits buy-in or resistance from individuals. By mobilizing institutional theory, we can consider ESG as a new logic of sustainability adding to the traditional financial logic. Our results show the sometimes tense cohabitation of these two logics: some verbatims (P11, P5) reflect

a rationality dominated by financial logic (priority for profit, skepticism towards ESG), while others (P17, P9) embrace the logic of sustainability (long-term vision, moral value of ESG). This tension represents what literature calls a collision of logics at the individual level. On the practical level, our findings on the lack of ESG data for SMEs and the difficulty of quantification are in line with the sectoral reports.

The United Nations Initiative for Responsible Investment (UN PRI, 2019) emphasizes that ESG integration requires more data and specific tools for SMEs. From an academic point of view, Eliwa et al. (2021) document how European banks value available ESG information by reducing the cost of debt for well-rated companies, suggesting that when data exists it is used. In our context, the absence of standardized data creates a blind spot that the bank must fill. This confirms the importance of developing ESG reporting standards for SMEs, an emerging avenue in the European Union. Without this information infrastructure, ESG may remain a one-time supplement rather than an integrated component of the risk management system.

Finally, our results on tensions and trade-offs reveal an asymmetry between time horizons (short term versus long term), referring to the notion of myopia of financial markets applied to credit. Banks may be tempted to neglect long-term risks (climate change, regulatory transition) in favor of immediate profits, a problem raised by Chava (2014). Our participants confirm this myopic trend while being aware of the paradox it represents. This highlights the need for incentive mechanisms aligning the consideration of long-term ESG risks with performance objectives often measured in the short term. Ongoing research explores how to integrate sustainability horizons into bankers' compensation and performance indicators.

6.1. Theoretical implications

On the theoretical level, this study suggests an expansion of the conceptual framework of credit risk beyond traditional financial parameters. The testimonies collected show that some practitioners already conceive risk as multidimensional, including the risk of ecological transition or the reputational risk related to the borrower's ESG behaviors. This argues for an expanded credit risk theory explicitly incorporating extra-financial factors. One can consider enriching the probability of default models with ESG variables, which is conceptually justified by the theory of information asymmetry: ESG criteria provide additional information on the quality of management, the resilience and reputation of the borrower, as many indirect determinants of default risk.

Our study thus invites to develop an integrated theoretical framework where financial risk and ESG risk are treated jointly rather than separately. In connection with institutional theory, our results support the reflection on the coexistence of logics in financial organizations. They illustrate how the logic of sustainability, still emerging, seeks to institutionalize itself in the banking field dominated by financial profitability.

Our observations document the concrete foundations of this institutional change: practitioners adopt different roles (carriers of change or resisters), use circumvention or compromise strategies (treat ESG as a simple addition), and go through phases of ambivalence. For the theory of institutional change, this offers a concrete case study on how sustainability standards attempt to assert themselves in a regulated sector. This is in line with work in business ethics and sustainability that focuses on the processes of institutionalization of corporate social responsibility (Aguinis & Glavas, 2012) and more specifically sustainable finance in banks (Weber, 2012; Scholtens, 2009). Our study enriches these approaches by highlighting the importance of internal translation: how an external injunction is translated, negotiated and transformed by internal actors.

Moreover, our results suggest ways to refine the theory of banking intermediation. Traditionally, these theories emphasize the supervisory and selective role played by banks in limiting the risks of asymmetric information (Diamond, 1984). ESG can be seen as a new monitoring tool (controlling the borrower's sustainability) and a new element to reduce adverse selection risks (avoiding lending to companies with hidden risks). Our data shows, however, that the bank's ESG oversight role is still nascent and limited. This theoretically questions: to what extent should the bank be considered as an agent for controlling responsible corporate behavior?

One of the conceptual implications is that the bank's function could evolve from a purely financial to a socio-environmental evaluator of its clients, thus becoming a guardian of sustainability in the economy. It is a potential paradigm shift in the intermediation function. Theories such as triple performance in finance (Elkington, 1998, applied to banks) argue for this expanded role.

Our study gives empirical weight to this perspective but also shows the current limits to achieve it, which suggests necessary adjustments in intermediation theories to incorporate these new realities (for example, integrating the notion of shared value into risk-return analysis). Finally, on a methodological level, this study highlights the interest of interpretative qualitative approaches to capture emerging phenomena in finance. Quantitative methods establish general correlations (for example, the link between ESG and lower cost of capital), but our interpretative approach reveals intermediate mechanisms and concrete processes (for example, how corporate culture moderates the impact of ESG on decision-making). This theoretically reinforces the need for a multidisciplinary look at sustainable finance, mobilizing both finance, organizational management and social psychology.

6.2. Sectoral implications

Our research also has specific implications for the banking sector regarding SME financing and according to the sectors of activity of the companies financed. For banks financing SMEs, the results highlight the particular challenges that mid-sized banks focused on SMEs face compared to large international banks. In the context of SMEs, the problem of ESG data is particularly acute because these companies are often unlisted, little followed by external analysts, and do not have standardized extra-financial reporting.

For the SME banking sector, a practical implication is the need to develop shared ESG rating tools. For example, collective initiatives could emerge to create databases of SME-specific ESG indicators through banking federations or specialised fintech companies. Our participants mentioned the purchase of an external tool: it goes in this direction. There is a sectoral opportunity for information providers: the simplification of ESG for SMEs. A bit like there are simplified credit scores (type Banque de France rating), one could imagine a standardized ESG SME rating.

Our results suggest that this could be beneficial both for the SME (which improves its sustainability and therefore its risk) and for the bank (which secures its loan portfolio). Thus, from a sectoral point of view, an implication is that ESG integration in SME credit could become a differentiating factor between banks: those who succeed in operationalizing it effectively will not only be able to better manage their risks, but also attract a clientele sensitive to these issues and satisfy the regulators more easily.

Our results indicate, however, that there is a need for sector alignment. If some banks apply strict criteria (e.g. by refusing to finance unsustainable sectors), but other competitors continue to do so without constraint, there is a risk that the problem will be displaced rather than resolved. This calls for concerted action at sectoral or even regulatory level in order to avoid distortions of competition (for example, preventing a virtuous bank from losing all its construction sector customers to a less lender bank). Public policies such as the European taxonomy precisely aim to standardize criteria. For SME banks, this may eventually mean common standards in the provision of sustainable credit, which would be a major shift in traditional lending practices (usually within the purview of each bank).

Depending on the sectors of activity of the SMEs financed, our results highlight that the importance and nature of ESG criteria vary greatly according to the sector in which the SME operates. Concrete implication, the ESG analysis must be adapted by sector. Banks would benefit from developing sectoral ESG guides. For example, for industrial sectors (manufacturing, transport, intensive agriculture), the focus will be on environmental risks (pollution, greenhouse gas emissions, dependence on fossil fuels) and workplace safety, as these are material risk factors (accidents, disputes, costly compliance).

On the contrary, for tertiary sectors (services, consulting, digital), ESG issues rather concern governance (cybersecurity, data ethics) and social (employee well-being, equality, human capital). Adapting ESG analysis to the sector would allow the evaluation effort to focus on the relevant points and not unnecessarily burden the files where the impact is low.¹¹

¹¹ For example, it may not be necessary to ask a small marketing agency for its detailed climate transition plan, whereas for an industrial printer it is fundamental. This differentiation is consistent with the sectoral materiality

Another sectoral implication is the management of concentration risk: our exchanges have indicated that the bank cannot simply stop financing whole sectors (e.g. construction, transport) from one day to the next without endangering its commercial activity. However, not changing anything exposes to future risks (portfolio concentrated in polluting assets). The sectoral solution could be a gradual diversification of the portfolio towards more sustainable sectors, while accompanying traditional sectors in their transition. Moreover, risk sharing through sectoral mechanisms (public guarantees for transition, carbon offset funds, etc.) could help banks continue to finance certain sectors while covering the excess of ESG risk.¹²

Our results also imply that sector regulators (such as the European Central Bank) should consider the size and segment of banks in their ESG expectations. Large international banks have the means to deploy numerous teams of ESG analysts and complex systems, where banks dedicated to SMEs must find more economical solutions. We already see this differentiation in the directives: the ECB talks about proportionality. Concretely, there could be lighter requirements for SME portfolios in terms of ESG reporting, or a longer implementation schedule. Our data shows that on the ground, the effort is considerable for small structures, so the sector and the authorities must integrate this constraint.

7. MANAGERIAL IMPLICATIONS AND RECOMMENDATIONS

From a managerial point of view, our study offers several practical recommendations for financial institutions seeking to improve the integration of ESG criteria in credit risk analysis.

7.1. Strengthen ESG tools and data.

It is a priority to equip credit teams with reliable tools for assessing ESG criteria. Banks should invest in external databases or develop suitable repositories internally. For example, an SME-specific ESG assessment grid including average sector scores would contextualize the company compared to its peers. The use of machine learning or artificial intelligence tools could be explored to aggregate public data (environmental violations, employer reviews) in order to evaluate SMEs that do not publish ESG information themselves.

Furthermore, integrating ESG into the internal rating system in a more structured way is recommended: for example, giving it an explicit weight (even modest at the beginning) in the calculation of the overall risk score. This would force consideration of these criteria and allow for the accumulation of a history to refine their long-term relevance. However, it is important to calibrate these tools by ensuring that they do not create unjustified bias, particularly by systematically penalizing certain sectors or family SMEs for lack of data (a risk highlighted by our participants). An internal ESG model validation committee, including sustainability experts, can be set up to oversee this approach.

7.2. Train and raise awareness among staff

Our results argue for a continuous training effort. Banks should organise practical workshops, case studies showing how an ESG criterion has a concrete impact on a credit risk, and invite external experts (e.g. climate risk specialist) to exchange with the teams. Establishing an internal ESG ambassador program – more in-depth trained volunteer employees who act as referrals to their colleagues – can help spread ESG culture within the organization.

These referents could, for example, co-analyze certain files with an ESG perspective, helping their peers to improve their skills. Corporate culture will evolve all the more quickly as ESG-related successes are valued: managers should celebrate and communicate internally on cases where integrating ESG has helped avoid a trap or open an opportunity (for example, financing a promising sustainable business). This will help move ESG from being simply regulatory compliance to being a strategic lever in the eyes of staff.

7.3. Alignment of incentives and internal governance

An important point is to align the objectives and internal governance with ESG ambitions. It is contradictory to require staff to integrate ESG if remuneration, performance evaluation or decision-making systems do not take these efforts into account. Thus, banks could include ESG criteria in the

approach advocated by certain international standards (the SASB – Sustainability Accounting Standards Board – provides, for example, matrices of materiality by industry).

¹² For example, a loan to a highly issuing SME could be partially guaranteed by an ecological transition fund, reducing the risk for the bank.

annual objectives of the risk and commercial teams.¹³ At the level of governance, it is appropriate to give decision-making weight to the sustainable risk function. When an ESG analyst (or a social responsibility committee) identifies a major risk, his voice must count in the credit agreement or refusal. Creating transversal committees (risk + social responsibility + commercial activity) to arbitrate contentious cases can be a solution. In short, embedding ESG into the decision-making apparatus (and not only into communication reports) is paramount.

7.4. Managing customer relations in a sustainable manner

On the commercial front, our results show that one must know how to talk about ESG with SME clients without damaging the relationship. Managers should equip the business officers with educational arguments to explain to clients why the bank is asking these questions (for example: "this can help you get a better rate in the future, or access specific green funding"). The bank can also offer incentives to customers, for example, a rate advantage or relaxed conditions if the borrower commits to ESG objectives. Some banks already offer sustainability-linked loans where the rate is modulated according to the achievement of ESG objectives.

This type of tool transforms a potential conflict into a collaborative issue: the bank and the client work together to improve ESG, each finding their interest in it (risk reduction for one, financial advantage for the other). Internally, this would facilitate the task of the business manager, who would have something positive to offer rather than a constraint to announce.

7.5. Organizational learning and feedback

It would be beneficial to establish a feedback process on credit decisions related to ESG. For example, after a few years, the bank could analyze if files with poor ESG ratings have indeed experienced more problems (defaults, restructurings) than others, and conversely if companies performing well in ESG have resisted better. This type of empirical internal analysis will convince the teams by the facts, and will allow to adjust the ESG rating by prioritizing the indicators that have proven predictive. Furthermore, anonymously share among peers (or even between banks via sectoral working groups) practical cases on the management of a particular ESG risk.¹⁴

7.6. Synthesis

The fundamental managerial implication is that successful ESG integration relies on rigorous change management: providing tools, training actors, adapting decision-making processes, and aligning motivations. It is a transformation that affects both the technical infrastructure (systems, models) and the culture (values, habits) of the bank. The banks that manage to orchestrate this change will gain a competitive advantage, in a world where sustainability becomes inseparable from financial performance. On the other hand, a purely superficial integration, carried out solely to satisfy appearances, risks not only being inefficient, but also exposing the bank to greenwashing criticisms and poorly controlled long-term risks.

8. LIMITS OF THE STUDY AND FUTURE PATHS

It is necessary to recognize certain limits of our research, which also open up so many avenues for future work. First of all, this study is based on a single sample (one bank, in a particular geographical and cultural context – Luxembourg, with a specific banking tradition). The results, although thorough, are therefore difficult to generalize as such to all banks. Practices and attitudes may differ in other countries.¹⁵

A potential avenue of research would be to replicate this approach in other contexts, or to conduct a multi-site study to compare the dynamics. Then, our focus group method promotes group dynamics in responses. This has its advantages (emergence of debates, consensus), but may also have masked certain

¹³ For example, a target could be "x% of new loans granted must include a thorough ESG assessment and, where applicable, ESG commitment clauses". Or even, link part of the prime for business managers to compliance with certain practices, such as correctly filling out the ESG sections of the files or accompanying x clients in an ESG improvement process.

¹⁴ For example, the way a client faced with a social scandal was managed helps to develop collective know-how.

¹⁵ For example, Nordic banks, often more advanced in sustainability, or on the contrary banks from emerging countries where ESG is less on the agenda.

dissonant voices (notably a very critical employee who would have self-censored in front of his colleagues). Moreover, all statements are self-declared, without direct observation of actual practices.

It would be enriching to complete with individual confidential interviews to see if individuals nuance differently one-on-one, or with non-participating observations (in particular, attending real credit committees) to confront speech and action. Moreover, we mainly collected the point of view of the credit provider (the bank). However, the other side of the analysis – the point of view of borrowing SMEs – is not addressed here. Understanding how SME leaders perceive the rise of banks' ESG requirements would be a fundamental complement. Perhaps they themselves adapt, or on the contrary slow down. Future research could conduct interviews with SME clients on their experience of the 'ESG' lending process to triangulate with bankers' reports.

Finally, the period covered (collection in June 2024) corresponds to a time when ESG regulations were in the process of coming into force, but they had not yet produced all their effects. Our study could be updated in a few years to see the evolution. A longitudinal study would be valuable in tracking change over time; will some of today's skeptics become tomorrow's champions? What intermediate steps (external shocks, scandals, new laws) will have accelerated or hindered ESG integration?

Despite these limitations, we believe that the lessons learned from this qualitative research provide a solid and nuanced basis for both banking practice and academic reflection on sustainable finance. By articulating the experiences of professionals, emerging theories and concrete implications, we hope to have contributed to partially bridging the gap between the stated *intentions* for sustainability and the reality of their implementation in the financial sector.

9. CONCLUSION

This study allowed to fully conduct, from an original empirical material (discussion groups with 30 credit professionals of a Luxembourg bank), a scientific approach dealing with the integration of ESG criteria in the analysis of the credit risk of SMEs. Structured according to academic standards (introduction, methodology, results, discussion, conclusion), the reflection explored in depth this complex subject by combining field testimonies and analytical perspective.

Our results highlight a contrasted situation. On the one hand, there is less and less doubt about the necessity and relevance of integrating ESG dimensions into risk assessment, supported by regulatory incentives and empirical evidence showing that good ESG performance tends to be associated with lower credit risk. On the other hand, the concrete implementation by credit practitioners faces real challenges: lack of structured data, quantification difficulties, cultural resistances, tensions with traditional financial objectives. The focus groups revealed four central themes.

Firstly, the attitudes of professionals oscillate between conviction and skepticism, reflecting a transitional phase where adherence to sustainable logic is not yet unanimous or fully internalized. Secondly, the practical obstacles are multiple: without appropriate tools and reliable information on SMEs, ESG analysis often remains superficial, a state of affairs that requires investments in new methodologies. Thirdly, the organizational environment plays a determining role: the support (or lack thereof) of general management, corporate culture, internal training, strongly condition the success of ESG integration. Finally, fourth, structural tensions remain, particularly between short-term profitability and long-term sustainability, forcing banks to rethink certain arbitrations and alignments of interests.

Despite these obstacles, positive trends are emerging. Regulatory and normative pressure is pushing the banking sector as a whole towards greater consideration of ESG risks, which our participants recognize, including the most reluctant. There is also a rising generation of bankers more aware and eager to reconcile finance and sustainability. As the tools improve (e.g. generalisation of ESG ratings for SMEs, development of contractual clauses linked to sustainable objectives) and the first successes are visible (e.g. avoidance of a default thanks to an anticipated ESG signal), one can expect that ESG integration will gradually become second nature in the analysis of credit risk, and not a separate dimension. The implications of our study are concrete.

For banks, it is about operationalizing sustainable finance by adapting their processes, training their teams and aligning their incentives with their strategic ambitions. For sector regulators and decision-

makers, the challenge is to support this movement with clear but proportionate frameworks, in particular so as not to penalize the financing of SMEs in the transition. For academic research, our results open avenues to develop integrated risk models and deepen the understanding of institutional changes underway in the financial sector.

In conclusion, integrating ESG criteria into the credit risk analysis of SMEs is not a simple technical adjustment, it is a paradigm shift in the way banks approach their profession as lenders and their responsibility towards society. This change is ongoing, driven by multiple forces, but it still requires learning, perseverance and innovation to overcome the apparent contradictions between ethics and profit, short-term and long-term, finance and sustainability. Our study, by reflecting the voices of those at the heart of this process, hopes to contribute to advancing this urgent and important project for the economy. If finance really wants to support a sustainable economy, then the day may be no longer distant when ESG criteria will be as natural and essential for a credit analyst as the apprehension of the accounting balance sheet, to the joint benefit of banks, their SME clients and the entire community.

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Sebastien RISTORI is a financial analyst, director of BARNES Corsica, Associate Lecturer and PhD student at the University of Corsica. He is the author of several books published by Editions Ellipses on corporate finance and business plans. His research topics focus on corporate finance, value creation, and sustainable financing.



Christophe STORAÏ Is Professor of Economics, IUT of Corsica, University of Corsica, Director of the University Apprenticeship Training Center in the Corsican region, Director of Continuing Education Department at the University of Corsica. His research topics include: international economics, multinational strategy, foreign direct investment localization, regional attractiveness and competitiveness, work-study programs in higher education, knowledge and skills economics, competitiveness clusters and industrial clusters.

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