

Louvain School of Management

Analyzing SME Financing Constraints with Shiperise as an Alternative Financing Model

Author(s): Elyn Bindels
Supervisor(s): Xavier Marichal
Academic year 2024-2025
Dissertation for the master of CEMS
Master subject and focus: Business Engineering
Daytime schedule

Declaration on the Use of AI Tools

During the preparation of this master's thesis, the author made use of the AI tool ChatGPT to support the writing process. Specifically, ChatGPT was used to:

1. Suggest alternative formulations and synonyms to improve clarity and avoid repetition.
2. Assist in structuring certain arguments or refining academic phrasing.

All content generated or suggested by ChatGPT was critically assessed, edited, and integrated by the author. At no point was any text used without modification or reflection.

The final content of this thesis is the result of the author's independent work and academic judgment. The responsible use of AI was limited to support and not to replace the author's contribution.

By signing this declaration, I confirm that this thesis is my original work, with appropriate and transparent use of AI tools.

Elyn Bindels, Le 11/05/2025

A handwritten signature in black ink, appearing to read 'Bindels', with a horizontal line underneath.

With immense gratitude and a sense of accomplishment, I am thrilled to share with you the completion of my master's thesis, marking the end of my five-year academic journey. This work represents my dedication and the invaluable support, guidance, and encouragement I have received from many people along the way.

First and foremost, I wish to express my gratitude to my master's thesis supervisor, Professor Xavier Marichal, whose insightful feedback and advice guided me through this project. I am particularly grateful for the trust he placed in me and the autonomy he offered to explore a subject that truly inspired me. His support allowed me to pursue this research with both freedom and confidence.

I am also extremely grateful to Lionel Slusny and Nicolas Meerschaert from Shiperise. Collaborating with them at Shiperise has not only enriched this thesis, but also deepened my appreciation for their commitment to building a more inclusive and sustainable financing model for SMEs. I feel fortunate to have worked alongside them and to have had the opportunity to contribute to their mission.

Thank you as well to all the financial professionals who generously shared their time and insights during interviews. Their expertise brought essential depth to my research and enriched my understanding of the subject.

Lastly, I am deeply grateful to my parents for their constant encouragement and steadfast belief in me. Their unwavering support throughout all my projects and academic journey has been invaluable, and I truly believe that I would not have succeeded without them.

Table of contents

1	<i>Introduction.....</i>	<i>1</i>
1.1.	Shiperise solution for SME financing.....	1
1.2.	Shiperise as the Starting Point for This Research.....	2
1.3.	Investigating Barriers to SME Financing.....	2
1.4.	Research Structure and Roadmap	3
2	<i>Understanding the SME Financing Landscape.....</i>	<i>5</i>
2.1.	Importance of SMEs in the World Economy	5
2.2.	SME financing: Opportunities and Limitations	5
2.3.	SME Access to Bank Loans.....	6
2.4.	Credit Constraints.....	7
2.5.	Regulatory Challenges for SME Financing Under Basel III	7
2.6.	Loan Guarantees and Collateral	10
2.6.1.	Personal Guarantees.....	11
2.6.2.	Third-Party Guarantees	12
2.6.3.	Government Guarantees	12
2.6.4.	Collateral-Based Guarantees	12
2.6.5.	Effectiveness of Credit Guarantee Schemes (CGS) in Closing the SME Financing Gap.....	13
2.7.	The Role of Inventory in SME Financing	14
2.8.	Access to Financing for Sustainable SMEs	16
3	<i>Testing the Hypotheses on SME Financing Barriers</i>	<i>18</i>
3.1.	Hypotheses on Barriers to SME Financing	18
3.2.	Two-Stage Approach.....	19
3.3.	Quantitative Phase: Secondary Data Analysis	20
3.4.	Qualitative Phase: Financial Expert Interviews.....	20
3.5.	Triangulation of Findings.....	21
3.6.	Research Assumptions and Limitations.....	21
4	<i>Trends in SME Financing Across Europe</i>	<i>22</i>
4.1.	Understanding SME Credit Access Through Existing Data	22
4.2.	Data-Driven Patterns in SME Financing.....	23
4.2.1.	Trends in Collateral Requirements for SMEs (2008-2022)	23
4.2.2.	Impact of Economic Crises on Collateral Conditions	23
4.2.3.	Regional and Country-Specific Variations in Collateral Requirements	24

4.2.4.	Structural Barriers to SME Financing	25
4.2.5.	Financing Purposes and Preferences of SMEs	26
4.3.	Limitations of the Secondary Data.....	28
4.4.	Data Findings on Collateral and Credit Access.....	28
5	<i>Expert Insights on SME Financing</i>	29
5.1.	Interview Design and Data Collection	29
5.2.	Thematic Analysis of Interview Data	30
5.2.1.	Collateral Requirements in SME Financing	31
5.2.2.	Operational Hurdles in inventory-based financing.....	32
5.2.3.	Loan conditions for sustainable SMEs	34
6	<i>Inside SME Financing: Findings and Reflections</i>	36
6.1.	Key Challenges in SME Access to Finance.....	36
6.1.1.	Regional Inequalities in Collateral Requirements	36
6.1.2.	Collateral Dependency in SME Financing	36
6.1.3.	Limitations of Traditional Lending Models for SMEs	36
6.1.4.	No Systematic Incentives for Sustainable SMEs	37
6.2.	Added Value of Combining Quantitative Data and Expert Insights.....	37
6.2.1.	Collateral as Regulatory Strategy.....	37
6.2.2.	Inventory Finance faces Operational Barriers	37
6.2.3.	Sustainable SMEs Receive Incentives Without Systemic Change	38
6.2.4.	Connecting Macro Trends with Micro Realities	38
6.3.	Broader Observations on SME Lending.....	38
6.3.1.	Differences Between SMEs and Large Corporations	38
6.3.2.	Credit Scoring and Digitalization.....	39
6.3.3.	The ESG Paradox	39
7	<i>From Structural Barriers to Financial Innovation.....</i>	39
8	<i>Bibliography</i>	41
9	<i>Appendices</i>	50

1 Introduction

1.1. Shiperise solution for SME financing

Small and Medium Enterprises (SMEs) represent 99% of all businesses in Europe and make up for two thirds of employment (Chládková, 2009). They are at the heart of the world economy and create 55% of the world's GDP (World Trade Report, 2016). Since the 2008 financial crisis, the landscape of bank lending has gone through significant changes. Macroeconomic conditions can negatively affect the credit supply of banks for SMEs (Harrison et al., 2022). Most importantly, the impact of the financial crisis on regulation has changed a lot of requirements for banks. The Basel III framework imposes much higher capital requirements on banks, which make access to bank financing more difficult for SMEs (Fraisie et al., 2020). With SMEs being more constrained, their growth is not only restricted, but it also limits economic development and job creation (Nizaeva & Coskun, 2019). In response to this difficulty of access to finance, innovative solutions are developing (Palmieri & Ferilli, 2024).

Shiperise s.a. is one of these innovative financing solutions. Shiperise is designed to support growing sustainable brands in their financing challenges related to inventory. Their mission is to guide investors and businesses in allocating their resources toward projects that are meaningful and transformative. Their clients, referred to as 'Brands', are SMEs that sell tangible goods in B2B or B2C markets. These Brands are experiencing growth and are in need of external financing to sustain their expansion. Shiperise made a commitment to support businesses that respect the environment and the well-being of their communities. For this reason, potential clients of Shiperise go through a sustainability assessment and need to comply with multiple environmental criteria.

Shiperise does not function like a traditional lender. Shiperise purchases the legal ownership of the goods that the Brands need financing for, but the ability to sell the goods remains with the Brand. While Shiperise technically owns the products, the Brand remains in full control of their stock. They store, market and sell the products as they would have if they owned them. When the Brand decides to sell, move, or transfer the products, it must pay Shiperise a pre-agreed price for each item. This payment must be made within 15 days after the goods are sold. If the Brand does not buy back all the goods Shiperise financed by the pre-agreed deadline, Shiperise can force the Brand to buy the remaining stock back. If after exercising this right, the Brand still does not pay Shiperise back, Shiperise can sell or dispose of the goods however it sees fit. Additionally, wherever the goods are stored, the operational risk is held by the Brand. The primary benefit for brands is that they don't have to dedicate their working capital to purchase inventory and can focus entirely on growing sales and turnover of the inventory.

On the investor side, Shiperise provides a platform where investors can fund these businesses. The investors can be private, institutional or corporate. This innovative financing solution is a win-win situation that connects Brands that can operate more efficiently and scale their business with investors that are looking for a promising investment model based on sustainable product inventories. For Brands to gain access to Shiperise's services, they need to pass a credit risk assessment and provide several key documents. These include past and current accounting and financial statements, as well as inventory details and an option for an onsite visit. They also need to submit a table of their liabilities. Finally, a bank statement is required.

1.2. Shiperise as the Starting Point for This Research

On top of SMEs' financing challenges, this research is motivated by my direct involvement with Shiperise. During my summer internship at Shiperise, I assisted in developing Shiperise's business and gained a first-hand insight into the barriers that SMEs face in securing financing. My experience at Shiperise deepened my interest in exploring different financing models that can help sustainable brands overcome credit constraints.

Shiperise's model targets SMEs with a sustainability focus and addresses their need for short-term credit constraints by offering an innovative financial solution. As demonstrated by Nicolas (2022), short-term credit constraints are crucial to SMEs' investment decisions, equally as important as long-term ones. The impact of short-term credit constraints can be felt more acutely by smaller firms that rely strongly on working capital and inventory. By financing these small Brands through an inventory purchase agreement, Shiperise offers a promising way to deviate from the traditional credit system. They support these growing brands in their journey without the burden of working capital constraints.

In this context, the goal is to apply prior experience and knowledge to support the continued growth of Shiperise by examining the current landscape of SME financing and identifying the structural factors limiting access to credit. By exploring new ways to improve their credit allocation model, the aim is to make their financing solution accessible to the brands that need it most.

1.3. Investigating Barriers to SME Financing

This thesis explores the different factors that limit SME access to financing, by focusing on the structural and regulatory challenges that create barriers for traditional lenders. Moreover, it investigates how Shiperise's credit allocation can be optimized to better address the financing needs of sustainable SMEs. By identifying financing gaps in SME lending, it aims to inform how alternative financing models like Shiperise's could better address the needs of sustainable SMEs.

The central question for this thesis is:

What structural barriers in SME financing, including collateral requirements and regulatory constraints, limit access to credit, and how might Shiperise's lending approach address these gaps for sustainable SMEs?

To answer this question completely, the following sub-questions will be explored:

1. *What are the key structural and regulatory factors that affect the availability of bank financing to SMEs?*

This first sub-question investigates the role of economic conditions and regulatory frameworks in influencing the banks' willingness to lend to SMEs.

2. *How do collateral and guarantee requirements affect SME access to credit?*

This question investigates how different forms of guarantees (e.g., personal, public, inventory-based) are used in credit decisions and their impact on SMEs.

3. *How does Shiperise address the limitations of traditional credit allocation for sustainable SMEs?*

This sub-question explores how Shiperise's lending approach compares with conventional practices and whether it can better support the financing needs of sustainable SMEs.

Through these questions, this thesis aims to provide a refined understanding of financial challenges faced by SMEs, with a particular focus on sustainable businesses, and to provide insights that can inform Shiperise on how to improve their credit allocation model to better support this market segment.

1.4. Research Structure and Roadmap

This thesis is organized into six chapters, followed by a conclusion.

Chapter 1: Introduction and Background

This chapter introduces the research problem, addressing structural barriers to SME access to financing such as collateral requirements and regulatory constraints. It offers the motivation for the study, the research questions and introduces Shiperise as an alternative financing model for sustainable SMEs. The chapter also includes a summary of the thesis structure and methodology.

Chapter 2: Understanding the SME Financing Landscape

This section summarizes the academic and policy literature that focuses on SME financing constraints, in which a particular attention is given to the structural factors such as regulatory and collateral requirements. It analyses how these factors limit traditional bank financing to SMEs.

Chapter 3: Testing the Hypotheses on SME Financing Barriers

This chapter presents four hypotheses related to financing barriers faced by SMEs, the role of guarantees in the credit allocation process, and the relevance of innovative lending models such as Shiperise to fill these gaps. It also outlines the two-stage research methodology:

Quantitative Analysis: Secondary data from OECD and SAFE is analyzed to identify trends in collateral requirements and key financing barriers faced by SMEs across Europe.

Qualitative Analysis: Semi-structured interviews with financial experts provide insights on current lending practices, challenges related to collateral and inventory financing, and the treatment of sustainable SMEs.

Chapter 4: Trends in SME Financing Across Europe

This chapter presents the findings from the quantitative data analysis and examines whether economic instability or capital requirements influence the financing decisions of traditional lenders and alternative platforms like Shiperise.

Chapter 5: Experts Insights on SME Financing

This chapter provides findings from semi-structured interviews with financial experts related to practical financial barriers in SME financing, such as collateral requirements and inventory-based lending challenges. Particular attention is given to the loan conditions offered to sustainable SMEs. The final section of the chapter presents the limitations of the study, and some potential ideas for future research are offered.

Chapter 6: Inside SME Financing: Findings and Reflections

This chapter summarizes the key findings of the study and reflects on the added value of combining quantitative data with expert insights. It also discusses the persistent collateral barriers SMEs are faced with, the limitations of inventory financing, and the loan conditions for sustainable SMEs, along with broader reflections.

Chapter 7: From Structural Barriers to Financial Innovation

This chapter concludes the thesis and discusses its contributions, practical implications, and proposes opportunities for future research.

2 Understanding the SME Financing Landscape

2.1. Importance of SMEs in the World Economy

The definition of a Small and Medium-sized Enterprise (SME) is a company with an employee count of less than 250 employees. It also cannot exceed an annual turnover of EUR 50 million and must have an annual balance sheet of less than EUR 43 million (Kuruppu et al., 2014). SMEs are a big part of the economy. In Europe, they represent 99% of all businesses and employ two-thirds of the labor market (Chládková, 2009). According to the World Trade Report (2016), SMEs make up 90% of the world's economy and contribute approximately 55% to global GDP. Despite their importance in the world and European economy, SMEs are faced with a lot of challenges and barriers to growth. An abundance of evidence in the literature demonstrates that access to financing is one of the most significant, if not the greatest barrier hindering SMEs from achieving inclusive. (Ang, 1991, 1992; Baker et al., 2020; Carpenter & Petersen, 2002; Chittenden et al., 1996; Cosh & Hughes, 1993; Fazzari et al., 1988; Gibson, 1992; Guariglia et al., 2011; Hall & Hutchinson, 1993; Hamilton & Fox, 1998; Hutchinson & Xavier, 2006; Jordan et al., 1998; Kaplan & Zingales, 1997; Lopez-Gracia & Aybar-Arias, 2000; Moscalu et al., 2020; Robson et al., 1993). This issue is evidently affected by demand and supply factors (Moscalu et al., 2020). One positive development for Shiperise is that literature shows SMEs are increasingly interested in informal and innovative financing channels such as their proposal (Rao, Kumar, Chavan, & Lim, 2021). This master's thesis will try to confirm this claim. It is important to make sure SMEs have access to financing since, as previously mentioned, they contribute enormously to the world economy and provide employment for a large portion of the global workforce. Additionally, they are known for their innovative potential and are the front runners of bringing new products and techniques to the markets (Muçollari et al., 2012). They also contribute to social inclusion and local employment which can reduce poverty and promote equitable development (Auzzir et al., 2018).

2.2. SME financing: Opportunities and Limitations

SMEs can finance themselves in two different ways: internal financing or external financing. According to Jianzhong and Jundan (2015), SMEs rely on retained profits from within the business to fund their operations and growth, avoiding the costs and risks associated with external financing. SMEs also use "nearly internal" funds in the form of equity financing like owners, friends, family, business partners, or personal contacts (Berger & Udell, 2003). However, since SMEs are small, they typically cannot rely on this method alone. External financing provides access to funds outside the company and comes at a cost. Bank loans are a common source of external financing for SMEs and the most appropriate one in developing and developed countries (McCarthy et al., 2013; Harrison et al., 2022). Keasey and McGuinness (1990) observed that despite the high cost of bank financing, SMEs generate a higher

return. Additionally, Vera and Onji (2010) show that being financed by a bank leads to better performance compared to other financing sources because banks monitor SME finances. This helps to keep SMEs in check and ensures they use their funds more effectively and responsibly. Even though bank loans are the most important source of financing for SMEs, they usually have trouble obtaining those loans (Walker, 1989; Binks, Ennew and Reed, 1992).

Literature reviews point to different reasons for limited access to financing for SMEs. The most significant factor is the information asymmetry, which is the main difference with big corporations: owner managed firms tend to be less transparent and perceived as opaque. Due to this lack of transparency and information asymmetry, it is difficult for banks to assess the creditworthiness of SMEs. Banks need to be certain that an SME applying for a loan can generate enough cash flows to repay it. The financial records and business plans that SMEs present to banks are often inadequate for banks to make such determinations (Camino & Cardone, 1999; Cressy, 1996; Gregory et al., 2005; The UNCTAD Secretariat, 2001). A second reason banks do not lend to SMEs is that they are perceived as high-risk. This is due to the high failure-rates of SMEs, their sensitivity to economic fluctuations, volatility in earnings and insufficient collateral (Bernini & Montagnoli, 2017; Gertler & Gilchrist, 1994; Hannan & Freeman, 1984; The UNCTAD Secretariat, 2001). Hence, banks tend to ration credit for this part of the market or ask for more collateral than from big corporations.

2.3. SME Access to Bank Loans

There are quite opposite views on the accessibility of bank financing by SMEs. First there is the side of SME owners, that accuse banks of not lending enough to SMEs (i.e. the supply effects). On the other hand, banks criticize the lack of strong credit demand from entrepreneurs (i.e. demand effects) (Casey & O'Toole, 2014). Both supply and demand effects have impacts on the access to financing by SMEs, but there is a lot of debate about on which side the problem lies. Harrison et al., 2022 has investigated SME bank financing in Ireland before and after the financial crises. Their results show that there were no significant changes in demand for bank credit by SMEs during the crisis (2009-2011) and after (2012-2014). This shows that the demand effect is less affected by economic conditions. However, their research showed that the limited supply of credit is likely the cause of SMEs' challenges to secure bank loans, which aligns with supply effects.

A theory to overcome the information asymmetry between banks and SMEs originated in the 1990s: the relationship theory. This theory is based on the "know your customer" principle and suggests that small banks are better suited to serve SME clients. The reasoning behind this is that such banks have a smaller number of clients and can therefore get to know them and their needs better. On the other hand, large banks have very large client portfolios to serve and don't have time to get close with their

clients. According to this theory, small banks have an advantage in dealing with information asymmetry compared to large banks (Duqi, Tomaselli, & Torluccio, 2019). Research by Petersen and Rajan (1994), Rajan (1992), Keeton (1995), and Berger et al. (1998), found that large banks dedicated a lower percentage of credit towards small businesses. Moreover, banks that were created through bank mergers and acquisitions were revealed to reduce their credit supply to SMEs even more (Berger et al., 1998). Relationship lending uses soft information that is collected from continuous interactions with SMEs (Guida & Sabato, 2017; Liberti & Petersen, 2019), compared to transaction lending which relies on hard data like financial statements and credit scores. Degryse et al. (2018) believe that relationship lending can stabilize the financial system by assuring credit supply for small businesses. On top of that, Behr et al. (2011) provide proof that a close relationship for micro loans between borrower and lender helps reduce the problem of information asymmetry and access to bank financing.

2.4. Credit Constraints

The definition of financing constraints by Agostino et al. (2008) is the inability to access and use the benefits of financial resources. Those constraints exist due to poor accounting, financial and regulatory systems (Beck & Demirguc-Kunt, 2006), but also competition (Anzoategui & Rocha, 2010), interest rates (Foltz, 2004) and the lack of knowledge on where and how to access finance. As mentioned before, younger and smaller firms are more likely to be financially constrained. This is due to the information asymmetry problem between those firms and traditional lenders (Gerlach-Kristen et al., 2013). In the conclusion of their paper, Gerlach-Kristen et al. (2013) also find that the shorter the firm's relationship with the bank, the higher the probability of that firm to be financially constrained. Lastly, their research also showed that the higher a firm's outstanding debt level, the more likely it is to face credit rationing.

2.5. Regulatory Challenges for SME Financing Under Basel III

SMEs' access to bank financing is not only determined by market and firm characteristics, but also by the regulatory environment in which banks operate. The financial crisis of 2008 revealed shortcomings and weaknesses of the financial sector. This promoted the Basel Committee on Banking Supervision to revise existing regulations. The Committee put in place different frameworks, with the most recent one being the Basel III Framework. This section explains the core elements of Basel III and analyzes both their direct and indirect impact on the availability and conditions of credit for SMEs. Understanding these regulatory dynamics is crucial, as they shape the structural barriers that SMEs face when seeking financing. These structural barriers directly influence the need of alternative models like Shiperise.

The Basel III framework is a set of rules that is designed to strengthen the overall banking system and ensure its stability. The primary objective of the Basel III Framework is to improve the safety and stability of the banking sector and avoid another crisis. The framework introduces stricter capital requirements, a leverage ratio, and more robust liquidity standards with the goal of making banks better equipped at absorbing shocks and maintaining their operations during economic distress. A secondary objective of this framework is to encourage more market-based financing by making it more attractive than bank loans (Jayadev, 2013; Sairally, Muhammad, & Mustafa, 2013; Mendoza, 2015; Eisele & Nowak, 2018).

The Basel III framework has imposed increased capital requirements for banks. The new regulation imposes a higher proportion of high-quality capital, which comes in the form of Common Equity Tier 1 (CET1). CET1 is commonly composed of common shares and retained earnings. One of the objectives of the Basel III framework was to redefine the composition of regulatory capital to ensure that banks rely on more robust capital instruments. The framework has raised the minimum capital ratios that banks must keep. The minimum Common Equity Tier 1 ratio is now fixed at 4.5% of risk-weighted assets (RWAs), with an additional capital conservation buffer of 2.5%. This brings the total CET1 requirement to 7% (Jayadev, 2013; Mendoza, 2015; Basel Committee on Banking Supervision, 2011).

The second innovation Basel III has implemented is the leverage ratio. This ratio is a non-risk-based measure to ensure banks do not accumulate too much debt. It is a simple ratio of the bank's capital to its total assets. By limiting the banks' leverage, the Basel Committee aims to promote long term financial stability (Jayadev, 2013; Mendoza, 2015; Basel Committee on Banking Supervision, 2011).

The next implementation is the regulation that may have the most impact on SME financing, but we find contradicting views in the literature. The Basel committee decided to introduce two liquidity standards: the Liquidity Coverage Ratio (LCR) and the Net Stable Funding Ratio (NSFR). The LCR requires a bank to hold enough highly liquid assets that can easily be transferred. Highly liquid assets are defined as assets that can be liquidated in less than a month. In other words, the regulation makes sure the banks have enough cash to cover their short-term liquidity can withstand a crisis. With this new rule, banks need to maintain at least 25% of their expected cash outflows as liquid assets. On the other hand, the NSFR is supposed to guarantee the funding of a bank on the medium term, which reduces their need of short-term borrowing. The rule indicates that the ratio of long-term liabilities, which is greater than one year, to weighted long term assets must at least 100% (Eisele & Nowak, 2018 ; Basel Committee on Banking Supervision, 2011; Mendoza, 2015).

Eisele and Nowak (2018), believed that the LCR and NSFR would have a significant impact on SME lending. In their point of view the LCR would change the traditional maturity transformation business

since banks had to change the composition of their balance sheet into more liquid assets. This means that the loans to SMEs would be shortened. Furthermore, they observed that the collateral requirements for SME borrowers become stricter from 2008 to 2015, while the maturities for these loans became shorter. After the crisis, SME borrowers were able to borrow less, at higher interest rates and for shorter time periods, while providing even more collateral.

Conversely, according to the EBA report at the end of 2013, there was no correlation between the gradual compliance of banks with LCR ratio and a decrease in bank loans to SMEs. Pons & Quatre (2014) researched the impact of the Basel III framework on SME lending in Europe. They first explained why Europe applied a derogation to the Capital Requirement Regulation (CRR) to protect the access to financing of European SMEs. During the transposition of Basel III in Europe, SMEs have benefitted from a specific treatment and derogation to the general rules which is called: the support factor (Fraisie & Mésonnier, 2023). Without this protection, French bank economists estimated that the increase in capital requirements would have constrained the credit supply to SMEs. Since banks needed to reduce their risk-weighted assets by 20%, they would have reduced loans to SMEs that are considered as riskier business than other firms. The extent of the reduction of credit for SMEs was not specified. Additionally, European SMEs are much more dependent on bank credit than in the United States. While in 2008 the non-financial corporate debt accounted for 25% in the United States, it represented 73% in France. This means the new capital requirements would have different impacts because the financing models in the world are different. Economists also argued that banks would discriminate SMEs based on their risks and increase the interest rates for their loans. Dietsch et al. (2016) noted that in the Basel III framework, the capital requirement for an SME loan only depended on the probability of default. The asset correlation was also a function of the probability of default. Given that SMEs are associated with higher default probabilities, this had an impact on the supply of credit to SMEs.

For all these reasons the European legislation took the possible consequences into account and implemented the CRR IV regulation. In this regulation the Capital Requirements are “neutralized” by the capital conservation buffer (CCB). This means the capital requirements for SME loans have not changed. As a conclusion to their research, Pons & Quatre (2014) state that the credit to SMEs has not been affected by the increase in banks’ capital requirements. But this is mainly due to the European legislator for mitigating the effects of these new rules for SMEs.

Since then, academic papers like Mayodormo and Rodriguez-Moreno (2018) have shown that the support factor indeed reduced credit constraints for medium-sized firms, but it had little to no effect on small firms. Small firms are typically defined as firms with less than 50 employees, which is the main

type of firms Shiperise works with. Medium-sized firms are defined as firms having between 100-500 employees (Ayyagari, Demircuc-Kunt, & Maksimovic, 2014). The general observation is that unconventional policy operations have had a positive effect on big corporations and less risky SMEs (Fraisie & Mésonnier, 2023). A similar observation was made by Eisele and Nowak (2018) using survey and balance sheet data on European SMEs, they found a recent decline in SME financing through bank institutions. Nevertheless, their findings also show that policies that encourage new forms of market-based financing could mitigate the possible negative economic effects of limitations on bank lending.

Looking at the state of the European bank system, the European market is dominated by a few major banks (European Systemic Risk Board, 2015). According to Acharya and Steffen (2015), the European banks are underfunded compared to their equivalents in other countries. Because of this, the banking sector is more volatile in Europe than other sources of financing (Becker and Ivashina, 2014). Gambacorta et al. (2014) shows that countries with a financial system based on bank financing are subject to be affected more harshly by a financial crisis. Given that the supply of bank loans to European SMEs is likely to decline even more in the future due to struggling banks and new regulations (like Basel III, the International Financial Reporting Standards (IFRS) and the markets in financial Instruments Directive (MiFiD)), there should be a significant growth potential for alternative sources of financing (Eisele & Nowak, 2018). A similar conclusion is made by Wandhöfer (2019), there are multiple forms of digitized finance penetrating the market. These alternative forms of financing often use transactional and non-traditional data, usually removing the information asymmetry banks face with SMEs. There are a lot of innovations that can be observed in this field which stretches across e-commerce, payments, microlending and new marketplace lenders. Pioneering collaborations between fintech companies, banks and SMEs come to the surface, introducing financing solutions for SMEs that can reduce costs and improve transparency (Wandhöfer, 2019). Additionally, Petersen & Rajan, 1995 demonstrate that when SMEs have struggled to access traditional financing, they often move to relationship lending. These developments reflect the growing relevance of emerging financing models like Shiperise's that rely on innovation to bridge the credit gaps created by traditional banking models.

2.6. Loan Guarantees and Collateral

As stated above, the main reason why SMEs have difficulty accessing credit from banks is because of the serious information asymmetry that exists between banks and SMEs. To mitigate this moral hazard banks often use guarantees and collateral to transfer the risk from the lender to the borrower. This way, they ensure the borrower's commitment by putting their personal assets at stake. To improve the credit supply to SMEs, different types of lending technologies are applied to SME lending. The first to make the distinction between transaction lending and relationship lending were Berlin and Mester

(1998). Building on this theory, Berger and Udell (2002) classified the lending technology used by commercial banks for SME loans based on the type of information used, into transaction and relationship lending technology. Transaction lending is defined as a relationship between the borrower and lender that only relies on hard information, like financial statements, which are publicly available (Petersen, 2004). This type of lending technology is primarily used by banks and can be divided into three categories: financial statement lending technology, asset-backed lending technology and credit scoring technology (Berger and Udell, 2002). Five years later, Taketa and Udell (2007) further extended this classification by adding factoring, equipment lending, real estate lending and leasing. In contrast, relationship lending is based on soft information, which is qualitative, non-public, and acquired through ongoing interactions between the lender and the borrower (Boot & Thakor, 2000; Petersen, 2004). Relationship lending technology can also be categorized following three characteristics: private information, long-term and multi-channel communication and exclusive bank-enterprise relationship (Boot, 2000).

In practice, due to the information asymmetry that exists between banks and SMEs lending institutions aim to minimize default losses as much as possible. To bridge the gap caused by information asymmetry banks require guarantees, which lie at the center of loan contract design. There are different forms of guarantees: personal guarantees, third-party guarantees, government guarantees, or collateral. The increase of guaranteed loans is driven by the need to mitigate credit risk in uncertain times and weak global economic conditions. But more importantly, guarantees play a crucial role in capital regulation since assets weighted by their level of risk are at the base to determine bank-level capital ratios. After the financial crisis and subsequent regulatory changes, this has become a key concern for banks. The use of specific guarantees involves important trade-offs (Mayordomo et al., 2019). By using collateral or guarantees to secure a loan, the risk associated with the loan is reduced. As a result, it lowers the risk-weighted assets (RWA) and forces banks to hold less capital against these loans, which overall reduces the capital requirements (Degryse et al., 2021).

2.6.1. Personal Guarantees

A personal guarantee involves an individual who personally guarantees the loan if the business defaults. In most cases, this individual is the business owner and is personally liable for debt. There can also be a joint liability of multiple guarantors, each of whom has demonstrated sufficient resources to cover the borrower's default. By entering a personal guarantee, a general claim is put on the present and future wealth of the guarantor. Only if specified otherwise, these are indefinite guarantees until the contract is fulfilled, such as the repayment of the loan. They are also indeterminate, which means that if enforced, the bank can seize various assets from the guarantor(s), including properties and present and future salaries. Additionally, these claims usually do not limit the borrower's utilization of

their wealth, which can create uncertainty around the guarantee's value in the medium and long term (Mayordomo et al., 2019).

2.6.2. Third-Party Guarantees

For third-party guarantees, it is not the individual who assumes liability but an external party, called the guarantor. This third-party can take the form of another company or a guarantor institution. These types of loans play an important role in the SME lending market. According to Posey and Reichert (2011), third-party guarantees can replace collateral to a certain degree. Menkhoff et al. (2012), further show that in the Thai family financial market, third-party guarantees are more effective than bank-enterprise relationships for lowering collateral requirements. An additional finding on third-party guarantees serve as a motivation to reduce moral hazard, since borrowers want to maintain a good relationship with guarantor (Doh & Ryu, 2004).

2.6.3. Government Guarantees

Governments employ various measures to tackle SMEs' limited access to external finance, with loan guarantee schemes (LGS) being the most common approach. The economic reason behind government-sponsored LGS is the widely recognized inability of the private sector to allocate credit efficiently. Unlike the two previous types of guarantees, in this case, the government takes on the responsibility for covering the loan in the event of default. The implication of the government in backing SMEs loans shows their critical role in the global economy. It also highlights the expectation that guarantee recipients will use the funds to generate economic and social benefits (Bannock and Partners, 1997; KPMG, 1999). In the United States, Craig et al. (2004) found that Small Business Administration (SBA) loan guarantees effectively reduce credit rationing in the SME loan market. They also demonstrated a significant positive relationship between the level of SBA and future personal income growth.

2.6.4. Collateral-Based Guarantees

In collateral-based guarantees, the repayment of the loan is backed by fixed assets, such as real estate and equipment, or other assets, like accounts receivables or deposits. Those assets are seized by the lender in case of default. There is a large variety of types of collateral and contrary to personal guarantees, these claims tend to include restrictions on the utilization of the assets by the borrower (Mayordomo et al., 2019; Song & Zhang, 2018). According to the classification of lending technologies, collateralized loans should be considered as transaction lending, more specifically as either asset-backed lending technology, equipment lending or real estate lending (Taketa and Udell, 2007).

2.6.5. Effectiveness of Credit Guarantee Schemes (CGS) in Closing the SME Financing Gap

The effectiveness of Credit Guarantee Schemes (CGS) to address financing challenges of SMEs, remains a debated issue in the economic literature, particularly for reducing the information asymmetry between SMEs and banks. Some scholars argue that CGS are costly instruments that can cause problems for financial stability (Vogel and Adams, 1997; Llisterri, 1997). Specifically, government guarantees, do not appear to show any evidence of enhancing credit availability to financially constrained SMEs. According to Vogel and Adams (1997) & Llisterri (1997), they should not be viewed as a substitute for correcting financial market or legal system failures that lead to credit rationing. On the other hand, CGS can provide new access to loans even though it only works under specific conditions of their operations (Holden, 1997; Levitsky, 1997; Boocock and Shariff, 2005; Riding et al., 2007). However, Levitsky (1997) argued that government guarantees should take externalities into account as well as sustainability. His study raises the question of whether government guarantees lead to excessive subsidies and cause moral hazard, affecting their long-term sustainability and development. Uesugi et al. (2010) also questions the sustainability of this tool encouraging banks to take on more short-term loans by reducing the risk probabilities. It increases the likelihood of a financial crisis to erupt and ultimately decreases the probability of repayment. Additionally, Smith and Stutzer (1989) demonstrated that when government guarantees are issued through the banks and are available to all borrowers, can reduce the borrowers' interest rates and raise the likelihood of obtaining credit for low-risk borrowers.

In addition to CGS, the requirements of collateral for loans can reduce credit rationing and borrowing costs under certain conditions. It provides a better allocation of credit and investment in the economy (Coco, 2000; Bester, 1985; Besanko and Thakor, 1987). This is only the case for certain working characteristics of the individual loan, deposit markets and effectiveness of legal procedures for loan recovery. The SME would remain restricted, if it the SME is unable to back their loan with collateral, or that the legal system is unable to ensure creditor protection. Zecchini et al. (2009), present empirical evidence from Italy, where 83% of bank loans to small companies are secured by guarantees. These guarantees take the form of real assets in 65% of the bank loans.

Since collateral is a "credit risk mitigant", banks use it to reduce the risk weights associated to the loan to calculate their risk-weighted assets. Additionally, under the Internal Rating-Based approach, all personal guarantees are also used to reduce risk weights because they are a function of the probability of default and the loss given default (Mayordomo et al., 2019). Personal guarantees transform the firm's responsibility from "limited responsibility firm" to an "unlimited responsibility firm".

Coming back to the problems of moral hazard and adverse selection, which stand at the center of the use of collateralization. The banking literature recognizes that collateral alleviates those problems, and therefore reduces credit rationing. First, it forces a borrower to reveal their default risk reducing the adverse selection, but it also gives the borrower an incentive to make an effort and give a truthful state of their project (Bester, 1985; Bester, 1994; Bester, 1987). These two effects apply above all when personal guarantees with assets outside the firm are put as collateral. When the borrower has personal assets at stake, it incentivizes them more to repay the loan. In comparison, when collateral is assets inside the firm, it serves as a way to reduce the conflict of interest between multiple lenders. The use of collateral, however, varies across loans depending on the characteristics of the borrowers, the loans, and the relationship between the bank and borrower. All these characteristics affect the information asymmetry between both parties about the credit risk of the loan (Jiménez et al., 2009). Overall, the theoretical predictions are in line with empirical literature. Most studies find a positive relationship between the borrower's risk and collateralization, with the highest incidence and degree of collateral observed in young and small firms. This, in turn, supports the risk reduction and monitoring function of collateral (Berger et al., 2011a; Berger et al., 2011b; Steijvers and Voordeckers, 2009; Degryse et al., 2009).

2.7. The Role of Inventory in SME Financing

The business of Shiperise is specifically targeting the gap in financing of SMEs that are in the growth phase and need to finance their inventory. Linked to this financing gap is the Cash Conversion Cycle (CCC). This theory explains that companies can increase their profitability by reducing the time between paying for inventory and selling their product (Deloof, 2003; Tauringana and Afrifa, 2013; Aktas et al., 2015). This means that the faster a company sells its products, the more profitable it becomes (Deloof, 2003). This model helps understand how long it takes for companies to get their money back after the investment made in their inventory, which is an important variable for Shiperise. Following this theory, companies should try to invest less in their inventory to improve their profitability, since keeping inventory longer comes at a cost. But there is one important shortcoming to this theory: the access to financing when companies need the cash. This is exactly where Shiperise comes in and fulfills this need. Gitman (1974) was the first to introduce CCC. Later, Johnson and Soenen (2003) showed that the CCC is a strong working capital measure to predict the success of a company. There are a few factors influencing the CCC, like the company's internal resources, the level of investments in fixed assets, firm sustainability, external borrowing and the overall economic environment.

According to Fazzari and Petersen (1993) and Carpenter et al. (1994), access to financing tends to increase inventory investment of companies, which is in line with the theory of constraints (TOC). This theory demonstrates that a lack of access to financing prevents companies from profiting from their inventory investments (Cunha & Paisana, 2011). Therefore, it is expected that there is a difference in inventory level between constrained and unconstrained SMEs.

As stated by Bagliona and Sembenelli (2004) inventory is a component of the firms' assets that is most likely to be affected by financial strain and unfavorable macroeconomic conditions. One of the reasons for this is that SMEs experience easier access to financing during boom periods. The marginal cost of inventory is then lower since higher sales are expected (Cunha & Paisana, 2011). The link between high GDP growth rate and access to financing by SMEs has been made by Jenkins & Hossain (2016) in emerging markets like Turkey, Argentina and Brazil. They also show that conversely, high inflation and unfavorable interest rates will discourage banks from making loans to SMEs due to the increased perceived risk. Harrison et al., (2022) and Carpenter et al. (1994) found that the supply of credit to SMEs during financial crises decreases. As a result, SMEs' inventory investments are heavily affected in financial crisis periods, especially since they rely more on bank loans than larger firms (Oliner & Rudebusch, 1996). This effect continues into the post-crises period, which further limits SMEs' access to financing. Research by Harrison et al. (2022), shows that in the period following a financial crisis, banks are still reluctant to approve loans for high-risk firms. They demonstrate that while the demand for bank loans is not affected by the economic conditions, the supply of credit presents a big challenge for SMEs.

Since SMEs have limited access to external financing, their inventory investment is even more critical (Mathuva, 2013). SMEs are known to be higher-risk businesses and thus are more prone to financial stress, which makes effective inventory management even more important (Belgithar & Khan, 2013). Many studies have demonstrated that a positive relationship exists between access to financing and inventory investment (Carpenter et al., 1994; Kashyap et al., 1994; Fazzari et al., 1988). Inventory is a highly liquid asset that is associated with low adjustment costs, which makes it more responsive to changes in the financial capabilities than other types of investments, like fixed assets or R&D (Guariglia & Mateut, 2006).

Understanding the role played by inventory exposes the fact that access to finance is not only vital in working capital management but also disproportionately challenging for small businesses in periods of financial distress. The issue is even more urgent for sustainable SMEs, which now face the challenge of financing their operations in parallel with long-term environmental and social goals while dealing with traditional financial challenges. The next section will subsequently discuss how such

sustainability-focused businesses fund themselves, and how actors like Shiperise can help bridge the gap between sustainability objectives and credit availability.

2.8. Access to Financing for Sustainable SMEs

This research aims to provide more information on the access to financing of sustainable SMEs. The core business of Shiperise is to help the growth of sustainable SMEs and accelerate the sustainable transition for the economy. A sustainable SME is defined by Shiperise as one that integrates at least one of the following pillars into its operations.

1. Local development: Supporting the economic and social growth of local communities.
2. Nature-friendly practices: Adopting environmentally responsible methods that minimize harm to nature.
3. Sustainable lifestyle: Offering products or services that encourage and promote sustainable living habits.
4. Reparability: Ensuring products are designed to be repaired, extending their lifespan and reducing waste.
5. CO2 reduction: Actively working to reduce carbon emissions as part of the business operations.
6. Water use reduction: Minimizing the consumption of water in production processes.
7. Waste reduction: Implementing practices that decrease waste generation and encourage recycling or reusing materials.
8. Support for nature-oriented lifestyles: Providing products or services that either reduce environmental impact or foster a connection with nature, encouraging life on Earth.
9. Local communities with small distances between producers and end-users: Strengthening local supply chains to minimize transportation emissions and promote closer connections within communities.

These principles collectively highlight the commitment of sustainable SMEs to reducing environmental impact, supporting local communities, and fostering long-term sustainability in their business practices.

The OECD (2017) underlines that SMEs can contribute to the United Nations Sustainable Development Goals through their employment generation, sustainable industrialization and income inequality reduction (Bartolacci et al., 2020). According to Bpifrance (2020), SME managers seem to be personally aware of the challenges of the low-carbon transition. There are also more and more SMEs appearing with the green transition at the heart of their mission and may propose disruptive innovations. But like

regular SMEs, the access to financing seems to be the major challenge to their ability to act and innovate for the sustainable transition (Deffains-Crapsky, 2023).

Traditionally, institutional investors only looked at financial statements to evaluate the value of a company. However, non-financial factors such as carbon emissions, energy efficiency, employee training, and working conditions are now increasingly considered. These ESG indicators can be compared to a company health check report. Since society is expecting people to pay more attention to social and environmental issues, the expectation for Corporate Social Responsibility is increasing. This leads to large companies having to consider those key ESG indicators when making a decision. To stay competitive, companies must understand the principles of ESG (Egorov, 2023). Several authors have researched whether sustainable SMEs have better access to credit compared to other SMEs. D'Apolito et al. (2024) researched Italian SMEs during the period of 2017-2021 and confirmed both of their hypotheses. The results suggest that SMEs with more sustainable operations have better access to bank credit and a better capacity to pay the cost of bank debt. Their research supports these results for both short-term and medium- to long-term loans, which confirms that sustainable business models improve access to credit and can also improve bank-SME relationship. The stronger the SMEs' commitment towards sustainability, the greater their ability to pay the cost of debt. Additionally, D'Apolito et al. (2024) point to financial regulators that are reinforcing regulations with the goals of encouraging banks to support sustainability practices. They are specifically putting pressure on EU banks to integrate sustainability in their lending decision-making processes. By implementing those practices, banks would also benefit from a more effective environmental management system, which would in turn improve their overall financial stability (EBA – European Banking Authority, 2020a, EBA – European Banking Authority, 2020b).

In addition, Pietrovito et al. (2024) used the WBES database to show that companies in sustainable sectors have less difficulty getting credit supply. This is contradictory to longstanding literature that shows that more innovative companies have more trouble accessing external financing (Lee et al., 2015). The same findings have been observed by Yang et al. (2025), who show that ESG can significantly help a firm's capacity to obtain commercial credit financing. Integrating ESG in the bank-firm relationship helps to deal with information transparency, supplier concentration, operational risks and managerial myopia.

3 Testing the Hypotheses on SME Financing Barriers

3.1. Hypotheses on Barriers to SME Financing

The previous chapter presented the key structural and regulatory challenges confronting SME access to financing. It highlighted the importance of SMEs in the global economy, the implications of capital requirements under Basel III, and the role of inventory in SME financing. While policy responses such as the SME support factor and credit guarantee schemes have been put in place to alleviate these barriers, their impact remains uneven, particularly for smaller and sustainable SMEs that lack traditional types of collateral.

Based on these insights, this chapter proposes four hypotheses on SME financing constraints, particularly on the issues of regulatory constraints, guarantees, and collateral, as well as the issues faced by sustainable SMEs. These hypotheses form the foundation for the empirical analysis and help answer the research question.

This study aims to examine the financial constraints SMEs encounter despite regulatory frameworks intended to promote their access to credit. Particular attention is paid to how the characteristics of sustainable SMEs affect their financing conditions.

H1: SMEs continue to face financing constraints despite regulatory adjustments.

Many measures in the Basel III framework are intended to support SME lending, such as the SME support factor under CRR IV regulation in Europe. Nevertheless, evidence indicates that in the real-world banks continue to be hesitant to fund SMEs because of their perceived riskiness, low transparency, and economic instability (Dietsch et al., 2016; Fraisse & Mésonnier, 2023). This hypothesis seeks to test whether regulation efforts have managed to modify SME financing conditions or if access to financing is still limited.

H2: SMEs with any type of guarantees or collateral are more likely to access bank financing and benefit from better loan conditions compared to those without.

SME lending is also made possible through guarantees and collateral, vital risk mitigation tools for banks, and a key for reducing risk-weighted assets (RWA). Research demonstrates that SMEs possessing a robust guarantee or collateral receive better loan conditions than those lacking collateral or guarantees (Petersen & Rajan, 1995; Bernini & Montagnoli, 2017). Loan guarantees, like the ones provided by the European Investment Fund (EIF), tend to reduce banks/creditors' capital burdens because when defaults occur, they are compensated by public institutions, thus encouraging lending

to riskier SMEs (Eisele & Nowak, 2018). This hypothesis analyzes whether guarantees or collateral improve financing access and loan conditions, and whether the absence of guarantees and collateral still hinders access to financing for the SME market.

H3: Inventory-based financing creates operational hurdles for traditional lenders.

Of the different types of collateral, inventory-based financing brings certain operational challenges for traditional lenders. In comparison to fixed assets, inventory is subject to changing market values and needs daily supervision, which only adds to risk assessment and recovery processes. The risks of these complexities can lead to banks avoiding inventory-based loans given the increased potential of loss or miscalculated risk. Inventory-backed loans also demand domain-specific knowledge and systems to track the value of collateralized assets regularly.

H4: Sustainable SMEs face different collateral requirements and loan conditions compared to traditional SMEs.

Finally, the study provides insights on whether sustainable SMEs are subject to different collateral requirements and loan terms when compared to traditional SMEs. On one hand, sustainable SMEs may face political risk when their regulatory frameworks diverge from these growing market trends in favour of eco-friendly and ethical business practices. Lenders, on the other hand, might view them as comparatively riskier owing to ambiguities in emerging markets or cutting-edge technologies. Additionally, sustainable SMEs may not have traditional physical assets, leading to their inability to offer conventional collateral. One of the main questions regarding sustainability is whether SMEs with progressive and sustainable strategies face alternative conditions for financing, which helps assess whether lending practices are inclusive and whether financial institutions are adapting to new aspects of sustainable entrepreneurship.

Based on these hypotheses, the research seeks to contribute to revealing the nature of SME financing constraints while also evaluating how well solutions such as guarantees, and alternative financing initiatives address these issues.

3.2. Two-Stage Approach

This section presents the methodology and analytical approach used for the research in this thesis. This study uses a deductive approach, where hypotheses are formulated from the literature and tested with data (Easterby-Smith et al. 2023). This methodology integrates both quantitative and qualitative approaches to examine how collateral requirements, guarantees, and regulatory constraints shape SME access to financing, with a deeper focus on sustainable SMEs.

The analysis proceeds in two stages. The first approach is a quantitative descriptive analysis of secondary data related to collateral requirements for SME loans in European countries. Secondary data is information originally collected by other organizations or researchers and reused in this research to study trends in SME financing (Saunders, Lewis, & Thornhill, 2019). The second phase involves qualitative semi-structured interviews with financial industry professionals to provide richer insights and validate observations made through the quantitative analysis. It combines data from macro-level financing trends with micro-level experience.

3.3. Quantitative Phase: Secondary Data Analysis

The first phase of the analysis is based on secondary data collected from public databases. This compilation comprises data related to collateral requirements for SME loans in various European countries, classified by country and year. Data was predominantly available in Excel format and was analyzed for descriptive statistics and visualizations using Microsoft Excel. Since the data is quantitative, the analysis is exploratory and descriptive to derive patterns and trends related to collateral requirements. This phase uses the following steps:

Descriptive Statistics: The first phase of the analysis included examining trends in collateral requirements across country and year. Using visual tools like line graphs and bar charts, the paper presents how collateral needs have changed over time and across different economies.

Comparison: This part was to compare differences in collateral contracts at the national level and to determine if smaller firms consistently had more stringent conditions compared to larger firms. This involved recognizing patterns, for example, observing if collateral has increased or decreased over time, and looking for anomalies, like outlier countries or bubble periods.

Link with literature: Findings from the Data Analysis were then matched against findings of the Literature Review to either confirm or challenge existing theories of financing amongst SMEs and between SME firms and collateral constraints.

The findings from the quantitative phase provided a high-level overview of trends in collateral requirements in Europe over time and will serve as a starting point to interpret the qualitative phase.

3.4. Qualitative Phase: Financial Expert Interviews

As a follow-up to the quantitative analysis, the second stage of the research consisted of semi-structured interviews with financial experts. The aim is to triangulate and further illuminate the trends identified in the secondary data and to understand the lived experience and perceptions of stakeholders regarding collateral requirements and SME finance.

3.5. Triangulation of Findings

A triangulation approach was adopted in order to enhance the robustness and validity of the research findings. Triangulation is a method of enabling collection of independent data sources that should allow verification of findings and enrich the data (Denzin, 1978). In this study, triangulation was reached through a systematic comparison of the findings of the secondary data analysis and financial expert interviews.

This approach had three main objectives. First, it sought to identify congruence and divergence between macro-level trends seen in quantitative data, and the real-life experiences articulated by financial experts. Particularly, the differences between trends in collateral requirements and loan conditions should align with what was observed in the field. The second objective was to examine whether sustainable SMEs encounter distinct challenges relative to traditional SMEs, especially regarding collateral requirements and loan conditions. Such a comparison was intended to determine with sustainable business models or whether it actually contributes to some structural barriers.

The triangulation approach offered a well-rounded and multifaceted view of the complexities surrounding SME financing by contrasting the various sources of data. This improved the validity of the findings, ensuring that research was contextually grounded in both regulatory frameworks and on-the-ground experience (Patton, 1999). This methodological rigor adds credibility to the findings and provides a more comprehensive perspective on the impact of collateral requirements and guarantees on SME access to financing.

3.6. Research Assumptions and Limitations

The methodology used in this study is based on some fundamental assumptions. First, it presents the assumption that the secondary data accessed from public databases is both accurate and representative of wider financing trends. Since these are the approaches strictly based on publicly or freely available information, they also depend on the quality of these publicly available data sources. Secondly, the assumption is made that the participant's insights were honest and accurate reflections of their professional experience in the semi-structured interviews. This presumption is crucial to maintain the validity of the qualitative analysis. Third, although from the very nature of qualitative data, there is a risk of subjectivity in the interpretation, this risk had been reduced as we conducted a triangulation approach that confirmed findings across multiple data sources for achieving validity. However, even with these precautions, some limitations should be noted. Given that secondary data may be missing for some countries or years, results may limit the generalizability for some of the findings. Furthermore, because qualitative interviews were interpreted there was potential bias, as qualitative methods do not necessarily reflect SMEs as a population with diverse lived experiences and

variations in industry sectors, sizes and geographical contexts. However, the use of both quantitative data analysis and qualitative interviews combined creates a holistic view of the research problem studied. Also, this diverse multi-method approach allows the study to not only cover macro-level trends but also micro-level experiences, which is a significant strength in enhancing the richness and reliability of the study's findings.

4 Trends in SME Financing Across Europe

4.1. Understanding SME Credit Access Through Existing Data

This section aims at evaluating available secondary data from credible institutions to investigate the financing constraints of SMEs, especially collateral as a requirement to access financing. The study employed a secondary data analysis, which involves the analysis of data that have already been collected for reasons other than the specific research question and thus can be a timely and effective method for investigating wide-ranging patterns and trends (Babbie, 2013). This analysis will focus on emphasizing the factors influencing the barriers faced by the SMEs in obtaining the bank loan and the degree to which firms are required to deposit collateral against loans. Through the examination of this data, this study aims to determine if SMEs are still facing chronic issues despite changes in regulatory regimes and if the availability of collateral can affect their ability to achieve better loan terms.

To conduct this analysis, this research will draw data from a reliable source such as the OECD (Organisation for Economic Co-operation and Development) and SAFE (Survey on the Access to Finance of Enterprises), both of which have large and representative data on the SMEs' financing situation. Both sources are very reputable among economic studies, with informative data on the evolving trends of SME finance across Europe and globally. The OECD provides cross-country comparisons of financing conditions facing SMEs, while SAFE offers comprehensive data for the financing hindrances, among them the collateral role.

This analysis will test the following hypotheses:

- **H1:** *SMEs continue to face financing constraints despite regulatory adjustments.*
- **H2:** *SMEs with any type of guarantees or collateral are more likely to access bank financing and benefit from better loan conditions compared to those without.*

This work analyzes such data sources for signs that trace the extent to which collateral still acts as a salient access gateway to finance for SMEs and to what extent the existing regulation efforts to remove this factor from their otherwise binding constraint on lending actually reduced its constraining role.

4.2. Data-Driven Patterns in SME Financing

4.2.1. Trends in Collateral Requirements for SMEs (2008-2022)

Graph 1 in Appendix A shows the median growth rate of SMEs requiring of collateral for financing from 2008 to 2022, showing how collateral requirements have changed over time. The negative growth rate of -1.26 in collateral requirements during the financial crisis in 2009, indicates that collateral requirements were loosened during that time. This suggests that financial institutions relaxed their collateral requirements in reaction to government intervention and liquidity measures designed to help SMEs throughout the crisis. From 2010 – 2013, the growth rate remained stable around 0, which indicates stability of collateral requirements.

The other loosening of collateral requirements in 2016 saw a notable negative growth rate (-2.24). The global economic recovery and better access to capital, allowed banks to be more aggressive in taking risks. Between 2013 and 2019, however, the data reflects mild rises in collateral conditions, indicating a more sound economic environment. The COVID-19 pandemic in 2020 triggered a decline to -1.64, demonstrating once again how collateral requirements softened as a result of government support packages. 2021-2022 suggested a marginal tightening of collateral demands, as evidenced by the positive growth rate of 1.17 witnessed in the year of 2022 (seemingly & somewhat indicative of returning to stable financial conditions). This shows that SMEs have experienced loosening of collateral requirements during periods, but these episodes are transient.

4.2.2. Impact of Economic Crises on Collateral Conditions

Appendix B illustrates the change in collateral requirements for SMEs and large firms between Q2 of 2023 and Q4 of 2024 by SAFE. The data shows strong trends in the collateral conditions for SMEs, including a small upturn in the percentage of firms reporting stricter collateral requirements in Q4 2024, increasing to 15% from 14% in Q3 2024. Importantly, large firms had relatively lower collateral until the third quarter of 2024. However, the larger firms reported higher collateral in the last time period than SMEs, suggesting a slight shift in financing conditions.

SMEs experienced a slight decrease in collateral requirements in the period 2023-2024, indicating that though collateral requirements remained a challenge for SMEs, the overall trend was not one of incessant tightening. In contrast, large firms seemed to face a reversal of their collateral conditions in the second half of 2024, likely tied to general economic conditions or lending policy changes affecting the larger firms more intensely.

These trends indicate that collateral constraints do remain for SMEs, but they have eased a little over time, especially with respect to large firms. This contradicts the expectation that SMEs would

experience the most negative financing conditions as in previous years, suggesting that the overall financing environment for SMEs has improved somewhat, even though collateral is still a key obstacle.

4.2.3. Regional and Country-Specific Variations in Collateral Requirements

Appendix C shows how the collateral that SMEs have to provide in order to obtain bank financing has changed across European countries between 2014 and 2024. On average, this trend appears to lead to collateral requirements stabilizing over time. In terms of changes in collateral requirements, the percentage of SMEs characterizing their situation as having worsened remained steady through 2014-2019 (around 16-17%), while those reporting a loosening of the collateral remained low (around 4-6%).

By 2020, however, this decreasing trend changed, reporting a tightening of collateral requirements. Once the pandemic had passed, lending conditions tightened again as economies normalized. Generally, most of SMEs (68-76%) reported that there is no change in their collateral requirements, meaning that for many, their lending conditions remained stable. In 2024, the share of SMEs reporting higher collateral requirements slightly decreased to 18% and is potentially indicative of a stabilization in lending conditions after the post-pandemic credit tightening.

These results suggest that, while regulatory changes during the pandemic have provided some temporary relief from conditions, collateral remains a large barrier for SMEs. The data thereby confirm that, despite of some loosening of regulations, SMEs are still subject to financing constraints, but access to financing does not have a uniform quality across the European nations indicating the impact of national economy on credit access.

Shown by Appendix D, the collateral requirements for SMEs differ enormously from one country to another varying significantly with regional economic conditions and lending practices. In the case of Luxembourg, 0.53% is the average for 2023 with a slight decrease, to 0.48% in 2022. By contrast, a country such as Portugal, which required an average of 89.4%, demonstrating the regional differences in how countries access financing.

Collateral requirements vary widely even within Europe. As an example, collateral requirements in France remain very low, 3.75%, compared to other EU countries, meaning that SMEs in France are not subject to face strict collateral requirements. In contrast, Greece has higher collateral requirements at an average rate of 20.22%. Finland and Ireland had even higher collateral requirements, averaging 35.67% and 43% respectively. These examples show that practices for collateral requirements vary significantly between different European countries and therefore are not uniform even for the same geographical region.

Over the time sampled, collateral requirements vary by country, and for some, such as in Portugal and France, there are few changes. These differences imply that changes in economic conditions and adjustments of regulation affect collateral requirements not always in the same way, indicating that the use of collateral in SMEs financing is complex and varies with context.

The following can also be said after observing Appendix E which shows the 2017 statistics of SMEs requiring collateral to obtain credit approval. Some countries, such as France (4%) and Greece (26%), have low collateral requirements; others like Portugal (81%), Switzerland (82%), and the United States (93%) have higher requirements. Thus, countries with high collateral requirements tend to restrict access to financing through bank loans. This geographical gap suggests that SMEs in certain countries experience relatively lower barriers regarding the obtaining of financing in terms of collateral. Whereas SMEs in other countries face relatively high collateral rates requirements, which may have implications for their access to credit overall.

Looking specifically now at collateral requirements in Belgium in Appendix F, the only datapoints found were from nearly 15 years ago. In 2010 the share of SMEs that needed collateral to access bank lending stood at 74%, 72% in 2011 and 79% in 2012. So even though these small fluctuations, the overarching trend shows that collateral is still a major hurdle for SMEs in Belgium as a large proportion are still required to provide collateral when seeking finance. This percentage of collateral requirements for SME financing in Belgium will be discussed again during the qualitative analysis with financial experts.

4.2.4. Structural Barriers to SME Financing

Key observations from Appendix G on the that limit SME access to financing in Europe show that “No obstacles” is consistently the most reported factor, with a significant percentage of SMEs stating that they did not experience any significant barriers to financing. Yet this trend is not steady over the years, with some years having a higher proportion of SMEs reporting barriers than others. Other challenges like high interest rates, lack of sufficient collateral and paperwork remain the key hindrances, but their effects differ by years.

More specifically, the corresponding time series for insufficient collateral shows a negative slope. By 2024, 8% of SMEs cite insufficient collateral as a minor barrier (previously 18% in 2014). It indicates an improved collateral situation or a transition to other forms of financing. However, for a subset of SMEs, collateral is still a recurring pain point, especially relative to paperwork, or loss of control of the firm.

In contrast, the effect of interest rates has undergone a substantial change. The proportion of SMEs indicating interest rates being too high as a barrier has more than doubled from 17% in 2014 to 34% in 2023. Given the indication of tightening economic conditions and higher interest rates over recent

years, this highlights the mounting challenge being faced by SMEs in managing the cost of borrowing. It suggests that interest rates are now a more serious issue for SMEs, adding to the overall problems they have accessing financing.

Appendix H displays the financing barriers identified by the SMEs from different countries for 2024. High interest rates appear as the most significant barrier for the EU27 on average (reported by 26.13% of SMEs). Insufficient collateral is a hindrance for 8.24% of SMEs, being the second largest barrier. The third most frequent barrier is the paperwork (8.19% of SMEs), and the availability of financing appears lower down, with only 4.59% reporting it. Furthermore, 26% of SMEs say they have no difficulty when accessing finance in the EU.

Analyzing the data sets for Belgium shows some interesting trends. The most commonly cited issue for Belgian SMEs is high interest rates, with 24.57% of Belgian SMEs reporting this issue (a little lower than the EU27 average). Only 7.77% of Belgian SMEs state that they do not have enough collateral, which is below the European average of 8.24%, and indicates that Belgian SMEs tend to have slightly improved access to collateral compared to their European peers. Paperwork is cited by 5.76%, less than the EU average of 8.19%. Lastly, 41.85% of Belgian SMEs report that no barriers exist, which is a little more than on the EU27 average, suggesting that a higher number of Belgian SMEs are able to obtain financing without barriers.

The other countries were selected due to their geographic proximity to Belgium and GDP values that are the same order of magnitude, which means that the financing conditions in these countries can be directly compared in the context of the EU's economic highlights. For instance, France reports 8.87%, which means that a larger number of SMEs in France face issues regarding insufficient collateral. In contrast, it reports a significantly lower number, from Germany, with 7.28% of SMEs declaring collateral problems, indicating that collateral forms a bigger issue for French or Belgian SMEs than for German SMEs. Luxembourg is doing even better in this respect with 4.61%, a substantially lower ratio compared to the EU27 average, implying a relatively accommodating financing framework for SMEs, especially concerning guarantees available. On the flip side, Austria holds the largest share of SMEs reporting that they lack sufficient collateral or guarantees (9.61%), indicating that collateral continues to be one of the main barriers in Austria relative to the other countries studied.

4.2.5. Financing Purposes and Preferences of SMEs

Appendix I discusses the purpose of financing for inventory and working capital. For SMEs in the EU27, 36% indicated that they used financing for inventory and working capital and 59% stated that they did not. This means that most SMEs in Europe do not borrow and depend on internal financing to meet their operational liquidity needs.

In Belgium, 25% of SMEs used financing for their inventory and working capital, which is below the average EU27 adoption of 36%. However, 69% do not use such financing at all. This suggests that Belgian SMEs are relatively better-equipped (in-house or externally) than other European SMEs to obtain the funds needed to sustain their operations.

The only exception is Germany, where 41% of SMEs use funding for working capital, which is significantly higher than in Belgium and EU27, indicating a higher dependency on external financing in Germany. Austria is at 51% of SMEs use funding for working capital. In contrast, the data for France and Luxembourg show far lower utilization rates, 14% and 17% respectively, indicative that SMEs in these countries could be more self-sufficient or may have better access to alternative financing options. Such differences suggest differences in financing needs across Europe and indicate that Germany and Austria are more reliant on external sources of liquidity than countries like Belgium or France, which are less reliant on external financing.

Appendix J provides further insights on how European SMEs prefer to finance their growth ambitions. 63% of SMEs in the EU27 cite bank loans as their most preferred method of financing growth ambitions. Fifteen percent opt for loans from other sources, and 8% would choose investment equity. Only a small percentage of SMEs opt for other types of finance (9%). This reflects strong growth across Europe depending on traditional bank loans.

The preferred approach of SMEs in Belgium for 64% of the cases, is bank loans, higher than EU27 average. 14% select loans from other sources, and 6% equity investment. 9% choose other types of financing as well. These figures indicate that Belgium follows closely the general European trend, which clearly prefers bank loans to finance growth.

At 76%, France has the strongest preference for bank loans, far more than in Belgium and the EU27. This suggests a greater dependence on classical funding in France than elsewhere. Luxembourg paradoxically demonstrates a strong bias for equity investment (13%). This points to a greater appetite for dilutive financing options among SMEs in Luxembourg. Interestingly, the number of loans from other funders (20%) for the Netherlands is more active, while the UK is more passive regarding the diversity of sources.

The disparity in trends across Europe highlights different preferences, with domestic bank loans being by far the most important source of financing, but certain countries, like France and Luxembourg, taking a more multifaceted approach to financing growth.

4.3. Limitations of the Secondary Data

There are a few limitations to this study that should be acknowledged when interpreting results. A big issue is comparing datasets. OECD and SAFE datasets are obtained differently. Therefore, comparing results must be done very carefully. These methodological differences may have implications for the consistency of trends observed.

Another limitation is geographical bias. Although European countries are well represented, regional differences within such countries, urban versus rural or otherwise, may not have emerged, and thus could influence the findings. Finally, studying European countries vs. non-European countries presents challenges highlighting differences in financial systems and domestic economic conditions.

The study is similarly sensitive to sample size. Differences in sample sizes within countries and by year can inflate results to produce misleading conclusions. Non-response bias can equally misrepresent the information, particularly in the SAFE done by the European Union where SME owners respond to this survey themselves.

A further limitation is that the data is an aggregate by country, so the firm-level granularity may be lost. Consequently, it precludes detailed information on the characteristics of SMEs (for example, by sector or size), which could help determine barriers to financing. Intuitively, this will make sense, because self-reported data is problematic (SMEs may underreport or overreport difficulties), especially when it comes to collateral requirements.

Lastly, local differences in financial practices and time constraints, including the impacts of the COVID-19 pandemic, may impact long-term trends for financing SMEs. The limited availability of longitudinal data for some countries also prevents assessment of long-term trends.

4.4. Data Findings on Collateral and Credit Access

This secondary data analysis finds strong statistical evidence confirming H1. The findings indicate that finance constraints still limit SMEs, mainly due to high interest rates and collateral. There is a large amount of between-country heterogeneity in the collateral requirements to secure financing. Although temporary easing at the onset of the 2008 financial crisis and the COVID-19 pandemic provided fresh liquidity during periods of volatility, these adjustments were short-lived, and collateral requirements have tightened again as the economies stabilized. Since 2010, collateral was required by 74% of SMEs in Belgium where SMEs are traditionally exposed to high collateral demands. Interviews with financial experts from Belgium will delve further into this.

For H2, there is evidence to confirm the hypothesis that collateral-backed SMEs will have higher probabilities of obtaining financing. France, which has relatively lower collateral requirements, has fewer financing constraints, while Portugal and Greece with high collateral requirements face more challenges in enabling SMEs to access loans. The demand in Europe for traditional bank credit, as well as lower collateral requirements, further confirms the correlation between collateral and access to financing. However, the significant level of heterogeneity across countries (e.g., Luxembourg's very low collateral requirements) suggests that the application of collateral to secure funding is variable across locations and highly context dependent.

Overall, both hypotheses are supported. Evidence shows that despite regulatory reforms, SMEs still face financing difficulties, and collateral is a key consideration for accessing bank finance during favorable times.

5 Expert Insights on SME Financing

5.1. Interview Design and Data Collection

To gain comprehensive insights into the obstacles faced by SMEs to obtain bank financing in Belgium, qualitative data was gathered from 11 semi-structured interviews with financial professionals. Collecting a variety of views on the topic was considered important in order to give a nuanced picture of the Belgian financial sector. This is also the reason why special attention was given to choosing experts from Flemish as well as Walloon institutions.

Semi-structured interviews were selected because they allow the integration of structure across themes while maintaining conversational freedom. Such a format allows the interviewer to tailor questions to the flow of the discussion and to explore new themes more in depth, creating rich and contextual knowledge (Thiétart, 2014; Gotteland et al., 2012). Of the eleven interviews, seven interviews were held online (using an AI transcription tool to guarantee documented accuracy). Three interviews were face-to-face at the experts' place of work, allowing for a more detailed exchange whereas one was held in writing because of the schedule's constraints.

The financial experts interviewed are the following:

- Aren Vanhoutte, Head of Special Credits & Recovery (BNP)
- Nicolas Van Klinkednberg, Partner at Ernest Partners
- Freek Van Loo, Head of Credit Department (VDK)
- Clément Piedboeuf, Asset-based Lending Program (ING)

- Bronson Mostinckx, Origination Manager, Loan and Debt Markets (KBC)
- Cédric Dewitte, Manager PME/Adjoint Directeur Business Center (ING)
- Thomas Claeys, Business Center Director (ING)
- Laurent Joye, Sales lead coach BBC (ING)
- Geert Van Dael, Verantwoordelijke Kredietonderzoek (Bank Van Breda)
- Dirk Minkwitz, Manager Professional Banking (Beobank)
- Koen Verniest, Head go-to-market business (Crelan)

To standardize the interviews while allowing for individualized focus, one interview guide was designed that could be used across all interviews. This guide was structured in four parts inspired by Giannelloni et al. (2019). The first phase aimed at creating a climate of confidence by talking about the interviewee's position and knowledge, in particular in the field of financing of SME. The next part examined the guarantees or collaterals used to provide financial resources, which is the focus area of this study. In the third phase, the subject of inventory finance was discussed, as well as an assessment of operational constraints for this lending model. Finally, the fourth section focused on sustainable SMEs and whether such firms face different loan conditions to traditional firms.

The interview ended by thanking the respondent and inviting him to make final comments or ask questions. This framework allowed for the themes to be thoroughly explored and remain open-ended. The interview guide can be found in Appendix K. The number of interviews was determined by expert availability and the objective was to capture a diverse range of perspectives.

5.2. Thematic Analysis of Interview Data

Once the interviews were conducted, the qualitative data were analyzed thematically to extract patterns and assess alignment with the study's hypotheses. A thematic coding method was used to examine the interview transcript qualitative data. This approach enabled the discovery of recurring patterns, differences, and insights in the interviews, and preserved the richness of expert language use. The analytical focus was on three main themes directly relevant to the study objectives and interview guide: (1) collateral requirements in SME financing; (2) operational challenges in inventory-based finance; and (3) loan conditions for sustainable SMEs. Transcripts were reviewed line-by-line and manually coded. A preliminary code, representing the meaning of each unit of data had been designated, and these codes were then grouped into sub-topics. The coding grid and results can be found in Appendix W.

Overall, both convergence (in particular in terms of structural dependence on collateral in SME lending) and divergence (e.g. in the levels of operational involvement with inventory and the changing

place of sustainability in credit decision making) emerged in this process. The analysis of each theme is provided in the next section with direct quotes from the interviews and organized with reference to the hypotheses in the study.

5.2.1. Collateral Requirements in SME Financing

Across all interviews, there was widespread consensus that collateral is a key element in small business lending in Belgium. Although elements such as risk modeling, public guarantee schemes and digital transformation have modernized the credit process, the premise of securing loans through guarantees remains at the core of banks' decision-making. Our results are consistent with previous studies arguing that collateral acts as a screening device that allows lenders to evaluate borrower quality and reduce moral hazard, and not just as a tool for recovering in the event of default.

Respondents all confirmed the OECD's estimate that around 70% of SME lending is collateralized. Aren Vanhoutte (BNP): "70% seems fair." And so did Thomas Claeys (ING): "For SMEs, there are clearly more guarantees taken". For some strong clients, unsecuritized transactions can take place but it is still an exception, added Geert Van Dael (Bank Van Breda). The norm is that some form of collateral, either moral or real, is required based on the risk rating, solvency and ability to pay of the borrower.

The nature and form of the collateral can vary according to the use of the loan and the borrower. Loans financing tangible assets (e.g. real estate, machinery, as well as takeovers) the financed asset is itself the guarantee. In the case of more generic credit lines such as working capital or tax pre-financing, the bank may require additional guarantees like personal guarantees, business asset pledges and or third-party guarantees (by public agencies as PMV or Wallonie Entreprendre). This way, lenders create a multi-layered risk-protection system, balancing asset-backed security and institutional risk-sharing.

But a significant difference arose around the ticket size and deal structure. For small tickets (e.g., smaller than €50,000) and especially for those approved through automated scoring systems (as reported by ING's Laurent Joye), collateral can be exempted if the borrower's credit class is strong. These are more automated transactions using the bank's internal standardized processes and risk models that enable fast and efficient lending while maintaining the health of the bank's risk profile. Conversely, as loan sizes grow, the need for more formal guarantees also increases. Thomas Claeys (ING) explained that larger deals, of more than €5 million, would typically include club deals between several banks which are split equally. This collaborative model facilitates risk sharing and coordinated enforcement of collateral, mainly for corporate business.

In addition to traditional guarantee mechanisms, a few banks, mainly ING, reported more sophisticated practices of collateralization, i.e. the application of mandates or hypothèque de contrôle

(a legal instrument that secures a lender's right to enforce a mortgage without immediate activation). In doing so, banks secure a potential right to enforce a guarantee without activating at the start of the loan. This is a flexible and anticipatory legal instrument that permits the bank to step up security if over time the risk profile of the borrower increases.

A number of institutions further emphasized the role of government guarantee schemes in order to extend financing to SMEs with no or insufficient tangible or financial collateral. These include PMV, Finance&Invest, Brussels, and Wallonie Entreprendre. For banks, these guarantees allow them to mitigate risk, lower RWA, and meet regulatory capital guidelines, which are critical capabilities under Basel III. As Koen Verniest (Crelan) argued, public guarantees are very often the key that makes loans possible. Without the government guarantee, these loans that would not otherwise be made.

Interestingly, although collateral is the norm, its function is becoming a more dynamic feature. Today, the importance of guarantees transcends their recovery value in the event of a default and also becomes a means to achieve optimal capital efficiency, manage internal risk limits, and drive deal profitability. "When you're able to reduce the risk, your capital costs go down, and that improves the profitability of the loan," as Thomas Claeys put it. This is part of a broader trend in which collateral has evolved from a legal fallback in credit models to a strategic resource in both portfolio management and regulation.

In short, this topic reminds us that collateralization is not just a conservative reflex, but rather a strategic condition of SME finance. Even though ESG considerations and alternative lending models emerge, Belgian banks maintain SME lending on the basis of asset-backed principles, which they use flexibly through public-private partnerships, scoring models and mandate-based-instruments. Collateral remains a default expectation, especially when the loans exceed a certain threshold, an unfavorable credit rating and inadequate creditworthiness of the borrower.

5.2.2. Operational Hurdles in Inventory-based Financing

Hypothesis 3 proposed that inventory-based financing creates operational obstacles for traditional lenders. This is indeed supported by the qualitative data. While sometimes inventory is part of a broader structure of collateral, such as a fonds de commerce pledge, banks are reluctant to rely upon it as a standalone security due to the volatility, complexity and low recovery value attributed to inventory.

A more direct pattern observed across all the interviews is the sense that inventory is illiquid, unpredictable, and difficult to monitor in a way that real estate or machinery or other sort of assets companies have to manage are not. Clément Piedboeuf (ING) called inventory financing a "mess,"

highlighting issues around fraud detection, condition tracking and valuation accuracy. Beobank's Dirk Minkwitz emphasized that inventory is priced at 0 in their risk model, and therefore showing that inventory serves as a symbolic, rather than a practical collateral.

A primary operational obstacle is the problem of real-time valuation. Inventory is naturally dynamic: it has value, volume, and composition that changes over time. "A stock of frozen fish is much harder to fund than a stock of iPhones," as Nicolas Van Klinkenberg of Ernest Partners put it. The difficulty is not only to get a reasonable initial value, but also to have confidence in the value during the period of credit. Perishability, specificity, and market dependence of the inventory all contribute to a high level of lender caution.

Apart from the valuation issues, operational and legal barriers make enforcement challenging. As several interviewees described, there is in theory some amount of inventory that can be reclaimed and resold in the event of a default, but in practice the process is expensive, time consuming, and low yield. As Aren Vanhoutte (BNP) pointed out, it can be seen in practice: "selling inventories is sometimes very difficult... you need to open shops, pay people, and decide if it's worth it." Koen Verniest (Crelan) even referred to theft in a warehouse to illustrate that physical control risks cannot be enforced and drive-up perceived risks.

Administratively, a number of organizations emphasized that inventory-based lending is resource-intensive, especially for small loans. Inventory financing is "process heavy and needs to be of sufficient size to be worthwhile", says Bronson Mostinckx (KBC Securities). It is very expensive to monitor, evaluate, maintain control over, etc. The potential for financial return is disproportionate to the process and this model becomes unviable in most SME contexts. Inventory financing is therefore usually confined to large corporate deals or structured deals where professional valuation and control solutions can be installed.

Some of the interviewees recognized that inventory could be part of a general pledge on operating assets (*fonds de commerce*). Nevertheless, even when using a general pledge, the single value of inventory is not computed nor used apart from the other. "We pledge everything that is not real estate, so inventory is part of that, but it's not the main thing", Freek Van Loo (VDK) said. It would seem to support the idea that inventory is more of a legal concept than a reliable means for risk transfer.

In some more significant cases, other solutions such as warrantage have been used to improve the structure of inventory financing. Cédric Dewitte (ING) explains that warrantage enables a third-party company to physically seal and watch over the borrower's stock. This external company seals all warehouse points and verifies the inventory at regular intervals. The borrower keeps operational

ownership of the stock but partial access to it is lost if the conditions of the repayment aren't met, thereby giving the bank a superior and more enforceable claim. Although warrantage imposes transaction costs due to the third party commissions and generally practiced with large and centralized inventories, it offers better security than a conventional inventory pledge. But until now, it remains rare expensive, restricting its usefulness mostly to big distributors or concession holders.

In rare cases some banks will accept inventory as part of a financing arrangement, but this approach is very controlled and conservative. Thomas Claeys (ING) presented the ING internal policy, which assigns discounted value tiers for different types of stock in the inventory, for example only a fraction of the inventory stock is eligible, but with tighter restrictions above a certain threshold. This tiered model further demonstrates banks simply have no faith in the liquidity of inventory.

In the end, these results support hypothesis 3: operational barriers pose critical limitations on the workability of inventory-based financing in general bank systems. The perception is that inventory is too volatile, unsecured, and too expensive to manage, especially for higher-risk or early-stage SMEs. Accordingly, even though it is found in legal collateral specifications, it carries relatively little weight in lending decisions.

5.2.3. Loan Conditions for Sustainable SMEs

Hypothesis 4 states that sustainable SMEs have different types of collateral requirements and loan conditions than traditional firms. The interviews paint a nuanced, but evolving, picture. While there is increasing enthusiasm in banks for financing sustainable projects, that eagerness has not yet translated into systematically differentiated loan conditions. Instead, sustainability predominantly affects loan pricing and qualitative assessments, with most firms keeping similar credit risk and collateral frameworks regardless of ESG alignment.

Almost all respondents accepted that sustainability is strategically important and that the financial sector has an increasing responsibility to help with the green transition. In practice, most banks draw a line between the type of the project and the profile of the borrower. For instance, Cédric Dewitte (ING) explains that *“we offer preferential rates... not because the company is green, but because the investment is green.”* This difference is representative of a more general pattern, sustainable projects are incentivized but in credit risk models there is no difference for the type of project.

Similarly, Koen Verniest (Crelan) noted that, ESG is built into the scorecard used by the back-office and used for observing its reputation and adjusting its rates, but the collateral requirements do not change. This was supported by Freek Van Loo (VDK), *“we consider sustainability equally important to financial*

analysis, but we still ask for the same guarantees". These cases illustrate a discrepancy between ESG philosophy and operational lending decisions.

Some institutions did mention that a few tangible benefits were available for green investments, that is slightly less expensive interest rates, longer loan term and more flexible structuring. For example, Thomas Claeys (ING) said *"the conditions are different for green deals, whether in terms of duration or interest rate."* But he added lenders still follow the same financial principles.

The interview with Geert Van Dael (Bank Van Breda) highlights this cautious progress even more. He wrote that the bank places great emphasis on 'Corporate Social Responsibility' and encourages investments in green projects. But his response was more about encouragement and motivation, not structural policy differences (ING) even made a slightly different point, explaining how ESG-related decisions are beginning to impact the valuation of collateral, at least in real estate lending. If the PEB rating of a property (energy performance rating) is bad, the bank can require more equity from the buyer, impose renovations or finance renovations to improve the property's energy efficiency.

Overall, the qualitative data is partially confirming H4. Yes, sustainable SMEs are selected because they are provided with preferential pricing or access to ESG aligned financial products. No, they do not have lower demands for collateral, and they are not consistently graded differently. Banks have been cautious, waiting for clearer ESG data, regulatory clarity and industry-wide standards for modeling risks.

During the interviews the possibility that prudential requirements including risk weighted assets (RWA) could be recalibrated to create an incentive towards lending sustainably was pointed out, but there was limited support for this view. Cédric Dewitte (ING) firmly addressed the idea that sustainable project does not lower the credit risk and should not justify lower capital charges. According to Thomas Claeys (ING), green investments are currently not treated differently when it comes to risk calculations. The only gesture in favour of this idea came from Nicolas Van Klinkenberg (Ernest Partners), who said that in future it may be the case that regulation ties ESG performance to capital relief measures. This highlights the continued divergence between sustainability goals and the regulatory infrastructure still enforcing lending protocols. "Our model integrates ESG, but it does not yet change the credit risk score outcome... that might evolve," said Dirk Minkwitz (Beobank).

6 Inside SME Financing: Findings and Reflections

6.1. Key Challenges in SME Access to Finance

The aim of this study was to investigate the financing barriers faced by SMEs in accessing bank credit, including the role of collateral, operational viability of inventory-based lending and the inclusion of sustainable SMEs in lending frameworks. Through an extensive secondary data analysis and qualitative interviews with financial experts, the results present a wide reflection of the present approach to credit in Belgium and in Europe.

6.1.1. *Regional Inequalities in Collateral Requirements*

A critical observation from the secondary data is that collateral requirements vary considerably by region. Some countries are still demanding high guarantees, such as Portugal and Switzerland, while others such as France and Luxembourg offer more favorable conditions. Belgium ranks between moderate and high in terms of collateral requirements. SMEs are still reliant on asset-backed lending frameworks, especially in collateral-heavy countries but also in other parts of Europe.

The qualitative analysis provides a closer-in look at the day-to-day lives driving these patterns. All banking experts interviewed agreed that taking collateral is not only a common practice, it is necessary for strategic purposes of regulatory capital cost management, particularly under regimes such as Basel III. Although smaller loans or high-quality borrowers might benefit from a lower amount of collateral from time to time, most SME transactions require collateral in the form of real estate, fonds de commerce or third-party support, for example, in the form of regional guarantee schemes.

6.1.2. *Collateral Dependency in SME Financing*

From the secondary data collected, it can be understood that collateral is still frequently demanded as a condition for SMEs financing, as shown by previous Belgian statistics indicating that up to 79% of SMEs must have provided guarantees. There have been some periods of relaxation, notably at the time of the global financial crisis and the COVID-19 pandemic. Collateral requirements have continued to be largely unchanged or to have eased slightly. The most recent data reveals a slight fall in the share of SMEs that consider insufficient collateral as the most important barrier to access finance. However, it is still in the second place in a list of the EU's most widespread financing challenges, next to high interest rates. This confirms that the role of collateral acts as a significant and complex structural and perceptual barrier for SMEs with no fixed assets.

6.1.3. *Limitations of Traditional Lending Models for SMEs*

For inventory-based financing, the interviews provided overwhelming support for Hypothesis 3. Inventory is too risky, illiquid and complicated to manage as reliable standalone collateral. While

occasionally included in larger pledges, inventory is heavily discounted in risk models and rarely used as the basis for credit terms. The only exception for this is high ticket sizes or well controlled inventory financing deals, thus illustrating the operational inapplicability of this model to the majority of the SMEs. This exemplifies the gap that Shiperise aims to fill, through its inventory financing model. It seeks to serve SMEs left out of the traditional lending framework due to insufficient collateral. However, its model is still constrained by market norms and the accompanying operational risk.

6.1.4. *No Systematic Incentives for Sustainable SMEs*

Regarding Hypothesis 4, banks have increasingly adopted a sustainability-oriented approach in their strategic outlook, yet loan conditions of sustainable SMEs are still largely undifferentiated. Some banks offer preferential terms for green projects, whether through lower interest rates or flexible terms, but these benefits are linked to the nature of the investment rather than the borrower's overall ESG profile. Neither collateralization requirements nor credit scoring models have so far been developed to consistently reward sustainable business models. But early signs, at least for real estate lending, show that ESG performance is beginning to shape the way collateral is valued.

Summing up, the secondary as well as the qualitative results show that collateral is still a persistent and complex problem for SMEs, with inventory financing not being feasible and a slow transition toward integrating sustainability into lending practices.

6.2. Added Value of Combining Quantitative Data and Expert Insights

Combining secondary data with expert interviews allowed for more detailed research into SME financing constraints. Where OECD and SAFE data showed broad strokes, like the wide use of collateral and the limited take up of inventory-based loans, the interviews unpacked why those patterns endure. They provided insights into lender behavior, risk views and developing trends in ESG integration that could not be captured by quantitative data alone.

6.2.1. *Collateral as Regulatory Strategy*

Both Hypothesis 1 and Hypothesis 2 are verified. The data show that SME lending is still heavily dependent on collateral, particularly if we consider Belgium. Interviews explained this persistence: the use of collateral allows banks to optimize the source of regulatory capital, rather than simply to reduce credit risk. The financial experts stressed that needs can differ based on borrower profile, loan purpose and deal size, information not included in macro-level data.

6.2.2. *Inventory Finance faces Operational Barriers*

The quantitative data showed that only 25% of Belgian SMEs have access to working capital loans (SAFE). The interviews pointed out that inventory is rarely accepted as standalone collateral, given its

perishability, volatility, and enforcement complexity. It is often heavily discounted or cross-collateralized and explains why traditional banks avoid inventory-backed lending, especially for product-based sustainable SMEs.

6.2.3. Sustainable SMEs Receive Incentives Without Systemic Change

Although ESG reporting has become more prominent, lending activities have not substantially changed. Interviews revealed that banks may offer lower rates of interest for sustainable projects, but not for sustainable companies. Collateral requirements remain, but ESG factors are starting to impact asset prices (e.g., real estate), signaling a slow change.

6.2.4. Connecting Macro Trends with Micro Realities

Trends and benchmarks were given by the quantitative data. Behaviors and institutional logic were revealed through interviews. For instance, they explained why collateral is still central to lending practices and why ESG and inventory lending have not advanced. This combination of qualitative and quantitative methods allowed for an in-depth analysis of the issues and for a better understanding of the findings.

6.3. Broader Observations on SME Lending

This research emphasizes the financing environment of SMEs and has also led to some wider considerations. These findings go beyond the initial hypotheses and provide useful perspectives for further research and policy development.

6.3.1. Differences Between SMEs and Large Corporations

A surprising and repeated phenomenon in both the secondary data as well as the interviews was the disparity in the treatment of SMEs and larger enterprises concerning collateral requirements. In fact, as can be seen from SAFE data (Appendix B), large firms experienced a sharper increase in collateral requirements than SMEs. This gap emerged in late 2024, indicating a change in risk perceptions, economic conditions or lending policies. But interviewees were unanimous in their opinion that big corporates had a different logic when it came to finances. Thomas Claeys (ING) & Bronson Mostinckx (KBC Securities) explained that large transactions often involve club deals, structured finance instruments or shared collateral. These instruments are not available to small businesses. Using these mechanisms larger companies have more flexibility and negotiation power. The SME sector is typically confronted with standard scoring systems and tighter collateral requirements, particularly in the case of an early-stage or high-risk scenario. This difference implies that there is a greater structural stiffness in credit access for SMEs, although large firms are sometimes subject to stricter absolute collateral requirements.

6.3.2. Credit Scoring and Digitalization

A second transversal revelation was the contribution of automatic credit scoring and digital transformation in SME lending. One interviewee in particular, Laurent Joye (ING), referred to the growing use of standardized credit streams for small credit amounts, in which decisions are taking place with minimal human interference. It is efficient and allows minimized bias, but the problem is that it is binary. The firms either meet the strict criteria or they don't. That automation restricts SMEs' flexibility (for those falling into the "grey zone") as they may not have a traditional security but in practice have other strengths (positive cash flow, ESG commitment). In the future, credit innovation may require a mix of automation and contextual evaluation to adequately cater to these kinds of SMEs.

6.3.3. The ESG Paradox

Finally, despite the general consensus that sustainability is a strategic imperative, the analysis exposes a paradox that ESG has been highly promoted in theory but not yet successfully translated into credit practices. There are ESG-oriented products, but they generally apply to projects more than companies and do not systemically affect risk scores or collateral requirements. This suggests that the financial system is still structured under the old (traditional) risk model, i.e. asset-based security concerns rather than strategic or societal risks. This gap is likely to be bridged through regulatory incentives (such as ESG-adjusted RWAs), better integration of ESG data.

7 From Structural Barriers to Financial Innovation

This thesis set out to answer the following research question: What structural barriers in SME financing, including collateral requirements and regulatory constraints, limit access to credit, and how might Shiperise's lending approach address these gaps for sustainable SMEs?

Evidence verifies that collateral is an important obstacle to accessing financing for SMEs throughout Europe and Belgium. Regulatory reform and crisis-period interventions have occasionally reduced collateral requirements, but these reductions have been temporary. Asset-backed lending still dominates under structural credit models, especially under the Basel III regulation. SMEs with weak collateral, in particular small businesses that are either young or inventory-intensive, struggle to access favorable loan conditions.

Inventory financing generally remains impractical in traditional banking. Problems such as uncertainty about value, perishability, the risk of fraud, and the enforcement difficulties make inventory unreliable collateral in the majority of cases. Even where models such as warrantage are available, they require scale and are best applied to larger, well-structured deals, which sustainable SMEs don't always have.

Although banks are aligning with sustainability objectives, the focus on ESG has not yet become an integral part of credit risk models and collateral frameworks. Even though banks provide preferential terms, such as lower interest rates or longer periods for repayment, for some green investments. Examples of these green projects are energy-efficient renovations or installations of solar panels, these benefits rarely apply to companies with ESG-aligned standards in their operations. This creates room for players such as Shiperise to stand out, by embedding sustainability into their credit logic.

Shiperise's approach is to fund sustainable SMEs by leveraging inventory-backed lending. Their credit mechanism addresses a number of challenges identified in this study. It can fill the gap left by the banking system by giving SMEs a non-traditional source of financing if they lack hard collateral. The model isn't about replacing traditional banks, but rather complementing them by providing credit where established banks do not provide financing. Doing so, it provides a case for how targeted financial innovation can progress both economic inclusion and sustainable entrepreneurship.

This study adds to the rapidly increasing literature on SMEs, access to credit and integration of sustainability factors, showing the practical barriers, such as the overemphasis on collateral requirements and underplaying the role of ESG issues in current lending models.

Future research could examine how risk models should better include non-traditional assets' value (inventory, receivables, or intangible assets) and how to tailor risk parameters to SMEs with stable business models. It would also be useful to explore how other alternative finance providers, such as fintechs and impact investors, score creditworthiness through non-traditional indicators, offering more inclusive frameworks. Simultaneously, analysis of ESG considerations being incorporated into regulatory frameworks (such as green-adjusted capital requirements) may provide lessons for systemic transformation. Lastly, case studies of platforms such as Shiperise could help evaluate their broader impact on SME growth, financial inclusion and environmental results in order to inform a more adaptive and purposeful financial sector.

8 Bibliography

- Acharya, V. V., & Steffen, S. (2015). The “greatest” carry trade ever? Understanding Eurozone bank risks. *Journal of Financial Economics*, 115(2), 215–236. <https://doi.org/10.1016/j.jfineco.2014.11.004>
- Aktas, N., Croci, E., & Petmezas, D. (2015). Is working capital management value-enhancing? Evidence from firm performance and investments. *Journal of Corporate Finance*, 30, 98–113.
- Ang, J. S. (1991). Small business uniqueness and the theory of financial management. *The Journal of Entrepreneurial Finance*, 1(1), 11–13.
- Ang, J. S. (1992). On the theory of finance for privately held firms. *The Journal of Small Business Finance*, 1(3), 185–203.
- Anzoategui, D., Martínez Pería, M. S., & Rocha, R. R. (2010). Bank competition in the Middle East and Northern Africa region. *Review of Middle East Economics and Finance*, 6(2), 26–48. <https://doi.org/10.2202/1475-3693.1313>
- Auzzir, Z., Haigh, R., & Amaratunga, D. (2018). Impacts of disaster to SMEs in Malaysia. *Procedia Engineering*, 212, 1131–1138. <https://doi.org/10.1016/j.proeng.2018.01.146>
- Ayyagari, M., Demirguc-Kunt, A., & Maksimovic, V. (2014). Who creates jobs in developing countries? *Small Business Economics*, 43(1), 75–99. <https://doi.org/10.1007/s11187-014-9549-5>
- Babbie, E. (2013). *The practice of social research* (13th ed.). Cengage Learning.
- Bagliano, F. C., & Sembenelli, A. (2004). The cyclical behaviour of inventories: European cross-country evidence from the early 1990s recession. *Applied Economics*, 36(18), 2031–2044. <https://doi.org/10.1080/0003684042000218534>
- Baker, H. K., Kumar, S., & Rao, P. (2020). Financing preferences and practices of Indian SMEs. *Global Finance Journal*, 43, 100388. <https://doi.org/10.1016/j.gfj.2017.10.003>
- Bannock and Partners. (1997). *Credit guarantee schemes for small business lending: A global perspective*. London: Graham Bannock and Partners.
- Bartolacci, F., Caputo, A., & Soverchia, M. (2020). Sustainability and financial performance of small and medium-sized enterprises: A bibliometric and systematic literature review. *Business Strategy and the Environment*, 29(3), 1297–1309. <https://doi.org/10.1002/bse.2434>
- Basel Committee on Banking Supervision. (2011). *Basel III: A global regulatory framework for more resilient banks and banking systems*. Bank for International Settlements. <https://www.bis.org/publ/bcbs189.pdf>
- Beck, T., & Demirguc-Kunt, A. (2006). Small and medium-sized enterprises: Access to finance as a growth constraint. *Journal of Banking & Finance*, 30(11), 2931–2943. <https://doi.org/10.1016/j.jbankfin.2006.05.009>
- Becker, B., & Ivashina, V. (2014). Financial repression in the European sovereign debt crisis. *Review of Finance*, 22(1), 83–115. <https://doi.org/10.1093/rof/rfx041>

- Belghitar, Y., & Khan, J. (2013). Governance mechanisms, investment opportunity set and SMEs cash holdings. *Small Business Economics*, 40(1), 59–72. <https://doi.org/10.1007/s11187-011-9366-z>
- Berger, A. N., & Udell, G. F. (2002). Small business credit availability and relationship lending: The importance of bank organisational structure. *The Economic Journal*, 112(477), F32–F53. <https://doi.org/10.1111/1468-0297.00682>
- Berger, A. N., & Udell, G. F. (2003). Small business credit availability and relationship lending: The importance of bank organizational structure. *The Economic Journal*, 113(484), 32–53. <http://dx.doi.org/10.2139/ssrn.285937>
- Berger, A. N., Klapper, L. F., & Udell, G. F. (1998). The ability of banks to lend to informationally opaque small businesses. *Board of Governors of the Federal Reserve System Finance and Economics Discussion Series*, 1998-35. <https://doi.org/10.17016/FEDS.1998.35>
- Berger, T., Hämmerli, K., Gubser, N., Andersson, G., & Caspar, F. (2011a). Internet-based self-help for social phobia with minimal therapist support via email. *Behaviour Research and Therapy*, 49(3), 158–169. <https://doi.org/10.1016/j.brat.2010.12.007>
- Berger, T., Hämmerli, K., Gubser, N., Andersson, G., & Caspar, F. (2011b). Internet-based treatment of depression: A randomized controlled trial comparing guided with unguided self-help. *Cognitive Behaviour Therapy*, 40(4), 251–266. <https://doi.org/10.1080/16506073.2011.616531>
- Berlin, M., & Mester, L. J. (1998). On the profitability and cost of relationship lending. *Journal of Banking & Finance*, 22(6-8), 873–897. [https://doi.org/10.1016/S0378-4266\(98\)00033-8](https://doi.org/10.1016/S0378-4266(98)00033-8)
- Bernini, M., & Montagnoli, A. (2017). Competition and financial constraints: A two-sided story. *Journal of International Money and Finance*, 70, 88–109. <https://doi.org/10.1016/j.jimonfin.2016.07.003>
- Besanko, D., & Thakor, A. V. (1987). Collateral and rationing: Sorting equilibria in monopolistic and competitive credit markets. *International Economic Review*, 28(3), 671–689. <https://doi.org/10.2307/2526573>
- Bester, H. (1985). Screening vs. rationing in credit markets with imperfect information. *The American Economic Review*, 75(4), 850–855. <https://www.jstor.org/stable/1821362>
- Bester, H. (1987). The Role of collateral in credit markets with imperfect information. *European Economic Review*, 31(4), 887–899. [https://doi.org/10.1016/0014-2921\(87\)90005-5](https://doi.org/10.1016/0014-2921(87)90005-5)
- Bester, H. (1994). The Role of Collateral in a Model of Debt Renegotiation. *Journal of Money, Credit and Banking*, 26(1), 72–86. <https://doi.org/10.2307/2078035>
- Binks, M. R., Ennew, C. T., & Reed, G. V. (1992). Growing firms and the credit constraint. *Small Business Economics*, 4(1), 1–6. <https://doi.org/10.1007/BF00391972>
- Boocock, G., & Shariff, M. N. M. (2005). Measuring the effectiveness of credit guarantee schemes: Evidence from Malaysia. *International Small Business Journal*, 23(4), 427–454. <https://doi.org/10.1177/0266242605054054>
- Boot, A. W. A. (2000). Relationship banking: What do we know? *Journal of Financial Intermediation*, 9(1), 7–25. <https://doi.org/10.1006/jfin.2000.0282>

- Boot, A. W. A., & Thakor, A. V. (2000). Can relationship banking survive competition? *The Journal of Finance*, 55(2), 679–713. <https://doi.org/10.1111/0022-1082.00223>
- Camino, D., & Cardone, C. (1999). The valuation and cost of credit insurance schemes for SMEs: The role of the loan guarantee associations. *International Small Business Journal*, 17(4), 11–22. <https://doi.org/10.1177/0266242699174001>
- Carpenter, R. E., & Petersen, B. C. (2002). Is the growth of small firms constrained by internal finance? *The Review of Economics and Statistics*, 84(2), 298–309. <https://doi.org/10.1162/003465302317411541>
- Carpenter, R. E., Fazzari, S. M., & Petersen, B. C. (1994). Inventory investment, internal-finance fluctuations, and the business cycle. *Brookings Papers on Economic Activity*, 1994(2), 75–138.
- Casey, E., & O'Toole, C. M. (2014). Bank lending constraints, trade credit and alternative financing during the financial crisis: Evidence from European SMEs. *Journal of Corporate Finance*, 27, 173–193. <https://doi.org/10.1016/j.jcorpfin.2014.05.001>
- Chittenden, F., Hall, G., & Hutchinson, P. (1996). Small firm growth, access to capital markets and financial structure: Review of issues and an empirical investigation. *Small Business Economics*, 8(1), 59–67. <https://doi.org/10.1007/BF00391976>
- Chládková, H. (2009). Comparison of the selected conditions of the small and medium-sized enterprise in the Czech Republic and EU. *Acta Universitatis Agriculturae et Silviculturae Mendelianae Brunensis*, 57(3), 55–64. <https://doi.org/10.11118/actaun200957030055>
- Coco, G. (2000). On the use of collateral. *Journal of Economic Surveys*, 14(2), 191–214. <https://doi.org/10.1111/1467-6419.00109>
- Cosh, A., & Hughes, A. (1993). *Enterprise Britain: Growth, innovation and public policy in the small and medium sized enterprise sector 1994-1997*. ESRC Centre for Business Research, University of Cambridge.
- Craig, B. R., Jackson, W. E., & Thomson, J. B. (2004). On SBA-guaranteed lending and economic growth. *Federal Reserve Bank of Cleveland Working Paper No. 04-03*. <https://doi.org/10.26509/frbc-wp-200403>
- Cressy, R. (1996). Are business startups debt-rationed? *The Economic Journal*, 106(438), 1253–1270. <https://doi.org/10.2307/2235519>
- Cunha, J., & Paisana, A. (2011). Evidence on the investment-cash flow sensitivity for a panel of Portuguese manufacturing firms. *Proceedings of the International Conference on Project Economic Evaluation, April 28-29, Guimarães, Portugal*.
- D'Apolito, R., Miglietta, N., & Ricci, O. (2024). Sustainability and bank credit access: New evidence from Italian SMEs. *Research in International Business and Finance*, 69, 101–115. <https://doi.org/10.1016/j.ribaf.2024.102242>
- Deffains-Crapsky, C. (2023). Le financement de la transition bas-carbone des PME : enjeux et défis. *Revue d'économie financière*, N° 150(2), 213–227. <https://doi.org/10.3917/ecofi.150.0213>
- Degryse, H., De Jonghe, O., & Van Cayseele, P. (2018). Competition and regulation in the banking sector: A review of the empirical evidence on the sources of bank rents. In *Handbook of Financial Intermediation and Banking* (2nd ed., pp. 483–554). Elsevier.

- Degryse, H., Karapetyan, A., & Karmakar, S. (2021). To ask or not to ask? Bank capital requirements and loan collateralization. *Journal of Financial Economics*, 142(1), 239–260. <https://doi.org/10.1016/j.jfineco.2021.05.017>
- Degryse, H., Kim, M., & Ongena, S. (2009). Microstructure of the loan market and the effect of collateral on loan pricing. *Journal of Financial Intermediation*, 18(4), 510–532. <https://doi.org/10.1016/j.jfi.2009.06.001>
- Deloof, M. (2003). Does working capital management affect profitability of Belgian firms? *Journal of Business Finance & Accounting*, 30(3–4), 573–588.
- Denzin, N. K. (1978). *The research act: A theoretical introduction to sociological methods* (2nd ed.). McGraw-Hill.
- Dietsch, M., Düllmann, K., Fraise, H., Koziol, P., & Ott, C. (2016). Support for the SME Supporting Factor: Multi-country empirical evidence on systematic risk factor for SME loans. *Bundesbank Discussion Paper No. 45/2016*. <https://doi.org/10.2139/ssrn.2885073>
- Dietsch, M., Fraise, H., & Mésonnier, J. S. (2016). The risk channel of prudential regulation in the euro area. *European Economic Review*, 85, 193–210. <https://doi.org/10.1016/j.eurocorev.2015.05.006>
- Doh, T., & Ryu, K. (2004). Analysis of loan guarantees among the Korean Chaebol affiliates. *International Economic Journal*, 18(2), 161–178. <https://doi.org/10.1080/1016873042000228312>
- Duqi, A., Tomaselli, A., & Torluccio, G. (2019). Is relationship lending still a mixed blessing? A review of advantages and disadvantages for lenders and borrowers. In *Contemporary topics in finance: A collection of literature surveys* (pp. 249–296). Wiley. <https://doi.org/10.1002/9781119565178.ch9>
- Egorov, A. (2023). ESG as an innovative tool to improve the efficiency and financial stability of financial organizations. *Procedia Computer Science*, 221, 705–709. <https://doi.org/10.1016/j.procs.2023.08.041>
- Eisele, A., & Nowak, E. (2018). Market innovations for (non-bank) financing of SMEs in light of the crisis and new regulation: A policy perspective. In C. Mayer et al. (Eds.), *Finance and investment: The European case* (online ed.). Oxford Academic. <https://doi.org/10.1093/oso/9780198815815.003.0012>
- European Banking Authority. (2020a). Guidelines on legislative and non-legislative moratoria on loan repayments applied in the light of the COVID-19 crisis (EBA/GL/2020/02).
- European Banking Authority. (2020b). Guidelines on loan origination and monitoring (EBA/GL/2020/06).
- European Central Bank. (2023). *Survey on the access to finance of enterprises (SAFE)*. https://www.ecb.europa.eu/stats/ecb_surveys/safe/html/index.en.html
- European Central Bank. (2024). *Survey on the Access to Finance of Enterprises in the euro area: April to September 2024 (SAFE report, November 2024)*. European Central Bank. <https://www.ecb.europa.eu/stats/accesstofinancesofenterprises/pdf/ecb.safe202311~c94d2c3a78.en.pdf>

- European Central Bank. (2024). *Survey on the access to finance of enterprises (SAFE): Analytical report 2024*. <https://op.europa.eu/en/publication-detail/-/publication/c64a5444-d48a-11ef-be2a-01aa75ed71a1/language-en>
- European Central Bank. (2024). *Survey on the access to finance of enterprises (SAFE): Results by country [Data set]*. https://single-market-economy.ec.europa.eu/access-finance/data-and-surveys-safe_en#earlier-studies-and-other-references
- European Systemic Risk Board. (2015). *ESRB Annual Report 2014*. Publications Office of the European Union. <https://www.esrb.europa.eu/pub/pdf/ar/2015/esrbar2014.en.pdf>
- Fazzari, S. M., & Petersen, B. C. (1993). Working capital and fixed investment: New evidence on financing constraints. *The RAND Journal of Economics*, 24(3), 328–342.
- Fazzari, S. M., Hubbard, R. G., & Petersen, B. C. (1988). Financing constraints and corporate investment. *Brookings Papers on Economic Activity*, 1988(1), 141–206. <https://doi.org/10.2307/2534426>
- Foltz, R. (2004). *Rethinking nature: Essays in environmental philosophy*. Indiana University Press.
- Fraisse, H., & Mésonnier, J. (2023). Accès au crédit des PME depuis la grande crise financière : Quels effets des nouvelles politiques monétaires et prudentielles ? *Revue d'économie financière*, 150(2), 35–56. <https://doi.org/10.3917/ecofi.150.0035>
- Fraisse, H., Lé, M., & Thesmar, D. (2017). *The real effects of bank capital requirements* (ESRB Working Paper Series No. 2017/47). European Systemic Risk Board. <http://dx.doi.org/10.2139/ssrn.3723394>
- Gambacorta, L., Hofmann, B., & Peersman, G. (2014). The effectiveness of unconventional monetary policy at the zero lower bound: A cross-country analysis. *Journal of Money, Credit and Banking*, 46(4), 615–642. <https://doi.org/10.1111/jmcb.12119>
- Gerlach-Kristen, P., O'Connell, B., & O'Toole, C. M. (2013). *SME credit constraints and macroeconomic effects* (ESRI Working Paper No. 467). The Economic and Social Research Institute.
- Gertler, M., & Gilchrist, S. (1994). Monetary policy, business cycles, and the behavior of small manufacturing firms. *The Quarterly Journal of Economics*, 109(2), 309–340. <https://doi.org/10.2307/2118465>
- Gibson, B. (1992). Financial information for decision making: An alternative small firm perspective. *The Journal of Small Business Finance*, 1(3), 221–232.
- Gitman, L. J. (1974). Estimating corporate liquidity requirements: A simplified approach. *Financial Review*, 9(1), 79–88. <https://doi.org/10.1111/j.1540-6288.1974.tb01453.x>
- Gotteland, D., Haon, C., & Gavard-Perret, M.-L. (2012). *Méthodologie de la recherche : Réussir son mémoire ou sa thèse en sciences de gestion* (2nd ed.). Pearson.
- Gregory, B. T., Rutherford, M. W., Oswald, S., & Gardiner, L. (2005). An empirical investigation of the growth cycle theory of small firm financing. *Journal of Small Business Management*, 43(4), 382–392. <https://doi.org/10.1111/j.1540-627X.2005.00143.x>
- Guariglia, A., & Mateut, S. (2006). Credit channel, trade credit channel, and inventory investment: Evidence from a panel of UK firms. *Journal of Banking & Finance*, 30(10), 2835–2856. <https://doi.org/10.1016/j.jbankfin.2005.11.002>

- Guariglia, A., Liu, X., & Song, L. (2011). Internal finance and growth: Microeconomic evidence on Chinese firms. *Journal of Development Economics*, 96(1), 79-94. <https://doi.org/10.1016/j.jdevco.2010.07.003>
- Guida, R., & Sabato, V. (2017). Relationship lending and firms' leverage: Empirical evidence in Europe. *European Financial Management*, 23(4), 807–835. <https://doi.org/10.1111/eufm.12109>
- Hall, G., & Hutchinson, P. (1993). Financial constraints and the firm start-up and growth in the United Kingdom. *The Review of Economics and Statistics*, 75(2), 285-289. <https://doi.org/10.2307/2109430>
- Hamilton, R. T., & Fox, M. A. (1998). The financing preferences of small firm owners. *International Journal of Entrepreneurial Behavior & Research*, 4(3), 239-248. <https://doi.org/10.1108/13552559810235529>
- Hannan, M. T., & Freeman, J. (1984). Structural inertia and organizational change. *American Sociological Review*, 49(2), 149–164. <https://doi.org/10.2307/2095567>
- Harrison, R., Li, Y., Vigne, S. A., & Wu, Y. (2022). Why do small businesses have difficulty in accessing bank financing? *International Review of Financial Analysis*, 84, 102352. <https://doi.org/10.1016/j.irfa.2022.102352>
- Holden, P. (1997). Collaterals and guarantees: What is the best way to lend to small businesses? In D. L. Ferranti & A. Ody (Eds.), *Beyond microfinance: Getting capital to small and medium enterprises to fuel faster development* (pp. 61–72). Brookings Institution Press.
- Hutchinson, P. J., & Xavier, A. (2006). Comparing the impact of credit constraints on the growth of SMEs in a transition country with an established market economy. *Small Business Economics*, 27(2-3), 169-195. <https://www.jstor.org/stable/40229496>
- Jayadev, M. (2013). Basel III implementation: Issues and challenges for Indian banks. *IIMB Management Review*, 25(2), 115–130. <https://doi.org/10.1016/j.iimb.2013.03.010>
- Jenkins, R., & Hossain, M. (2016). An Analysis of the Macroeconomic Conditions Required for SME Lending: Evidence from Turkey and Other Emerging Market Countries. *Journal of Development Studies*, 52(3), 456–472. <https://doi.org/10.2298/PAN140213008J>
- Jianzhong, Y., & Jundan, P. (2015). A research on the financing efficiency of small and medium-sized enterprises by fuzzy evaluation method. In *Proceedings of the 2015 8th International Conference on Intelligent Computation Technology and Automation (ICICTA)* (pp. 89-93). IEEE. <https://doi.org/10.1109/ICICTA.2015.31>
- Jiménez, G., Maudos, J., & Yerramilli, V. (2009). Collateral and credit risk in bank lending. *Journal of Financial Intermediation*, 18(2), 254-280
- Johnson, R., & Soenen, L. (2003). Indicators of successful companies. *European Management Journal*, 21(3), 364–370.
- KPMG. (1999). *KPMG International survey of environmental reporting 1999*. The Hague/Amsterdam: KPMG/WIMM.
- Kashyap, A. K., Lamont, O. A., & Stein, J. C. (1994). Credit conditions and the cyclical behavior of inventories. *The Quarterly Journal of Economics*, 109(3), 565–592. <https://doi.org/10.2307/2118414>

- Keeton, W. R. (1995). Multi-office bank lending to small businesses: Some new evidence. *Federal Reserve Bank of Kansas City Economic Review*, 80(2), 45–57.
- Kuruppu, N., Mukheibir, P., & Murta, J. (2014). Ensuring small business continuity under a changing climate: The role of adaptive capacity. In J. P. Palutikof, S. L. Boulter, J. Barnett, & D. Rissik (Eds.), *Applied studies in climate adaptation* (Chapter 48). Wiley. <https://doi.org/10.1002/9781118845028.ch48>
- Lee, T. M., et al. (2015). Predictors of public climate change awareness and risk perception around the world. *Nature Climate Change*, 5(11), 1014–1020. <https://doi.org/10.1038/nclimate2728>
- Levitsky, J. (1997). Credit guarantee schemes for SMEs – an international review. *Small Enterprise Development*, 8(2), 4–17. <https://doi.org/10.3362/0957-1329.1997.013>
- Liberti, J. M., & Petersen, M. A. (2019). Information: Hard and soft. *The Review of Corporate Finance Studies*, 8(1), 1–41. <https://doi.org/10.1093/rcfs/cfy009>
- Llisterri, J. J. (1997). Credit guarantee systems: preliminary conclusions. *The Financier* 4(1–2), Feb/May.
- Mayordomo, S., Moreno, A., Ongena, S. R. G., & Rodriguez-Moreno, M. (2019). Bank capital requirements, loan guarantees, and firm performance. *Swiss Finance Institute Research Paper No. 19-28*. <https://doi.org/10.2139/ssrn.2731833>
- Mathuva, D. M. (2013). Determinants of corporate inventory holdings: Evidence from a developing country. *The International Journal of Applied Economics and Finance*, 7(1), 1–22. <https://doi.org/10.3923/ijaef.2013.1.22>
- McCarthy, S., Oliver, B. R., & Verreyne, M.-L. (2013). Bank financing and credit rationing of Australian SMEs. *Asian Finance Association (AsianFA) 2014 Conference Paper*. <https://doi.org/10.2139/ssrn.2395020>
- Mendoza, C. R. (2015). *Bank capital and Basel III regulations: Implementation and effects* (pp. 1–121).
- Menkhoff, L., Neuberger, D., & Rungruxsirivorn, O. (2012). Collateral and its substitutes in emerging markets' lending. *Journal of Banking & Finance*, 36(3), 817–834. <https://doi.org/10.1016/j.jbankfin.2011.09.010>
- Moscalu, M., Dascălu, C., & Dascălu, D. (2020). Determinants of SMEs' access to finance: Evidence from Romania. *Journal of Financial Studies*, 24(2), 45–60. <https://doi.org/10.2478/jfs-2020-0010>
- Muçollari, M., Dumi, A., & Kukaj, L. (2012). SMEs and enterprises represent potential employment and economic growth in emerging economies in Albanian development. *Mediterranean Journal of Social Sciences*, 3(11), 63. <https://doi.org/10.50901/mjss.2012.v3n11p63>
- Nicolas, T. (2022). Short-term financial constraints and SMEs' investment decision: Evidence from the working capital channel. *Small Business Economics*, 58, 1885–1914. <https://doi.org/10.1007/s11187-021-00488-3>
- Nizaeva, M., & Coskun, A. (2019). Investigating the relationship between financial constraint and growth of SMEs in South Eastern Europe. *SAGE Open*, 9(3). <https://doi.org/10.1177/2158244019876269>
- OECD (2024), *Financing SMEs and Entrepreneurs 2024: An OECD Scoreboard*, OECD Publishing, Paris, <https://doi.org/10.1787/fa521246-en>

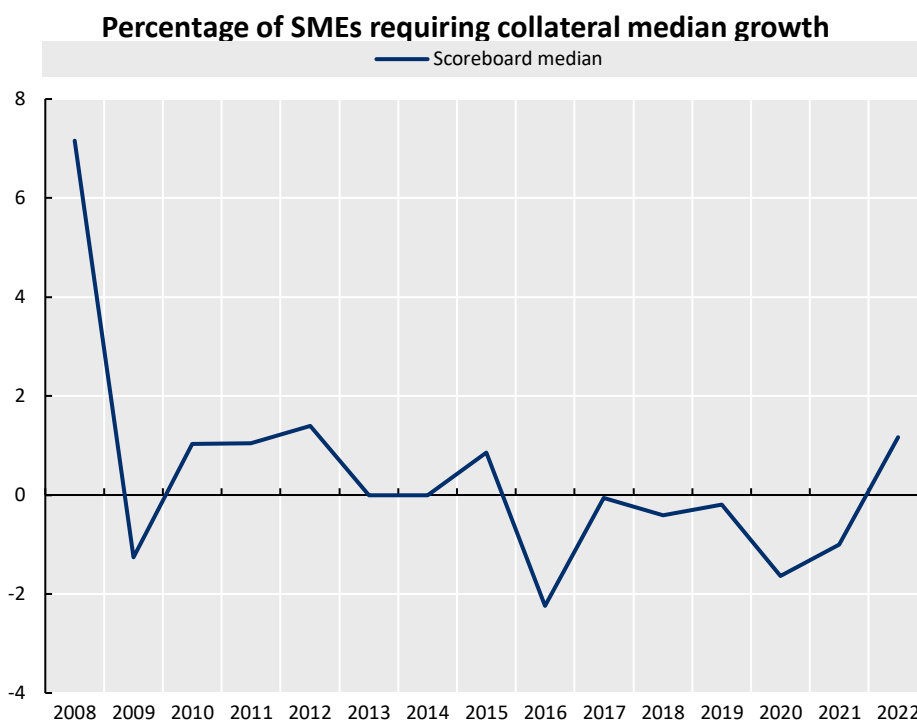
- OECD. (2024). *Financing SMEs and entrepreneurs 2024: Recent trends in SME and entrepreneurship finance – Figure 1.10. Collateral requirements* [Figure]. <https://stat.link/l5imas>
- Oliner, S. D., & Rudebusch, G. D. (1996). Is there a broad credit channel for monetary policy? *Economic Review*, 1996(1), 3–13. <https://www.frbsf.org/economic-research/wp-content/uploads/sites/4/3-13-2.pdf>
- Palmieri, E., & Ferilli, G. B. (2024). Innovating the bank-firm relationship: A spherical fuzzy approach to SME funding. *European Journal of Innovation Management*, 27(9), 487–515. <https://doi.org/10.1108/EJIM-02-2024-0102>
- Patton, M. Q. (1999). Enhancing the quality and credibility of qualitative analysis. *Health Services Research*, 34(5 Pt 2), 1189–1208.
- Petersen, M. A. (2004). Information: Hard and soft. *Northwestern University Working Paper*. <https://doi.org/10.2139/ssrn.495525>
- Petersen, M. A., & Rajan, R. G. (1994). The benefits of lending relationships: Evidence from small business data. *The Journal of Finance*, 49(1), 3–37. <https://doi.org/10.1111/j.1540-6261.1994.tb04418.x>
- Petersen, M. A., & Rajan, R. G. (1995). The effect of credit market competition on lending relationships. *The Quarterly Journal of Economics*, 110(2), 407–443. <https://doi.org/10.2307/2118445>
- Pietrovito, F., & Rancan, M. (2024). Credit rationing and sustainable activities: A firm-level investigation. *International Review of Economics & Finance*, 94, Article 103417. <https://doi.org/10.1016/j.iref.2024.103417>
- Posey, R., & Reichert, A. K. (2011). A comparison of non-price terms of lending for small business and farm loans. *The International Journal of Business and Finance Research*, 5(2), 45–59
- Rajan, R. G. (1992). Insiders and outsiders: The choice between informed and arm's-length debt. *The Journal of Finance*, 47(4), 1367–1400. <https://doi.org/10.1111/j.1540-6261.1992.tb04662.x>
- Rao, P., Kumar, S., Chavan, M., & Lim, W. M. (2021). A systematic literature review on SME financing: Trends and future directions. *Journal of Small Business Management*, 61(3), 1247–1277. <https://doi.org/10.1080/00472778.2021.1955123>
- Riding, A., Madill, J., & Haines, G. (2007). Incrementality of SME loan guarantees. *Small Business Economics*, 29(1–2), 47–61. <https://doi.org/10.1007/s11187-005-4412-2>
- Sairally, B. S., Muhammad, M., & Mustafa, M. M. (2013). Instruments for meeting capital adequacy requirements under Basel III: A Sharôñah perspective. *ISRA International Journal of Islamic Finance*, 5(1), 183–189. <https://doi.org/10.12816/0002765>
- Saunders, M., Lewis, P., & Thornhill, A. (2019). *Research methods for business students* (8th ed.). Pearson Education.
- Smith, B. D., & Stutzer, M. J. (1989). Credit rationing and government loan programs: A welfare analysis. *AREUEA Journal*, 17(2), 177–193. <https://doi.org/10.1111/1540-6229.00483>
- Steijvers, T., & Voordeckers, W. (2009). Collateral and credit rationing: A review of recent empirical studies as a guide for future research. *Journal of Economic Surveys*, 23(5), 924–946. <https://doi.org/10.1111/j.1467-6419.2009.00587.x>

- Taketa, K., & Udell, G. F. (2007). Lending channels and financial shocks: The case of small and medium-sized enterprise trade credit and the Japanese banking crisis. *Monetary and Economic Studies*, 25(2), 1–44.
- Tauringana, V., & Afrifa, G. A. (2013). The relative importance of working capital management and its components to SMEs' profitability. *Journal of Small Business and Enterprise Development*, 20(3), 453–469.
- Thiétart, R.-A. (2014). *Méthodes de recherche en management* (5e éd.). Dunod.
- UNCTAD Secretariat. (2001). *World Investment Report 2001: Promoting Linkages*. United Nations Conference on Trade and Development.
- Uesugi, I., Sakai, K., & Yamashiro, G. M. (2010). The effectiveness of public credit guarantees in the Japanese loan market. *Journal of the Japanese and International Economies*, 24(4), 457–480. <https://doi.org/10.1016/j.jjie.2010.08.001>
- Vogel, R. C. , Adams, D. W. (1997). Costs and benefits of loan guarantee programs. *The Financier*, 4(1–2), Feb/May.
- Walker, M. (1989). *The financing of small firms: A survey of the literature*. Small Business Research Centre, Kingston University.
- Wandhöfer, R. (2019). Financing models for SMEs in the age of disintermediation. In E. Kaili, D. Psarrakis, & R. van Hoinaru (Eds.), *New models of financing and financial reporting for European SMEs* (pp. 65-85). Palgrave Macmillan. https://doi.org/10.1007/978-3-030-02831-2_5
- World Trade Organization (WTO). (2016). *World trade report 2016: Levelling the trading field for SMEs*. https://www.wto.org/english/res_e/booksp_e/world_trade_report16_e.pdf
- Yang, X., Shira, R. K., Dang, L. P., & Hao, P. (2025). Unforeseen benefits: Can ESG enhance corporate access to commercial credit financing? *Research in International Business and Finance*, 75, 102735. <https://doi.org/10.1016/j.ribaf.2024.102735>
- Zecchini, S., & Ventura, M. (2009). The impact of public guarantees on credit to SMEs. *Small Business Economics*, 32(2), 191–206. <https://doi.org/10.1007/s11187-007-9077-7>

9 Appendices

Appendix A: Percentage of SMEs requiring collateral median growth rate

Figure 1: Percentage of SMEs requiring collateral median growth rate. (%)



Source: OECD. (2024). *Financing SMEs and entrepreneurs 2024: Recent trends in SME and entrepreneurship finance* – Figure 1.10. Collateral requirements [Figure]. <https://stat.link/l5imas>

Appendix B: SAFE

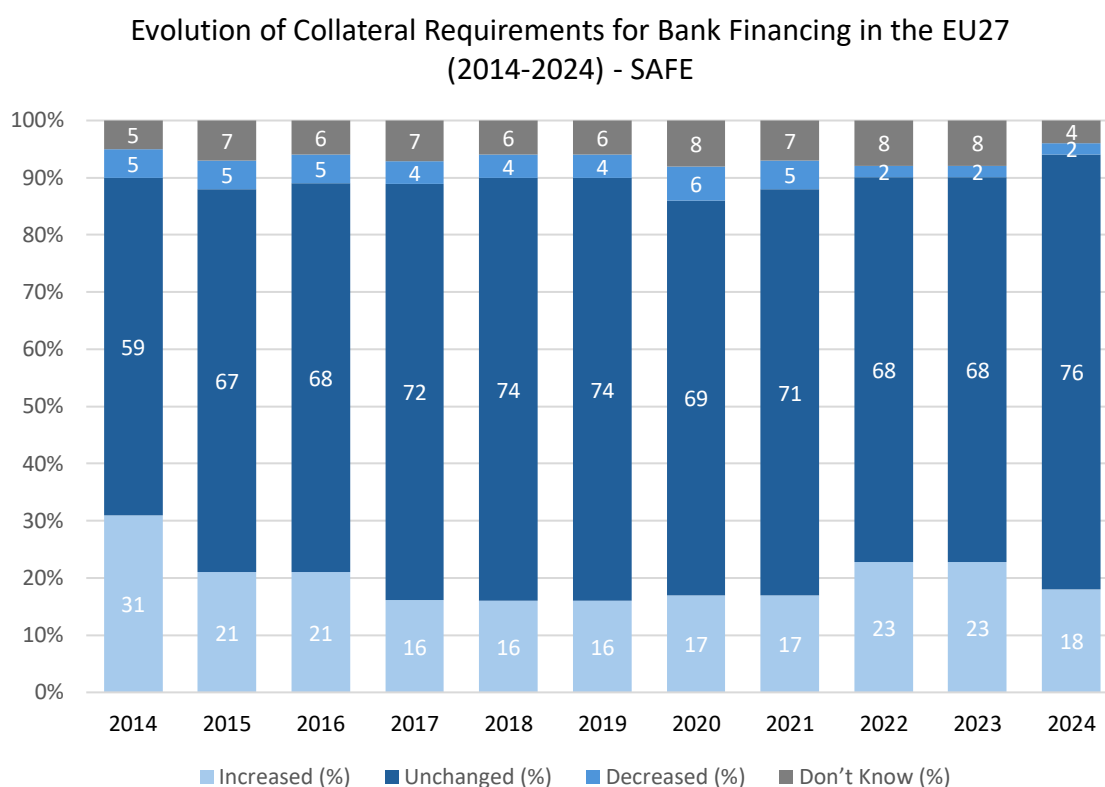
Figure 2: Changes in the terms and conditions of bank financing for euro area enterprises. (net percentages of respondents)



Source: European Central Bank. (2024). *Survey on the Access to Finance of Enterprises in the euro area: April to September 2024 (SAFE report, November 2024)*, p. 17. Retrieved from <https://www.ecb.europa.eu/stats/accesstofinancesofenterprises/pdf/ecb.safe202311~c94d2c3a78.en.pdf>

Appendix C: Evolution of Collateral Requirements for Bank Financing

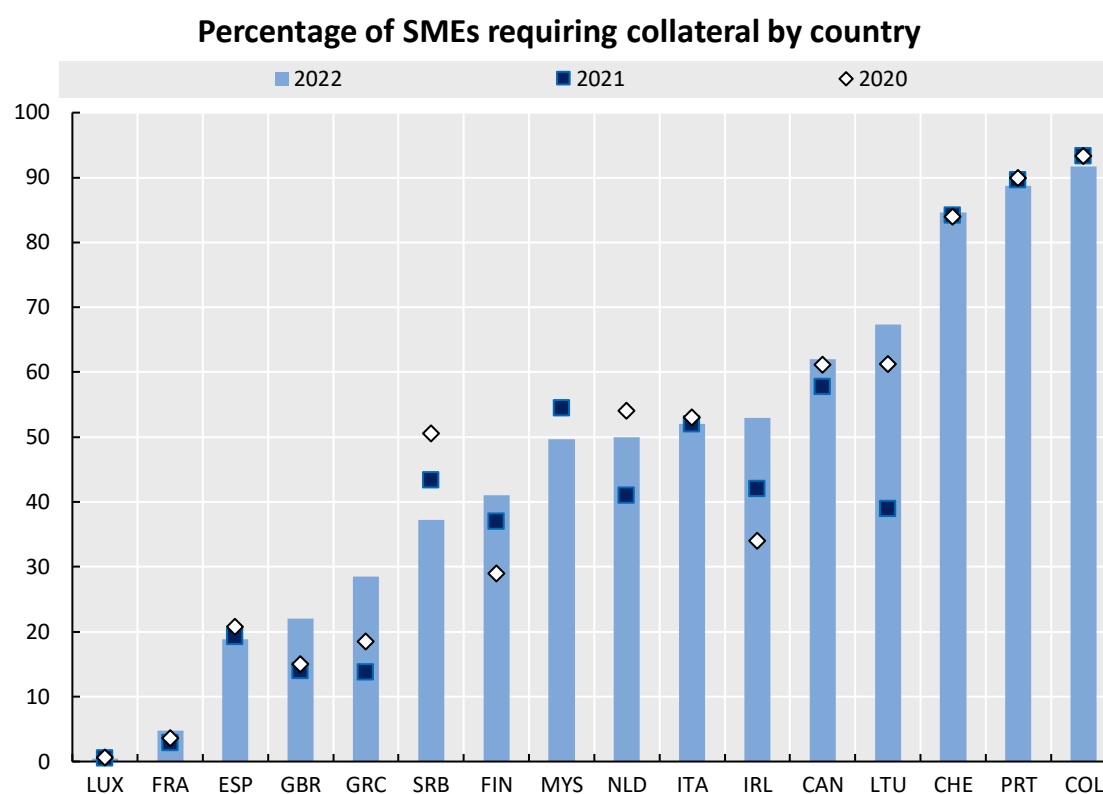
Figure 3: Evolution of Collateral Requirements for Bank Financing in the EU27 (2014-2024)



Source: European Central Bank. (2024). *Survey on the access to finance of enterprises (SAFE): Analytical report 2024 (p. 110)*. <https://op.europa.eu/en/publication-detail/-/publication/c64a5444-d48a-11ef-be2a-01aa75ed71a1/language-en>

Appendix D: Percentage of SMEs requiring collateral by country

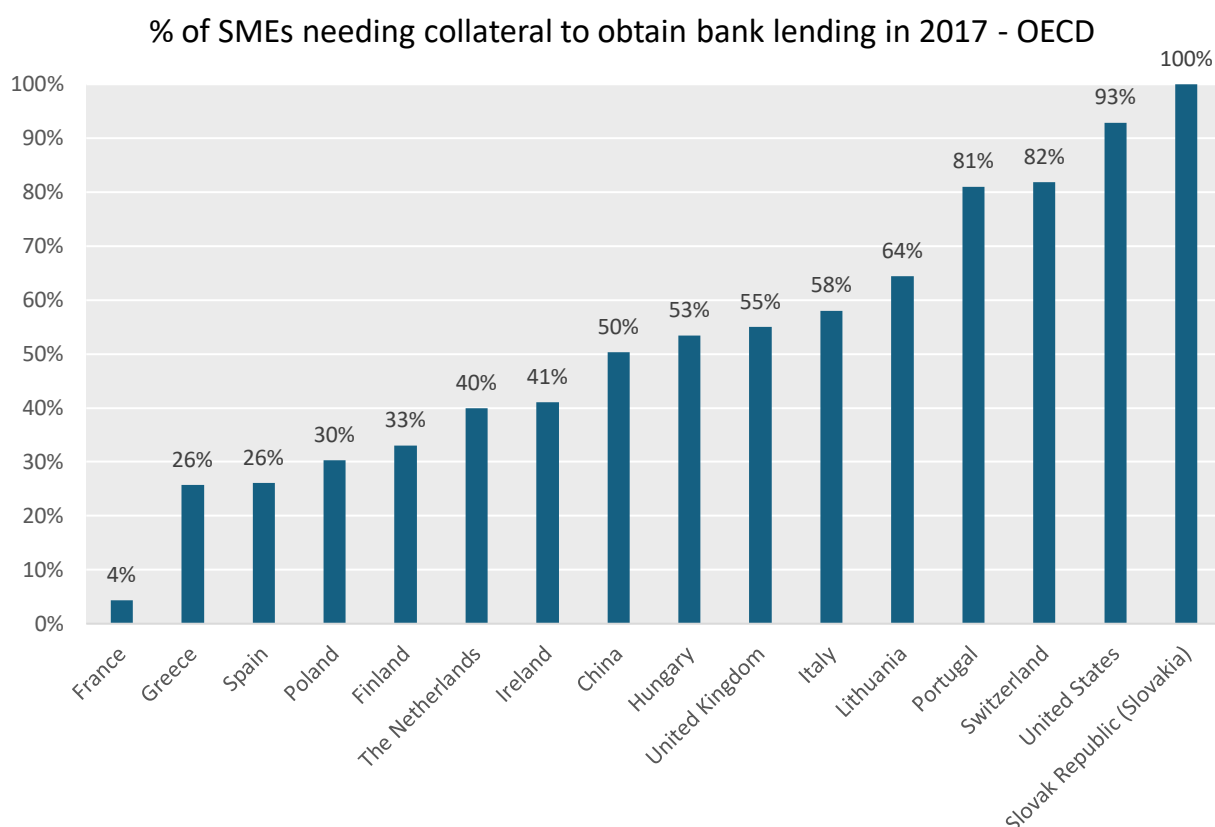
Figure 4: Percentage of SMEs requiring collateral by country. (%)



Source: OECD. (2024). *Financing SMEs and entrepreneurs 2024: Recent trends in SME and entrepreneurship finance* – Figure 1.10. Collateral requirements [Figure]. <https://stat.link/l5imas>

Appendix E: % of SMEs needing collateral to obtain bank lending in 2017

Figure 5: % of SMEs needing collateral to obtain bank lending in 2017

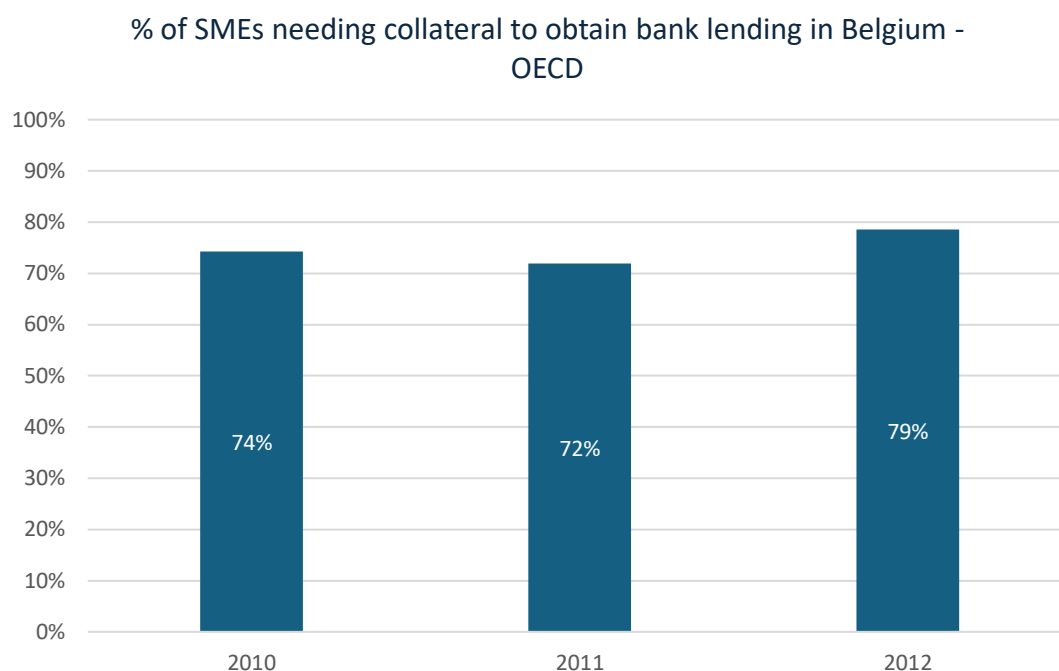


Source: OECD (2024), *Financing SMEs and Entrepreneurs 2024: An OECD Scoreboard*, OECD Publishing, Paris, <https://doi.org/10.1787/fa521246-en>

Note: The data on collateral requirements for SMEs were retrieved from the individual country scoreboards compiled for the OECD report “*Financing SMEs and Entrepreneurs 2024*.” The year 2017 was selected for analysis because it provided the most comprehensive dataset, with the highest number of available datapoints across the countries most relevant to this study.

Appendix F: % of SMEs needing collateral to obtain bank lending in Belgium

Figure 6: % of SMEs needing collateral to obtain bank lending in Belgium

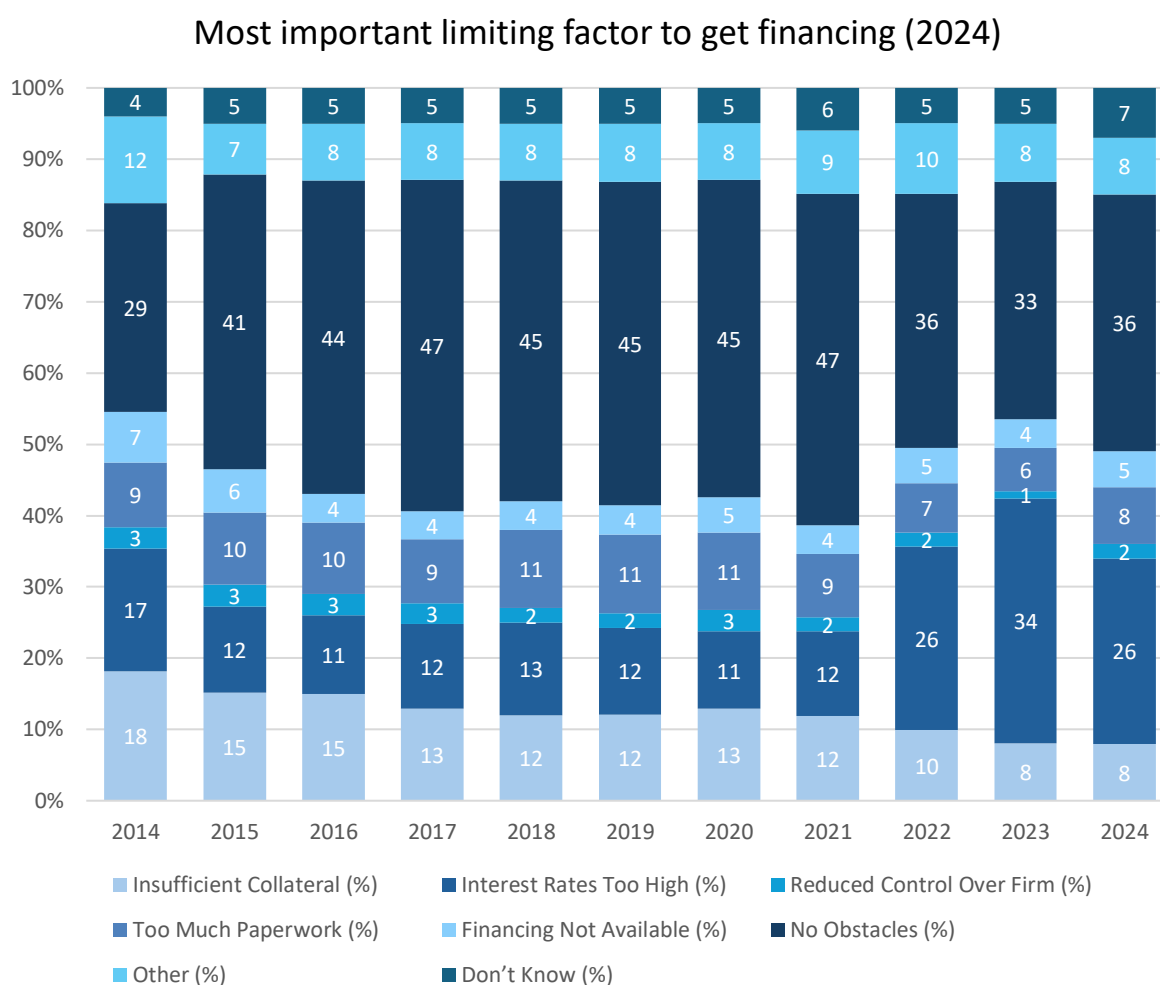


Source: OECD (2024), *Financing SMEs and Entrepreneurs 2024: An OECD Scoreboard* (p.117). OECD Publishing. <https://doi.org/10.1787/fa521246-en>.

Note: The data on collateral requirements for SMEs were retrieved from Belgium's scoreboards compiled for the OECD report "*Financing SMEs and Entrepreneurs 2024*."

Appendix G: Most important limiting factor to get financing (2024)

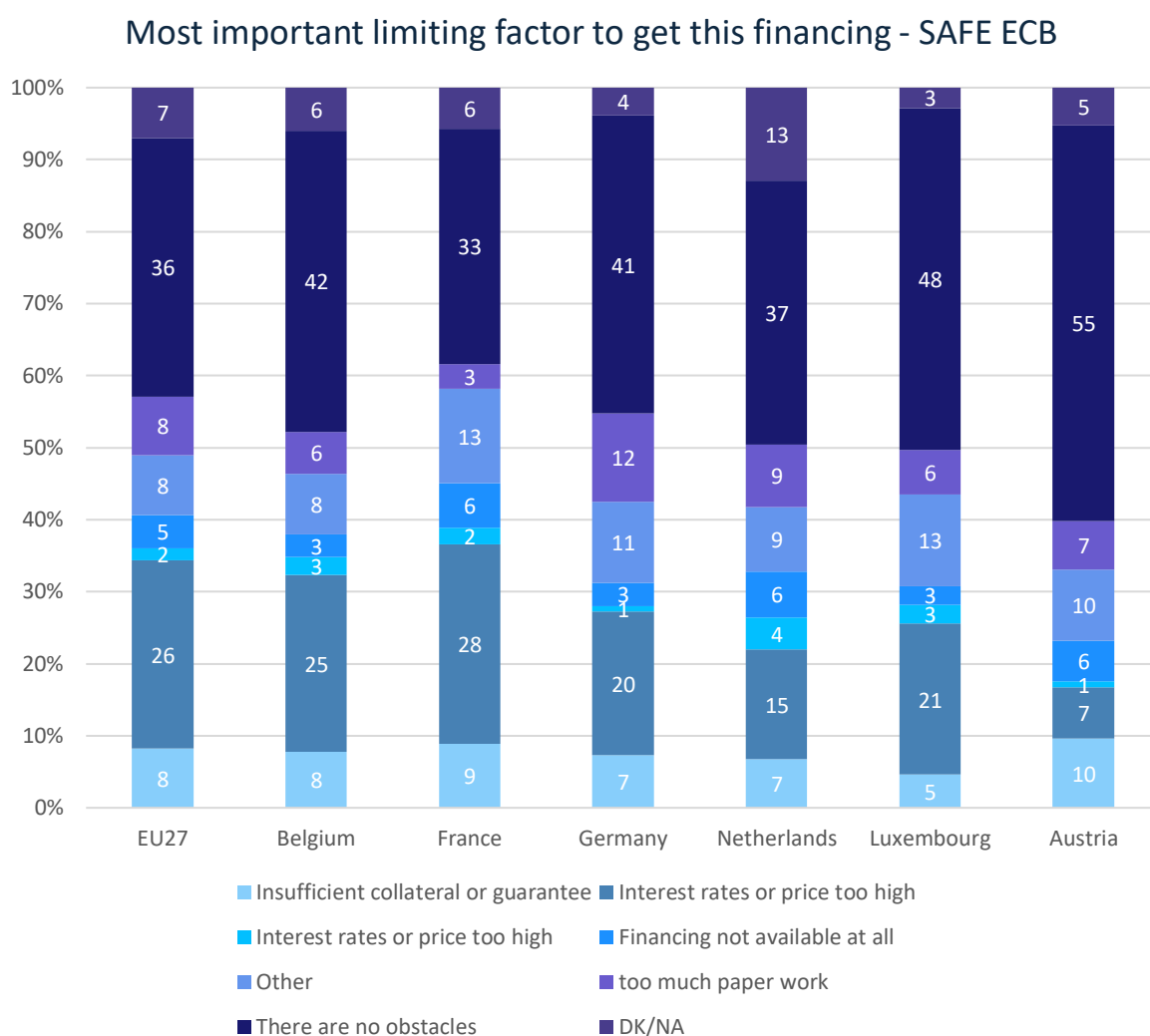
Figure 7: Most important limiting factor to get financing (2024)



Source: European Central Bank. (2024). *Survey on the access to finance of enterprises (SAFE): Analytical report 2024* (p. 127). <https://op.europa.eu/en/publication-detail/-/publication/c64a5444-d48a-11ef-be2a-01aa75ed71a1/language-en>

Appendix H: Most important limiting factor to get this financing

Figure 8: Most important limiting factor to get this financing. (%)

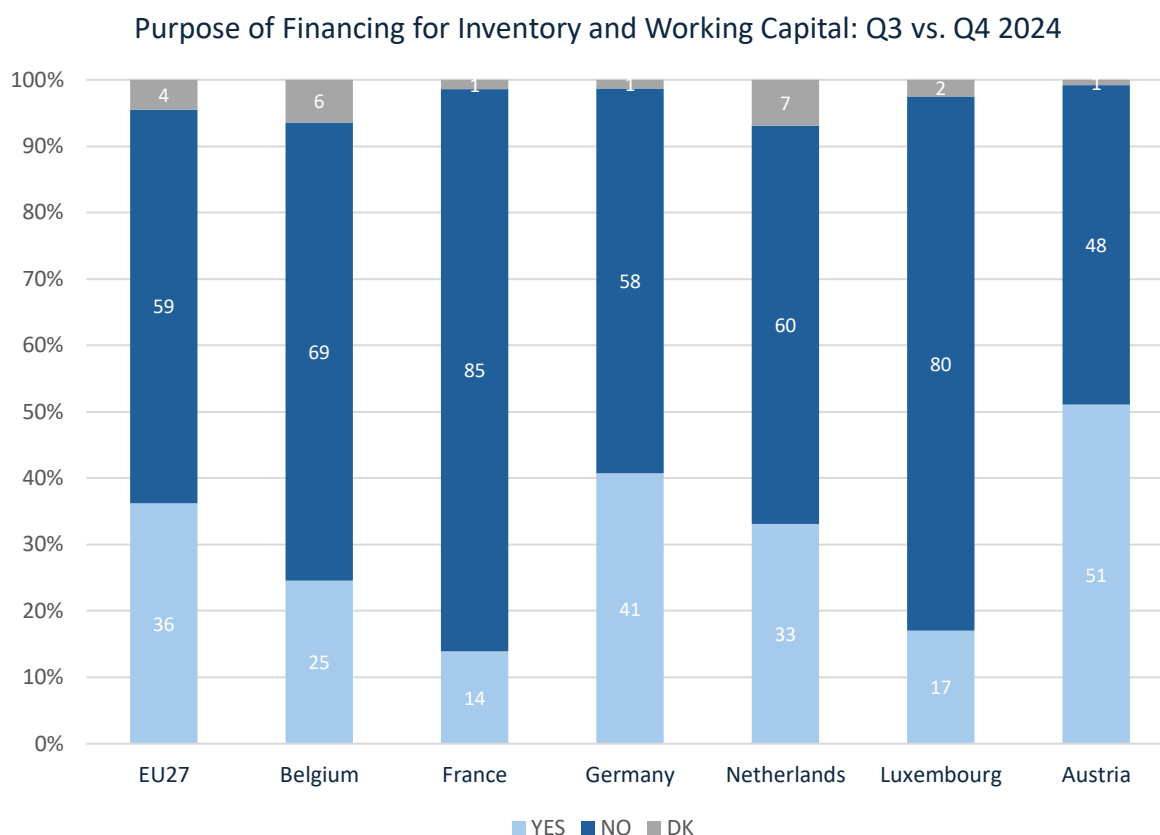


Source: European Central Bank. (2024). *Survey on the access to finance of enterprises (SAFE): Results by country [Data set]*. https://single-market-economy.ec.europa.eu/access-finance/data-and-surveys-safe_en#earlier-studies-and-other-references

Note. Data extracted from question Q22 of the 2024 SAFE dataset (European Central Bank, 2024), referring to factors limiting financing.

Appendix I: Purpose of Financing for Inventory and Working Capital: Q3 vs. Q4 2024

Figure 9: Purpose of Financing for Inventory and Working Capital: Q3 vs. Q4 2024. (%)

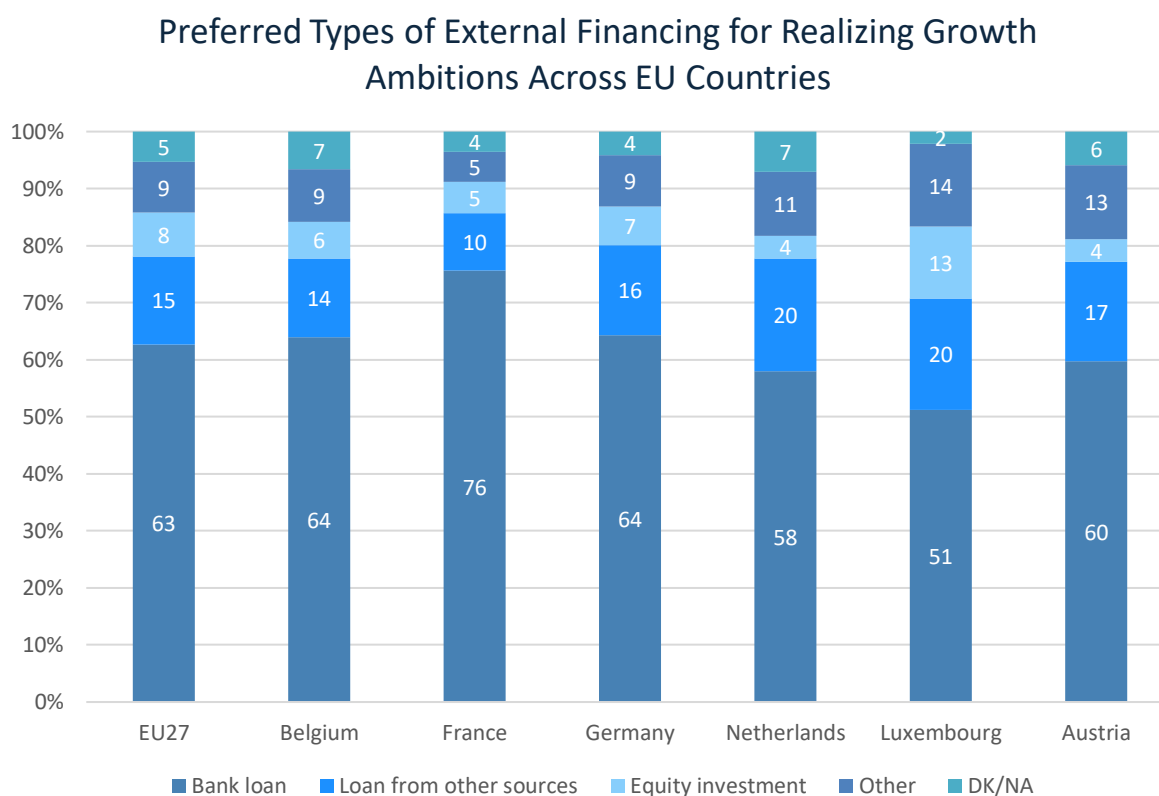


Source: European Central Bank. (2024). *Survey on the access to finance of enterprises (SAFE): Results by country [Data set]*. https://single-market-economy.ec.europa.eu/access-finance/data-and-surveys-safe_en#earlier-studies-and-other-references

Note. Data extracted from question Q6A_2 of the 2024 SAFE dataset (European Central Bank, 2024), referring to purpose if financing for inventory and working capital.

Appendix J: Preferred Types of External Financing for Realizing Growth Ambitions Across EU Countries

Figure 10: Preferred Types of External Financing for Realizing Growth Ambitions Across EU Countries. (%)



Source: European Central Bank. (2024). *Survey on the access to finance of enterprises (SAFE): Results by country [Data set]*. https://single-market-economy.ec.europa.eu/access-finance/data-and-surveys-safe_en#earlier-studies-and-other-references

Note. Data extracted from question Q20 of the 2024 SAFE dataset (European Central Bank, 2024), referring to preference of the type of external financing.

Appendix K: Interview Guide Financial Experts

Interview Guide for Financial Experts

Purpose: To gather insights on the challenges and opportunities SMEs face in accessing financing, particularly through asset-backed lending, with a focus on inventory as collateral and the differences faced by green or sustainable businesses.

Introduction:

- Brief introduction to the purpose of the interview and the research topic.
- Permission to record the interview for transcription and analysis purposes.

Part 1: General Information and Role

1. Can you briefly describe your role and function in the SME financing process?
2. What is the typical size range of SME loans you work with?
 - Are there specific loan types or sectors you specialize in?

Part 2: Collateral Requirements and Asset-Backed Lending

3. Approximately what percentage of SME loans in your portfolio require guarantees or collateral?
 - How do you assess which SMEs require collateral for loans?
4. Have you ever been involved in financing deals where inventory was used as collateral?
 - If yes, could you describe the types of inventory involved (e.g., raw materials, finished goods)?
5. What are the main hurdles/difficulties faced when using inventory as collateral in SME loans?
 - How do these challenges differ compared to other forms of collateral, such as real estate or receivables?

Part 3: Sustainable SMEs and Financing Challenges

6. In your experience, do “green” or “sustainable” businesses face different hurdles when it comes to securing financing?
 - Are there any additional challenges or advantages specific to sustainable SMEs?
7. Can you share an illustration or case where a sustainable SME faced unique financing challenges or had success in securing funding?
 - How did inventory-based lending work (or not work) in this case?

Part 4: Closing

8. Thank you for sharing your insights. Is there anyone else—colleagues or other experts—you would recommend I speak to about this topic?

Appendix L: Interview of Aren Vanhoutte from BNP Paribas

This interview has been conducted through Visio-Conference on March 24, 2025.

Elyn Bindels: Yeah. Okay, so thank you so much for giving me the time. Today I'm doing my master thesis on SME access to financing and more precisely on asset based asset backed lending. So I will be very strict, straight to the point, not too much thought, blah, blah around it. So my first question would be what is the typical size of loans that you work with?

VANHOUTTE Aren: Yeah, but first of all, if you looked at my profile in LinkedIn, since now two months, I'm responsible for debt restructuring and recovery. So I'm really now responsible for everything that is going the wrong, wrong direction. So I don't know if that is really the focus of the, of the, of the question. But in general it's very difficult to talk about a usual amount. I mean we are active from the very small professional clients without company up to the biggest corporates that we have in Belgium or even international. So the average ticket size, I don't know, but average, well you will have a huge variation around that average. So I think there are almost no limits at the bottom or at the, at the top.

Elyn Bindels: And are you just talking about generally or just really specifically about SMEs so small, medium.

VANHOUTTE Aren: Yeah, well, yeah, like I said, we are active in the full range of professional lending from professionals up to SMEs. It all depends on what we call an SME because they also have very different definitions on that. But there's no maximum amount on what a SME could, could loan at the bank. Yeah, there are obviously delegation levels that will determine our appetite towards. And there are lots of policies, but the policies do not describe amounts. It's not the amount, it's, it's the, the probability of default and the collateral. And obviously if we have appetite in the sector and if we have belief in the company that will determine whether or not we are open to, to do the client.

Elyn Bindels: To give you an idea, what I'm mostly looking at is mainly loans around 5, a little less than 5 million, something like that. I don't know if that's. Yeah. So I just wanted to know if you had any experience with that amount.

VANHOUTTE Aren: Yeah, sure.

Elyn Bindels: Yeah, yeah. And so my next question will, with kind of that size range in mind, Would you say that? Or if on your experience, give me an approximate percentage of the SME loans that require collateral or guarantees. Yeah, yeah, I know it's very. It's a quantitative question, so it may be a bit difficult, but it can be really a range and not a precise percentage.

VANHOUTTE Aren: But yeah, it's a very difficult question. I'm sure we have some data somewhere. But to. Yeah, it also depends on the activity that we do. I mean, of the activity of the client. If you do for instance, real estate financing, either in for a developer or an investor, but it could also be an industrial company who asks to finance a new warehouse, then I would say up to 100% is probably collateralized. So it's not the profile of the client. It will for some extent also be the activity of the client or the transaction for which he's looking for a loan. Like for instance, if the client would like to get a pre financing of his taxation, then it's almost always unsecured. If he wants a loan to pay for the Social Security, or what we call the 13 months in Belgium, that will be unsecured almost always. So it's very difficult. It depends on the transaction. Secondly, very specifically for Belgium, usually we have collaterals. If we take collaterals, they are. We can use them for the current exposure, but also for the future exposure. So that means that if we do a transaction against a mortgage loan, a mortgage registration, that loan for which we have taken that mortgage is an amortizing loan. So each month the client repays parts. If he later on comes for a new loan to us, that is nothing to do with that assets, with that immovable assets, just the mere fact that we have a mortgage, that mortgage will also be usable for that loan. So the loan and the collateral are not always specific. They are general. We can use them for all amounts present and future. That is completely different in other countries, but that is in Belgium is the way we work. So even on that aspect, it would be very difficult to say which part of the the portfolio secured. You can take a picture and you have at a certain moment in time, but it will be very hard.

Elyn Bindels: If I can help you on the O. OECD website, but I only have data for 20, 10, 11 and 12 there. They say in Belgium it's around 70%. Yeah, that would make sense, but it's just that we don't have more. Yeah, because that's the exact question. But I just don't have more recent data. So that's why.

VANHOUTTE Aren: Yeah, I would have to look into that. If we have something available off the shelf, I'm not sure, because that is really on an aggregated level. And then you need to split it up. Specifically for SMEs, we tend to report on. On business lines, and SMEs might have a very different definition than. Than what you're looking for. So. But I would say indicatively, 70% seems fair.

Elyn Bindels: Yeah. Okay, perfect. Thank you. My next question is, and it's gonna be become even more specific. Have you ever had financing deals where the collateral is inventory?

VANHOUTTE Aren: Yes, sure. Yes, that's in. In Belgium, it's rarely specific the inventory. It's rather. We take a pledge on the business assets. Pant Handelsag, font commerce. And then you have a preference on the stock as well as on, for instance, the invoices. Now, invoices are usually much more liquid than inventory. Inventories. Yeah, that's. You have a preference in case of a default if you want to sell. Now, selling inventories is sometimes very difficult, and it all depends what it is because you have inventories that are. Yeah. That age. If it's foods. You need to be quick. If it is something that is very illiquid because there's a very specific market, very difficult to find buyers. If it's retail, is it business to consumers? Yeah. Then selling it requires additional costs. I mean, you need to open up the shops, you need to pay for the people. On a company that is already bankrupt. So the bank in that case would have to make the case if it's worthwhile or not. Because selling something, is it worth it? It depends on the value of the goods, liquidity of the goods, and so on and so on. Is it in one shop or is it 100 shops will all make a difference.

Elyn Bindels: Yeah, well, you actually already kind of answered my second question about that. It's about the obstacles that big banks like BNP would face in, I would say also like, kind of the research of like due diligence. On the inventory, which is I think maybe complicated for a big structure. And it takes so much time. So it also costs additional costs. Yeah, yeah.

VANHOUTTE Aren: Well that is if you. If you want to execute the. The as a collateral. Yeah, but the due diligent part is when you grant a loan and usually at that moment the client is doing fine. Otherwise you wouldn't give the. Give the loan. But then we can. We can arrange some conditions where we say we are willing to finance the inventory for an X percentage, but we will. Some part of the inventory will not be eligible. You can say if it's older than 60 days, if it's older than two years, depending on the nature of the goods. In some cases we could also ask that the auditor of the company give us a view once a year stock taking if it's still there and what. In what condition is it? These are things that we can ask to the clients in our loan contracts. Yeah, these are two very different things. If you talk about the purpose of the loan, it's financing stock or is it the collateral that you take? These can be separated from each other.

Elyn Bindels: Yeah, for sure. But if we compare inventory as collateral compared to other types of collateral collateral. Would you say that it's more costs for the lender for. For the bank than other types of collateral? Or not really cost.

VANHOUTTE Aren: But collateral doesn't cost. I mean it's. But the value in terms.

Elyn Bindels: Yeah, I mean the. The work behind. Because I feel like maybe inventory you need to really make sure. Like what is it? There's more labor costs may be related to that than other collateral.

VANHOUTTE Aren: Well, in going concern it depends if we add a lot of costs and burden. But then it's usually a burden up to the clients to fulfill. In some extreme cases we ask a third party on a regular basis to have a look at the inventory. But that's very exceptional. It can happen. So the costs in that case, if we ask it, it's not the bank who pays it's. It will be obviously declined. But then the costs in terms of recuperation that could make it. I would say in case of a default that it's not worthwhile to do anything with the stock. So that's also a cost then in the sense. Among you could have done something with it, but it's probably not worthwhile. And so we don't take the efforts.

Elyn Bindels: Yeah, okay, perfect. And then another step further. I'm also looking into everything that's more sustainable. Sustainable SMEs. So would you say that there are different conditions for sustainable companies when asking for a loan and. Etc and then maybe even more precisely on collateral as well.

VANHOUTTE Aren: On collateral? I don't think so. We have specific loans that are. That have as a purpose financing ESG related activities. Yeah, that is well defined. And in that case there can be a pricing differentiation where in some cases we. We give a discount because of the purpose or where the pricing is depending on certain KPIs that the client has to achieve and then he gets a price reduction. So very price driven. I don't think there's a correlation with collateral.

Elyn Bindels: Okay. Yeah. Okay, perfect. And last question. Would you like to share a case or illustration? Don't need to have the real company but just like a case you would maybe share on all the topics and discussed.

VANHOUTTE Aren: What do you mean? If I can talk about a specific case or.

Elyn Bindels: Yeah, if you have. So we've touched upon collateral inventory. Sustainable. If you can all make.

VANHOUTTE Aren: Okay, well what could be interesting for you is to have a. If you talk about collaterals. We're now talking about loans. Now we have different type of loans. You also have leasing. Now we don't lease inventory, but there's a lot of things that we can lease and then the leasing company is the owner. So then you don't need collateral. You own the activity. The. The. Yeah. What you find it. If you're talking more about working capital, then factoring is also an option. We are the, the biggest factoring company in Belgium. BNP Pariba Fortis Factor. And, and there you, You. You own,

you buy I would say the, the. The. The invoice and you become owner of the invoice. And so it's also assets backed. In some cases they also finance the inventory.

Elyn Bindels: Okay.

VANHOUTTE Aren: So we have factor lines where we say we finance 80% of the. Of the. Of the invoices and 60% of. Of the stock. What rules they have, I don't know. In terms of due diligence and follow up. Probably not so very different from what we do as a bank and sometimes we are both in the same file and we do more the. The fixed assets, the machinery and so on and they do more the working capital.

Elyn Bindels: Okay.

VANHOUTTE Aren: But that's also a variation. I would say to. To asset backed lending but not lending in the sense of a bank loan. But yeah, very similar of course.

Elyn Bindels: Perfect. Well I said I was going to keep it short and I have everything I need. I just have one more question so first thank you so much for taking the time and if you have any colleagues or other people who could answer those questions I would really be happy if you can refer to like anyone's me but

VANHOUTTE Aren: it depends on what activity you are want to dive deeper into. If you would like to have an an introduction in factoring that I can arrange. If you are more looking to data that might be very difficult because a lot of is a lot is very confidential and then you're sharing this with third parties that could be competitive information that we don't want to share. So that might be very difficult. This being said on the quantification of collaterals and so on I wonder if at the national bank they don't also have a lot of information on that which they can share on a more aggregated and so it's not opening the box of an individual bank that could be interesting to have a look at.

Elyn Bindels: I already looked at what it was World Bank Group and then also ECB European because other European Commission has a lot on information on as well. Yeah yeah.

VANHOUTTE Aren: So but it's for sure the national bank of Belgium has also we have to report a lot of things all the banks have. So they have a lot of information and it might even be depends collaterals is I don't recall lately but the bank the national bank of Belgium publishes on a yearly basis a lot of reports one of which is the financial stability reports and in that report maybe you can find also some information on that aspect as well. On terms of other data it focuses on collaterals might be difficult but also at Fable Fin they don't look at collaterals but they look at the activity of the banks. So that's maybe not entirely what you're looking for if you more than intra BNP Pariba Fortis on ESG related topics. Yeah we have specialists on that but if your focus is collaterals then I think what I said they will

just reconfirm that as such it's not collateral is not something that is completely different when you finance ESG related topics. So that might not be so useful for you. So factoring and I think. The rest. I mean a lot of people that would say just the same what I just said. So it might not help you.

Elyn Bindels: I know it's. But it's also because I need a certain amount of people even though they say the same thing. So it's more about. Yeah.

VANHOUTTE Aren: Well so then have you tried other banks?

Elyn Bindels: Yes, I've. I've had kbc, but those are like. I mean the big bell. Also Belfuse. But yeah, so kind of.

VANHOUTTE Aren: Okay, so you already checked that.

Elyn Bindels: But it's pretty difficult to find even on LinkedIn because I found your profile by looking for asset backed lending verification which you put in in the skill section. But otherwise it's pretty. It's pretty also niche if I can say. So it's.

VANHOUTTE Aren: Well, it's not that difficult in the sense that at fablefin you have a corporate banking committee where representatives of each bank meets on a quarterly basis. And so by definition the people that are representing the main banks are people that are active in corporate banking and corporates in a sense, corporate, large corporates. But it's is the full range. So I can send you those names and you can try them.

Elyn Bindels: Would be really happy.

VANHOUTTE Aren: That would be great. Just have a look. I'll send them by email. I'll have a look.

Elyn Bindels: Yeah, perfect.

VANHOUTTE Aren: Yes, so I'll send you that.

Elyn Bindels: Okay, perfect.

VANHOUTTE Aren: Thank you so much.

Elyn Bindels: Yes, thank you. Thank you. Have a nice day. You too. Bye.

Appendix M: Interview of Nicolas Van Klinkenberg from Ernest Partners

This interview was conducted through Visio-Conference on March 26, 2025.

Nicolas van Klinkenberg: Now it works perfect.

Elyn Bindels: Okay, so yeah, doing my master thesis on SME access to financing. I'm also at Luva School of Management. So that's the. The business school at ucl. So first, could I ask you to describe your role in the finance world?

Nicolas van Klinkenberg: Yes, in the finance. Okay, I'll present Ernest. I present myself. Then you have a bit of an idea with what I can help you. So I'm a former banker, first of all, I've worked for 20 years at ING in various positions in commercial finance. Commercial finance is financing a company on the basis of its receivables. So we purchase receivables, pay out a purchase price, and when the receivable is paid, the lending is being repaid with that. So that's the product that is called factoring, or in France, in French factorage. And I did that for 20 years to finally decide like the bank. I saw it enough, I did what I wanted to do. So time for something else. And then I ran into a former colleague at ING and we together to start a nest. And en nest is a debt advisor. And with debt advisory we help companies, and these are in general mid sized and large sized companies. We help them structure their financing so we find for them financing at banks, at debt funds or other alternative parties that can provide financing. So in the five years that we are doing this with Ernest, we created a database of about 600 to 700 parties that can help Belgian companies in their financing needs. How do we do that? There's an analysis, a pitching and a closing phase in our projects. The analysis phase is where we make a thorough analysis of the company. We build a financial model, we try to understand what the financial situation of the company is and what its future looks like. And based on that future projection, we structure a financing for that company. And that is of course a financing in terms of what kind of product, what's the term of that product, what's the price of that product, and at what level of seniority does that product have? So is it a risky financing product? Is it a fully covered financing product? So that's the work we do. We do that for mid sized and large size. So the smallest type of financings we did is 1, 2, 3 million. The largest is a few hundred million. And I'm quite sure that at the end of the week we will do the last, the biggest one, which is over a billion and which will be announced in the newspapers in a few days time if everything goes well. So that's our business. We are with 11 people, two analysts, two associates. These are really employees of the company. And then we have seven partners which are freelance experts in certain domains. So we are three owners, so myself, Sebastian and Laurent, having all our expertise. And next to that we have freelance very Expert people with 20,

30, 40 years of experience in the market in a specific domain. So in leasing, in corporate finance, in investor relations, whatever. So that's what we do in practice. So that's NS Partners. For real SME finance. We have some little side projects what we call, which is maybe interesting for you also to touch upon, we have a real estate leasing activity where we do small real estate leasing businesses which entails that we buy company real estate that is used by the company itself and the company can rent it back. And that's the type of transactions we do is in 500,000 and 1 million euro. And next to that we are setting up a debt fund, which that's a project we do together with the crowdlending platform winwinner. And in that depth fund we will finance real SME companies. So companies with a turnover of say on average between 1 million and 5 million. And we will help them finance their activity through our debt fund. We will do that in Belgium and in the Netherlands.

Elyn Bindels: Okay, great. Well, you kind of already answered my first question. What type of range sizes of the loans that you offer? So it's pretty a big range. So that's great. Then my next question would be, and I know so now you have this project and you have other things, but in terms of guarantees and collateral for those loans. So more specifically SMEs, I would say like if we have to take a, a range, I would say until 5 to 10 million max. Like would you say. Say like if you can give me an approximate percentage of how many of those would be collateralized or asset backed.

Nicolas van Klinkenberg: That's really depending of the structure of the company. In general, every loan that is provided for financing the operations of a company. So the working capital, the purchasing of assets, the investments, they are covered by the reason that this loan is provided. So if you want to build a new factory, you will ask a loan to build the walls and the stones, etc. You will get a first mortgage on that part on the machinery you put in that factory, you will get a pledge on the machinery. So these are all covered loans. Same for working capital financing, financing of your stock, financing of receivables is all fully collateralized. So these are what we call the senior tranche of loans. Where is it becoming more difficult? For instance, when you want to acquire a company, so you want to do an acquisition, you buy a company at, for instance, five times the EBITDA of that acquisition company. Then you will see that in financing the acquisition you will not be able to provide collateral for that because you don't have the collateral. You're buying goodwill, you're buying a future promise. So that's not. You can't collateralize that other than with the shares, for instance, of the company you're buying. So you pledge the shares of the company to the bank that will be financing you. But those shares, what's the value of those shares if the company goes bankrupt? Yeah. Zero. So that's what we call paper collateral. That gives the bank or the lender in general a certain position, a grip to talk and to be at the table when decision have to be taken on who is going to be paid. If loans have to be restructured at a certain moment for whatever reason, then they have a seat at the table, but that's the only thing

they get. They don't get real value. So it's difficult to say like which percentage it's more like it's depending on how you use your funding

Elyn Bindels: and because I'm mostly looking at working capital. So if the goal was working capital that you would say is always fully collateralized.

Nicolas van Klinkenberg: You won't find much financing which is not collateralized, which is used for working capital. Maybe you can only find that in certain sectors, like software, for instance, because their working capital is the receivable. What is working capital is all that you have on the left side of your balance sheet and which is quickly gone. It's less than a year of value. And so a software developer, he has a receivable on his clients, so that's valuable. Maybe he has a bit of stock, but a stock of what? But it's not very clear. And then he has knowledge. And that knowledge, it's very difficult to value it. But you can pledge it, you can pledge goodwill, you can pledge rights, you can pledge. Well, that kind of stuff. But the value, I don't know.

Elyn Bindels: Yeah, and so you already touched upon it. But if we really look at inventory and stock, if that's the collateral, would you say that. So you're more in the advisory part. But would you say that for traditional lenders, for big banks, inventory has operational difficulties because the type of like stock, etc. So it depends really on the.

Nicolas van Klinkenberg: The type of stock is difficult, but it depends a lot on the habits of the country. So in the Netherlands, for instance, stock is financed at 50 to 70%, maybe even more if they follow up the stock very, very precisely. And today, with the digital means that we have, that's quite, well, easy, I won't say, but it's doable. So there are financing products where you can finance a Stock up to 80 or 90% even there are even in the past, when I was working in the Netherlands, we had structures where we were financing, for instance, in the fashion industry, we were financing, in first instance, the orders that were made to Asian companies that are producing the clothes. Then the clothes arrive in Europe, in a harbor somewhere in Europe. Then the order that you funded will turn into stock because the stock arrives and becomes real material stock. Then your financing is adapted to that stock from your stock. Once it goes to the shops, it will be invoiced to the shop, and then your stock turns into an invoice. So you can do this whole cycle of financing, working capital. You can do that quite well at a level of. 70 to 80, 90% and you can follow that quite well due to the digital means we have today. So yes, depending on the habits of the country you can do it and that's again depending on the legal constraints that you have. So for instance the Dutch or the UK systems, legal systems, you can finance them quite a quite high level. In Belgium or France which have a bit of a similar civil code, this is less easy. I can't really explain you the really different between the Dutch and the French civil code. But here in Belgium for instance, the habits are to finance stock 30 to 50% of its stock value. So if it's

internal value, not its selling value but its project, so you have relatively low financing on that stock. There are now developing products developing to fund this stock at a higher level again based on digital exchange of data between the company and the financier and then you can go up to 70, 80% but it has to be very tangible stock. So for instance, plates of steel, coils of steel, they have a very clear value. They are present, you can move them easily so they have a market value. You can find on the Internet what a coil of a certain steel type is worth. So that kind of stocks, you can finance them at a relatively high volume. To give you an idea, a stock of frozen fish for instance will be way harder to fund because there are. Well, first of all you have to have a freezer to keep it in and because otherwise after a day it's well it lost its. And secondly the value of fish in between brackets is not so clear. That's just the price you put on on a line in your digital. But there's not a website where you can check like hey, the fish has that value.

Elyn Bindels: Yeah.

Nicolas van Klinkenberg: So it's really also depending on the type of stock that you're refined type of stock.

Elyn Bindels: Yeah. And so you touched upon like steel etc but for even like following through this whole like inventory receivable like the whole way it goes through. If it, if it's for like a small ticket for an SME, would you say that like the banks would go through this operational. No, it's more for very big. I mean for example, if we're talking about fashion, maybe for very big like fast. Fashion, maybe.

Nicolas van Klinkenberg: Yeah. The Zara type of companies, they are well funded in that sense. Yeah. The small type of companies do not have access to those kind of products or at a very low rate. But that has more to do with, in general, the automation and the predictability of those companies. A small company is very volatile, which is difficult for a financier, certainly. And one of the reasons why Ernest has been founded is that certainly the professional. The larger banks are the four large banks in Belgium, they reason out of a sort of standard that they can offer to a small company. So if you tick all the boxes, then you're in and then you can get your funding. If there's one box missing for whatever reason, then they simply say, like, I'm sorry, I can't help you.

Elyn Bindels: Yes.

Nicolas van Klinkenberg: And then even the Belgian market is quite commercial and quite aggressive in the sense that they are competitive and commercial towards SMEs. If you go, for instance, to the Netherlands, you will just have to tick the box. If you don't take the boxes, well, you're out. And you just get an email or you just get a short WhatsApp message saying like, I'm sorry, your financing request has been denied and that's it. So it's. It's quite well optimized and not us anymore. And certainly. So

that's why you see that there are alternatives popping up in the Dutch market. A lot of alternatives. About 40% in the Dutch market of the lending to SMEs goes through alternative platforms, so goes through other parties than the traditional banks, which is huge. Because if you compare that to Belgium, for instance, it's maybe 1% or something like that. But even in Belgium you see some initiatives popping up to help SMEs in their funding. I don't know precisely where your thesis with. In which direction your thesis goes with this kind of information is, I think, quite very relevant.

Elyn Bindels: Yeah, yeah, yeah. No, for sure. I've seen also in my literature review that there's a lot of alternative financial solutions that are popping up and it's actually a market also for SMEs. Since the big traditional lenders, like you said, like not ticking off, then there's obviously a need. So a market is. Yeah, creates. Yeah, perfect. And then I have one last question, and maybe you can also kind of see a trend, I don't know on your stuff, but I'm looking also into green or sustainable SMEs. So I'm saying integration of ESG etc and you talked about also the analysis that you do at the beginning of your projects. Do you feel like next to the financial analysis that the sustainability analysis or maybe that it also takes up a place and would you say that sustainable SMEs have different conditions than traditional ones?

Nicolas van Klinkenberg: It's a nice question. So, first of all, if you want to get a bank financing today, you will have to fill in forms about your sustainability footprint, etc. So banks want to know, and it is part somewhere in the decision tree of a bank if you get your financing, yes or no. But today it's more a tick the box in the sense, like you filled in the forms and the forms are correctly filled in, then you tick the box. So don't leave a blank field and you'll tick the box. The next step in that process will be like. And that's for larger companies. So for small SMEs it will not be applied yet, but for quite large financing, so real large plants, etc. We negotiate that the sustainability plans of these companies will be integrated in the finance documentation. And if those plans are reached, so there are milestones in those plans and if those milestones are reached, a certain bonus system is triggered so that the interest rate that the bank is calculating, for instance, will reduce. Don't think of too much money there, but it's very small money up till now. But that's the way that we try to negotiate ESG elements into the financing documentation. Next to that you have a what they call sustainability linked loan that's really based on the milestones of the company. And then you have green loans and these are really provided for green projects. So you have, you want to invest in a machinery that is really reducing your carbon footprint, then it would be a green loan. If you're saying like I need financing and I want to get it into a sustainability framework, so I'm ticking the boxes that my milestones are being done, then you're more in a sustainability linked loan type of. So there are some frameworks that are used that are used for larger type of financings. For smaller type of financings. I didn't see them other than it's always a question from the bank next to that. What my knowledge is at least is that the banks today, they don't

take it in their risk committee, so they don't take. They don't. They just tick the box like, okay, there is an ESG form made and they are aware that they have to do something with esg, but nothing more. But in the future, it could very well be that ESG elements will be part of the risk decision.

Elyn Bindels: Yeah, for sure.

Nicolas van Klinkenberg: Well, for sure, for sure. I'm not so sure, but that's a debate. But what can happen in the future is that the risk weighted assets that a bank has to keep for lending will be adjusted based on their ESG portfolio. So on the ESG footprint of their clients. That's currently not the case, but that will probably come in the future. And then the ESG footprint will be part of your risk analysis. And then it becomes interesting because if you're a very polluting company and you're doing nothing about it, well, you don't get your loan anymore today if you're a very polluting company and you, yeah, you have a little plan and you put some, some milestones in it, you get your funding. So I'm quite sure that it will be part of it. But then, sorry to put another discussion element to your thesis. The question is, is that the role of the banks? Why do we ask the banks to be the policemen of esg?

Elyn Bindels: Because they're at the center of the system and to change the system you have to go at the heart.

Nicolas van Klinkenberg: It's a good response. And yes, banks are the spider in the web. I, I agree. So there. I agree they, they can have a rule, but still, why should they be policing? Why shouldn't they just say like, you have to have a AESG framework and that's it. Yeah, but that's also the question

Elyn Bindels: of like, you have it or you don't. But how about the quality of the framework? It doesn't say anything. So, yeah. Oh, but it's super, yeah, it's super interesting about the capital requirements because I've also touched upon that and it would make sense to integrate it that way because then the banks. But it, I feel like everything, and that's just globally, like about sustainability. Everyone's gonna have to be forced. There's going to be a transition period everywhere where people are forced to do stuff. It's like the CS3D that's also arriving for everyone. So. Okay, yeah, well, great. Thank you so much.

Nicolas van Klinkenberg: These are the. I got questions for you. You get nothing for free. So I was talking to colleagues about these thesis that you are making. Not sure. Where are you based? Are you based in Brussels?

Elyn Bindels: Yeah.

Nicolas van Klinkenberg: Okay. Something to think about. If you're interested, we can talk about this a bit more in detail because the questions I asked, answered I think. Well, they are very generic. Would it be interesting for you to have a look a bit on how this works in our company?

Elyn Bindels: For sure.

Nicolas van Klinkenberg: Why I'm asking is. So we're quite busy, we're a small team. But maybe it can be interesting for you to see how we work with a client, what we're doing and talk a bit more in detail about your thesis with our colleagues and well, it could at least improve the quality of your thesis or at least your understanding of what we are doing. And next to that, if you're really interested, we're always looking at people that are looking for maybe a future job, maybe at least some interest, maybe a one day a week understanding what we're doing, working with us so that you get a real grip on what it is. Because I can imagine that if you're looking at it from a student point of view of a student which reads in the newspaper, reads in its books, is different than really looking at a company.

Elyn Bindels: And that's basically what my master thesis is, is looking at the theory, but also also like comparing theory to what is the reality actually and what are the real numbers on the field? So. Yeah.

Nicolas van Klinkenberg: Okay. And can you give me an idea of what. What is your problem? Sterling, your.

Elyn Bindels: I will take my thing. So the question is what macroeconomic and regulatory factors limit SME access to bank financing? And how can credit allocation be optimized to address these financing gaps for sustainable SMEs?

Nicolas van Klinkenberg: That's a nice question. Okay. If you like, we can take a bit more time for this because I think that the questions that you asked me, they just give a general view.

Elyn Bindels: Yeah. But I'm also doing a data analysis, secondary data analysis. So on my two first hypothesis and then my three and fourth hypothesis, I'm doing through interviews and really with experts of financial experts in Belgium.

Nicolas van Klinkenberg: Yeah. And who are you more talking to?

Elyn Bindels: Well, you are my third interviewer, but before that I talked to BNP and Vidika.

Nicolas van Klinkenberg: Okay. Okay. Yeah.

Elyn Bindels: And I have eng planned Friday.

Nicolas van Klinkenberg: Okay. And you got a bit of similar response. Answers or.

Elyn Bindels: Yeah, yeah, no, yeah. Mostly people are saying the same thing, but it's nice to have an other view that's not just the big banks. So that's why it's super interesting to have. To have your. Your opinion and your view on it.

Nicolas van Klinkenberg: Okay, what I can do for you, if you, if you would like, I would suggest you to look at the alternative lending landscape a bit. Also. It gives a way wider scope to your. You don't have to spend 50% of your thesis on this, but having a software chapter, what's happening in the alternative space is I think quite interesting because that's really something that is upcoming.

Elyn Bindels: Yeah, well, what, what has inspired my thesis is because I did an internship this summer at a startup that does alternative financing and they specialize in everything that's so inventory financing of sustainable SMEs. And they're called Shiparize. You can find it on my LinkedIn profile. And so yeah, so that's what inspired also my master thesis and looking into this market.

Nicolas van Klinkenberg: But they're not in the European market. Or are they?

Elyn Bindels: They are. Yes, they are. They are based in Brussels.

Nicolas van Klinkenberg: They're based in Brussels and they call Shiprise.

Elyn Bindels: Shiperise.

Nicolas van Klinkenberg: Okay, don't. I don't know them. That's interesting.

Elyn Bindels: But they're. They're super small. They're like, they're very small startups. But. Yeah, so that's.

Nicolas van Klinkenberg: But they have clients already, I guess.

Elyn Bindels: Yeah, yeah, yeah, yeah. But they started 2023 last like November 2023. So still very. And I don't know, maybe you know, because you worked in, in, in the Netherlands, but they were part of the tech stars. Yeah, yeah. So they just did this program from September to December and I'm still learning a lot, evolving. So.

Nicolas van Klinkenberg: Yeah.

Elyn Bindels: And they're in the climate. The Climate House at. In Brussels. Their offices are there. Yeah.

Nicolas van Klinkenberg: Okay. Because they do something in the ESG space.

Elyn Bindels: Yeah, I mean they could like. It's really a choice of them for their own values to. To only concentrate on sustainable SMEs because otherwise their market would be bigger. But here it's really a choice of them to do. To support sustainable SMEs. Yeah.

Nicolas van Klinkenberg: Okay. Oh, that's nice. I'll look them up on the Internet.

Elyn Bindels: Okay, perfect.

Nicolas van Klinkenberg: Well, let me know if you're interested in seeing more in talking to one of the analysts, for instance.

Elyn Bindels: Sure.

Nicolas van Klinkenberg: Can always happen.

Elyn Bindels: Yeah, I saw that one of your employees also did the same program as me. What was his name?

Nicolas van Klinkenberg: I checked your LinkedIn this afternoon together with Peter.

Elyn Bindels: Oh yeah, exactly. No, he did the same study as me. That's funny.

Nicolas van Klinkenberg: That's what he said. So if you be in touch with Peter, he will certainly help you out in some questions or whatever. And I don't know if you're interested, but we're always open for traineeships, that kind of things for you. So even just being one day in the office or something, if you're interested, it gives you simply a really practical view on what happens in the SME space and how it works, etc.

Elyn Bindels: Oh, that would be great. Great opportunity. Also, if you think of anyone else, maybe even outside your business, that can also give me a good view on the question or has the knowledge to answer my question, that would be. That would be great as well because I'm still looking for interview.

Nicolas van Klinkenberg: Yeah. Okay. I will forward your details, if you don't mind, to my dear friends at Vinvenner. I think it makes sense to talk to the crowdlending platform. Yeah, for sure. It's I guess the largest in. At least in Flanders, but maybe even in Belgium. That can be interesting. They have probably a bit of another view of things than we, but they will be able to answer the questions that you raised. And next to that, if you're interested in the depth fund that we are setting up, could be interesting also for you to look into that because there it's really in the alternative space of SME financing, we fill a gap that the banks do not do. And that could be interesting maybe.

Elyn Bindels: Super. Yeah.

Nicolas van Klinkenberg: Great.

Elyn Bindels: We can I guess email about it or maybe find a date when I can come by at the office. That would be great.

Nicolas van Klinkenberg: Yeah.

Elyn Bindels: All right, well, thank you so much for taking the time and the awesome opportunities we did. So thank you so much.

Nicolas van Klinkenberg: Yep, with pleasure. And well, let me know. And in meanwhile, I'll send your contact details to win winner to have a little call with them too.

Elyn Bindels: Perfect. Thank you so much.

Nicolas van Klinkenberg: Have a good day. Bye.

Appendix N: Interview of Free Van Look from VDK Bank

This interview was conducted through Visio-Conference on March 26, 2025.

Elyn Bindels: So perfect. My master thesis is on SME access to financing and more. More specifically I'm looking at everything that's collateral and guarantees for people to get have access to financing. So that's the questions mainly, mainly about collateral what we're going to talk about. Yeah. So yeah, just if we can have a very quick description of what you do.

Freek Van Loo: Yeah, yeah, yeah, yeah. And you're in your, your final year now?

Elyn Bindels: Yes. For the.

Freek Van Loo: Where do you study exactly?

Elyn Bindels: I, I study at ucl so yeah and I'm in business engineering. So handelsingenieur.

Freek Van Loo: Yeah, yeah, yeah. No, no, perfect. No, no, some I'm Frick and I'm the work for VDK bank and I'm responsible, I'm the head of the department corporate finance. But for us the corporate finance here at VDK because we are not one of the four big banks, we're not a small bank, we're not

one of the four big ones. For us the corporate financing is everything that is not related to the private individuals. So that goes from the rather smaller private persons who are self employed towards the SMEs towards the bigger companies who are listed on stock exchange but also the local authorities. Everything that has to do with social profits, health care, education, also everything that has to do with certain specific sectors like real estate, like energy, sustainable energy, these kind of things. So that's all been taken care of in our, in our department. So everything that is not the either typical mortgage finance, that's for the private individuals or the small consumer loans in the car finance for that's not dealt by us. But all the rest is from the very small self employed businesses to the, to the big ones.

Elyn Bindels: Okay, perfect. So then one of my introducing questions would be what are the type of the size of the loans that you mostly work with? Just so we have an idea,

Freerk Van Loo: it's quite broad of course to the typical SME finance. If it goes to real estate then I think it's between 0 and 1 million euro. That's a typical ticket size. If you go we have more and more bigger tickets as well. We have a bit of internal limit that goes to around 15 million million euro because we don't want too much risk, too much concentration on. On one party. So that's why I try to limit a bit. But we can go higher depending on quality of the. Of the file. And also if there's a extra collateral that. That can be offered by the. By the client, then we can go a bit bit higher. Yeah, yeah, but like. Because the. Like we have. You have to separate a bit between. We have a lot of local branches still, so we are still very present in the market. So we are still opening new branches. Those branches are typically dealing with the SME portfolio and there goes ticket size. I think the 1 million euro is a nice, nice maximum size there. And then we have account managers who are more liked for the bigger enterprises and the organization. So everything that's to do with the nonprofit and the social profit they are dealing with the. With the bigger ticket size.

Elyn Bindels: Okay. And I know there's. Well, you already talked about real estate, etc. So there's some types of all the type of loan as well for what it's going to be used. Do you have a lot of SV loans for working capital?

Freerk Van Loo: Yes, it also exist so. And lately we see a bit more questions related regarding that topic. That's a bit more need for liquidities and working capital in the sector. So we also have just working capital that can be amortizing credits, can also be credit lines that we offer them that can be withdrawn and put back for a certain amount of time then. So that's also existing. Yeah.

Elyn Bindels: And then I have a very. I know it's, it's. It's a quantitative question, but there's not a lot of data publicly available. So just like if you had to give an approximate of those SME loans that require guarantees or collateral, would you have like a percentage in mind from our whole portfolio?

Freek Van Loo: I mean that's. Yeah, it's pretty broad I think amount wise, I mean just the number of loans. So you have two kinds of measures with the number of loans and the amount that can be. Because we. The amount the majority of the loans are the smaller ones and those all have mainly hard collateral. So real estate or from regional government also offer some collateral mechanism. If we really go for the bigger loans typical like listed companies that can be that it's without any hard collateral. But we only do that if other banks also don't ask for collateral. So that if we are in a bigger company, if refinance a bigger company, then we're willing to go for a credit line of a couple of million euro without any hard collateral, but only if we are always treated in the same rank as other banks. If anything happens that all banks are going to be on the same level. That's why. But that's typical kind of way of working. If you go for these bigger listed companies, real estate companies, they're not allowed to offer any collateral as well. So then they don't do it. But they don't do it for anybody then. So that's not that we are going to be last in line or subordinated then so that we know, okay, we don't have any collateral, but nobody has.

Elyn Bindels: And so the last. To just give you an idea of what I found, it's the last numbers were for 2010, 2011, 2012 and average in Belgium in SME loans would have been around 70% that required collateral. Would you. How would you like yourself?

Freek Van Loo: I think that's still a representative average for that.

Elyn Bindels: Perfect.

Freek Van Loo: Maybe it's also the SME. We also because we are very present into the. The NGOs and then the social profit. So that's not really like the. The industrial, the corporate, the commercial companies. But those also have the same kind of financing as. And also with the same kind of kind of collateral there. But there you see a bit more. I don't. I don't know if you also in that kind of area you have to have some information about. But those. They also need credit line. Where you see there is that they more need a bit. Because a lot of them are their fund. Their funding comes from subsidies or governments who. But that's. They give that on certain. Maybe once a year or twice a year they get. They get. They get paid by the government but they need. They have expenses that need to be paid regularly. They need every month they need to pay their workers. They have other costs. So they can't always wait for when they get the money from the government to bridge that. To bridge that period. And they also. That's a bit more working capital. So that's very. A bit more use there there also in that kind of sector.

Elyn Bindels: Yeah. And for. If I'm going even more specific into the type of collateral but have. Do you do SME loans where collateral is the inventory or that the purpose of the loan is financing of inventory?

Freek Van Loo: Well, not just the inventory then. So the purpose can be inventory. But then we pledge the everything that is not real estate. So all the other assets of the. Of the company. So the inventory is a part of that. But also machinery installations. The brand itself also can be valued with all these kind of things. All the receivables they have towards their clients that can all be pledged towards banks. So that's then the typical kind of collateral we do. So that's not the real estate. You don't put a mortgage on the real estate, but you pledge those other assets, and you can also register that into a central register where everybody can confine it. And then it's pledged already towards favor of a banker.

Elyn Bindels: And would you say that there are more operational complications when it's that type? Of collateral than for example real estate, which can be maybe more easily valued, et cetera. Because sometimes inventory, it's very specific, so.

Freek Van Loo: Exactly.

Elyn Bindels: It's the type. Yeah, exactly.

Freek Van Loo: And then when you, when things go wrong and you need that kind of collateral, it's in real time. When you have the real estate yet you have, you can sell the real estate and there are parties who are specialized in that. And so then you have public sales for that real estate. If you have pledged on the other assets, then it's a bit more risky. Of course we don't call that a hard collateral because it's. The value is different valuation, what's it still going to be worth, how long it's been used already? That kind of machine, the inventory can be. Is it still there? Could you pledge it? But does mean if it's really like a bankruptcy or insolvency, you never know what's still going to be there when you try to recover then. So that's more risky. And that's why we treated it also a bit, bit differently, that kind of collateral. So we do it sometimes we use it as an extra collateral. So we, that we have a combination of collaterals. So that's, it's, it's, it's, it's there and we use it, but it's, it's, it's. We consider it different than, than a hard collateral like real estate.

Elyn Bindels: Okay. And then one of my last questions is more, I'm also looking into more sustainable SMEs. So what I understand by that is that they just incorporate sustainability into their business, so operations, etc. And you've already touched upon NGOs. But do you think or do you feel like there are different conditions for sustainable SMEs or

Freek Van Loo: it's going to be more and more important and especially for us, VDK is always very present into the. And we really consider ourselves as one of the market leaders towards sustainability

finance here in Belgium. And if you look at credit applications 15 years ago and credit applications now and the way we analyze it, the financial analysis is still very important and collateral as well. But everything that comes towards sustainability, the governance, the transparency of a company is as important now as just the financial thing. So we also take that into consideration. And if we receive credit applications, so that's a very more and more important factor, also the kind of investment they want to do, then we have a look how it's going to impact their way of working. Is it going to improve their sustainability? Companies also are also more and more obliged to do reporting about their governance, about their impact, about their ESGs. So that's also very important for us now. So that's a very important factor.

Elyn Bindels: Yeah. So you would say that the most important still stays. So the financial analysis. But sustainability is an additional. Yeah, yeah.

Freek Van Loo: And it's becoming as is important as a financial. So that also has to be a match. There are certain sectors we don't want to finance if governance or transparency is not clear enough to us. That's also a criteria we take into account.

Elyn Bindels: Yeah, but the conditions in itself on the, the collateral needed etc are the same or still a bit.

Freek Van Loo: Well, if you towards conditions, if we can differentiate a bit into conditions, if we look towards interest rate or these kind of things, if it's a positive impact, if it's really like sustainable investment they want to do, then we take that into account and then offer. We want to. Because our portfolio and our credit portfolio is also. We also have to report about that. So the more sustainable our portfolio is, the better it is for us as well. And kind of collateral. Well, if you really do go to sustainable investments that like solar panels or the kind of things and then you can have the real estate, that's okay. It could be that we are maybe willing to be a bit more flexible toward collateral if it's, if the rest is okay. If they really score high on the sustainability factor. So that's. But all the rest still has to, we have to tick all the boxes still. Okay, great.

Elyn Bindels: Well I tried to keep it short to not take too much of your time. That was already it. Thank you so much. It helps enormously. And then if you have anyone in mind that could also have the knowledge to answer those questions, feel free to. I'm always looking for. I'm really at the start of my interviews so, so I hope it was, it was okay.

Freek Van Loo: Yeah, yeah, that's fine. It's fine. And how did you, how did you get in touch is by Aaron. You got my, my contact.

Elyn Bindels: I interviewed him Monday and he was my first interview. You're my second so.

Freek Van Loo: Okay.

Elyn Bindels: Okay.

Freek Van Loo: Okay. Okay.

Elyn Bindels: But I, I, I only found him on LinkedIn because it's pretty difficult to find people, especially since I'm on asset backed lending. I'm not really familiar with like how the structure is in the banks and who can really like has the knowledge to, to kind of answer those questions. So if you have any ideas of colleagues it can even be in VDK as well.

Freek Van Loo: Okay. Okay. It's just, well here in VDK I think it's a bit. Because we have smaller teams always it so it's not, it's not that we have like 10 different persons who are dealing with these kind of, these kind of things, but I can have, look maybe in some other that. Can it be smaller organizations as well?

Elyn Bindels: Yeah, for sure.

Freek Van Loo: A lot of contacts with it, no? True. Okay. We'll have a look then to let you know. Is it possible to get some information about the final result as well of your.

Elyn Bindels: Yeah, for sure. I can send you. Yeah. So on the analysis part I'm doing so macro analysis, so secondary data analysis. So all about the public data from the European Union, World bank, etc. So I'm really like having a big overview and then I'm also doing the interviews on the Belgian market and really having. Because there's not that much data since it's so specific because it's not only SME loans, it's also like collateral and then working capital and inventory. So. Yeah, but I can definitely send you. I should be done by the end of May with my master thesis, so I can always send it to you.

Freek Van Loo: Yeah. So you're planning to finish it and before the summer, that's okay?

Elyn Bindels: Yes, yes, I hope so. Yeah.

Freek Van Loo: Yeah. But do you have an idea about what kind of collateral? The bank can ask or sometimes I have a like a list already. Like the types of collateral or.

Elyn Bindels: Yeah, I'm. I'm also like. I'm looking into guarantees and collateral in general. What comes back usually is real estate. It's hard collateral like you said. But I'm just like wondering for very small SMEs if like and especially for trade. So if they're the finance of their inventory, basically

Freek Van Loo: what there is also quite handy. So the collateral real estate is the most easy. Of course. Then I talked about the pledge on the other assets. That's also very broadly used especially for working capital and inventory. What also is what we ask a lot is also the personal guarantee. So by the shareholder. So the main shareholder that we ask him to also have a personal guarantee doesn't have to be always hard that he pledges some kind of amount of cash on account. But also that it means that he's a guarantor with his personal, his own wealth. So if everything goes wrong we can go for the full amount, we can go towards him. So that's also very something that. Especially when you don't have any hard collateral, that is usually combined with it. What is also very interesting with this kind of finance, if we're lacking a bit of hard collateral, is that we can go to regional governments. So we work a lot with Flanders, with pmv it's Parti Passi mackay and they have a very quite interesting program as well. So every year we can apply for a certain amount of warranty we want to use with them once you get through the procedure. So we've been working them for a couple of years now and then you can. For certain especially it's for the SMEs and then if we say we really want to do this kind of finance with this company, but we're lacking a bit of warranty, and then they come, they come into the. To the story, and then we can ask them for a certain amount. It's limited towards. The maximum is 75% of the loan. You can ask for a warranty for them, but that's really, for us, a very interesting. Warranty because it's a regional government, it's a government of Flanders who is willing to step into the story as well. And that's every year we use for a certain amount of credit applications.

Elyn Bindels: And so it's you, it's the bank that goes to the government and not the SMEs that goes.

Freek Van Loo: Okay, okay.

Elyn Bindels: So you have a. Yeah, you work with them?

Freek Van Loo: So we are always the contractor. We have the credit application and we analyze everything and we say like yeah, this is very interesting and we really want to do it. But yeah, we're lacking a bit of collateral. And then we use the guarantee of Flanders for this. And we don't need like for every credit application, we don't need always a separate approval by them. And so when we are in the, in the system, it's just that. So if we, if we give it in the file, then it's okay. Okay. Afterwards. Every year they do a check for a certain amount of credits to see if everything is followed. Like they have certain rules. We have to, we have to follow certain credits. They want, they don't. It's not allowed like refinancing these kind of things. It always has to be new investments that they want to. Because they really want to show that Flanders helps to grow the economy. But that's a really interesting system. And so the, the, especially for the, the, the, the kind of finance you're talking about, the trade, trade finance, working capital, that's, that's something we can use. Cost, cost a bit. The, the, the client has to pay for it. It's a one, one time, one time fee they have to pay. But it makes a difference. So

sometimes one yes or no for the credit so into account. So that's also very quite handy. And every, every region has this kind of government has this kind of guarantee. So Brussels region has it. The Walloni region also has it. So they, they all have the same kind of guarantee system. So, so that's more and more USD.

Elyn Bindels: Okay, that's great. Yeah. So that's more government guarantee and then personal guarantee and then collateral. Yeah, so that.

Freek Van Loo: But always, always a mix. So the regional governments like Flanders always ask the banks to follow their own policy still. It's not like okay that the bank says we, we have this guarantee of the government, we can just do whatever we want, we can take more risk. They really say like no, you follow your own procedure like you always do and, and just we can step in for an extra, for an extra guarantee. That's what, that's what they want. To do. Maybe it's interesting. I don't know. If I give you the contact of somebody from PMV itself who is dealing with this kind of guarantee. So we have an account manager who's working for PMV I can give you. He's also a very open guy to talk about this kind of system. So I think it might be handy to talk to him as well. That's really specified on that kind of guarantee, but I think it might help you as well.

Elyn Bindels: Yeah, I'm totally open to every discussion.

Freek Van Loo: Okay, okay. I will send you his details and let him know that I. And then afterwards you have plans already for more studying or it's. That's it?

Elyn Bindels: No, I think after five years I will be. I will be stepping into the active life. Hoping to start in September. I'm not really sure I want to stay in Belgium because I'm really young. So I'm thinking maybe want to. Because I did an international. So my master's in ucl. It's a Master in International Management with a major in Business Engineering. But I've been abroad three times during my master's to Montreal, New York and then also Vienna. And so I love the international culture, the context, etc. So I'm thinking about, about that to kind of see because now is a good opportunity for me. But.

Freek Van Loo: Yeah, yeah, of course, of course. You had the taste of it and it.

Elyn Bindels: Exactly. It was good.

Freek Van Loo: Well, no, no, no. Okay, no, but I will send you the details and then you can maybe try to arrange something with him as well.

Elyn Bindels: Perfect.

Freek Van Loo: I think. No, no, and all the best of luck. And if you could. Yeah. If it'd be possible to receive the final results or is it. Are you going to use really like names like VDK into your thing? And maybe if, if you want to do that, maybe it's best to send me in advance as well a bit how you're going to use the information,

Elyn Bindels: but I'm thinking I can also. I mean I'm just like expert of the finance sector, but I'm not really sure yet if I'm gonna use the names, etc. I don't think so. Or just like fake, but not like more. Yeah, yeah.

Freek Van Loo: But if you, if you, if you want to do, just let me know in advance and I can have a look at it and because I think I have to get some approval then as well here just what kind of information you will use. But yeah, no, no. Okay, fine.

Elyn Bindels: Well, thank you so much. And if you think about anyone else that can help, I'm pretty open to anything.

Freek Van Loo: All right.

Elyn Bindels: All the best of all, thank you so much.

Freek Van Loo: Yeah. Okay, bye. Bye.

Elyn Bindels: Have a good day. Bye.

Freek Van Loo: Yeah, you too. Bye.

Appendix O: Interview of Clément Piedboeuf from ING

This interview was conducted through Visio-Conference on March 28, 2025.

Elyn Bindels: I don't know why my AI just came in, but. Okay.

Piedboeuf Clément: Yeah, no worries.

Elyn Bindels: So is it okay if I. Because I usually ask if it's okay if I record before it pops up.

Piedboeuf Clément: Totally fine.

Elyn Bindels: Yeah. Okay, perfect. Thank you.

Piedboeuf Clément: But you. Which language do you speak? Would you prefer in French, Flemish or English?

Elyn Bindels: My questions if it's okay will be in English, but otherwise French is also good.

Piedboeuf Clément: Oh, now I can see you.

Elyn Bindels: Perfect. But you did Ism, right? So I assume you speak French. Bonjour. Merci d'avanc Interview. Yeah, so maybe just. I don't want to take too much of your time, so let's just start up, right up. Could you first describe your role and function at Yenjie?

Piedboeuf Clément: Yeah. So basically what I'm doing right now is a graduate program. So you're probably familiar with the term but you're switching every six months to a new team where you will be responsible for typical projects. So right now I'm the team of Asset based Lending which is really concentrating on working capital solutions. So for wholesale banking, business banking and we have a, like. Yeah some kind of strange, strange type of client which are trade, trade finance clients. So there we find traders. Most of them are steel traders, cacao traders or coffee traders. So yeah, this is mainly, mainly, mainly the focus of the team. And yeah we ensure, we. We ensure that the requests made by the front office for new files for, for. For new financing not without risk because there's, there's never no risk but is with the least risk possible on the side. We also trying to. Yeah. To be. How to say. Like to see it in a commercial point of view. Like to. If there is something, if there is a problem like a low liquidity in the company at a certain point but not cut the financing because otherwise the company will just go past. So we'll just try to work together to find a solution. So that's mainly what. What I'm doing.

Elyn Bindels: Okay, perfect. Well, it lies perfectly with what I am doing for my master thesis because I'm really looking at. Well, I'm doing probably more SMEs. I don't know if you're only working with SMEs but that's my focus. So I'm doing access to financing for SMEs and really looking at asset backed lending and collateral requirements as well. So with everything that you just mentioned, what kind of typical size of the tickets or loans do you work with?

Piedboeuf Clément: It really depends. So we're working with four products, lease, so leasing solutions, receivable finance, which is commercial finance. Do you know what receivable finance is?

Elyn Bindels: Yes.

Piedboeuf Clément: Okay, wonderful. And then we're working with working capital solutions which are basically receivable finance but for wholesale banking. So really tailor made and, and, and really like it's really technical and, and it's, it's a structure lending opportunity for the company. And on the side of course we have like the fourth product is trade finance where we finance traders. And so the ticket size is really depending on which type of product. For example working capital solutions. So the tailor made receivables for really big corporates can go up to 1 billion. On the other side, leasing, we have very, very small tickets that are of course automated. We're not looking at those, but they can, they like the smallest one can be like 30k or something. So it's really depending on the product. The average size of requests we get that we really treat would be I don't know, like 10 million, 30 million, something like this. It really depends on the products, I have to say.

Elyn Bindels: Yeah. So just to give you an idea, since I'm really looking into SMEs I would like say that I'm really looking around more 5 million and under that kind of range. And so you talked about those types of products and so acid based, so receivables etc. But in terms of, I'm looking really at trying to understand also what is happening in theory and what is actually happening in reality. And there's not a lot of data since it's so specific, since I'm already looking at SMEs and then collateral based. But since you're in this division, could you approximately try to give me a percentage of those smaller loans so more for SMEs that could fit for SMEs that really require collateral and guarantees.

Piedboeuf Clément: If I understand your question, you're asking for receivable finance, which type is asset backed or in general lending? How much is asset backed?

Elyn Bindels: Yes, how much is asset back in general? Not just receivables, it can be any type of. Collateral, Any type of guarantees?

Piedboeuf Clément: Yeah, that's actually a good question.

Elyn Bindels: And I know it's very hard to just like give me a number. It's really hard to quantify. But if, if I can give you some guiding because I only found specific data for Belgium for the years 20, 10, 11 and 12 and then it was around 70% of the loans for SMEs. If that can help you in any way.

Piedboeuf Clément: Which is collateralized, right?

Elyn Bindels: Yes, yes.

Piedboeuf Clément: Yeah, because but in collateral you're also taking probably just like guarantees.

Elyn Bindels: Yeah, I'm really looking at everything. So just collateral and guarantees. So collateral can be real estate, everything, receivables, everything. And then collateral guarantees that can be personal guarantees, government guarantees, everything. Yeah.

Piedboeuf Clément: Okay, I see that's really hard to say. To say I'm not totally familiar with the whole portfolio of ing. Yeah, I can ask if you would like. But yeah, that's something quite hard to say, to be honest.

Elyn Bindels: Yeah, no, honestly, very understandable. It's also just very hard to give a. To quantify something so big. So.

Piedboeuf Clément: Yeah, but in my opinion like the most majority of. Of lending is backed by something because we have very few clear lines. Clear lines are really just lines that, that, that are given to, to pay for just certain expenses, but we have very few of those. So would surprise me if it's. It's. It's low marks. They can ask if she wants.

Elyn Bindels: Okay, perfect. You've already talked about working capital, etc. So also receivable asset back. But have you already or in your experience used inventory financing? So really financing for inventory and then also using that inventory as collateral.

Piedboeuf Clément: So the whole purpose of my team is that ING becomes the sole owner of the things we finance. So I just gave the example and you mentioned with receivables, we are the owner of the receivables, but of course you have inventory. So it's a fairly new product at ING that we were launching, Inventory Finance. And basically yeah, what we do is that we give a credit line to the client which is purchasing and can only purchase goods with it. So for, for its inventory and so on and on the goods on the, the inventory it is written there is, there is ownership of ing. So yeah, that's certainly something we do.

Elyn Bindels: So you have. So in case of default or is it during the financing, is the inventory already in your. Is it like ownership of ING already or only in case of default?

Piedboeuf Clément: Oh, it is in any case, the ownership of ing. For the better, but also for the worse. Right, okay. Because if there is damage to the goods, then it's also for ing. Right.

Elyn Bindels: Okay.

Piedboeuf Clément: Of course we're insured and so on. But so you get perspective.

Elyn Bindels: Yeah. Okay. And would you say that. Because that's one type of collateral and also one type of means for the financing. But would you say that inventory financing has some more operational difficulties? Because obviously, like, it depends on the type of inventory and what kind of goods they are, etc. So I believe it's a lot of. Maybe more work than other types of. Also in terms of valuation of the inventory. Yeah. So if you want to maybe talk about more of the operational difficulties.

Piedboeuf Clément: So that's actually a very good point. The whole receivable finance and inventory finance thing is really a mess if you compare it to just general lending where you just give the money and then you hope it will come back. So the first thing is you have, of course, as you said, operational problems because you have to track down your goods. Right. So if we finance, for example, I'm taking a very stupid example where we're financing some forklifts for a building company, we have to know where those forklifts are going. Right. Because it's not enough to write on the forklift. This is ING property. Because if they're selling it down to someone else or down to another country, we cannot track it down. So, yeah, there are regular checks which are called CBCs, collateral valuation checks. So this has to be done quite often to ensure that the risk that ING takes is really measured and is really the real risk that we intended to. To. To take. Right. And. But this is not the only problem. For example, if we're financing coffee that has to be stored in a certain room, we could imagine that there will be some kind of deterioration of the coffee. Right. Due to, I don't know, most or humidity or. I don't know. So this is also like, this is something else. We have a policy that we're following. You know, we. That we try to follow at best, that some goods cannot be stored too long or cannot be in a certain type of environment. And, and yeah, We also have, we compute the, like the end value of the product. If we're financing a forklift in a couple of years, four year later, well, the value will be like, I don't know, like 10% of what it would have, like, would be like when you buy this right now. So that's the, that's the second point. Like you, you could, you can have damage. The third point, which is really, really important, this fraud, it is not totally part of operational risk, but it's, it's kind of close. When you're financing a forklift, how can you know that the client is not faking the invoices? Because to, just to, to. For your own knowledge, when we're financing a forklift, we are getting an invoice from the forklift. We pay and this is done. We, we never put money in the client's accounts. But if they're faking the invoices or the, I don't know, they, they say they have, they need a forklift, but it's, it's not, it's not a building company or like, it's, it's really strange. We are not going to find us, I don't know, a Maserati for a hairdresser or something, you know. Yeah, it has to be, it has to be justifiable and it has to be like. Yeah, you can, you have to track it down.

Elyn Bindels: Yeah.

Piedboeuf Clément: And it's especially complicated when you're dealing with like international goods. For example coffee that is coming from Africa or coming from Brazil. It's. When it's in the middle of the ocean, it's really hard to, to track it down. So we, we're working with some, we're working with some companies, small startups that are dealing with this and that are quite good to. Yeah. To, to, to try and find out where they are, if they're in a good state and so on. But yeah, it's, it's really hot.

Elyn Bindels: Okay. And that's awesome information for me. Would you say that also? Like, I suppose that you wouldn't because it has a lot of cost, like all what you described. It's additional cost that also goes I suppose on the client that has, the client has to pay that as well. So also for ING to put that much effort in it. I suppose it's not for super small projects. Like, I suppose it's a pretty big ticket size at least if all those operational difficulties are added on. Would you say that's correct.

Piedboeuf Clément: So it is a really profitable business. Even though there are certain. You have more cost than. General lending, but it's really profitable to be honest. And so the first thing is. No, we do small tickets. But why is it still working? Is because we're working with vendors. And so because we're working with vendors, they are dealing with all the operational things and we are only providing financing, but we're still owner, we still own of the asset. Right.

Elyn Bindels: Okay.

Piedboeuf Clément: Yeah, so we're working with. Yeah, I'm not sure I can say this, but we're working with some pretty big vendors and so they're dealing with all this operational stuff. And, and yeah, we, every year we have to owe them, but it's. Yeah, we, we kind of, we kind of say you're dealing with this, you're getting financing at a good price, but we don't want to, to take part of this. And we, we just assume you will do this. Right. And every year's audit will, will kind of. Yeah. Try to, to find some leak in the or breach in the pulse or something. So that's the first for small tickets. We use vendors for big tickets. There we're charging the clients because it is operational and it is, yeah, it is an operational hazard. We are able to charge the client quite, I would say quite high. Yeah, which is totally like, which is totally agreed by the clients.

Elyn Bindels: They're more than happy to get a financing.

Piedboeuf Clément: And then the second thing is, because you mentioned profitability, why is this really profitable? Because do. Are you familiar with RWA concept?

Elyn Bindels: Yes, I know. Also something that I. Yeah, it's also something that I've been looking and I know it's also used as to reduce the risk weighted assets in the bank. Yes, yeah, exactly.

Piedboeuf Clément: So basically in a bank we're not really looking at sole profitability, we're looking on profitability on rwa. So because the bank has to keep a certain amount of capital, every lending, every deal, every, everything that they're doing will consume a certain amount of capital. The more like, the higher the risk, the more capital. So the thing is with asset based lending, it is asset backed, so it imply a very low risk because we are owner of the assets. So if there is a, like a bankruptcy at the client's level, well, in fact it's ours. So we can just get the asset and sell it back. Of course you have marketing issues and remarketable ability and so on.

Elyn Bindels: Do. Do you make a difference on the type of asset? Because again like the receivables are way more liquid than inventory. Because the problem with inventory is that you don't, you're not for sure know that if the. Imagine if the client did like bankrupt because they didn't sell the product, then you don't also don't have the market to sell the product. So I guess there's also a risk associated with it.

Piedboeuf Clément: Yeah, exactly. So basically every product has its own RWA consumption that can go from yeah, zero is maybe a bit low but like a couple of percentages points to like 100, even more than 100. But in asset based lending where we're quite low, I think we're, I'm not sure totally sure which we should be like at 20 or something, you know, it's really, really low.

Elyn Bindels: That's just out of my curiosity, but do you make a difference on like the type of inventory? Because like also I'm like we were talking about the forklift that's like a tangible good but like you have like clothes and you also have maybe I mean food. For me that's like super. Way more riskier because it has a.

Piedboeuf Clément: So yeah, of course we do. Yeah, so yeah, of course we do a difference and it is really based on, on like every product has its own.

Elyn Bindels: Okay.

Piedboeuf Clément: Forklift has its own consumption, coffee ventry has its own consumption and so on. There are also goods that we're not doing. For example, you mentioned clothes. We're not glowing that we're not doing because it's really hard to, to get them back. It's really hard to remarket them. It's really hard to keep, yeah to, to keep them in a good condition. Like yeah, we're not doing it but so yeah, it is really profitable because it has a low RWA consumption. So we're more than happy to take this operational hazard to like to be able to charge more to the clients but at the same time decrease our RWA consumption. So if you have the, like the, the equation it's really, it's really revenues going up, RWA going down. So it's, it's a, it's a double profitability boost.

Elyn Bindels: Yeah. Okay, thank you so much. And I have one last question because aside of inventory specifically, I'm also looking at more sustainable companies. So what I mean is really like integrating ESG practices into their whole business model. And obviously not it is linked to asset based financing. But would you say that they have different conditions than in terms of loan conditions than traditional I mean, I don't know if you have any experience with this, but in general, if you have any thing that you can add on this,

Piedboeuf Clément: Your question is if ESG is implemented in. In a different way for asset based lending than it is for lending.

Elyn Bindels: Yeah. Or in general if like if a company. Let's take an example. If a company that really puts ESG at the center, their mission, blah blah like the whole thing and then another company who's like pretty traditional would. If they ask for the same loan, would they've been given a different sort of loan conditions or would it still be the same?

Piedboeuf Clément: We don't have particular like we. We have the general lending guidance which is taking into account those things. So for example, we're not financing oil industry. We're not financing. What is it weapon industry which might change in a couple of weeks month. But anyway we're not finding seeing like cigarettes and alcohol and those. So that's for the general lease policy. For asset based lending we of course do the same and I think we also, I think we're also doing something else like for brown energy and then I'm not totally sure of because we have a. We have big fraud risk issues. So the thing is sometimes we, we are not going for a client that is like how to say not very good in. In its shoes and, and which is. It's hard to explain but which is not really like the client is. Is not really trustable. I would say yeah, you might be going for a lending but you might not be going for an asset based lending. It's not totally esg. Maybe, maybe the S of esg. But yeah.

Elyn Bindels: Okay.

Piedboeuf Clément: Most of the time we just refer to the general ING lending policy

Elyn Bindels: and would you say that's another question but like so if they. A company. I don't know if you also have like you have the financial analysis but do you also do like maybe a sustainability ESG analysis additionally or

Piedboeuf Clément: so that's actually a good question. I think there is some analysis. But how this work at IG and in most banks is that asset based lending cannot be a sole product. So what does this mean? We cannot just have an asset based lending relationship with the client. It has to be like a multi product. Yeah.

Elyn Bindels: So if you never have any relationship with ing, you cannot come to the door like hey, I want. So there has to be already some type of relationship built.

Piedboeuf Clément: Okay.

Elyn Bindels: So you have more information in the end. So we can know if we can trust the client or not. Imagine we say like a green company, like really into sustainability. Some other interviewers told me that they might do some lower interest rates. Would you agree with that or not really?

Piedboeuf Clément: Non, pour être honnête, je ne pense pas. Je sais que c'est le cas pour les banques de commerce, mais je ne suis pas sûr que c'est le cas pour les banques de commerce. C'est quelque chose que je n'ai jamais entendu parler.

Elyn Bindels : D'accord. Merci. C'était vraiment intéressant. J'ai aussi aimé votre vue sur les requirements du capital parce que c'était l'un de mes points de littérature. Je suis vraiment contente que tu l'aies apporté. Thank you so much for your time. Je vais repasser en français comme c'est fini. Donc, merci beaucoup. Et si jamais vous pensez à d'autres collègues ou d'autres contacts, parce que je recherche toujours des gens qui pourraient répondre à ces questions, je sais que la connaissance est assez niche souvent, et même pour rechercher sur LinkedIn, parfois, à cette base landing, il n'y a pas énormément de gens qui mettent ça sur leur profil. Donc, voilà, si vous pensez à quelqu'un qui saurait répondre à tout ça, ce serait génial.

Piedboeuf Clément : Mais j'ai vu que vous étiez déjà en connexion avec un de mes collègues sur LinkedIn, Heartour.

Elyn Bindels : Oui, il m'a accepté, mais il n'a pas répondu à mon message, donc je peux le relancer.

Piedboeuf Clément : Si vous voulez, je peux lui envoyer un petit message. Vous pouvez faire circuler un mail dans l'équipe.

Elyn Bindels : Ouais, sinon je peux aussi lui envoyer, je vous dis que vous vous interviewez, ça peut peut-être aussi marcher. Au pire, je vous mets en CC sur le mail, ça peut peut-être...

Piedboeuf Clément : Ouais, faites ça, c'est très bien.

Elyn Bindels : Génial. Merci beaucoup. Bonne après-midi.

Piedboeuf Clément : Ça marche.

Appendix P: Interview of Bronson Mostinckx from KBC Securities

This interview was conducted through Visio-Conference on April 2, 2025.

Elyn Bindels: In the context, I did an internship in a startup that does sort of alternative financing specifically for SMEs and therefore I'm really looking at how do SMEs get financing and in terms of also lack of collateral and everything that's basically collateral or guarantees that they need to give, which is sometimes a bit less easy for SMEs. I know that you're not particularly very into that sector, but that may be one of my first question is what do you do in your job?

Bronson Mostinckx: Well, I'm an so I may. And thank you for that background, Elin. So I am an. I am a DCM or Debt Capital Markets originator in the Loan and Debt Markets team at KBC Securities. So basically what that means is I originate and structure and execute bond transactions for corporate clients of KBC Bank. So if one of our banks, if one of our corporate clients decides that they wish to finance themselves via a bond issuance or if they agree with a proposal that we have prepared for them because we think they are a good candidate to issue a bond, or we think that's a suitable financing product for them. So I am involved in that entire process, let's say. So I basically advise corporate clients on bond issuances in terms of structure, in terms of the investor audience that the company can reach with a bond issuance and of course the various aspects of the bond itself such as the purchase price, of course the, the tenor, terms and conditions or any other features of, of the bond, et cetera. So that's, that's, that's, that's maybe one part of the job. Other part is, is more in general providing our clients with sufficient market information what we, what we perceive in the market, trends, evolutions, etc in order to be able to, to properly advise our clients.

Elyn Bindels: Okay, yeah, so not because I think I found your LinkedIn profile because one of your skills said asset best Asset based lending or asset backed lending. I don't know if that's so that's why I think I found you. But then because like. Obviously super interesting and we could, I could have a lot of questions on bond but just in terms of time efficiency, any then experience in maybe like corporate banking?

Bronson Mostinckx: Well maybe maybe why that was listed as one of my skills was. So I started my career in 2016, 2015, 2016. Professionally I started as a, as a lawyer at the Brussels bar working in banking and finance. And from in that position I was involved in a number of financing transactions where collateral or security was provided.

Elyn Bindels: Okay, so maybe then one question that I think you could have maybe some knowledge to answer and I know it's very like, it's very broad and general question. It's just that public data is not very available on this topic since it's so specific etc. But I always give. It's like a quantitative question. But in general if you had to give a percentage of the corporate loans and if you can target more to SME than would, perfect. But how many of the percentage would you say need collateral or need guarantees in corporate banking in general?

Bronson Mostinckx: Well, I think very broadly speaking I would suspect that most of the SME financing will and this is my personal view view by the way or as how I understand it is that most of the SME financing will need some kind of form of security or collateral to be posted for any lending activities that we engage in with SMEs. I think unsecured financing or unsecured lending is, is of course also something that we do but is only reserved for let's say large cap clients with a, A, a proven track record and, and, and credit credit profile. Because if, if that isn't the case then then I don't. Yeah, that is, that is a viable option to provide unsecured financing to, to those types of, of that the majority of SME financing will have some kind of security or guarantees or collateral to be provided by the, by the borrower.

Elyn Bindels: Yeah, obviously I've already heard that just coming into a bank without any relationship with it prior, etc, you can't come in and say like give me a loan unsecured. Obviously. It's also kind of like made me more relationship. That's true.

Bronson Mostinckx: That's a very good point. Yeah.

Elyn Bindels: So obviously because I know sometimes in big banks also products, so you need to have multiple products to kind of get access to some other things. And then so again, tell me if I'm really like going above like something that you don't know nothing about. But I'm looking into and it's very specific. So I know it's really complicated to find the right people. But collateral, that would be more inventory. So any experience with that?

Bronson Mostinckx: It's a good question. So inventory, inventory based financing. It's, it's, it's, it's funny you bring that up because that is a topic that passed past our desk in the context of a certain client. I can't disclose the name but it was a topic that was, that was brought up and it is, it is something that is, it's more uncommon in the market than we see or from our perspective. It's not typically something that we often come across or provide to clients. So I think if that is something that you're looking for as a company, that's already a very specialized form of financing.

Elyn Bindels: Yeah.

Bronson Mostinckx: Which is not readily available, I would say, without a prior relationship. Prior lending relationship. And even then I think it's to be evaluated on a case by case basis because

Elyn Bindels: yeah, obviously I think it brings with it a lot of like operational difficulties I would say because it depends and tell me, cut me off if you want. If I'm saying something completely.

Bronson Mostinckx: No, it's, no, it's very true.

Elyn Bindels: I think, I think it's also because like obviously inventory, very broad, again like type of inventory, the life of the inventory etc. Then also it's just like you don't know if for sure. Like if, if there is default, is there a market for that inventory? So can you really like. It's very, I think complicated and also I think for big banks or that's my hypothesis that if it's not for a very big ticket size, you won't go through the trouble of all those operational costs for the bank to really finance something.

Bronson Mostinckx: No, I think broadly speaking that's. That's a very correct assessment, Aileen.

Elyn Bindels: It's true.

Bronson Mostinckx: It's very process heavy as you've described and indeed it needs to be of a sufficient size in order to make it worthwhile the effort. So.

Elyn Bindels: No, that's true I think. Yeah, I've heard a few examples on more textile industry but I would imagine then it's for really big groups of multi big big multinationals, big brands that we know like H and M Zara, et cetera. But I would assume that for a small company that wouldn't really match or especially if they don't have a relationship yet, it depends on I think the information available. Okay, perfect. And then last question that I have so really wanted to make it quick. Also kind of looking into and that's another topic I'm looking into, it's more like sustainable, the all the sustainability topic. Would you say in your experience that companies that really integrate ESG practices and really center sustainability into their model have other conditions then the traditional companies who don't yet or don't integrate it? Oh, and it can really be on all levels?

Bronson Mostinckx: Yeah, no, I think that's definitely the case and I think we can make it very tangible with the fact that we do provide sustainability linked financing for example, or financing that is that has a sustainable purpose or for example a green bond of which the proceeds will be used for sustainable purposes or as I've mentioned, ESG linked or sustainability linked financing where the financing itself may not necessarily be in the context of a sustainable project, but is linked to to certain ESG KPIs for example, which can have an impact, both positive or negative in terms of pricing or the

margin on that financing. So we have a whole list of clients to whom we provide such finance and for whom we structure such financings as well. So I think definitely in the market this is a hot topic and has been so for a number of years now. But of course if you look at it at a company by company or sector by sector basis, there are differences because some activities or some sectors may not. It's not as straightforward to make the transition both in terms of the activities as the financing of these activities. So again, it's a bit on a case by case basis, but there are some clients that are very far advanced in this regard. For example, in real estate, ESG is a topic that has been around for years and years now. So that sector in general tends to be a front runner in terms of ESG financing. So we know there, that is something that a number of our clients have been able to profit from, that they have extensive ESG policies and even ESG built into their financing.

Elyn Bindels: Yeah. Okay, great. Well, thank you. That were all my questions. I would just say also on a personal basis that like, obviously there's TSRD now and reporting, etc. But in terms of like looking at two projects and saying like, okay, this is what we do for esg, I think it's also like, it's really nice, but like the quality of the report, sometimes it's hard to really grasp like, okay, how much effort is put into this. But yeah, that's another.

Bronson Mostinckx: No, it's a good point, Ellen. And from our experience, it's also often a question of resources because we see that a lot of our larger clients struggle with the reporting obligations, the wave of reporting obligations that, that they are facing, let alone the smaller clients such as SMEs who don't have the resources that their larger counterparts have. They're definitely struggling coming to terms with all of these reporting obligations. So it's definitely a big challenge for a lot of.

Elyn Bindels: Because for now I know that financial services is kind of left out because I'm doing a project on CS3D as well, the new regulation. And I know financial services is left out of that, but do you think that one day would be like made that like policies of. Because, for example, capital requirements, do you think that maybe they will play with the risk weights for like sustainable projects and then you know, like make it an obligation in the end for the bank to stay in the comp. In the market, you know.

Bronson Mostinckx: Yeah, it's, it's, it's a very good question and I, to be honest, I don't immediately, immediately have the answer. But if I do think that that's something that we will see further develop in the coming years, I know that this is something that is on the radar and that is also something that the regulators. And the central banks are looking at in terms of financial institutions regulation and capital requirements regulation, that, that is also something that they will or that they might factor in in the future. But for now, I think it's a bit too early to say how great or how small this impact will be in this domain. But it's definitely something that we haven't heard or seen the last of, I believe.

Elyn Bindels: Okay, well, great. Thanks for the discussion and thank you for your time. That's all for me. And then if you have any contacts that you think might think now that, you know, the questions that I kind of ask, I think they're very broad. But for me, since I don't know the structures of the banks, it's always super difficult to really target the right people who have more than others.

Bronson Mostinckx: I fully appreciate that, Elyn, and I will, I will definitely keep it in mind if, if I come across someone who I think wouldn't would be good for you to get, I will, I will definitely let you know. Thanks a lot.

Elyn Bindels: Yes. Well, thank you so much and thank you for your time and have a good evening.

Bronson Mostinckx: Yeah, thanks for you too. Take care. Bye.

Appendix Q: Interview of Cédric Dewitte from ING

This interview was conducted in person on April 2, 2025, at the ING Business Center in Louvain-la-Neuve.

Elyn Bindels: Donc, je suis là pour mon mémoire que je fais sur tout ce qui est. Enfin, j'analyse et j'essaie de regarder tout ce qui est collatéral et garanti pour des SME loans. Aussi, tu vas voir que parfois, je sors des petits mots en anglais parce que toute ma thèse est en anglais. OK. Donc, la traduction, parfois, ne se fait pas tout Mais vraiment, tout ce qui est PME, financement de PME, et vraiment.

Cédric Dewitte : Quel est le niveau de définition PME ? Parce que chez nous, il n'y a rien à propos de définition.

Elyn Bindels: Max 250 employés. Mais je regarde plus petit parce que je regarde plutôt les tickets, on va dire, jusqu'à max 5 millions. OK. Voilà. Mais donc, première chose, peut-être juste toi, te présenter, ce que tu as fait, voilà. OK. En général.

Cédric Dewitte : Donc, moi, ça fait quoi Ça fait 24 ans, 25 ans que je suis à la banque. Je suis passé directeur d' Puis, j' ai été manager d' équipe. Puis, j' ai été directeur de région sur Branly Vale. Puis, j' ai été manager PME pour Midcorp. Et puis maintenant, j' ai la gestion du Donc, c' est une équipe de 10 et de personnes. Donc, on cherche cette relation. Qui ont des clients. À l' inverse de Thomas. Donc, Thomas, lui, c' est des clients qui ont au- dessus de 10 millions de chiffre d' Moi, c' est entre 1 et 10 de chiffre d' Et au niveau en cours crédit, on va jusque 5 millions. OK. Voilà.

Elyn Bindels: C'est parfait. C' est exactement. Parfait. Donc, moi, je regarde. Enfin, j' ai plein de types de collatérales et de garanties que j' analyse. Mais en général, parce qu' il n' y a pas un vrai chiffre. En tout cas, data belge n' existe pas. J' ai seulement trouvé des chiffres pour 2010, 2011 et 2012. Mais en général, si le chiffre était, on va dire, autour de 70% des crédits qui doivent avoir une garantie ou un collatéral, est- ce que. Quoi est- ce que tu te positionnerais par rapport à ça aujourd' hui

Cédric Dewittte : Je ne connais pas du tout le pourcentage. Ça va vraiment être du cas par cas, en fait. Donc, ça va vraiment être en fonction de la structure, de la qualité de la la structure des fonds propres. Nous, ce qu' on regarde beaucoup, c' est la structure des fonds propres. Donc, est- ce que le risque qu' on prend par rapport à l' encours est cohérent par rapport à ça Mais oui, à mon avis, oui, on ne doit pas être loin. 70% des dossiers doivent être, à mon avis, couverts.

Elyn Bindels: Et est- ce que ça joue aussi le fait que vous ayez déjà une relation avec l' entreprise Enfin, on va dire plutôt de relationship banking. Parce que par exemple, s' ils ont d' autres produits, s' ils imaginent qu' ils veulent un produit, à ce moment- là, vu que vous savez déjà, vous avez déjà une relation avec eux, peut- être que cette fois- ci, on ne prendra pas une garantie.

Cédric Dewittte : C' était vrai avant. Aujourd' hui, avec la concurrence et la compétition, ce n' est plus vrai. Donc, on va parfois être même plus strict avec des clients existants. C' est horrible. On va être plus regardant avec des clients qui sont effectivement peut- être fous chez nous. Et on va par contre peut- être prendre beaucoup plus de risques pour des sociétés qui ne sont pas clientes. Parce qu' on a envie de rentrer en relation avec eux. Et donc, si on veut se démarquer par rapport à nos conquérants, on devrait être plus agressif en matière de risques.

Elyn Bindels: Mais donc, 70% ça a l' air...

Cédric Dewittte : Oui, c' est une bonne taille.

Elyn Bindels: Parfait. Alors là, maintenant, encore plus spécifique, mais je regarde aussi tout ce qui est financement d' inventaire. Stock Oui, stock PME.

Cédric Dewittte : On finance l' inventaire, mais c' est aussi l' inventaire qui est la garantie, on va dire. Oui, gage fin de commerce. Est- ce que tu as de l' expérience avec ça Oui, évidemment. Oui, on finance évidemment pas mal de stocks. Maintenant, en contrepartie, on va demander effectivement une garantie sur le fonds de commerce, ce qu' on appelle le gage fonds de commerce. On est très strict par rapport à la valorisation dont on va...

Elyn Bindels: Cette valorisation, j' en parle souvent, parce qu' évidemment, tout dépend, je pense, du type d' inventaire. Thomas avait pris l' exemple de pots de yaourt et de montres de luxe. Oui, c' est deux choses différentes.

Cédric Dewittte : Nous, on va le regarder... Dans un gage fonds de commerce, qu' est- ce qu' on va regarder On va regarder trois choses. On va regarder tout ce qui est matériel. Et donc là, on va prendre... Si dans ton bilan, il y a du matériel pour 300 000 ou 500 000 euros, on va prendre ça en considération à concurrence de 50 Si je ne suis pas clair, tu n' hésites pas. Pour valoriser le gage fonds de commerce, on va prendre 50 de ce poste- là. Pourquoi 50 Parce que souvent, dedans, tu as peut-être des véhicules qui sont financés avec des privilèges du vendeur et qui ne rentrent pas dans le fonds de commerce. Donc, on prend 50 de ces valeurs- là. Pour le stock, on va être très On va prendre 10, voire 20 Pourquoi Parce que quand on doit faire appel à un gage fonds de commerce, parce que la société ne rembourse pas et donc on doit dénoncer les crédits et donc faire appel à une autre garantie, souvent, quand une société ne va pas bien, la première chose qu' elle a faite, c' est de pomper toute sa trésorerie. Deuxième chose qu' elle a faite, elle a fait des promotions sur son stock pour essayer de générer de la liquide, de la trésorerie. Et donc finalement, quand tu l' exerces, il ne reste plus rien. Ou peut-être que le produit ne fonctionne pas et que tu n' as pas de marché. Et qu' il n' y a pas de demande. Il n' y a pas de Exactement. Donc on va prendre 10 du stock et on va même être encore plus sévère parce qu' on va prendre le stock moins l' aide des fournisseurs. D' accord Ce qui est Parce que si j' ai du stock, mais que je n' ai pas encore de l' aide des il va partir parallèlement. Donc on va prendre le stock moins l' aide des fournisseurs et on va prendre ça en concurrence de 10, 20 Et puis on va regarder les créances commerciales. Et là, les créances commerciales, au plus la société est grande, au plus on va pondérer le pourcentage de ces créances commerciales. Ça veut dire quoi Ça veut dire que si j' ai des créances commerciales pour 500 000 €, on va prendre peut-être que 20 de ces créances commerciales. Si par contre, j' ai des créances commerciales pour 3 millions, là, je vais prendre 50 Donc c' est vraiment en fonction de tranche. Pourquoi Et de nouveau, tout en regardant aussi les créanciers, donc les clients finaux. Est- ce qu' il n' y en a qu' un, que deux, que trois Ou est- ce qu' il y en a 250 C' est sûr que s' il y en a 250, ton risque est beaucoup plus lissé. Donc ça vaut plus. Tout ça veut dire quoi Tout ça veut dire qu' avec ce calcul- là, je peux te mettre parmi là, mais on va valoriser effectivement le gâchement de commerce et puis on va le mettre en porte- à- faux par rapport à ce qu' il nous demande et au risque qu' il nous demande de Ok. Je suis clair Oui. Mais vous n' allez jamais prendre juste comme garantie le stock Il y aura toujours autre chose C' est dans le bilan. Oui, ça sera d' office un gage de commerce dans lequel le stock est repris.

Elyn Bindels: Et même, on va dire petit ticket, dans le sens où si vraiment le but du prêt est le financement, on dit working capital, ou le financement vraiment d' inventaire, donc ce sera aussi un gage de commerce, c' est ça Ok.

Cédric Dewittte : Alors ça, c' est une première chose. Maintenant, je l' ai dit, un gage de commerce, c' est plutôt psychologique parce qu' on sait très bien que quand on doit l' exercer, il n' y a pas grand-chose. Là où on fait souvent appel aussi, c' est à des garanties de pouvoir public. Oui, gouvernement. Donc, gouvernement, support. Et donc là, on a Wallonie à entreprendre. Donc on les sollicite quand même souvent aussi pour tous ce type de financement. Et ça, parce que moi, j' ai aussi parlé à une banque du côté flamand et ils me disaient que. Warburger. Pardon Pour Bruxelles, c' est Warburger. PMV, non PMV, exact. Exactement.

Elyn Bindels: Moi, j' ai parlé avec VDK qui, eux, sont en relation avec PMV. Oui. Mais ils me disaient qu' en fait, ce n' est pas l' entreprise qui vient avec PMV.

Cédric Dewittte : Non, c' est nous. Non, c' est en fait VDK qui travaille avec PMV.

Elyn Bindels: Donc vous, si jamais il y a une entreprise qui vient vers vous et que vous vous dites « Ok, on aimerait quand même bien garantir ça avec. »

Cédric Dewittte : Oui, c' est nous qui demandons. Ok, ok. Donc on explique au client. Et puis une fois qu' on a la décision, on l' envoie chez Wallonie à entreprendre. Vraiment avec notre présentation, avec notre décision, donc en transparence totale. On met les points forts et les points faibles. Ils voient si on a dû chipoter, si on a eu l' accord facilement ou pas. Et puis on leur soumet. Ok.

Elyn Bindels: Et est- ce qu' opérationnellement, parce que là, on revient un peu, bon, ça dépend du type d' inventaire, etc.mais tout ça, ça prend opérationnellement. Combien de temps Pas combien de temps, mais est- ce que c' estEnfin cestplusdifficile qu' un autre asset, par exemple, un real estate Enfin, la valorisation. Donc le côté opérationnel de valoriser, par exemple, un stock, est- ce que c' est plus difficile ou est- ce que vous faites ça vraiment souvent

Cédric Dewittte : On fait ça souvent. On fait ça souvent. Maintenant, on va rentrer là- dedans, on va vachement. Enfin, on va. Ouais, on va. Comment dirais- je On va quand même aller plus loin pour voir s' il y a un réel besoin. Donc on va commencer à calculer les fonds de roulement, le besoin de roulement, la trésorerie nette. On va voir aussi si la société est bien capitalisée, parce qu' à un moment donné, on va leur demander aussi d' injecter des fonds dans la boîte pour pouvoir financer ce que nous, on ferait. Je ne sais pas si je suis clair. Si, si.

Elyn Bindels: Mais moi, quand je pense à ce scénario, par je pense vraiment à un PME. Voilà. Le PME, j' ai un produit, etc. Là, je suis en énorme croissance, et donc j' ai besoin du financement pour mon working capital, pour mon inventaire et pour continuer la croissance. C' est plus ce cas de figure que j' ai en tête souvent.

Cédric Dewittte : Alors, on va le mais on va vraiment assister à un moment donné sur les actionnaires qui jouent leur rôle aussi. Je prends un cas. Je ne peux pas donner le nom de la boîte. Non, pas Mais c' est une belle boîte, que les gens le connaissent bien, qui n' arrête pas de grandir et donc se base chaque fois sur un plan financier, sur les perspectives qu' ils vont faire sur un an, et donc démontre à chaque fois que pour pouvoir faire une croissance supplémentaire, ils vont devoir avoir du stock, par définition, parce qu' ils ont le stock vivant. Et donc, on arrive à des encours qui sont quand même relativement conséquents. On se fait couvrir aussi par Wallonie Entreprendre. Mais à un moment donné, on dit, voilà, maintenant, OK, on a déjà des montants qui sont conséquents. Là, c' est à vous maintenant à devoir... En fait, on est avec une autre banque. On est avec CDC, en l' On est avec Wallonie Entreprendre. Pour l' international. Et donc, on va mettre chacun 500 000, et on demande à ce qu' ils mettent 500 000 de liens. À un moment donné, on va dire, OK, on intervient, on intervient. Mais maintenant, jouez- vous aussi le parce que si vous les continuez à croître, on n' est pas un puissant fond. Donc, c' est vraiment réduire le risque déjà en nombre. C' est à la fois réduire le mais c' est surtout, je parlais tout à l' heure des fonds propres. Tu ne peux pas avoir 2 millions d' encours crédit avec une société qui a 100 000 euros de fonds À un moment donné, ça ne va pas. Ça ne matche pas. C' est gérer la C' est gérer la croissance. Et donc, si tu veux gérer ta croissance, tu as les 3 F. Responsable. Mais oui, mais ça revient partout. OK, top.

Elyn Bindels: Et peut- être un dernier petit sujet, et ça, je ne sais pas du tout si tu t' y connais, mais je regarde aussi, je fais un zoom sur l' inventaire. Il y a juste un truc. Juste avant. Non, vas- y, continue. Je te donnerai un truc après. Fais- moi penser au remportage. OK. Et je regarde aussi tout ce qui est sustainability, green, etc. Et donc, dans ton expérience, est- ce que tu dirais qu' au jour d' aujourd' hui, quelqu' un, enfin une entreprise, un prêt, on va dire green, je dirais green, sustainability, a d' autres conditions que un prêt traditionnel Et conditions larges, ça peut vraiment toucher à tout.

Cédric Dewittte : On a un Eco- Renovation, nous, qu' on a lancé. Je ne sais pas si Thomas l' a touché à moi ou pas. Non. Et donc, nous, on part du principe, avant, c' était un peu plus strict. Donc, on ne finançait vraiment que la tranche qui était propre à l' économie d' Là, maintenant, à partir du moment où le client nous démontre que je ne sais pas, sur 130 vont servir à l' économie d' on va pouvoir le justifier, financer tout le crédit sur l' Eco- Renovation. Donc, c' est encore énergie. Est- ce que c' est aussi, par exemple. C' est super large. Oui. On parle de reporting, mais On va mettre du lead. On ne va

même pas aller là. Je crois que le client doit s'engager à nous remettre, si c' est pour un bâtiment, pour améliorer un à nous remettre un PEB dans trois ans qui démontre comme quoi il a réduit son PEB.

Elyn Bindels: Et dans les PME, par si ils sont un peu green, même leur produit est green, par Est- ce que là, ça change quelque chose dans comment vous le. Même le taux, est- ce que le taux est différent?

Cédric Dewittte : Le taux est préférentiel. Préférentiel. À partir du moment où c' est un investissement green, pas parce que la société est mais parce que l' investissement qu' il nous demande de faire est green, oui, là, tu vas avoir un impact. Maintenant, dans les PME, je sais que les jeunes et c' est hors d' actualité, dans les PME, ça ne vit malheureusement pas. Ça ne vit pas parce qu' ils sont 5, ils sont 10, ils sont 15. Ils n' ont pas l' effectif suffisant pour pouvoir mettre une personne dessus. Ils ont d' autres contraintes au day- to- day. Ils n' ont pas une structure de fond qui permet aussi d' être. Oui, ils vont essayer de le mettre en avant, mais ça ne va pas être comme dans une grande entreprise qui va avoir vraiment un département spécifique. À part si le business model est tourné autour. Clair, clair. Ça, c' est clair. Donc, ce n' est pas juste, on va devenir sustainable, mais tu commences Non, mais c' est dans leurs mœurs. C' est plutôt dans leurs mœurs, et c' est plutôt, ils vont essayer d' avoir des labels, ils vont essayer de. Oui, de développer et vraiment de mettre tout ça en montrant comme quoi c' est dans un but. Ça a deux vitesses pour l' C' est incroyable.

Elyn Bindels: Et ça, c' est un autre truc que j' ai découvert pendant mes entretiens, etc. Mais c' est par rapport aussi à tout ce qui est régulation, capital requirements, RWA, etc. C' est marrant parce qu' il y a quelqu' un qui m' a fait la réflexion de. Est- ce qu' un jour. Parce que les régulations, elles arrivent aussi par rapport à tout ce qui est sustainability, etc. Là, je ne sais pas si tu t' y connais en mais moi, je fais un projet aussi sur la CS3D. OK. Et Financial Services, pour l' instant, je dis bien pour l' n' a pas été intégrée dans cette régulation. Elle est mise de côté. Mais je pense aussi que ce n' est pas. Tu ne peux pas traiter la même façon, demander la même chose de quelqu' un qui est dans l' industrie que quelqu' un dans le finance. C' est logique. Mais est- ce que. Parce qu' ils ont déjà fait ça après la crise financière, est- ce qu' ils pourraient toucher au RWA et faire que les green deals soient moins risqués et du coup, ça pousse les banques à plus les prendre ?

Cédric Dewittte : Je n' y crois pas. Je pensais aussi. Oui, Je n' y crois pas. Non. Je n' y crois pas. Pour moi, c' est vraiment deux choses différentes. Tu ne peux pas. Ce n' est pas parce que c' est green que ce n' est pas risqué. Oui, oui, Le territory asset, ils se basent sur les actifs que tu finances. Pour moi, c' est deux choses différentes. Par contre, quand c' est deux, oui, OK, c' est un impact. Mais tu ne peux pas diminuer ton RWA parce que tu finances le green. Oui. Même si, je dis ça, il y a déjà quelques études quidisent que vraiment les gens qui intègrent le ESG, la gouvernance, vu que c' est beaucoup plus long terme, au final, c' est moins risqué. Mais du coup, au final, on revient au risque. Oui, mais en

tant que banque, on ne va pas le mettre. Aujourd'hui, en tout cas, non. Et est-ce qu'un autre. Est-ce que tu penses. Ça, ce n'est plus du tout mémoire. Je reviens juste après. Comme ça, je ne vous le dis pas. Sur le warrantage. Tu connais le warrantage

Elyn Bindels: Non. Non En anglais, peut-être On dirait la même chose. Je ne sais pas. Je ne sais pas Parce que je ne vois tous les textes en anglais.

Cédric Dewittte : En fait, c'est une technique de financement pour le stock. OK. Je vais te prendre un exemple. On a. Maintenant, c'est chez Thomas, mais c'était chez moi avant. C'est un grand distributeur de boissons. Et donc, il a un stock énorme. Et la personne te dit clairement, il a la demande pour pouvoir vendre plus. Le tout, de nouveau, c'est par rapport au stock. Et donc, on a construit un bâtiment gigantesque. Il a triplé son volume. Mais on était la seule banque là. Et on ne finançait vraiment chaque fois que son stock. Qu'est-ce qu'on a fait À un moment donné, on a dit. OK. On va essayer de trouver un autre système. Et donc, qu'est-ce qu'on fait Le warrantage, c'est une société externe qui met une scellée sur toutes les portes du stock. OK. Il met un papier, un document, avec un système où, à n'importe quel moment, il peut venir et bloquer l'accès au stock. Donc, nous, c'est une garantie. En contrepartie, la société doit faire un inventaire mensuel du stock. Et nous, on finance à chaque fois un pourcentage de ce stock. Je ne sais pas si je suis clair. Oui, c'est clair. C'est assez Et donc, nous, notre couverture.

Elyn Bindels: C'est juste le financement de ce stock, mais celui qui détient toujours le stock est toujours l'entreprise. C'est toujours l'entreprise.

Cédric Dewittte : C'est toujours l'entreprise, mais avec cette EPD démocrate, parce que si, à un moment donné, nous, on donne le signal en disant stop, il n'a plus accès.

Elyn Bindels: Ça, c'est dans les contrats ?

Cédric Dewittte : Oui. Et donc, là, c'est vraiment la boîte qui vient et qui, en contrepartie, met un bloc tout. Il confère un warrant, entre à cette société externe qui est notre intermédiaire et qui donne la garantie. Société externe. Et eux, c'est quoi Enfin, c'est quoi leur. Ils ont une commission. Ils ont une commission sur la gestion du stock, leur business, c'est. Enfin, ils ne font pas les financements. C'est des garanties. Donc, c'est un intermédiaire pour nous. Ce n'est pas courant, mais on peut avoir ça, parfois aussi, pour des concessions automobiles. On a vu plusieurs concessions. Mais là, on parle de plus gros. En fait, c'est à partir du moment où tu as vraiment tout ton stock centralisé et que tu as la possibilité de. Lock it up. Voilà, exactement.

Elyn Bindels: OK. Mais donc ça, c'est quand même. C'est super intéressant, mais c'est pour des stocks. Alors, on parle de warehouses. On parle de gros trucs. OK, oui. Aussi. Oui, c'est vrai. Oui, tu ne vas pas faire un petit truc de 300 000 euros. Oui, c'est ça. Parce que je suppose que, de nouveau, opérationnellement. C'est plus gros. Enfin, tu as déjà.

Cédric Dewittte : Une fois que c'est mis en place, ça va. Tu as déjà l'autre. Contrepartie. Tu as la contrepartie. Eux, ils prennent sa commission. Donc, au ça revient aussi sur le du financement. Oui, c'est cher. Contrairement à un gage de commerce qui ne coûte plus rien.

Elyn Bindels: Oui. Mais. C'est toujours risqué parce que ça dépend aussi du stock. Parce qu' imagine, on parle des concessionnaires. Tu as la voiture qui ne se vend plus parce que, on va dire, dans un monde où il n'y a plus de clés électriques, mais c'est des voitures. Oui. Non Où on arriverait toujours à Enfin, pas en Belgique. Voilà. Exactement. Génial. Mais c'est super intéressant. Et donc, warrantage Warrantage. OK. Oui.

Cédric Dewittte : C'est est. Warranty, mais warrantage. Oui, je pense que c'est est. Je ne sais pas si il y a encore. La boîte, c'était warrant. vr, je crois. Je ne sais pas si. C'est en table dessus. Et donc, ING fait ça Oui.

Elyn Bindels: Et tu sais si d'autres banques en Belgique le font aussi ?

Cédric Dewittte : C'est est une bonne question. C'est est une bonne question. Parce que j'ai parlé à BNP, KBC et VDK et aucun d'entre eux m'ont parlé de. Oui, tu vois, si tu tapes Warrant. vr.

Elyn Bindels: Mais du coup, en fait, c'est plutôt avec l'intermédiaire. Enfin, eux passent par l'intermédiaire et après, ils viennent chez vous prendre le prix mensuel. Non, nous, on passe par eux, en fait, pour s'assurer de la surveillance du stock. Donc, eux, en fait, demandent. Donc, ont un contact avec le client et donc ont un relevé mensuel, vont faire, s'engagent à aller faire un inventaire une fois tous les trois mois ou un truc dans ce. Donc, nous, en fait, notre sécurité, c'est de dire quoi C'est est qu'il y a une tierce personne qui va s'assurer que c'est pas des. Comment est- ce qu'on appelle ça encore Je reviens plus sur le mot. Quand c'est est du stoc de merde. Ah, oui, oui. Allez, je reviens plus dessus, je l'ai déjà dit 15 fois. C'est est un oiseau. Tu peux le revenir. J'ai. Je sais plus. Oui, enfin, on s'est compris. Soc de merde, quoi. OK, génial. Bah, super intéressant. Bah, merci. C'était ça, la réflexion. OK. Il n'y avait plus rien de. Parfait. Oui, t'hésites pas. Non, non, de mon côté, non. En tout cas, si tu penses à d'autres gens qui pourraient répondre à ces questions.

Cédric Dewittte : On a le BCC, le Business Credit Center. Et ça, ça pourrait être intéressant pour toi aussi. Pourquoi Parce que les Business Credit Center, qu'est- ce qu'ils font Ils font vraiment. C'est est de

la masse. Donc, c' est par téléphone. Ils sont ici et ils sont à Et donc, n' importe quel client indépendant ou même nos clients à nous, quand c' est des petites demandes, en- dessous de 250 000, s' adressent à eux. De façon à ce qu' on part du principe que c' est des demandes qui, logiquement, doivent être faciles, simples, qui méritent pas non plus beaucoup d' analyse ou de showcase. Mais c' est eux qui les traitent. Et donc, eux traitent vraiment. Mais c' est à la chaîne, là. Alors, on a des systèmes internes avec des accords automatiques où on part du principe qu' en fonction de la qualité de la société, sur base du bilan publié et des critères qu' on a, on peut lui octroyer 100 000, 50 000, 70 000, 150 sans commencer à demander des sûretés spécifiques, tu vois. Et puis, parfois, quand c' est un peu plus élevé, ils prennent une garantie, mais qui sont de nouveau des garanties très simples, à savoir un gage de commerce, une caution. Ça, ça peut être intéressant. Est- ce que vous prenez aussi des garanties personnelles, genre, par exemple, de l' actionnaire Oui. Oui, mais c' est rare. Un, il faut qu' elle soit valorisable, parce que prendre la caution du mec qui est locataire, qui a pas un bail, ça sert à rien, tu On va prendre sa caution, mais ça sert à Si, par contre, la personne, effectivement, a un patrimoine et propriétaire et un deuxième bien, un patrimoine chez nous, que ce soit en gestion ou on peut le valoriser. Et si ça permet, finalement, de ne pas devoir prendre des sûretés supplémentaires qui sont payantes, parfois, les clients disent oui. Oui, mais c' est pas. Ils aiment pas. Ils aimeraient, à partir du moment où tu fais ta boîte, dire, en plus, je suis encore caution. Donc, on le fait de temps en temps. On le fait parfois aussi pour des montants qui sont, pas de la totalité du crédit, mais une parce qu' on estime que le risque est encore omniprésent. Donc, on dit, on l' a fait ici. Je pense à un dossier, c' est. On est dans le bio. On est dans le bio et ils ont un gros projet, ils vont acheter un nouveau bâtiment, ils vont tout rénover. Ils ont trois magasins déjà, ou quatre magasins. Très peu d' efforts propres. Et donc, on a marqué un accord. Moyennant intervention, on va nous l' entreprendre. Mais par rapport au risque qu' on a et par rapport au fonds propres, je reviens souvent avec ça, mais c' est vraiment crucial, on estime qu' il y a peut- être 300 000 encore qui est vraiment risqué. Et donc, on dit, OK, moyennant caution de 75 000 des quatre actionnaires. OK, ils n' aiment pas, ben c' est. Vous n' avez pas d' argent, vous n' avez pas de fonds propres, portez- vous caution, entre guillemets, à un moment donné, ça vaut ce que ça Mais oui, là, on va le demander.

Elyn Bindels: Et est- ce que vous dites beaucoup, enfin, ça, c' est juste ma curiosité, mais est- ce qu' il y a vraiment déjà des gens. Quel pourcentage vous dites non ? Quel pourcentage on dit non Parce que ça, moi, c' est dans les rapports et tout de l' Union européenne que j' ai regardé, le pourcentage de PME.

Cédric Dewittte : Je vais dire c' est plus ou moins. Un peu comme par étau, toujours. 20% peut- être Dans le truc, c' était moins. Oui.

Appendix R: Interview of Thomas Claeys from ING

This interview was conducted in person on April 2, 2025, at the ING Business Center in Louvain-la-Neuve.

Elyn Bindels: Voilà. Mais pour commencer un peu les première chose, votre rôle, votre expérience, ce qui est le secteur bancaire et ok, j'ai peut être commencer par mon nom comme ça, quelque chose de global. Donc je m'appelle Thomas life. J'ai un background en marketing en sciences de gestion et en sustainability management, donc à l'échec, la lsm et à lyric.

Thomas Claeys: Ça fait 15 ans que je travaille pour Ing. J'ai travaillé chez la banque de détail. Donc en ri réalité, j'ai fait la gestion de patrimoine. J'ai travaillais pour transformer son office. Donc le département à la banque qui s'occupe de la stratégie de la banque entre guillemets pour tous les clients et qui transforme, entre guillemets, la banque et en business banking et chez business banking. Donc, c'est. Je vais essayer de l'expliquer un peu plus, ce que c'est du coup, je j's essayer d'adapter business making. En fait, c'est le département qui s'occupe de la banque pour les professionnels. Donc, que ce soit pour les selfing plug, donc les indépendants pour les plus petites entreprises, mais pour les corps possibles. Donc corporate donc c'est à dire avec des chiffres d'affaires qui vont de grosso modo de zéro jusqu'à jusqu'à un milliard de chiffres d'affaires, pour autant qu'elles ne soient pas cotées. Et donc les années précédentes, jusqu'à janvier, j'étais responsable de l'activité PME sur le sud de Bruxelles. Et depuis janvier, j'ai repris l'activité des grandes entreprises, des institutionnels et du real Estate. Maintenant, mon scope, c'est quoi les grandes entreprises de 10 000 000 jusqu'à un milliard. Toute la partie irré est évidemment les pouvoirs publics, etc. Donc les institutionnels au sens large. Donc donc très large, donc très large, exact, très large. Et mon scope géographique est sur le Brabant wallon amur et sur Luxembourg. Donc c'est tout l'axe de la 411. Donc on a quoi faire, mais moi, pour un peu mettre le contexte, je m'intéresse. Je regarde vraiment tout ce qui est collatéral. Quand ça un peu tous trois dire de l'anglais. Normalement je l'idée, je ne pas en anglais. Donc tout ce qui est collatéral est garanti pour des tickets pour les PME.

Elyn Bindels: Ok, donc pour donner idée et pour qu'on parle d'un peu de la même tranche, je pense dirais des tickets jusqu'à 5 000 000, va dire plutôt petit, je pas si vous avez une expérience avec ça.

Thomas Claeys: Je toute mon expérience là dessus. Exact. C'est à partir de 5 000 000. Donc mon scope actuel en terme de lending à partir de 5 000 000 jusqu'à je ne vais pas dire l'infini parce que ce serait faux de le dire, je dirais jusqu'à 50, 60, 60 000 000, voire plus.

Parfois, on le fait en club deal. Donc si veut dire, c'est qu'on on partage entre guillemets le deal avec d'autres banques. Et donc, du coup, on le partage aussi en terme de garanties. Ok, donc c'est ce qu'on appelle le pari passou. Je meum que c'est quelque chose. Qui était déjà, en fait, c'est tout le monde se met pour un seul et même deal. On va par exemple trois, trois banques. On va prendre les grandes banques qu'on a ici en Wallonie et on se partage les garanties. Ok, donc on est sur le même rang et ça, c'est vraiment une raison hyper générale, très grande, mais c'est juste au niveau data. Il n'y a pas que c'est très précis. Est ce que si tu dois me dire, je peux bien sûr me dire un pourcentage des prêts aux PME qui devraient. Dont ils ont besoin du collatéral ou de garantie. Quand tu parles de garantie, tu peux aller plus loin en terme. Je parle vraiment de garantie que la banque prend ou pour lesquelles, pour lesquels d'autres d'autres acteurs entre guillemets, amènent des garanties est ce que c'est évidemment de choses différentes. Dans mes exemples, j'ai le government garanti personne garanti que c'est ça. Donc c'est global. Donc ça, donc ça peut être Wallonie, entreprendre comme ça peut être évidemment de l'ac, donc des mandats, des hypothèques, etc. Alors je vais, je vais te répondre. Comment est ce que je peux te répondre? J'aurais tendance à dire que je vais prendre la vision d'une banque. La vision d'une banque, c'est quoi? C'est quand tu, quand on met en place un crédit, évidemment, on calcule. On a tout un système de rating de classe de risque pour nos clients, parce qu'en fonction du risque, évidemment, les garanties sont valorisées de l'une ou l'autre manière ou en tout cas les risques. Les risques d'ac donc. Le on va le ce calcul aussi en fonction de ça, en fonction du fait qu'on soit garanti en fonction de la cla de risque, etc. Dans la vision d'une banque, il n'y a rien tel que de pouvoir mettre un crédit en place, d'être garanti au max et d'avoir le plus bas des ça. C'est le monde idéal dans une banque. Vous faites au profit. C'est comme ça qu'on essaye de les faire parce qu'on le fait, évidemment en diminuant, c'est assez simple. On essaye de, je vais te donner une formule qui peut de sympa peut être. C'est en fait, tu peux, tu peux avoir dans ta formule un numérateur, un dénominateur dans ton numérateur. Tu prends par exemple toute la partie, toute la partie in income. Donc, qu'est ce que la relation entre guillemets va te rapport? Tu vas le diviser après. Qu'est ce qu'elle va te coûter en terme de coût de risque? Et puis ça va te donner un certain pourcentage dans certains pourcentage, on va dire que sur 200 chez nous, on va dire 220 250 points de basse. C'est ton seuil de rentabilité. Et donc tout ça, c'est des choses sur lesquelles on doit justement faire attention. Donc, en clair, quand on fait un diminue le risque, mais en fait, tu dois jouer sur les deux paramètres d'ajustement de ta fraction, à savoir. Tu es essaye d'augmenter le plus possible ton libérateur. Donc te income avec les marges avec tout ton collatéral que tu peux avoir de l'autre côté, tu dois essayer de diminuer ton risque le plus possible pour ton capital te coûte le moins. Et donc si tu arrives à jouer sur les deux, évidemment en gagnant ça, c'est un peu ma réponse par rapport pour une banque.

Maintenant, évidemment, tout ça est mis sous pression en fonction du type d'assiette que tu vas faire, par exemple pour une voiture, etc. Mais en fonction de la qualité de la société, en fonction de la qualité de la personne qui va emprunter, mais tu vas peut être pas aller demander de garantie et etc. Pour une voiture, ça va compliqué. Tu vas pas aller prendre un gage. C'est un peu plus du mais exact. Tu vas, tu vas, tu vas déjà regarder là cette étude. Tiens en fonction de l'assiette est ce que je prendre des garanties. Quel est mon risque? Quel est la durée? Parce ton risque est toujours sur une durée. C'est un ré sur une durée de six mois. Non seulement tu peux le prendre si la société ok, si elle ne l'est pas, si par exemple, tu fais des financements pour des versements anticipés d'impôts, ce que tu vas aller prendre des garanties. Oui, non, ça, tu regarde là ou on va souvent aller regarder les garanties. Et ça, je pense que c'est ce qui peut intéresser de plus, quand on va faire du quand on va financer des capex. Donc des investissements à long terme pour une société. Et donc on va, par exemple prendre des garanties qu'elles peuvent être externes via des investis ou via des gouvernements support comme moi, Leon y entreprend, etc. Je cite cela, mais il y en a plein d'autres en France, c PMV ou exact. Exact est à finance Bruxelles, au niveau de haut niveau de Bruxelles. Donc il y a ça. Tu peux aller regarder tout ce qui existe aussi en terme de fonds de commerce, tu peux prendre un gage fonds de commerce, tu peux aller chercher des et ça, c'est plus des engagements moraux. Tu peux aller chercher, aller une caution ou une cache des pant. Donc ça, ça, c'est des choses que tu peux faire. La seule chose, c'est qu'il y a des garanties qui sont morales, des garanties qui sont réelles. Donc, évidemment, leur portée va être différente. Je ne peux pas les valoriser de la même manière. Par exemple, une caution, tu ne vas pas la valoriser sauf si elle peut s'appuyer sur une garantie réelle, comme une hypothèque, etc. Et là, tu vas évidemment beaucoup plus loin dans le calcul. Et de l'autre côté, ce n'est pas des caps, etc. Tu peux aller, par exemple dans le limo et là sur Lima et tu vas prendre l'. Et donc glr on va commencer ce que la Belgique est encore relativement bien faite pour ça. Si on la compare au pays européens, je ne nce d'autres trucs comme ça. Tu peux aussi renseigner par rapport aux autres pays. C'est on fonctionne avec des mandats. Donc le mandat, en fait, c'est ce qui va te coûter le moins cher parce que c'est en terme chez de terre. On ne prend pas encore la sûreté telle quelle, mais on peut l'apprendre. On peut le convertir qu'il faut. Et puis après, il y a de l'hypothèque, généralement ce qu'on fait, on prend un mandat. On va dire une hypothèque de contrôle. On va dire, on va prendre une hypothèque de 25 zéro comme ça. On est averti si un changement par rapport au bien. Et puis après tout le reste, on le fait en mandat. Et si à certain moment, en cours de comment dire en cours de vie du crédit ou ou de l'activité du client, on a un doute ou on a des raisons peut être de s'inquiéter ou le plus, avoir la même confiance ou le confort que au moment on l'a fait. Alors on peut convertir ce mandat et ce mandat, alors devient une hypothèque, vient se remettre au même titre que l'hypothèque du contrôle qu'on avait déjà. Et là, évidemment, en termes de r, c'est pas mal. Donc ça, c'est.

Elyn Bindels : Et pour juste un truc plus quantitatif, les derniers chiffres que j'avais trouvé sur internet de ces deux mille dix deux mille onze. Là, il disait qu'en Belgique se serait autour des 70 pour tout ce qui est vraiment pas. Les sme qui ont besoin de collatéral est ce que ou est ce que tu te mettrais.

Thomas Claeys: Je pense que je pense que cédril que tu vas rencontrer pourra t'en parler peut être aussi un petit peu plus, mais je dirais, je dirais que pour les PME, c'est ça ce qu'il faut savoir quand tu prends l'environnement économique belge. Tu as évidemment beaucoup plus de PME que de grande entreprise. Donc c'est logique. Donc si veut dire, c'est que ça va tirer ta moyenne. Évidemment là, c'est effectivement pour les PME, il y a beaucoup plus de garanties qui sont prises parce qu'en terme de solidité, etc. Mais il y a aussi, il y a aussi une notion de concurrence. Donc, par exemple, dans les grandes entreprises, tu vas trouver énormément de concurrence quand il y a énormément de concurrence potentiellement. Tu sais que des conditions sont tirées à la baisse. C'est logique. Et souvent souvent, c'est les garanties ou alors la partie, comme je disais, le numéro de l'infraction. Donc les 70, je n'ai pas le chiffre là comme ça, mais les 70 ne me choquent pas quand je, quand je l'entends, si je regarde le paysage global, si je prends des cautions ou ou des mandats, des gages, fonds de commerce, des choses comme ça, voire même aller des aides gouvernementales régionales ou provincial. Ça semble, ça semble coller à la réalité. Et maintenant je vais vraiment les super spécifiques, mais est ce que vous faites ou est ce que tu as déjà fait un deal du financement d'inventaires alors du financement d'inventaires. Alors j'aurais tendance à dire oui, tu peux faire, on le fait en financement. Donc ça, on peut le faire. Mais il y a aussi du factoring qui est mis alors, qui est mis en place? Je vais, je vais nuancer. Il est mis en place, mais. Il n'est pas encore assez nouveau chez nous. Donc tu veut dire, c'est que là là, c'est en train d'arriver. Donc on a certains clients pour lesquels on peut faire, mais est ce que ce n'est pas plus pour des vent. Si on remet ça dans le contexte de smi ou my corps, etc. Pour ce qui est financement d'inventaire est ce que. Ce n'est pas pour des plus gros. C'est en tout cas le financement d'inventaires qui se sont en factoring ou en financement. On l'a beaucoup plus effectivement en grande entreprise. Évidemment, les montants sont énorme là du coup dans l'enveloppe, ça prend plus de place, mais tu pourrais l'avoir aussi dans les p, mais est ce que professionnellement, mais ce n'est pas. S'il y a le plus courant pas, ce n'est pas ce qu'il est le plus courant et est ce que si, par exemple, une question.

Elyn Bindels: En hypothèse, mais est ce que si tu fais du financement d'inventaire, est ce que le l'inventaire peut être le collatéral, la garantie, tu pourrais l'avoir.

Thomas Claeys: Oui, oui. Tu pourrais, tu pourrais l'avoir dans ton, dans ta garantie de fonds de commerce parce que tu prends le stock avec. Ou donc tu peux, tu pourrais, tu pourrais l'avoir dedans aussi ou mais opération. C'est un collatéral assez. Plus de assez difficile vu que ça dépend vraiment du

stock du type de ça. Donc ça dépend de ton stock. Ça dépend, oui. Si par exemple, un stock périssable, etc, tu ne va pas le valoriser d'une même manière que un stock entre guillemets que tu pourrais prendre du chocolat ce que de chocolat, par exemple, la date de péremption est beaucoup plus, beaucoup plus lointaine, mais c'est clair que tu vas un risque qui pense évidemment un sorte de collatéral beaucoup plus risqué qu'en collatéral. Normal. Exactement parce que oui, parce que là c'est vraiment de la dette b. Oui. Si tu pourrais faire du réel, c'est vraiment à cette b là, tu sais ce que t'as, mais par exemple, si tu prends un stock, je vais prendre un bel exemple, un stock, un stock de monde de luxe. Potentiellement, tu pourrais le valoriser autrement que un stock de yaourt, par exemple. Je pense cet exemple là, mais comme ça, ça permet de grossir les traits. Donc c'est clair qu'effectivement ça, on peut le faire. On peut le prendre maintenant. Attention que dans les valorisations de stock, en tout cas, on a une police interne. Je ne l'ai pas rencontrée aussi. Je ne l'ai pas rencontrée, c'est lui qui m'a rédigé ok, donc je pense que j'avais dit albin que ça pourrait être intéressant que tu puisses rencontrer aussi quelqu'un de risque qui puisse expliquer la police qui est derrière, mais ça albin peut te diriger ou nous aussi, il faut le faire aussi, c'est que, en fonction des montants de stock, etc, tu vas pouvoir valoriser un certains avec certains paliers. Donc si t'as un stock, par exemple, de 10 zéro. Tu ne vas pas valoriser 10 zéro si par contre en a un de 2 000 000 potentiellement, tu vas pouvoir prendre, je ne sais pas, jusqu'à 125 zéro. Tu vas prendre 10. Et puis au dessus des 125 zéro, tu vas prendre 20 et ainsi de suite. Et là, ça permet de le valoriser. Mais donc oui, pour répondre à tes questions, si on fait du financement de stock, tu leur aura moins les factures parce que le factoring on prend en gage entre guillemets la facture. Donc la chose un peu à l'inverse, mais dans la partie financement de stock, tu pourrais avoir du collatéral lié à ton stock. Ça, tu peux faire, mais pour plus des gros tickets. Pas tout est toujours professionnel. Moi, je dirais, si tu veux, si on parle entre guillemets, d'une garantie collatérale, c'est important de regarder quelle est la valorisation parce que si tu m'as un crédit en place de 100 zéro balles, mais tu sais que, par exemple, tu peux, tu sais, pas aller chercher une garantie sur ton stock, une valorisation qui permet de couvrir entre guillemets ton crédit. Potentiellement ça servira, ça servira à moins. Donc il faut vraiment regarder les seuils et en fonction adapté, tu vas peut être alors l'accoupler et ça, je pense que ça peut être intéressant. Ça peut dire, j'ai un certain, un certain range de garanties que je peux prendre de l'autre côté. Tu regardes lesquels sont cumulables, etc. Pour pouvoir te donner du confort. Et donc pour pouvoir finalement accéder au financement, moi je le ferais plus comme ça.

Elyn Bindels: Et à alors dernier sujet dont je vais discuter, c'est vraiment le truc trendy en ce moment, c'est plus les green deal et tout ce qui est sustainability est ce que je suppose le début, mais est ce que tu dirais qu'il y a des conditions différentes pour ce genre de deals ?

Thomas Claeys: Les conditions sont différentes pour des projets ou des deals green comparés à des gens. Vraiment, je parle de l'intégration de ce système multi dans tout ce qui est business model. Là, je pourrais te donner si tu veux. Je ne sais pas si c'est un sujet à part entière, mais là, je peux te donner aussi un nom qui pourra t'aider, mais je peux déjà te répondre. Alors un, c'est un sujet tendance. Oui, comme tu le dis, c'est un peu trendy, mais je pense que c'est un peu comme la digitalisation internet. Quand c'est arrivé, je pense que c'est un train qui passe et qu'il faut absolument prendre en terme de, je pense, au niveau de la planète. Je pense que tout le monde sait ce qu'il est à faire. Ça, c'est une chose au niveau des banques. Il y a un rôle qui est super important. C'est, c'est de pouvoir guider et accompagner les clients dans cette transformation parce que c'est un peu du darwinisme économique. Ceux qui n'ont pas réussi à se transformer, c'est comme des girafes au petits coups et n'existent plus. Ceux qui ne sont pas entre guillemets, en lien avec la réalité de terrain, ils sont ne sont pas lament plus. Donc on a un devoir de, entre guillemets, on a un devoir de financement, un devoir d'accompagnement et d'information. Ça c'est déjà un. C'est ce qui est mis entre guillemets en place au niveau de la banque deux. Est ce qu'on facilite entre guillemets. Le financement, ou en tout cas, est ce qu'on a des conditions qui sont différentes. La réponse est oui, que ce soit parfois en termes de durée de financement ou que ce soit en terme de. Je dirais, en terme de taux ou en fait, on peut avoir des incitas. On ne va pas passer d'un taux de un à 50 points de base. Ça, on leur a pas, mais par contre, oui, par contre, oui, est ce qu'il y a des points de différentes sciences. Ça, c'est clair. Ça, c'est clair parce que on a un rôle à jouer deux potentiellement. Si on réfléchit vraiment au futur prof, on prend moins de risques à financer entre guillemets, une partie. On va dire plus énergétique, plus green qu'une partie.

Elyn Bindels: Ça, j'ai dans ma littérature, il y a déjà des preuves que des gens qui pensent plus tout ce qui est et sont moins risqués parce qu'ils voient plus au long terme, il y a la gouvernance qui fait déjà il y a moins de risque, mais est ce que tu pense qu'un jour avec, par exemple y avoir un Basel quatre qui retouche au RWA pour soutenir les greens deals ?

Thomas Claeys: Des deal green et du coup, au final, ça touche à la profit de la. Je pense que je pense qu'il faut voir le lien in direct. Pour moi, c'est plus à des deal green et entre guillemets, plus plus tu vas avoir des sociétés qui vont qui vont être en phase avec le monde économique sont plus en phase avec le monde économique. Potentiellement leur profil de risque va être différent. Je pense qu'il y a des ça, c'est peut être une petite astuce. Il y a des il y a des stades qui ont été faits sur je les connais plus au niveau des et états-unis, mais par exemple, si on retourne pas 20 ans en arrière. Des entreprises qui avaient par exemple un porte au niveau green, je crois qu'elles représentaient 10 à 15. Maintenant, tu prends un MP 500 plus de 84, 80 ou 85 le font. Et effectivement, on peut voir que ces sociétés là sont effectivement plus solides à tout niveau, parce qu' on pense toujours à la partie économique, mais à

la partie humaine aussi. Et donc dans la même logique des choses. Donc pour le moment, je ne vois pas encore que je fasse un grain ou pas un grain reste le même un peu de chose près. Par contre, au fur et à mesure, c'est plus, on a des sociétés qui sont prêtes à affronter le futur, potentiellement moins elles sont risquées, moins elles sont risquées et plus les classes de risque sont meilleures si les classes de risque sont meilleures, qu'on risque plus bas. Et donc ça peut avoir un impact, mais évidemment, c'est à mettre sur des années. On ne peut pas le faire en un an ou en deux ans, mais c'est sur des est, ce pense. Il y aura un petit coup de pouce du côté régulation ou pas, parce que ça, c'est plutôt du côté de la banque. Tu vois que c'est juste le meilleur fin est ce qu'il y aurait un coup de pouce au niveau régulation. C'est une bonne question. Parce qu'ils essayent de mettre des coups de pouce pour l'instant, en plus des côté des entreprises pour c, d CSD, etc. Ou à fait un jour, il pourrait faire un petit coup de pouce du côté des banques. Je moi même, je me pose la question. Je réfléchis, je réfléchis. Je pense qu'à partir, il faut qu'on voit les banques aussi comme une entreprise. Donc je pense effectivement qu'il pourrait y avoir un impact. Oui, je pense qu'il pourrait que sais pas si tu dis connais vraiment pas du tout, mais moi, je fais aussi un autre projet d'entreprise sur la CS d. C'est la nouvelle régulation, la de do diligence. Tu connais, mais justement tout ce qui est financi a été mis de côté. Donc ils ne sont pas du tout touchés par ça. Donc peut être car il y aura d'autres ations. Il faut être dé. Ils ne sont pas touchés pour le moment. Oui, non pour ça, c'est ça. Donc pour moi, pour tout ce que je vois pour le moment, c'est peut être que ce n'est pas la bonne. Ce n'est pas la même manière que oui, c'est des entreprises aussi, mais c'est pas la même mais non, non, je pense que je pense que c'est une question. C'est une question de report. Donc est ce qu'il y a un certain moment, on aura des obligations, etc. Est ce qu'il va y avoir des coups de pouce. Oui, je pense que oui. De quelle manière ça se, je pense qu'il faut jouer sur plusieurs facteurs. Ça, c'est clair.

Elyn Bindels: Merci beaucoup.

Thomas Claeys: Plaisir. Bon courage.

Appendix S: Interview of Laurent Joye from ING

This interview was conducted in person on April 2, 2025, at the ING Business Center in Louvain-la-Neuve.

Elyn Bindels: Donc bonjour, alors je ne sais pas ce que cédril vous a pu vous dire en cédril dit vous faisiez un mémoire sur la problématique du stock. Oui, voilà et vous bien, une ces questions que je pense qu'on fait une petite enquête. Voilà. Donc je regarde tout ce qui est donc prêt aux PME et je

regarde plus fin le collatéral et les garanties qui sont nécessaires pour ces prélat. Et puis je regarde un peu plus physiquement dans le financement d'inventaire peut être que ça, mais donc. Peut être, vous d'abord vous présenter votre rôle.

Laurent Joye : Je m'appelle Laurent Joye et je suis c SL coach au sein du b c. Donc j'ai expliquer un petit peu. Donc à la banque, on a un centre de compétence qui s'appelle le business credit center. Donc on s'occupe en fait de toutes les demandes pour les PME, entreprises et indépendants jusqu'à 500 zéro par ticket quai. Et donc toutes les demandes viennent chez nous, que ce soit des petites, des grosses entreprises. Et nous montrer jusqu'à ces demandes là, au delà, ça va directement télécharger de relations qui prennent leur qui prennent le dossier en main propre et qui le traitent. Voilà donc on ne fait pas les grosses cross d' million d'euros, ça part toujours chercher de relation.

Elyn Bindels: Génial. Alors première question, vu que niveau quantification est data, pas. Beaucoup de choses qui sont disponibles et les derniers datas pour la Belgique que j'ai trouvé, c'est 2010, 2011 et 2012 du pourcentage de prêts aux PME dont ou il y a besoin de collatérales et besoin de garantie.Dit et est ce que vous avez comme ça, un chiffre qui vous vient. Sinon, je peux vous donner les chiffres qu'il y avait en 2010 et vous pouvez vous positionner par rapport à.

Laurent Joye: Donc, vous voulez savoir un peu le nombre de dossiers pour lesquels on prend des garanties ou alors spécialement sur la problématique du stock, non?

Elyn Bindels: D'abord, en général, de manière générale.

Laurent Joye: C'est difficile à vous dire, on n'a pas d'autres de statistiques, étant donné qu'on travaille avec des programmes qui nous donnent des fois des accords automatiques à partir du moment ou certains critères sont respectés. On a un processus standardisé qui permet d'aller directement vers la décision sans prendre forcément de garanties complémentaires. Et après, c'est quand, effectivement, on n'est pas dans ces critères de standardisation des classes de risque, puisqu'il faut savoir qu'avec l'obligation européenne, il y a une class du risque qui est mise sur chaque entreprise ou chaque indépendant. Et donc cette classe de risque est très déterminante pour savoir si on va dans un. Un flot standardisé sans prendre de garantie ou pas. Voilà, ça va. Et donc si pour juste pour d'attaques que j'avais, si je vous dis septembre pour 100 des demandes de besoin, la colla, une garantie, ça vous semble. Pour moi, c'est beaucoup après ça cas dans notre scope d'activité. Pour nous, c'est beaucoup fait moins de garanties que cette, oui, parce que si on regarde tous les tickets jusqu'à entre 500 zéro, je suppose que et puis on ne va pas réagir de la même façon. Si vous faites une voiture de 10 zéro ou si vous faites une demande de 200 zéro de 300 zéro, oui, pour de l'immobilier, ce sera totalement différent. Voilà. Ok, merci. Et donc maintenant, pour aller plus dans tout ce qui est stock, inventer, etc.

Donc est ce que vous avez des demandes comme ça. Quand on a des demandes pour financer du stock, mais généralement c'est plutôt pour financer le fonds de roulement. Oui, puisque en fait, finalement le fonds de roulement, c'est le délai qui être le dél paiement des clients et délai de paiement des fournisseurs. Donc, finalement, c'est ce que l'on finance le plus. C'est ça cet fonds de roulement, mais indirectement, c'est le stock forcément oui, mais ça arrive qu'on fasse une fois potiquement un financement sur un durée très courte.

Elyn Bindels: Est-ce que quand en général, le stock, vous financez du coup vous donner vraiment les dettes ou vous donnez un prêt pour ces dettes. Je non, j'ai pas trop. Donc la facture est ce que vous payez, par exemple directement le montant exact de la facture du comme on dit, du fournisseur du fournisseur. Ou est ce que vous le donnez, un montant à la à la PME qui, après eux, ils font ce qu'ils veulent avec ?

Laurent Joye: Généralement, on est plus dans la deuxième deuxième version. Donc on met un montant effectivement à disposition pour ce fonds de roulement pour le stock. Mais on ne va pas vraiment faire à la facture près puisque c'est compliqué, sauf aussi vraiment, on a stock avec des marchandises. Peut être très cher ou la valeur à la pièce est très élevée. On pourrait éventuellement le faire. Mais ça, ça relève plus du factoring comme finance, mais là qui vont non, pas généralement, ils interviennent quand c'est des sociétés beaucoup plus grosses, ou là ils avancent 80 jusqu'à 80 % de la facture, etc. Eux travail la facture. Et là, si on prend vraiment les cas ou on fait du financement de stock, importe la façon dont ça se passe est ce que. Enfin, vous prenez du collatéral. Ça a dépendu la taille du ticket, effectivement, la taille du ticket. Effectivement, si vous demandez un crédit de caisse de 5000, pas forcément prendre les garanties et encore ça dépend et la société est une starter. Donc, une nouvelle société, on pourrait prendre la caution, par exemple, du gérant pour. Avoir une bonne fin d'exécution, mais généralement pour des petits tickets, on ne va pas prendre des petites garanties. Et puis après baisse des tickets plus gros, on vous peut aller jusqu'à du fond du du échauffant de commerce. On prend une garantie sur fond de commerce. Donc c'est à dire tout ce qui constitue le fonds de commerce. Donc les immobilisations corporelles, les créances, le stock.

Elyn Bindels: Oui j'ai eu toute une discussion avec cédrick sur tout ce qui est le type de stock, la la valorisation du stock, mais j'imagine aussi que ça pour des plus petits tickets. Souvent c'est de globe, des coûts opérationnels, quand même est ce que vous allez vraiment. Est sûr que déjà le stock existe. Tout ça est ce que c'est des difficultés qui se rajoutent.

Laurent Joye: On se base sur le bilan. Donc le bilan reste une photo à moment donné. Donc, forcément, on ne sait pas ce qui se passe, pas toujours ce qui se passe en cours d'année. Donc ce n'est pas toujours évident, mais oui, on nous. On se base plutôt sur effectivement le bilan précédent ou une situation

provisoire, parce qu'on travaille quand même de temps en temps et des situations provisoires, on en a besoin pour pouvoir estimer des fois ce genre de choses. De fait.

Elyn Bindels: Est ce qu'il y a une sorte de confiance quand même qu'on donne à l'entreprise d'utiliser ce prêt-là ?

Laurent Joye: oui, obliger parce que quand vous travaillez principalement avec du crédit caisse. Peu importe à forme, comment ça s'appelle d'une manière à l'autre ou des tris clones ou des choses comme ça vous fait une confiance puisque c'est si je veux, c'est l'administrateur, c'est gérant qui va gérer lui même la trésorerie qui va donner ses priorités. Et ce n'est pas nous qui disons à l'administrateur, tout à payer c fact. C'est donc oui, on fait effectivement une confiance. C'est pour ça que ce sont des crédits que l'on fait, mais c'est des crédits qui, généralement nous demandent une attention un petit peu plus particulière, ce qu'on fait un peu plus attention sur l'analyse et le besoin réel parce qu'il y a le fonds de roulement. Qui est généré par la qualité de l'entreprise. Donc on fait très attention à regarder ici. Finalement, les immobiliser ne sont pas financés par des actifs par des dettes court terme parce qu'on a beaucoup d'entreprises qui prennent des fois sur leur crédit de caisse pour financer une voiture ou financer des outils et mais finalement cinq nouveaux d'outils par ci s. Par là, on arrive finalement à finalement des gros montants et on a des situations dans des fonds de roulement négatifs. Et donc une des des structuration du bilan. Et donc il a après on regard, le besoin fait la balance forcément entre les deux, mais c'est vrai que ce n'est pas comme un crédit voiture du bon. Voilà 10 zéro pour une voiture. Souvent, les procès vont que c'est stress standardisé et on a la machine, souvent une décision positive. Mais ça, ce sont des crédits un petit peu plus particuliers ou on fait effectivement une totale confiance et on met finalement blanc aux clients. Et donc là, forcément, généralement, ça ne passe pas par un processus standard de décision automatique. Et donc intervention un peu plus d'analyse et d'humain derrière.

Elyn Bindels: Parfait. Et alors dernière petite question. Et ça, c'est très pertinent puisque que vous vous êtes vraiment les premiers à avoir les deals, etc. Est ce que vous vous basez seulement sur la mise financière. Ou est ce que, par exemple, les aspects sustainability est ce que ça s'est aussi pris en compte ou est ce que les conditions du prêt sont un peu différentes.

Laurent Joye: Si ça s'ajoute. Alors oui, de plus en plus pour répondre à la question, c'est qu'à moi, il n'y avait pas de différenciation si on était dans un cas de stabilité maintenant, effectivement, c'est le cas. Et donc les banques, je pense, veulent avoir un portefeuille. Vers en tout cas de plus en plus vert. C'est aussi des obligations aussi européennes en la matière. Et donc, oui, on essaye de faire d'une différenciation au niveau des taux qu'on a dans un pré rénovation avec tout quelque chose de green, effectivement, et à le alors aussi que les sûrs on fait attention que les sûretés que l'on pre soient entre

guillemets, pas trop énergivores. Donc, par exemple, Si c'est prix hypothécaire, c'est un peu autre chose, mais c'est hypothécaire. On va regarder forcément le pb et plus le pb va être proche de mieux c'est et moins plus sera éloigné, plus on va demander aux clients de soit mettre un peu plus de fonds propres dans l'opération, soit on va demander aux clients d'établir les travaux qu'il faut faire pour essayer de monter dans le peb et on va. Soit dire au client, il faut qu'il faut vous les financiers ou soit on va les financer pour le clients. Mais le but est d'amener à une verion. Ça comme ça, du portefeuille, en tout cas,

Elyn Bindels: est ce que souvent quand quand vous dites vert est ce que souvent c'est lié à l'énergie ?

Laurent Joye: c'est lié à l'énergie puisque le pb est lié à l'énergie, puisque c'est la consommation et la déperdition d'énergie. Mais tous les bâtiments et tous les biens ne sont pas n'ont pas une obligation de pb, en tout cas en Wallonie. Et donc les entrepôts industriels n'ont pas une obligation. Et puis on a encore aussi la problématique avec les appartements puisque les appartements, on a des fois des pb qui sont très bons. C'est des neuf des très mauvais, mais les appartements, on est un peu. En tout cas le client. Et nous aussi, on a un peu point pieds, point liés par rapport à la copropriété puisque entre guillemets, si la cop ne veut pas changer des châssis parce que c'est une décision des fois globale ou si on ne veut pas mettre des panneaux photo sur le toit, voilà, ce n'est pas la décision simple de notre client. C'est une fois une décision collective.

Elyn Bindels: Et si je lies les deux sujets dont on a parlé aujourd'hui, financement de stock et on va dire green est ce que, par exemple, si c'est les produits stock. D'une entreprise dont vraiment produit green un tout le business modèle, on va dire plutôt green est ce que ça, ça ferai une différence.

Laurent Joye: Ça fait, ça fait quand même une différence puisque c'est quelque chose qu'on bon à manière générale. Donc, oui, ça fait une différence, mais ce n'est pas une différence qui est très marquée si si lui, c'est bon, qui soit entre guillemets et qu'une base gris ou pas, je vais dire business, c'est bon, on ne va pas dire non parce que son business est bon, donc on ne va pas le freiner en la matière. Par contre, on va, on donne des formations, fait des conférences et en tout cas, on stimule le client pour qu'il y ait ce genre de réflexion et de démarche. Mais la base reste et la base reste financière. C'est plutôt sur le. Les sûretés que là on va être beaucoup plus attentif sur l'aspect énergivores. L'aspect green des sûretés.

Elyn Bindels: Ok, voilà. Super, qui voilà. Merci beaucoup pour votre temps. J'ai entendu que vous avez beaucoup de boulot.

Laurent Joye: Oui, on est. C'est la deadline aujourd'hui pour les versements anticipés. Donc les l'impôt, c'est le 10 avril, la première date et donc encore des clients ce matin à clients, j'ai oublié de demander,

je voudrais faire un crédit pour pour faire un versements anticipés d'impôt. Donc on a une deadline aujourd'hui à 15 h, donc on est en sous pression, ça va retomber. Agréable et est, je comprends aussi de temps en temps, c'est comme garantie comme ça, vous savez, c'est toutes les garanties de Wallonie Entreprendre oui, ceux qui peuvent être utilisées pour garantir aussi une à et ça, c'est bien qui travaille avec wallie entreprendre et ce n'est pas le, ce n'est pas le client, ce n'est pas le client. On fait interface, c'est à dire. Donc si vous voyez, par exemple un crédit, vous dites. Ceci y aurait moyen. Mais on aimerait quand même bien, bien prendre la garantie x Wallonie entreprend il y a des garanties automatiques Wallonie entreprendre d'ici vous êtes dans les critères cela vous pouvez automatiquement les octroyer sans nous demander vous nous demander après et on le fait automatiquement si vous êtes dans les critères. Et puis il y a des dossiers, effectivement ou là, il faut introduire le dossier chez eux pour avoir une décision. Mais il y a des garanties automatiques données par le entreprend.

Elyn Bindels : Et ça, ça reste aussi dans les mêmes les taux de tarif jusqu'à 500 zéro ou c'est plutôt des plus petits tickets, non?

Laurent Joye: Jusqu'à comme on bras par ticket de 500 zéro maximum. On bras quand même de pas mal d'opérations des opérations dans ce cadre là, mais il faut avoir des plus grosses opérations.

Appendix T: Interview of Geert Van Dael from Bank Van Breda

This interview was conducted via email (in writing) on April 14, 2025.

1. Can you describe your role/function?

Verantwoordelijke Kredietonderzoek: algemene coördinatie en eindverantwoordelijkheid van een team kredietanalisten en van de kredietstrategie van Bank Van Breda.

2. What is the typical size range of loans you work with? Do you have experience with SME loans under €5M?

Bank Van Breda richt zich tot uitsluitend tot Ondernemers en Vrije Beroepen, onze kredietverlening richt zich hoofdzakelijk naar kredieten in die grootorde, tot 5M.

3. In your experience, approximately what percentage of SME loans (under €5M) typically require guarantees or collateral? There is limited publicly available data on this, with the most recent figure from the OECD (2010-2012) indicating that 70% of SME loans in Belgium require collateral. How would you position yourself in relation to this data?

Afhankelijk van de kwaliteit van de kredietnemer zijn (bijkomende) waarborgen noodzakelijk. In eerste instantie zal de bank zich richten tot het doel van de investering en deze in waarborg nemen bijvoorbeeld vastgoed, machine, pand aandelen van een over te nemen bedrijf,... Bij twijfel over de kredietwaardigheid, solvabiliteit, terugbetalingscapaciteit zijn eventueel bijkomende waarborgen nodig. Gezien de kleine marges waar banken mee werken is het logisch dat er waarborgen worden genomen om de spaargelden waarmee zij deze kredieten verstrekt te beschermen. Uiteraard kunnen bij uitmuntende kredietwaardigheid de kredieten zonder waarborgen ter beschikking gesteld worden.

4. Have you been involved in financing deals where inventory was used as collateral, or in specific inventory financing? If yes, for what type of companies are these deals typically used?

Wij maken eerder gebruik van de algemene waarborg pand op handelsfonds, we streven hierbij naar een lange termijnskredietrelatie eerder dan korte termijn financiering

5. What are the hurdles/challenges when using inventory as collateral?

Intense administratieve opvolging is noodzakelijk, is moeilijk om te rendabiliseren.

6. In your experience, would you say “green or sustainable” deals face different conditions, such as collateral requirements or interest rates, compared to traditional deals?

Via onze financieringspolitiek naar ondernemers en vrije beroepen willen we onze cliënten inspireren naar meer maatschappelijk verantwoord ondernemen. We ondersteunen vernieuwende groene investeringen die bijdragen tot klimaatvriendelijke oplossingen en stimuleren het energiezuiniger maken van vastgoed.

Appendix U: Interview of Dirk Minkwitz from Beobank

This interview was conducted through Visio-Conference on April 16, 2025.

Elyn Bindels : Yeah, perfect. Okay. Thank you so much for taking the time to talk to me. Can I first ask you what your experience is? Maybe a short description of your role in the financial sector.

Dirk Minkwitz: Okay, so the career is 27 years long. I started simply in the bank giving money at the counter. I did that for six months and then I had my own portfolio of professional clients. I did that for nine years were about 500 professional clients that I had. Then I became an agency director. I did that for six years and was focused on all types of clients. But I always kept a big part of my clientele in professional business clients. And then I migrated from sales to the back office. First I did all the

projects for professional credits at BNP Paragraph Fortis for five years. And then I followed the last project I did, which was robotics in AI Linked and I built robotics in AI team for five years. And then I went back to management because I missed it. And I coached a bank guarantee corporate bank guarantee team for a year and a half. Then I switched because they asked to an operational team that draws up the professional credit contracts in Dutch. I first only had the team in Leuven and after a year I took over the team of Ghent and Antwerp also. So I had the three Dutch teams. So I did all the Dutch contracts for professional credits at BMP. And since the 13th of January I left BNP and I went to Baobank. And Biobank is starting to service professional clients at a bigger level from the agencies throughout the whole land. So it's more than 180 agencies, independent and really on the payroll of Biobank. And we are training them at the moment and coaching them to get enough expertise to be able to help. So we're gradually rolling out towards the agencies and next to that we have team pro centers that already help the clients at this moment.

Elyn Bindels : Very long, large, diverse career I can see. But I think that's great because I think you will have all the experience. To like have an answer to all my questions. That. That's perfect because I suppose that as in the first part of your career when you said you were at the office mainly, I suppose you have worked with a lot of SMEs or in your portfolio. Yeah, so that's also one of my. What I focus on, on my thesis. So mainly SME loans. But if you have to quantify it, I'm mainly going to talk about under 5 million loans.

Dirk Minkwitz: I mostly worked for SMEs. It was never banking or something. We had another segment for that. It was a different activity level that treated those clients perfect.

Elyn Bindels : And then I'm looking at. So SMEs asked for a loan and they need to put up collateral or have a guarantee to obtain that loan. And I know it's a very, very large question and it also ask it because there's not a lot of data points available on it. And the last phones that I have found on Belgium date from 2010. So I guess a lot of has changed since then. But if you can approximately give me a percentage of the SME loans that would need collateral or would need a guarantee to get through. Would you have a. An amount in mind?

Dirk Minkwitz: There's always something.

Elyn Bindels : Yeah.

Dirk Minkwitz: There are not a lot of credits that we give without any collateral.

Elyn Bindels : Yeah.

Dirk Minkwitz: Just on name base and on numbers base. We almost never give credits or we do a short term loan but then we try to get a priority on the machine or the car that we are financing that we can recuperate by sale selling the tool or we do a personal guarantee of the. The independent that buys the machine or the. The car something. So at least we have a personal guarantee if we can go directly to the goods that are bought. That's even better. So it's. Yeah, no, but I know what you mean.

Elyn Bindels : And would you say that imagine like you. It's more also depends on the relationship maybe that you have with SME. So if you already have. If they have already other products, maybe then they could have

Dirk Minkwitz: one mortgage on a building for example and we will easily give a small credit next to it. But Blanco, like we say we don't. Yeah, 98 is covered with something.

Elyn Bindels : Okay. Yeah. Because the. The numbers that I found for Belgium to give you an idea, in 2010 it said around 75%.

Dirk Minkwitz: Yeah, the economy got worse since then and we have to be more careful and even the government is more strict. So they have the Basel norms and we are at Basel. And if we. If you give a credit without any guarantee, then you have to keep a high number of liquidity in the bank. And frankly it's. It's too expensive to do so that's why the banks always take some guarantee.

Elyn Bindels : For sure. For sure. And so you have already talked about personal guarantees and then collateral. Do you also work with government guarantees? I know, I think in the Flemish side it's pmv. And then Wallonia.

Dirk Minkwitz: It's indeed. There is a special fund in Brussels. In Wallonia, in Flanders. And the one in Flanders is the most interesting and the biggest and is the most used also.

Elyn Bindels : Yeah, I saw you worked with that as well at bnp. I suppose. Yeah. Okay, perfect. And then I'm going even more into focus on the type of collateral that is used because I'm looking at financing deals that well finance inventory, but also where inventory is the collateral. So in case there's defaults. So have you ever worked with.

Dirk Minkwitz: Always a difficult one. Yeah, we put that in the gash fund commits in the sack.

Elyn Bindels : Yeah.

Dirk Minkwitz: But we've the evaluation of the. The estimation of the. The value that we expect to get from it if it's for stock is zero.

Elyn Bindels : Zero.

Dirk Minkwitz: Because if there's really a problem, there will be no stock or it will be stuck that we can't sell anymore. That's that you have to or even pay to clean up.

Elyn Bindels : Yeah, that's the experience we have. But what are the different. Because that was my next question. What are the difficulties when using stock as collateral?

Dirk Minkwitz: Well, if a company is in problem when we see it, we are already too late. All the stock is already sold. They just have no funds to buy new stock and continue the business. Or they saw themselves that the product they're selling there is no clientele anymore.

Elyn Bindels : Yeah.

Dirk Minkwitz: And yeah, even if there's something still in the warehouse, most of the time we can't sell it. There are known frauds from the past for big transporting companies with big boxes and cases that were in a big warehouse and there was a one big circle of the boxes and each time the inventory was made. So many boxes in the broads. So many boxes. High multiply. Okay, we have so many boxes, but in the middle there was nothing. But then that way you can build up stock and build up good numbers, but in reality there's nothing.

Elyn Bindels : Yeah. And also I suppose that like operational wise you already need to. Send someone to the warehouse to see, blah, blah. And then also like in terms of, well, you. It's also based on trust in what they do with their stock and if it's degraded or anything. So. But if we take back the type of loans, would you say that like big banks would do it for, I imagine big tickets, like enormous groups maybe, but Obviously for asset SMEs that's too little or some we do.

Dirk Minkwitz: But most of the times we estimated the zero and we try to have another collateral next to it so we can cover really the credit, but we do a part on the stock. But stock is also financed on short term and so most of the times, yeah, we only give short term loans. So that's gas credit, straight loan, something like that. And then they finance the stock with that. And it's only the iron stock, like we call it, that we can fund on, on a long term because it's.

Elyn Bindels : Yeah, yeah.

Dirk Minkwitz: If you have, for example, you have 100000 stock always in the warehouse, then we can finance one time the 100,000, never again.

Elyn Bindels : Yeah, yeah, yeah, yeah. I see what you mean. And do you make a difference if you say like the financing purpose is inventory or working capital. Do you make a difference or. Okay, because

how do you make sure. And that's just curiosity as well, but how do you make sure that they use it for what they say? They will, they will use it.

Dirk Minkwitz: If, if you have a long term loan that will pay for the stock, then we want to see the, the invoices and stuff with the short term loan, a credit line on the, on the account or a straight loan, then we don't need to see the, the invoices and they can use it for whatever they want, if they want.

Elyn Bindels : Yeah.

Dirk Minkwitz: With it. It's not, it's not smart, but they can.

Elyn Bindels : Yeah. And just to come back on the, the difficulty of like fraud and trust, do you have a lot of experience with that? Like, have you heard a lot of stories of like fraud? Yeah. Even in Belgium you would say that. Yeah, yeah. Okay, okay.

Dirk Minkwitz: Belgium is known to find the, the back door or something to try and do something and pay less taxes and.

Elyn Bindels : Yeah, yeah, okay. And then lastly, I also wanted to talk about most of the trendy aspects, so the green and sustainability aspect. And my question is, would you say that today, when still in the, in the, in the world of SMEs, if they come with sustainable practices, so a sustainable business. Plan etc. So they really incorporated ESG in their business. Is there any advantages in the conditions they get on their loans?

Dirk Minkwitz: It's starting to be a custom. Yes. So today the easiest ones is it's when it's financing something like better insulation, something that you can easily proof solar panels and stuff like that. It becomes more difficult if. Because ESG is also a good maintenance of the. The personnel and. And having a good division of all.

Elyn Bindels : Yeah, yeah.

Dirk Minkwitz: Aspects of the. Of the people. So every color. Every.

Elyn Bindels : Yeah. Inclusion.

Dirk Minkwitz: Inclusion. That's more difficult. And those rules and regulations and how to incorporate them to get a better rate on something that's all being built at the moment because it's easy to make new regulations but it's not that easy to incorporate them immediately. It was already the case at bmp. It's also the case at Baobank. So everybody wants to help with it because we are an important motor bank is an important motor to get there because we can motivate them with a better rate. Yeah but.

But it's not the easiest part to cover. It's. That's also the difference between the two banks I work for. Biobank is a small bank. BNP is a big one. Biobank has never touched a client that has something that is maybe in oil or. BNP has them historically and is getting down restrictions and they have to bring the credit amount down for oil and bring it up for other energy sources. But you can't say from one day or to the other we stop all credits to repay them because then you break down the whole economy.

Elyn Bindels : Yeah.

Dirk Minkwitz: And those. That's the difference between the two banks as I see for esg.

Elyn Bindels : Yeah. And also when obviously you have the financial analysis that you do and maybe in the future there's going to be like the sustainability analysis which also is the difference is that it's not like quantity the sustainability. So maybe each bank will create their own internal credit system on like how to.

Dirk Minkwitz: They are talking together and okay yeah. Cable fin to go to one one way of doing it but it's really. It takes some time. Yeah. The most difficult part is to not be called a greenwasher. You can say oh yeah, we give a finance for ESG and you never check it. Then you're possibly green washing. So you have to set up a whole control system that's bulletproof so you never get called the green rusher that you really only finance then ESG stuff. And that's the hard part. It's not that we are owner. We are not there all the time.

Elyn Bindels : No, no.

Dirk Minkwitz: And that's the hard part to set up the fact that giving a better rate for a finance, that would be easy. We give better rates every time. In all discussions with every clients, there are reductions that are put in place. So that's the easy part. Also putting an ESG flag on a credit, that's easy. But then setting up the control that it stays like this, that's the difficult part.

Elyn Bindels : Yeah. And also costly. So. Yeah.

Dirk Minkwitz: Responsibility of the bank is the government sets new rules but never follows them themselves. They have no team that will check it for us.

Elyn Bindels : No.

Dirk Minkwitz: And then.

Elyn Bindels : Yeah, just for the conditions. So you talked about the rates. Would that be the only thing that changes since. I mean, there are some that say that the integration of ESG make them less risky. But like in terms of collateral, it doesn't change anything.

Dirk Minkwitz: No, not really, no. Why would it be less risky?

Elyn Bindels : It says that because you integrate governance that you see the long term and so you're better at.

Dirk Minkwitz: But I think there are a lot of companies that only do ESG stuff that are not interested in economy long term. There are a lot of businesses that go. Go broke because they only wanted to do good for nature, but they're not sustainable in the company.

Elyn Bindels : Yeah, yeah, that's great.

Dirk Minkwitz: But then, then if there's a credit and it won't be repaid, it's the problem. So. Yeah, yeah, yeah, for sure.

Elyn Bindels : Okay. Well, that was everything for me. I have everything I needed. Thank you so much for your time and yeah, if you have any questions for me, I'm also open to it. Sorry.

Dirk Minkwitz: Good luck with your term paper.

Elyn Bindels : Thank you.

Dirk Minkwitz: Thank you. End of June or what?

Elyn Bindels : Yeah, I need to submit it before the end of May, I think and 28th of May. So I'm getting to towards the end. But I'm really happy with my.

Dirk Minkwitz: Do you have a good helper here with Ellen Bindle says it again.

Elyn Bindels : Yeah.

Dirk Minkwitz: Easier with the avdi. In my time it was still writing down and typing it and stuff. So it's.

Elyn Bindels : Oh no, this is great like this. It's called grain. And basically I also also have the free plan. So I have 20 free calls. And it's perfect because it makes you a summary, a little table, a content table now It's.

Dirk Minkwitz: It's awesome using it in schools now too. The, The. The. The teacher is saying stuff and. Okay, my summary when I get home. I haven't even listened. I was on my phone, and AI has done everything.

Elyn Bindels : Yeah, but we have to also make some changes. I mean, it's obviously way less complicated, even for, like, information and stuff. You get directly what you want, but then.

Appendix V: Interview of Koen Verniest from Crelan

This interview was conducted through Visio-Conference on April 18, 2025.

Elyn Bindels : Okay. Is that okay for you?

Koen Verniest : Yeah, absolutely.

Elyn Bindels : Okay, perfect. Thank you. Well, thank you. On the tattony, is it okay? Perfect, thank you. So can you first maybe describe your career in the financial sector or like what you do as your role?

Koen Verniest : Yes, of course. I started in 1988. It's a long time ago already. I started in the bank Brusque Lombert called bbl, which has been taken over by ING later on. I started my career as a university degree or university trainee. And then I started as a relation officer. And my main mission was having contacts with enterprises, discussing their loans and discussing to finance their loans. So it was a commercial function, because of course I had to judge whether they what we could finance their demands. But secondly, of course we wanted to if it was a good file. Of course, it was our aim to realize the credit facility. I did for about a year or five. Then I moved. I did that in Brussels. Then I moved to Bruges, where I applied for a management function as responsible of an agency that was the main agency in the Bruges area. Because I wanted to have some management feeling, expertation expertise. I did that for about a year or seven. Then BBL was grouping the agencies. So I was responsible for about 15 agencies in the Bruges area. We called it manager of the sector. So I was responsible not only for the Bruges area, but also for the agencies in the area. Then I moved to Kortrek, where I was responsible a bit similar function, but the area is bigger. So I was responsible for all the agencies in the south of West Flanders. So we called it area Kortrake. And then I think we're about in. It was 18 years later, I think it was about 2004. BBL was taken over by ing. A lot of things changed. I think I was at the end of my 30s and a lot of things changed in the bank. And. Well, it's something which is always going on changes. But they were quite drastic. For example, they didn't work with responsables of agencies anymore.

Elyn Bindels : They were.

Koen Verniest : They were canceled. I didn't feel very good about it. And in the same period I got a call from the KBC Group for one of their sister companies which was. Sentia was a part of the KBC Group and Sentia worked only with independent agencies. Kbc, their agencies. They are all lone trackender. They are all paid age the in the Sentia group all the agents are independent. It means that they have commission on all the production they do. So I. I thought if I want to change, I want to move. I have to do it now. So I did it. I went to Sentea and I was responsible for all the agencies in the area of West Flanders, which was 150. Of course I had a team which. Which of course did parts of West Flanders. But I was then zone director for the West Flanders for province. For the province of West Flanders. Then we had a financial crisis in about 2008, 2009. And KBC was very much involved. They had to. They had to sell about 10 companies companies abroad, but also companies in Belgium such as Fidea, which was their insurance company and Sentia as well. Sante was sold to Credit Agricole Lomboker. They worked with independent agencies as well. So I moved with the Sentia group into the Lombok Credit group. Later on Lomboker Dip decided to change their name into Krylon. And then later on, which is quite recently Krill on took over Aksa bank. But the bank group of AXA Bank. Do you know the difference between the insurance group and. And the bank group AXA has? AXA is known for insurance, but they also have a banking area. A banking. A very. Important banking. Yeah, area departments with about 400 agencies. And about a year or ten ago I think AXA France decided to sell the banking area. So as they were also working with independent agencies it was a good opportunity for Krillin to buy them. So Krillin took over Aksabong banking area. So the takeover was about four or five years ago. But because of Corona the due diligence period took quite long. So the actual takeover happened last year. The, the. The. The. The. The Juridic. Juridic happened last year. So since last year, June last year we are one one bank. And but besides that AXA Insurance, you will still see the AXA logo. You will still see it in the street. Because AXA Insurance still exists. And part of the takeover of AXA bank there is an agreement that Krelan sells the AXA Insurance products through the Credent banking offices. Okay, we have an agreement. So what do I do in the Credence group after it was taken over we had. Well, you had a remake of the functions. We started from another. Another. Another level a white paper. We. The organization structure was. Was. Was. Was rescheduled. So I was in for all the people who were involved in discussions with enterprises about financing their investments. We call it business experts. So if, if some. Even if. If an enterprise wants to finance something they contact their agent, banking agents. But if the amount is quite important, somebody of the hoofed contour has to come to discuss the loan with the client because the demand has to be decided at the central office. So it's always important that somebody with your agency is discussing with the client what do you want to finance, what kind of guarantees, what kind of interest. Interest rate. Are we gonna apply?

Who are you? How do you want to finance? And why do you want to finance? So all the talks about the loan are discussed with. We call it business experts. Another business expert is making a report, introducing the report to the credit committee and then they decide and the expert is introducing the report, explaining it. And he tries to make his point of. So that he. He can has an agreement for the financing and that we can do the loan. Because according loans is one of our missions. Of course. Yeah. So I was responsible of this group and I went to the credit committee as well. And I did that for about a year or 10. And now I'm responsible for more supporting role. We call it go to market business and go to market. We are responsible for all the commercial initiatives to support the agencies in their contacts with enterprises with entrepreneurs. What do we do? For example, we organize twice a year accountant events in which we invite accountants to seminars. The last one was with Michel Mose. Why do we do that? Because we want. Krylan is now the fifth bank of Belgium after the merger with axa, but still behind the big four such as kbc, Fortis, Belfius and ing. We are the fifth. So not all the banks, not all the entrepreneurs or even accountants consider us as also a bank for enterprises for entrepreneurs. So we want to be in top of mind with the accountants. When an accountant knows ah, Krillin. They do accord loans to enterprises as well. I want to introduce the demand of my client also with Krilan. So we do that. We do training sessions for agency as well. For example, investeerings. Off track. It's new. What's new about it? So we inform them. We do. We do also commercial actions towards clients. We do mailings to clients telling them. Do you know that this new opportunity. If you want to learn more about it, contact your agency. We make podcasts for enterprises. We have true podcasts. So a podcast is awareness. We do a lot of things to. To increase the awareness. We do things to increase the knowledge of agencies for. We do twice a year, business days. So we have in the business days, in the morning we do a plein air session. Session plein air, which is one hour in which we explain the main things which has changed. And the afternoon we have different workshops. A workshop about for example recent cases we have on the credit committee. We tell them that was the demand, that's the way we handled it and realized that this. So we want to let them learn about the cases. We had participants in Watskop Evland, so they explain what they do, how we can. How they can help us. In financing files we had Gudrun. Gudrun is an expertise. They valuate real estate, but we work with Gudrun and sometimes there are issues with Gudrun. They valuate real estate, but the agency thinks it's worth 500,000. But Goodwin says no, it's 450. So sometimes there are discussions as we invited for a workshop to explain how they work. So that's what we do. Increase brand awareness, increase the knowledge of agencies, commercial actions. And I have a team of different people helping me to do that.

Elyn Bindels : Great. You have a very extensive and like very various roles throughout your career. It's very important.

Koen Verniest : Yes.

Elyn Bindels : And I'm sure that with your all your experience, you're going to be able to answer all of my questions because one of them. So I'm basically focusing more on SME loans and I was going to ask you when is there a threshold when you say that the business experts have to. So when is the limit of big loans? Or does it depend on the ticket size to have the committee come in to the the loan process? Yes, it does.

Koen Verniest : There are two important thresholds which are taking into account first of all, the rating of the client. Every client has a rating. It's a model which turns and they take into account of course the balance sheet details, what's the quality, cash flow, solvability, the history we have on the client, has he always paid us back correctly or not? So all these. All these parameters give a rating. So depending on the rating and the amount of debt they already have, including the new amount. Yeah, yeah. So these two factors determine who is going to decide. On this file. And of course you have different layers, as small amounts can be decided by just a credit analyst or two colleagues. A bit higher amount will be decided be of a member of the credit committee with an analyst. And at Crelon, when you have a total amount of credits exist, existing credits plus the new one is more than 3 million euros, you have to go to the credit committee.

Elyn Bindels : Okay, okay, okay. Yeah.

Koen Verniest : And 4 million when it's a rating client.

Elyn Bindels : Okay.

Koen Verniest : But for all the rest, B, C, D, E, we go to the credit committee.

Elyn Bindels : Okay, perfect. And so I suppose maybe that's going to be more about your, the start of your career when you were really in the contour, et cetera, with entrepreneurs. Because so I'm talking for me, the threshold that I've put in my mind to give you an idea is 5 million. So all loans under 5 million. And I'm looking, and you've already talked about it, guarantees and collateral that loans have to do, you have to put up for loans. And I know it's a very broad question, but approximately, if you have to give a percentage of how much, how many loans have to have a guarantee or collateral to get through, I mean that can be 100. But if you have to give top of mind a number, what would you, could

Koen Verniest : you, could you precise your question?

Elyn Bindels : So if entrepreneur, small business comes to Crelan and wants the Havenoon between, let's say a small loan, do they have to put up, in how many cases do they have to have a guarantee or

a collateral? It can be in all the cases, but the numbers that I found date from 2010. To give you an idea. And it said that in Belgium, all the SME loans, 70% of them need to provide collateral or have a guarantee. It can be government guarantee, personal guarantee, third party guarantee to go through with the loan.

Koen Verniest : That's a very, very difficult question. Yeah, I will tell you why. I will tell you why. For example, there are some loans for which we do not ask any guarantee. Easy one, we do it without any guarantees. If we finance a car. We won't ask anything, especially if it's a good client. Yes, we already have guarantees we won't do it. I was just. For a next workshop, I was looking into a file to give you an idea. And it's a guy, he's 29. He's working with his dad in a company. They're doing gardening and he wants to take over a big, big firm who's doing gardening. And the two brothers, One of them is ill, so they look for taking it over. And it's. It's a good company. They have a free cash flow, 500,000 a year. They have a cash flow of 800,000, minus 300,000 existing loans. Free cash flow 500,000. There is real estate which is worth 1, 1.4 million. They sell the place at. At the. Sell the shares of the company for 2.9 million, which is okay because there's a real estate about 1.4 million, so it's certainly worth it. And the free cash. Cash flow is 500,000. It's. It's. It's worth it. So we did finance it for 1.9 million because it was a proper effort, about 1 million. He got some funds from his parents and, and the 1.9 million. We did it just with. With Gash Fontit. I don't know how you call it in. In. In. In English. We took into. In. In the shares. But shares from a private company are not. Are not much worth. Because if you have to sell them, there is no markets.

Elyn Bindels : Yeah.

Koen Verniest : So yes, we. And yes, we have some guarantees, but how much are they worth? So, Elyn, I do want to. So in this case we took guarantees.

Elyn Bindels : Yeah, it's.

Koen Verniest : It's. It's. It's on deal and gosh, Gash did him. They're much worth. So if your question is, in how many cases do you take guarantees and you consider this as a kind of a guarantee, then. And I take all the credit facilities, even included. Fie on the 75%. Yes, 75. But even taking into account minor guarantees, such as. Such as this one.

Elyn Bindels : Yeah, I suppose it also depends on the relationship. Maybe sometimes you already have. Yes, it depends because maybe they already have a few products or a few loans with Klan. And then for one you will not give the guarantee because you know you already have some other products. So it depends on.

Koen Verniest : Do we know him or don't we know him? Of course we do want to have credit facilities with new clients because we want to grow. But of course with the new grind, you just have client, you just have the balance sheets, you don't know how. How do they are. If you have an existing client, you have already a rating model behind it. You see his balance sheet, you know what happens on the account, you know, do they have other products with us? So the better you know the client, the more comfortable you are in granting a new loan. And perhaps for sure, if you have already existing facilities, it's more easy to give another one without any. Any facilities. And in guarantees you have what we call real Zeicherheaden Real, real guarantees. There's always some real estate behind it. The most real means we can realize. Activa behind it. Yeah, activa, such as real estate. Most, most clear example. But you can also. It doesn't happen a lot, but it does happen. That's per. Sometimes parents or grandparents, to confirm their belief in the projects they give Gash fontit they have some savings and they say listen, we really, we don't want to give him, we don't want him to give his proper house in guarantee, but we, we want him to help him. And we give you 100,000 of our savings in guarantee. It's a real secret because if something happens we can sell it immediately.

Elyn Bindels : Yeah.

Koen Verniest : What's the English name really? We. Actions. It's not really Actions. Shares Shares. In my case, when, when the BV sells the. The shares of. Of their bv. In this case, we never can sell the. The shares. So we have the guarantee. But yeah, how can we realize that we can't sell it on the marketplace? So it's not a real guarantee.

Elyn Bindels : Yeah. And do you ever take inventory as guarantee?

Koen Verniest : What do you mean by inventory?

Elyn Bindels : So the product that they sell, or for example, if the loan is specifically for working capital. And so. Yes, financing of inventory. Do you take the inventory as well for the.

Koen Verniest : Yes, yes, yes. We call it in Gachefont Commerce, le fond de commerce, which is in French. But fond of commercial is more than inventory. Yeah, it's also machines and yeah, it's always clients who hadn't paid their debts yet or part of the Fond e Commercea. Yeah, yes, yes, we do that, but we just value it. We add up on the balance sheets. We add up the inventory, the machinestander debiture. So clients who hasn't paid yet. And for example, if that amount is 500,000, we valued it at 20%.

Elyn Bindels : Okay.

Koen Verniest : Because we have. For the risk models, we have to make a calculation of what we think, how much we will realize if it go bankrupt. If it goes bankrupt, yeah. So behind every guarantee there's a model which tells us, based on statistics, of course, how much it will deliver it us if we sell it. And then for. For a real estate, we have an expertise. And if the expertise, say 500,000, we take 80%. So in our books it will be worth 400,000. Because we learned from previous cases that if you have enough expertise on 500,000, it has to be sold because bankruptcy only 80% of it. With the phone to commerce. If, if, if, if a company doesn't go very well, but what do they try to do? They try to sell their activities to make cash.

Elyn Bindels : Yeah.

Koen Verniest : So they're calling the. Yeah, the clients, please pay the bill. Perhaps they will sell old machines, they will sell some stock. So from the balance inventory, 500000 in the end.

Elyn Bindels : Yeah, this may be the first thing that goes out because. And then of course. And then if, in case they defaulted because they couldn't sell their product, you won't be able to sell it either because that means the market is not doing well. So.

Koen Verniest : That's right. Yeah, that's right.

Elyn Bindels : But if so if the purpose is inventory, are there like specific operational difficulties for like in the specific case? Because I'm looking into specific inventory cases and I imagine sometimes there's also a. I've also been mentioned by a few people during interviews that there are some people that are like there is fraud as well in inventory in general, because they. Like you cannot really control it since it's like a really tangible asset. Sometimes it's difficult to.

Koen Verniest : We are not very keen on that kind of guarantee because of the things you mentioned. You do not know what's in the inventory. It might be products who you can't sell anymore. There might be frauds. So we only take the fond de commerce as a supplementary guarantee, but we won't. Or with an existing client where it all goes well and we think, okay, this extra amount, I think it's good that it gives us the fond de commerce. And sometimes Elin, if the amount is quite huge and we do have some downs, we ask an expertise who is doing expertise on the inventory. We send somebody to have a look, have a look at the machinery, have a look at their books. Are they in their books? Or we ask, give them your inventory of your clients and we check the clients. For example, how many clients do you have? Is it just one client? So it's a risk because if that one doesn't pay anymore, you're going to get bankrupt. Or do you have 100 clients? And from these hundred clients, what's the importance of these clients and what's their, what's their pay period? If a client is open for six months, it's not very good. So. But we do these checks. If we do not feel comfortable with the client, then we ask them, give us

some extra information. So it's the first step of further investigations. But we don't start with it. We take the phone to commerce because we feel good with the client, we believe him. We look at the balance sheet. We see so many stocks, so many machinery, so many clients. 20%. So that's worth.

Elyn Bindels : And we go, yeah, but I, I suppose that for smaller tickets, if it's like a very small business, you won't go through with the expertise because it's also like a cost. And also I think, I don't think you're going to pay the cost. It's like it's going to be on the client. I suppose. So it's also additional cost for them. Right. Or is the expertise.

Koen Verniest : We try to let it be paid by the clients, but it's always commercial discussion. Of course.

Elyn Bindels : Yeah.

Koen Verniest : If we, if we, if we feel that it's a bit an urge for the client and we not feeling confident, comfortable, we will employ him to do it.

Elyn Bindels : Yeah.

Koen Verniest : If we really into competition with other banks and. We want to make the loan. We might decide to do it on our, on our costs. It's. It's.

Elyn Bindels : Yeah, okay, perfect. And then to me, the last subject that I wanted to, to have today is more about sustainable, sustainability etc, so more green. And I don't know why, but I feel like in my mind if I just like, I don't know very well, but maybe it's just the logo, but I feel like maybe you have a sustainable like department or something. No. Is that. Yes. Did I imagine that or.

Koen Verniest : Okay, yeah, yeah. We have a new. We do have an ESG department, especially because Krillin, because they come from Agricole, Longbow Credit, and still about 10 to 15% of our loan facilities still go to Longbow. It's still. We still. It's still an important market for us. ESG is very important. So. Yes, of course. Yes.

Elyn Bindels : Yep. And so my question would be if today the loans conditions are different when you have a company that is very much into or has integrated ESG or has a sustainable business model. So is there a difference in the loan condition that you offer them?

Koen Verniest : Yes and no. We have an ESG scorecard.

Elyn Bindels : Okay.

Koen Verniest : We have an ESG scorecard. So in the first phase, now we try, we want to have this scorecard implemented, filled in for every client which has more than 1 million credit facilities with us.

So if we see the client for a next discussion on a new loan, we'll introduce him and tell him ESG is important. How do you deal with it? We have some questions to feel. How do you do it? And then we fill in the ESG scorecards. Okay, first of all, do we have green liens, green loans? Yes and no. We do not have loans called green loans, but of course we stimulate loans who facilitate Dusamheit. If they call, if they finance an emissive reestal or new solar panels or a battery park will give them an extra reduction. So we have a reduction on the credit facility because of Dusama. And we are thinking about developing a product called Green Loan. But it's not because we have not the Green loan that we are not doing it. Yes, we're doing it because we give them an extra reduction on his, on his loan. On the interest rate of his loan, of course. I don't know if that's an answer to your question, Elin.

Elyn Bindels : Yeah, no, that's exactly the answer. And obviously. So it's only on the interest rate. Right. It doesn't change the risk of the collateral, the risk associated to the loan. So no changes in guarantees or collateral? No, no, no, no, no, no, it doesn't improve.

Koen Verniest : Of course, if he, if he asks us to finance a battery park to reduce his cost on electricity? And then we will ask him, do you have a calculation about investments and return on your investment? And if he says it will save, it will improve my cash flow, about €100,000. Perhaps I'm exaggerating. Then we will introduce his, his new financial plan, his financial revenues into the risk model. And it might improve his rating.

Elyn Bindels : Oh, yeah, yeah. Okay. Yeah.

Koen Verniest : And then, yes, it will have. Yeah, it will improve his rating and, and, and look at his risk. But we really look into these numbers, Anna. Is it realistic that it will improve?

Elyn Bindels : Show me.

Koen Verniest : Because a battery park, it costs a lot of money. Are you sure it will, your electricity? Because a battery park is only function when it's sunny. If it's not. Sorry. During the winter months. So we ask him questions. It's not a free. A free lunch, really. Yeah. Discuss about all he's. He's telling us and. But yes, it might. If his investment is improving his cash flow. It will. It might influence on a positive or influence on a positive way, the rating of the client.

Elyn Bindels : Yeah, perfect. And just out of curiosity, is the scorecard that you developed for esg, is that really internal to Klan or do you think that there's going to have. There's going to be like a standard that's going to be developed for Belgium or Europe maybe for those kinds of Fable Fin.

Koen Verniest : Fable Fin.

Elyn Bindels : Okay.

Koen Verniest : Of course, as ESG was important for all the banks, everybody developed on his own way. So that's what we did as well. And then it's a bit. With Corona, everybody tried to develop his own medicine and in the end you say, well, shouldn't we do it together? But it goes faster when you start with yourself and then later on, yeah, put all the ideas together. It's a bit the same with esg. I think every bank developed it, but in the meantime, Fable Finn did some efforts as well. So I think in the end we all use the same model because. Because it's, it's an advantage for the client as well. He has to answer to our questions. Perhaps if our client is also client with kbc, they might come up with the same thing or roughly the same thing, and then he has to do it again. So for the client, it's more easy if he fill in the Fabulfin questionnaire and everybody's using it. But yes, we have our own one because not all the banks are involved in agriculture.

Elyn Bindels : Yeah, no, for sure. Yeah.

Koen Verniest : So we had to develop it for ourselves because we can't use a model which is not developed for agriculture yet. So that's why we have our own model because some things are very important for us. For example, it's especially for flowers, not for the south of the country. So we have to develop some questions to know what our client is doing about it, which is typical for our ESG scorecard.

Elyn Bindels : Yeah, yeah, yeah. Okay. Very interesting. Well, thank you very much for this time and, and all the, the, the good answers. If you have any questions, let me know. And thank you so much. And yeah, that's it for me.

Koen Verniest : Pleasure, Elin. And good luck with your master study.

Elyn Bindels : You. I think you will be the last interview that I do. So you're closing this chapter for me, so I'm really happy. And then now it's just finalizing and putting it into the document. But yeah.

Koen Verniest : Okay. Could. Could I help you? Did I, Did I, Did I.

Elyn Bindels : Yeah. No, and it's very interesting. So to give you a bit of an idea, I spoke to almost every bank like the, the ones, the four that you mentioned and also bail bank, maybe that's maybe under you guys. But it's really interesting because in the big lines everyone says the same. But then it's interesting because every. And it also depends on the person that I've. That I'm speaking to. But there's just little details that they add. Like here it's more agriculture, Land bow. Land bow as well. Just so there's little details that change, but in the big lines it's all the same.

Koen Verniest : Okay, good luck.

Elyn Bindels : Well, thank you so much and well, have a good weekend.

Koen Verniest : Thank you. Same to you, Elyn.

Elyn Bindels : Bye.

Appendix W: Interview coding

Theme	Insight	
Collateral Requirements in SME financing	Collateral remains a central requirement in SME lending	AV, NVK, FVL, CP, BM, CD, TC, LJ, GVD, DM, KV
	Collateral types vary with loan use (real estate, machinery, etc.)	AV, NVK, FVL, CP, BM, CD, TC, LJ, GVD, DM, KV
	Government guarantees are critical for SMEs with weak collateral	NVK, FVL, CP, CD, TC, LJ, DM
	Smaller loans may bypass collateral via scoring models	BM, CD, LJ, KV
	Collateral is a tool for risk reduction and capital efficiency	NVK, AV, FVL, CP, BM, CD, TC, GVD, DM, KV
Operational Challenges in Inventory-Based Financing	Inventory has low recovery value and high volatility	NVK, AV, FVL, CP, BM, CD, TC, DM, KV
	Inventory is difficult to value and monitor over time	NVK, AV, FVL, CP, BM, CD, TC, LJ, GVD, DM, KV
	Operational and legal challenges in enforcing inventory collateral	NVK, AV, FVL, CP, BM, CD, TC, DM, KV
	Inventory financing is process-heavy and costly	NVK, AV, FVL, CP, BM, CD, TC, LJ, KV
	Inventory is often included in general pledges, not valued separately	AV, FVL, CD, TC, LJ, GVD, DM, KV
Loan Conditions for Sustainable SMEs	Sustainability affects loan pricing but not collateral requirements	NVK, AV, FVL, CP, BM, CD, TC, LJ, DM, KV
	Banks offer better terms for green investments, not for ESG status	NVK, AV, FVL, BM, CD, TC, LJ, DM, KV
	Collateral remains unchanged despite ESG scoring integration	NVK, AV, FVL, CP, CD, TC, LJ, DM, KV
	Regulatory framework does not yet support ESG-based capital relief	NVK, BM, CD, TC, DM

Legend:

- Aren Vanhoutte: AV
- Nicolas Van Klinkednberg: NVK
- Freek Van Loo: FVL
- Clément Piedboeuf: CP
- Bronson Mostinckx: BM
- Cédric Dewitte : CD
- Thomas Claeys: TC
- Laurent Joye: LJ
- Geert Van Dael: GVD
- Dirk Minkwitz: DM
- Koen Verniest: KV

Abstract: Small and Medium Enterprises (SMEs) often experience persistent barriers to access financing. These financing constraints are particularly related to structural barriers, such as collateral requirements and regulatory frameworks. This thesis examines these financing constraints and explore alternative lending models to overcome these financing gaps. This study centers on Shiperise, a platform that provides inventory-backed financing to sustainable SMEs. Using a mixed-method approach combining secondary data analysis from OECD and SAFE datasets and qualitative insights from expert interviews, the study highlights the continued dominance of collateral based lending. Additionally, it shows the operational impracticality of inventory as standalone collateral in traditional banking. While sustainability is gaining importance in strategic outlooks, ESG factors remain marginal in loan conditions and credit models. Shiperise emerges as a complementary financing solution, offering targeted credit access to SMEs excluded from conventional frameworks. The findings contribute to the literature on SME financing by emphasizing the need for more inclusive, flexible, and sustainability-aligned credit practices.

UNIVERSITÉ CATHOLIQUE DE LOUVAIN
Louvain School of Management

Place des Doyens, 1 bte L2.01.01, 1348 Louvain-la-Neuve
Boulevard Emile Devreux 6, 6000 Charleroi, Belgique
Chaussée de Binche 151, 7000 Mons, Belgique
www.uclouvain.be/lsm