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**The access to credit of
small and medium
enterprises.
What change when the
bank changes?**

Credit relations after a merger:
the BCC Pordenonese Monsile case.

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Introduction

This thesis investigates the modifications introduced by the consolidation of the financial system on credit availability for small and medium enterprises (SMEs). Indeed, those companies are of special interest for their characteristics of being especially dependent on banks and a particular type of lending technology, relationship lending. Small-medium enterprises have long demonstrated a high degree of opacity creating informational asymmetries that put significant constraints to accessing credit. In addition to this characteristic, the dimension of SMEs usually does not allow to access other types of credit that are present for larger enterprises, such as capital markets. Banks in this context acquire a dual role of credit providers and as a means of transferring information to the market thus increasing firm value thanks to the existence of bank-borrower relationships.

To address opacity, the relationship lending technology has proven particularly effective as it allows firms and banks to exchange information in a way that is consistent with the type of data produced by those SMEs, which is soft in nature. Information of that kind needs special attention due to its tight connection with three main factors: distance, both in geographical and hierarchical terms, and people. Banks organize their own structure and locate themselves in order to optimize those factors in relation to the type (or types) of loans they produce with more intensity also in connection with their dimension. This behavior is related to the necessity of reducing the gap between credit needs and opaqueness.

In this fragile equilibrium, an event of extraordinary nature as a merger could reasonably produce several modifications especially considering credit availability and the type of clients to which the newly constituted banks look at. Research on credit availability and small firm financing repeatedly highlight the criticality of consolidation for those companies, that often result in a deterioration of the financing available due to a transition to wider, less opaque businesses.

Italy is an especially interesting case since its tradition is rooted in a widespread presence of SMEs and a tight connection with the banking sector. In fact, it is often referred to as being a bank-centric system. That long tradition of small territory-linked banks makes the Italian environment of special interest since in recent years have experienced (and still is) a process

of profound modifications and consolidation, in an attempt to remain competitive in the present financial and economic environment.

In this setting, with such evolutions in action, the credit function is questioned also due to the advent of new technologies, and the role of banks mutates. We, therefore, ask ourselves which are the implications of this process for enterprises and how the behavior of the bank modifies in relation to modification in the structure of the financial system itself. And so, our question is, what changes when the bank changes?

The present work that will try to answer this question will be structured in the following way. In the first chapter, we will analyze the demand side of lending. To provide credit, several lending technologies have been developed through times in response to specific information needs. Among those technologies, one is of special importance for the purpose and scope of our analysis, relationship lending. Its ability to effectively provide an answer to the need for credit of SMEs, characterized by being informationally opaque will be presented stressing its importance for the supply of credit and match their informational need with the one expressed by the served firms. To gather this information, some elements have proven to be especially relevant. Hence, we will review them to see how the interconnection between structure, dimension, and lending technologies is optimized in order to enhance credit supply.

In the second chapter, demand for credit will be analyzed to gain a complete understanding of the reasons underlying what drives the need for credit expressed by SMEs. Since banks seem to be a fundamental stakeholder for SMEs and vice versa, we will look at demand from two main perspectives, the Bank Lending Survey and the Survey on the Access to Finance of Enterprises, taking a historical approach, and examining the evolution of credit demand through time.

Inside the third chapter, a review of the Merger & Acquisition process will be provided through its most typical ten steps and Post Merger Integration. Several motives, both internal and external that drive M&A waves. The consolidation inside the banking system has a deep influence on credit relations. The merger of two banks in fact implies also the merging of two different client bases and of their respective branches. We will analyze the combined effect on credit relations dividing factors between static and dynamic effects. In conclusion, we will examine how, in particular, small business lending is modified after consolidation.

All the discussion covered inside those three chapters will allow us to introduce the empirical case that will be covered in chapter four where a first introduction to the history of consolidation inside Europe and then Italy will be proposed in order to arrive at the core of our work with the BCC Pordenonese Monsile case. The research methodology used and how the qualitative analysis is carried out are hereby presented to introduce how we have proceeded in investigating the telephonic semi-structured interviews that were carried out with four managers, holding different positions. These multiple points of view approach will allow us to look at the considered phenomenon from different but complementary lenses. The shreds of evidence coming from the analysis of qualitative data in the form of themes defined with the Gioia methodology are combined with the result of the Natural Language Processing. This way of carrying out the analysis will allow us to enrich the discussion and corroborate the evidence of one analysis with the result of the other methodology, comparing them with the theory reviewed in the first three chapters.

The conclusions evidence the result of our analysis and most importantly highlight the question stemming from the result of the present work, setting it as the starting point for multiple considerations regarding the BCCs niche and their peculiar dynamics.

1. The lending function

The primary function of the financial system is *to facilitate the allocation and deployment of economic resources both spatially and across time, in an uncertain environment* (Merton, 1992, p.7). To provide individuals with those functions, intermediaries and institutions compete and cooperate together in order to maximize the efficiency (functional perspective of financial intermediation) with which the financial function is performed. Optimization is a process that requires continuous adaptation to developing social and economic environments thus changing its means while retaining its fundamental economic role.

Banks have proved their centrality in lending to business. Through a continuous adaptation towards firms' needs and opportunities, they have successfully achieved their primary role in supplying credit, in particular considering Small and Medium Enterprises (SMEs) with a reduced or excluded access to capital markets. Throughout this chapter, we will analyze the lending function with respect to SMEs financing. Our interest will be concentrated on this specific lending technology where an introduction and subsequent analysis of the relevant factors influencing its adoption and preference will be made. The reason underlying the choice of this focus could be found in its principal application. Relationship lending is indeed the first means of credit supply to SMEs. Those companies will be central in both chapter 2 and in the empirical case considered in chapter 4, hence our attention on them.

1.1 The lending function: process, products and types

Banks carry out their function as intermediaries by connecting the demand for credit - primarily deriving from businesses – to suppliers of resources and funds. In this context, lending acquires a central role in fostering and supporting the economic development of societies. A fundamental source of credit on which every company relies is indeed provided by bank loans in their different forms. Through their lending function, banks are able to make resources flow inside businesses able to grant their ability to repay the credit extended. In absence of resources or when alterations to availability are experienced, consumption decreases, and distortions to the normal economic cycle could arise. Investment is halted alongside the possibility to finance research and business development. The tension provided by the credit crunch experienced during the 2008-2009 crisis well represents the centrality of this lending function.

In order to diversify their commercial offer and provide credit in the most efficient manner, several categories of loans have been developed. A major traditional classification divides them between short-term and long-term. With the denomination short-term we identify loans in which repayment is due by the end of the year. Conversely, long-term loans are intended to last for a longer period of time that goes beyond a single year. Among the short-term types of financing we can identify four main types of loans:

1. Self-liquidating loans: are used to finance the acquisition of short-term assets that will generate cash-flows in the near future by taking advantage of the regular cash cycle¹. The repayment is in fact usually set to match assets' cash flow timing.
2. Working Capital loans: are designed to finance day-to-day operations and are extended to cover short-term needs. They are usually taken by companies that are cyclical or experience seasonality peaks in demand. Those loans could cover the costs related to that excess by amplifying the resources available.
3. Asset-based lending: refer to credit lines secured by assets. The ones usually taken as collateral are inventories, account receivable, or property. Collateral has the purpose of covering the sum granted if the client is not able to repay the loan in full. In this instance, the assets are used to recover (at least in part) the loss incurred.
4. Syndicated loans: is a form of financing extended to a business by a syndicate which is a group of lenders. Those types of loans have the advantage of sharing the risk connected to their employment between multiple parties. Indeed, syndicated loans are used to finance projects that require enormous resources. Therefore, they are especially risky in nature and would be unbearable for just one institution. That allows lenders to take on projects or investments that they would not be able to pursue alone due to the risk and capital required.

But the firm present also long-term needs. Looking at companies' balance sheets, we could notice that the most relevant division inside them indeed is the one that distinguishes between short-term assets and long-term assets. Moreover, there is a mirroring effect between assets and liabilities that are classified as well according to the timing with which repayment will

¹ With the regular cash cycle, we intend the process transforming cash into short-term assets involved in the products creation and commercialization phases and then again into liquid financial resources deriving from cash flows related to sales. This transformation is connected to the core activity of a business and therefore it continuously happens inside a firm when operations are following their natural flow.

occur. Therefore a "matching" between cash flows is needed to appropriately balance inflow and outflow through time. Long-term financing will be needed for specific projects (such as to expense the operations needed for the launch of a new product) and to finance extraordinary corporate transactions. Hence, banks have developed several categories of loans to provide matching cash flows in longer periods:

1. Term loans: are used to fund longer projects and usually, they are repaid in instalments with a predetermined schedule set ahead of granting the line of credit. The interest carried could be fixed or floating in which case, it is usually linked to benchmarks as the prime rate or the LIBOR. Due to their long-term nature, they are generally secured by fixed assets in order to provide an additional layer of security to the loan.
2. Revolving loan: allows the borrower to draw and undraw funds according to its needs. It is an extremely flexible tool that is often seen as opposed to term-loans that are instead tight to a prespecified schedule. This variable line of credit is characterized by having floating interest rates that change according to the prime or other money market indexes while also charging a fixed fee. Its flexibility allows businesses to adapt credit to the needs arising from exceptional obligations not predictable in advance (e.g. delay in payments by the customer).
3. Project loans: the riskiest type of credit. They are extended to finance projects that will produce a cash-flow stream in a future moment after an investment has been made. The risk connected with project loans could be summarized in three factors:
 - i. the amount of funds required;
 - ii. the possibility of delays in the project execution;
 - iii. the changes in regulations happening throughout the project.

The categories presented constitute the most common types of business loans extended to companies by banking institutions. The decision to provide credit is based on a process that has the intention to assess if the borrower will be able to repay its obligations. The loan itself will be structured in a way that favours the success of the operation. In order to decide whether the borrower is creditworthy or not, literature refers to the so called Five Cs of credit. Those represent five components that have been proved to adequately form a complete opinion about creditworthiness. Those Cs are constituted by character, capacity, cash, collateral, and conditions. Character refers to an assessment of the motives underlying the financing needs. In

this context, the sincerity and the adequacy of the purpose for which the loan is signed will be evaluated. Cash – as the word will suggest – consist of giving attention to the monetary side of the transaction. The presence of cash flows will be needed such that the borrower will be able to cover the repayment with an adequate level of certainty. Along with cash and liquid resources also collateral plays a central role. In fact, they have a dual role inside the operation. Collaterals are constituted by an item of value that a lender can seize from a borrower if he or she fails to repay a loan according to the agreed terms (ECB, 2016). In addition to this loss-covering function, they provide the lender with a psychological advantage over the borrower. Collateral is usually assets or properties that are especially relevant for him, therefore will establish another source of incentives for the repayment. The conditions to which we refer inside the Five Cs, are the ones of the relevant industry and of the general economy in which the considered company operates. It is important to stress that also those external factors are needed in order to acquire a complete picture and define growth prospects or contrary stagnant sectors from which shying away.

The reason underlying the need for a credit analysis process is to protect the bank against a possible situation of distress. The probability to incur in such contingency could be adequately reduced by assessing the creditworthiness. In order to form a complete judgment, the collection of a wide variety of information that stems from financial to subjective evaluations as the ones involved in the assessment of character is required. Therefore, information holds a prominent role as they encompass all the Five Cs. It shapes the way in which lending relationships are established and defines the level of credit conceded by banks to firms. Therefore, we could state that the possibility of receiving funds is directly proportional to the ability to eliminate informational asymmetries (Psillaki, Tsolas and Margaritis, 2010). In this way, an element of risk is smoothed, and credit could be freed to flow inside the firm.

As we will see in the next section, there are four approaches to information gathering, either based on tailoring their recollection around a continuous relation with the client or focused on standardizing and scaling the process of data acquisition, using mainly quantitative informaion.

1.2 Lending technologies

Berger and Udell (2006, p.2948) defined lending technologies *as a unique combination of the primary information source, screening and underwriting policies/procedures, loan contract structure, and monitoring strategies/mechanisms*. Therefore, the identification of a certain

lending technology encompasses multiple layers of the relation between credit institutions and borrowers. A division uniquely based on the preferred information source would be reductive and disregard significant elements enriching the definition of a certain lending technology. Nevertheless, this simplistic view is less unusual than expected. The division that is often reported distinguishes between two categories, one based on quantitative information - namely transaction-based lending – and another built on qualitative information, relationship lending. Although fundamentally correct in principle, adopting exclusively this point of view would be reductive as we have stated. In particular transaction-based lending, includes heterogeneous subcategories (Berger and Udell, 2006) that should be appropriately identified and explained. Lending technologies could differ from one another due to one or more of the characteristics cited at the beginning of the paragraph. Moreover, it should be noted that in some cases the division is blurred and elements that characterize a certain lending technology are present also in another. Therefore, contamination between different lending technologies is somewhat present. In those contingencies, the distinction could be made identifying the most prominent aspect and which should be regarded as just ancillary elements.

Nevertheless, a classification is useful and appropriate to be made. Business lending could be divided into four categories: financial statement lending, asset-based lending, credit scoring, and relationship lending (Berger and Udell, 2002). Each one of them is characterized by a different method of approaching the corporate-bank relation and information scarcity.

Financial statement lending

Financial statement lending stresses the relevance of evaluating the elements presented in the financial statements (Berger and Udell, 2006) by analyzing the strength through selected accounting items and ratios. In particular, what will be evaluated are cash flows, returns and overall profitability. Balance sheets and income statements in this context are the most important documents (Berger and Udell, 2002) since the former provides a static picture while the latter a dynamic vision over the considered company. In order to carry out those evaluations over the goodness of the examined statement, the analysis is usually carried out at a firm-level comparing the trend over different years. This is what we identify as a horizontal analysis where historical data is compared between different accounting periods. This because they provide a clear picture of the direction taken by the company, independently of how competitors are performing in the same considered time frame. Cash flows are another central element since they are the means by which credit will be paid back. Cash is the primary source inside a regular

scenario where business adequately flows, and capital is constantly generated. Differently, in case of distress, also collateral could provide a means to repay the lender, but this contingency is an extreme measure that should not be regarded as the regular way to repay the financing. To provide a complete assessment of the financial statements, a comparison with the market is certainly needed. Therefore, the company will be compared to other firms in its competitive arena. The juxtaposition is usually performed through vertical analysis (also known as common-size analysis) that expresses the elements of each line of the statements in relation to a base figure and defines the contribution given by each item in the composition of the final figure. This type of lending requires informative financial statements, such as audited statements (Berger and Udell, 2006) traditionally belonging to larger firms but also transparent small businesses, with sound audited financial statements (Berger and Frame, 2007) are good candidates for the implementation of lending procedures based on financial statements.

Asset-based lending

Asset-based lending is connected to securing the transaction with collaterals. In this case, the element central to bank evaluation in making the credit available is the quality of the provided collaterals (Berger and Udell, 2006). In order to be good candidates, collaterals should have some specific characteristics that make them attractive for banks. Hence, those should be assets preferably liquid in nature, stable in value, and easily sellable (Rigoni, 2019). Those peculiarities are fundamental since they grant the ability to be easily transformed into cash would the loan becoming unlikely to pay or past-due. Monitoring the persistency of the cited attributes is a fundamental requirement when assets are central to the bank-firm relation. Consequently, the downside of this lending technology is that a lot of energy is spent in periodically reassessing the states of the assets pledged. This monitoring requirement likely leads to an increased cost of credit. It should be noted that the pledging of accounts receivable and inventory is present also inside financial statement lending, relationship lending, and credit scoring, where the collateral is used as a secondary source of repayment (Berger and Udell, 2006, p.2949). The distinction consists in the fact that inside those technologies collateral has a "back-up" role. They have the role of granting the principal source of repayment usually constituted by cash flows. Inside asset-based lending, the value of assets acquires a primary role and constitute the subject on which lending itself is established.

Credit scoring

A credit score is a number summarizing the characteristic of a firm in terms of creditworthiness. This value encloses several statistical considerations about the probability of default of a firm. Hence, banks collect information on the past behavior of applicants (such as the number and details of loan accounts, details of slow payments, bankruptcies, the number of requests for new credit, and so on) (Hand and Henley, 1997, p. 527) to divide them between "bad" and "good" loans.

Attention is also posed to principal owners' credit history given their closeness and correlation (Berger and Udell, 2002). This type of evaluation is usually used for "micro-credit" (Berger and Frame, 2007) which are defined as credit under \$250,000. Credit scoring is a lending technology derived from the consumer lending tradition and has been widely used in the consumer credit market before being adapted to business. It has retained many of the initial characteristics, in fact, it takes advantage of the information regarding the personal history of the owner (Berger and Udell, 2006, p.2948). Due to its nature and simplified approach, it is generally used only for small firms and more specifically in the assessment of secondary transactions (Frame, Padhi and Woosley, 2001) for which is an adequate method for predicting loan repayment. With those credit scoring technologies also large banks are able to extend credit to opaque businesses. In particular, scoring techniques have increased small business credit availability in a number of dimensions (Berger and Frame, 2007, p.19)

- increasing the quantity of credit extended;
- increasing lending to relatively opaque, risky borrowers;
- increasing lending within low-income areas;
- lending over greater distances;
- increasing loan maturity.

The approaches presented above - Financial statement lending, Asset-based lending, and credit scoring - are categorized inside the so-called transaction-based lending technologies. These are quantitative methods designed for gathering information that is usually hard in nature. Hard information is the one recorded with numbers as opposed to soft information which is usually documented as text. Hard information is easy to collect, store, and directly used for several purposes. Its importance has been increasing with the advent of technology and the Big Data era (Liberti and Petersen, 2018). Those data are relatively easily available and can be requested by the banks at needs. Nonetheless, we stress again that the centrality of hard information for those technologies is not the central element in their definition but one of their main

characteristics and sometimes differences between them and other forms of lending – as relationship lending that we will present later – are not as clear cut as we would expect.

In addition to those lending technologies for which primary information is quantitative, conversely, there is another category that involves essentially qualitative information: relationship lending.

Relationship lending

Relationship borrowing is based on what we call soft information. Soft information takes the form of text (Liberti and Petersen, 2018) and is rather qualitative than quantitative in nature. It typically includes contextual information and data arising from a continuative relationship, that in the case of lending is developed between lenders and borrowers. Thus, soft information is not readily available since it is the result of a process and could be described as rather private than publicly available. Those data are gathered one day after another throughout the development of the bank-corporation relation. The process is more discretionary and presents both upside and downsides. The presence of some degree of subjectivity should not be automatically regarded as an issue (Udell, Uchida, and Yamori, 2008). It is true that this element could lead to the adoption of behaviors moved by the personal connection but there are several benefits that we need to at least consider before discarding relationship lending. In fact, establishing a connection not just with a faceless corporation but with a specific person (or a set of people) in charge of the considered credit relation, create a personal bond that could deter some free-riding behaviors. Moreover, relations could give contextual information that is not detectable through numbers but is as important as them. Although numbers are seen as the means to reach the best valuation possible, we should be cautious and consider that also in that contingency some manipulations could be done. We could refer both to illegal and systematic modification of the submitted statements - as several famous cases have shown² - but also to the perfectly legal practice called "window dressing". This method consists of presenting financial statements in a way such that inconsistencies in the business make less readily understandable

² See for example the Enron case.

1.3 Relationship lending and SMEs financing

In order to start providing some hint on the Italian context that will be discussed later in chapter 3 and 4, we could observe that this country is characterized by a predominance of Small and Medium-sized firm. Coherently, the financial system has developed acknowledging this entrepreneurial environment. Thus, it is characterized by small local and national banks that have the organizational structure needed in order to successfully fund SMEs. Therefore, it is relevant to analyze more in detail the characteristics of relationship lending, the technology mostly used by those bank-firm entities.

When considering SMEs two major categories of issues arise. One linked to adverse selection and the other connected to moral hazard. Literature has always underlined that, when assessing the opportunity of a project, only the ones with a positive Net Present Value (NPV)³ should be accepted. As with the capital rationing problem, also positive NPV projects that require an external source of financing could be rejected by banks. This because firms may not have the ability to provide adequate proof of the positive nature of the project, or of the real needs connected to its implementation. This induces a skeptical behavior in the bank, caused by the fear of a possible redirection of the fund provided.

In addition, another form of vulnerability arises from SMEs dependence on an external source of financing. As we will see in chapter 2, they do not have access to the capital market. This limitation bound their options to the banking industry, producing a dependence that could be critical especially in times of crisis. In fact, when there is a shock on the supply side of credit, it immediately transfers to the demand side, reducing the credit available. This has well proven to be the case during the 2008 crisis.

Those adverse selections and moral hazard issues could be easily solved by finding a coherent lending technology able to capture the information created by SMEs. This technology could be found in relationship lending. In fact, it allows companies to establish long-term relationships in which they are able to provide proof of their soundness through time. The importance of establishing a connection between the firm and the lending institutions is not only related to

³ The Net Present Value is the discounted value of future cash flow derived from a certain investment or project. It is considered to be especially relevant in the general literature in reason of its ability to appropriately discount cash flows, taking into consideration the value of time. Other method of project evaluation disregard that factor or others, making the related analysis subjected to flows and imprecisions.

the amount of credit provided. Its relevance covers also topics connected to collateral acceptance and the interest rates applied. The second is an obvious consideration. Giving better information allows a reduction of the cost of providing credit which conversely implies that is natural to see a reduction in the interest rate (namely the cost of financing) required by the loan provider.

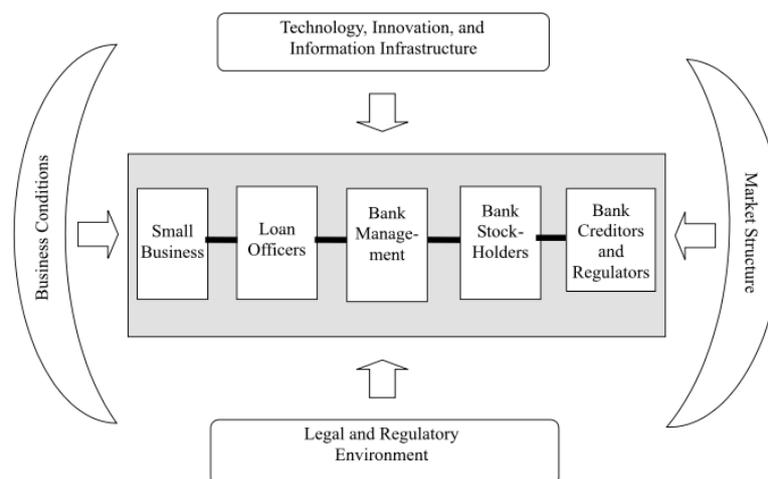
1.3.1 Bank organization and relationship lending

The fact of establishing a significant long-standing relation between firms and banks, obviously carry several implications on the organizational side. The success in the adoption of this lending technology depends on the strength of the soft information gradually acquired rather than on the efficiency of an automatized gathering of data. In particular, most of the advantage comes from the goodness of the officer-firm mutual exchange of knowledge. The ability to provide a consistent flow of information is linked to the internal structure of the firm and in particular to its corporate governance and operations systems. Not only the firm organizational arrangement should be addressed, but also the banks' structure does reflect the influence of relationship lending characteristics. Berger and Udell (2002, p.9) argued that banks offering relationship lending must delegate more lending authority to their loan officers than banks focusing on transaction-based lending. This situation is given by the peculiar nature of soft information that does not allow a fluid and easy transfer of all the facet of the relation. In order to not disperse the data gathered by the loan officer, a shift of authority is needed. This result in a transfer of centrality from banks to individual holding the relation (the loan officers). It naturally follows from this alteration that an agency problem could emerge. As we have argued before, the presence of data gives a sense of better monitoring capabilities. This psychological trait affects both the information-gathering phase but also applies with respect to the evaluation of performances and behavior of the officers. Their review is relevant since it allows the construction of coherent incentives plans that – especially when considering decision-making roles – have the effect of boosting both individual and aggregate performance. But those plans are not consistently transferable from transaction to relationship lending because the interest at play differs significantly. Therefore, attention should be paid when considering one lending technology or another. For the purpose of providing an example, imagine an incentive linked to the number of loans provided. Obviously, the officer will be more prone to search for new clients than focusing on developing the relationship with existing ones. Another risk arising with relationship lending is the possibility of conflicts of interest between the officer and the

bank. If the connection between the former and the firm becomes too tight, it is possible that the loan officer will not act in the best interest of the bank due to personal incentives that are outside the professional relation.

Since those elements are inherited in the definition of relationship lending, the only action that a bank could take in order to hedge against arising agency problems is to adapt its structure. In fact, they will have to concede more independence and decision-making capabilities to officers, while establishing a monitoring system that strictly follows the development of the relation. Indeed, it was found by Udell (1989) that banks delegating more authority to their loan officers, also tend to invest more resources in monitoring the performance of their loan officers through the so-called loan review function (Berger and Udell, 2002).

Figure 1.0 Loan processing organizational structure and external factors.

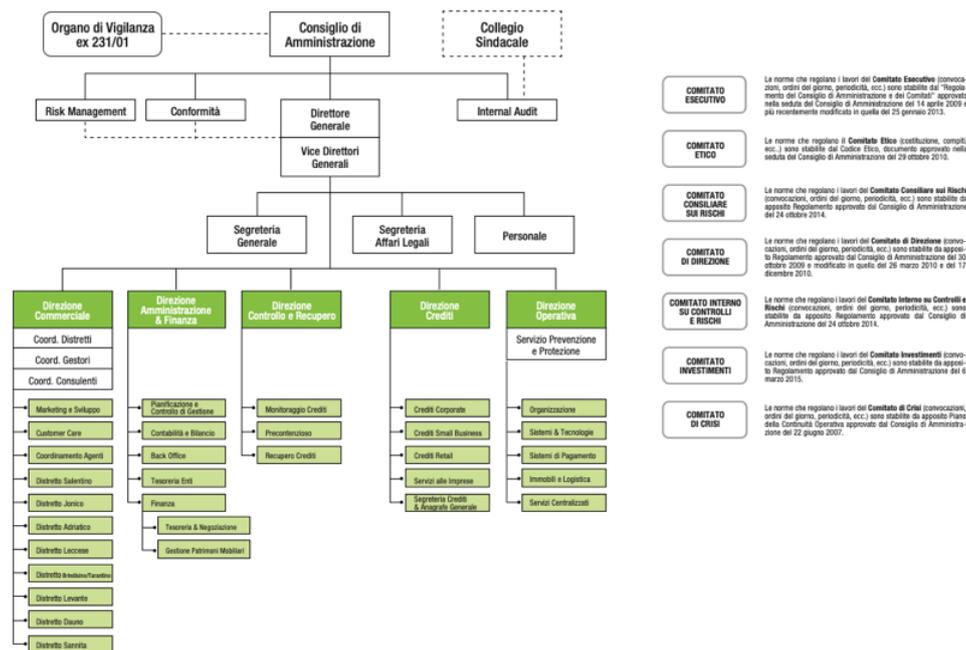


Source: Berger and Udell, 2002.

The relationship between officers and banks, on one side, and SMEs, on the other, is inserted in a wider environment of connections and factors influencing the two as demonstrated in the graph above. Moreover, a lot of layers could be detected between loan officers and bank management. It has been found that the wider the dimension and scope of a bank the more layers can be detected counting from the bottom to the top (Williamson, 1988) and that diseconomies arise in connection with this increased complexity. The environment in which the link between management and officers is developed could cause problems if it produces a dissipation of the soft information gathered, as stated above. A simple way to address the agency risk connected with officer control and decision-making power is a reduction in the

number of layers inside the organization and the creation of direct monitoring of the loan officer behavior by bank managers. We need to recall that the institutions we are considering in our analysis are generally of small dimension, with several branches dislocated in the territory. As we can see from Figure 1.1, the typical structure of a small bank is relatively straightforward with a few levels and key figures in charge.

Figure 1.1 Example of Banca Popolare Pugliese organizational chart.



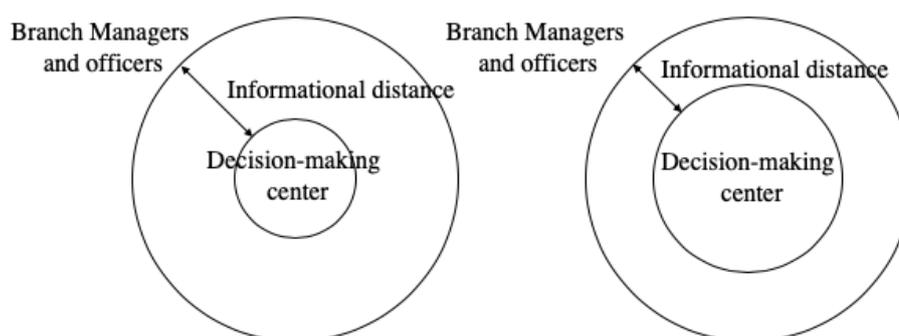
Source: www.bpp.it.

Moreover, a typical branch will present only one level of managers for every business unit (corporate, retail, and others) and a general territory director responsible for the branches comprised inside a certain region. Every level of authority has its own decision-making freedom. The higher the autonomy conceded, the wider the distance between the bottom (branch officer) and the top (the management). The hierarchical distance between the decision-making center and the margins could cause several inconsistencies. This is due to three main elements as Cotugno, Monferrà, and Sampagnaro (2013) identified:

1. an increase in the possibility to experience dispersion of the soft acquired when transferring them from the outside to the center;
2. an increase in the costs connected to officer and branch managers monitoring;
3. a decrease in the efficiency and the knowledge transfer inside the bank.

The resulting informational distance effect is presented below in Figure 1.2. Several theories support this view and the difficulty in using private (and non-verifiable) information across multiple organizational layers (Cotugno, Monferrà and Sampagnaro, 2013).

Figure 1.2 Informational distance effect.



Source: own elaboration.

Moreover, as we could notice going back to Figure 1.0 the organizational structure is also impacted by external elements that are not under the banks' control. Policymakers are particularly sensitive to small business lending subjects and frequently intervene in case of restrictions. Since the regulatory element is exogenous, we would not describe its impact as it is not a factor on which the bank can exert its power. Still, it is relevant to notice that banks and branches are not stand-alone businesses and are subject to external forces as much - if not more - than other companies.

1.3.2 The relevance of geographical distance in relationship lending

In addition to the so-called hierarchical distance, we identify geographical distance as another factor affecting bank-firm relations. Physical proximity shows its influence in particular on transaction costs that are generally distinguished in the literature between transportation information costs. The former includes all the costs related to the difficulty of reaching the lender if the borrower has the willingness to physically meet the officer to decide and discuss together on relevant matters. Those costs are to be intended both in terms of monetary expenses made for transportation but also of time spent in traveling instead of working (opportunity cost). The most important dimension impacted by transportation costs is the monitoring phase due to its extension in time. In fact, an effective monitoring process requires the lender to

physically visit clients periodically in order to assess if the initial conditions stated in the initial contract, are still met. Being a continuative and recursive process that lasts until the relation is ended, this dimension is the one influenced the most by distance (Cerqueiro et al., 2007).

Information costs are connected to the effort required in order to collect all the relevant details for the concession of the loan. While with transaction-based technologies those costs are mitigated due to standardization in the gathering process, with the presence of opaqueness and the need for relationship lending technologies, geographic proximity is required.

The presence of the transactional costs highlighted reflects itself in credit availability. The closer a firm is to its reference branch office, the more likely is the bank to offer credit as Agarwal and Hauswald observed (2010). What this paper suggests is that geographic proximity exerts its influence on three different levels: the ability to collect soft information, credit quality, and local informational advantage.

The result is an increase in rationing probability at the border, where the costs of collecting information and monitoring imply an increase in rates required. Thus, borrowers located farther away, paying higher rates, or having a higher proprietary score are more likely to switch lenders (Agarwal and Hauswald, 2010). Geographic proximity allows a better recollection of soft information creating the local informational advantage cited above. The strength of the position increases over time, creating a substantial competitive advantage for the firm that first establishes a credit relation. Conversely, as distance increases this advantage fades gradually, allowing more aggressive practices from competitors. Thus, the scenario that we are delineating is one in which information gathering constitutes a strategic choice, relevant for commercial purposes. Hauswald and Marquez (2006) have shown that not only the location influences credit availability but also pricing. In particular, they found that the more borrowers are distant from the lender with which they are entertaining the relation, the more they benefit from lower rates (see also Agarwal and Hauswald, 2010) since the lending decision-making process becomes unprecise with distance. The idea is that as they are screened less pointily they provoke increased competition from other lenders. Pricing could thus become a function of distance to capture those asymmetries. Since lenders can easily identify where borrowers are located, they could also apply price discrimination policies.

Those limitations could be overcome by adopting a mixed system that both rely on soft information and also take advantage of the advancement made in credit scoring technologies. These hybrid systems allow adopting the positive side of each technology while compensating for the weaknesses of the other.

Geography could also be analyzed in terms of industrial conglomerations. Such territories are characterized by the concentration of a firm constituting what is called an industrial district. Due to the high number of industries, it is more likely that there are close links between lenders and borrowers (Beretta and Del Prete, 2002). In those cases, the credit reduction experienced after the consolidation is almost not present or not significant. Since the district provides access to several businesses and creates sufficient synergies, the conservation of existing relationships is the pursued strategy.

Lastly, looking at recent trends in Information Technology we could easily notice a continuous shift toward unpersonal interfaces such as phones, e-mails, and home banking sophisticated services. Moreover, the progress made in storage capability and data analysis has softened asymmetries making information accessible to every competitor. This results in a more competitive market, benefiting the borrowers. Nonetheless, also if soft information is still relevant in particular in the business environment populated by SMEs, the development we are seeing is a net favor for hard information and their related credit technologies. The bulk of the revolution that will be experienced through the introduction of FinTech, AI, and Big Data, is indeed connected to hard information and its more affine lending technologies toward which migration may be possibly experienced in the upcoming years (Berger and Black, 2019).

1.3.3 The role of the loan officer in relationship lending

Although we could think of the commercial function as ancillary to the banking business, in the case of relationship lending the role of officers emerges as central in the lending process. Soft information is in fact produced at the base of the hierarchical pyramid ruling banks' internal relations. Officers are the link between customers and the bank, establishing and developing relations with clients. Here is the place where soft information is truly generated. Recalling the concepts previously seen, we remember how soft information requires time and continuous interaction in order to demonstrate its maximum potential. Those actions are provided by a loan officer interacting with the clientele on a recursive and continuous basis.

This tight connection strengthens their position since soft information has the peculiar characteristic of not being easily transferable.

Those acknowledgments have led to the creation of a theory (Udell, Uchida and Yamori, 2008) stating the centrality of the role of the loan officer when considering relationship lending and SMEs financing. Its ability to gather soft information will in fact directly affect the quality of the credit granted and thus one of the bank loan portfolios. In reason of their centrality inside the collection process, officers need also to be enabled to take decisions by themselves. This because of two principal motivations. First, if the decision-making center is situated in a layer far from the original source, information dilution will result in the dispersion of potentially fundamental facts, as we have previously noticed when discussing bank organization. Second, a problem of incentives further favors the adoption of a system where the role of the loan officer is central. Since soft information requires constant interaction and investment of time and resources, an officer not entitled to make decisions after engaging in the effort of producing those data, would not be incentivized to gather them in the first place. Thus, it seems a natural consequence to put the loan officer in a central position.

1.4 The interconnection between structure, dimension and lending technologies in the optimization of credit availability

The fact of adopting a certain lending technology has been found to be closely related to banks' and firms' size. In fact – for example – since SMEs are more informationally opaque and mainly provide information that is soft in nature and may be difficult to quantify and to transmit (Aristei and Gallo, 2017), they will be perfect candidates in the adoption of relationship lending technologies when assessing a credit request from them. Opaque business is the ones for which clear and readily available information is not present. In this sense, they are not easy to see through. This characteristic is intrinsic in small businesses that are not listed, thus not legally required to provide periodically an ample set of statements. In their case, it is not systematically a way of concealing the truth but in general, could be regarded as a consequence of their unstructured nature. Nevertheless, the same adjective could also refer to businesses hiding relevant information for illicit purposes. As opposed to those entities, large corporations that rely heavily on quantitative and standardized information, are more suitable for transaction-based lending technologies. In fact, their adoption allows banks to scale and reduce the cost of collecting and storing data.

But not only we could optimize the type of technology used. Also, the provider of credit (namely the type of bank) could be chosen in order to be the most efficient actor in the gather of a certain type of information. Indeed, soft information and hard information imply two different structures for the organization acquiring and processing them. Consequently, this influences the category of banks that will address a certain class⁴ of firms.

More specifically, many authors (see for example Berger et al., 2002; Cole, Goldberg and White, 2004 and Degryse and Cayseele, 2000) have detected the presence of a connection between SMEs and small banks on one side and of large firms with bigger banking institutions. This is due to the fact that large banks are less willing than small banks to extend informationally "difficult" credits, such as the ones towards SMEs - or in general - firms that do not keep formal financial records (Berger et al., 2002). Recently the paradigm of consistency between banks and firms' size has been challenged with statistical methods (Berger and Frame, 2007). The introduction of credit scoring and similar techniques have partially changed this scenario. Indeed, those innovations have allowed a better understanding of small businesses and have reduced the cost of gathering information from them, introducing a more quantitative SMEs lending era.

Some considerations have also been made with regards to geographical proximity as previously discussed when considering relationship lending. Not only small banks serve small firms, with coherence on the dimension plan, but also the ones closely located. In general, firms and banks - when both are small size entities - are located in the same region or country, underlying a clear preference for the local. This situation is linked to several factors. For example, we could consider the limitations posed by regulation. Considering the Italian case, indeed no significant incentive towards foreign banks could be detected. This implies the persistence of limitations to operate in the host country, although several steps forward have been made. Those limitations are not to be intended as a prohibition to foreign activities. The process of integration undergone in Europe has favored cross-country activity but the cost of operating in a foreign country still exists also if not explicit. Aristei and Gallo (2017) observed that banks located outside national borders tend to cut back lending more frequently and apply higher fees and rates than domestic banks, in particular considering crisis periods. Therefore, the cost of operating in another region or country results in not being sustainable for small entities that

⁴ By firm class we refer to the standard business classification distinguishing between small, medium and large size firm.

consequently find themselves to be the most efficient provider of credit toward local corporations.

Table 1.0 Combinations of firms' bank ownership-type choices.

Combination	Bank type			Percentage of firms choosing the combination:				
	Local	National	Foreign	Italy	France	Germany	Spain	UK
At least one local	Yes	Yes/No	Yes/No	69.01	86.12	81.41	54.43	17.45
At least one national	Yes/No	Yes	Yes/No	85.65	73.96	40.29	79.00	88.05
At least one foreign	Yes/No	Yes/No	Yes	8.58	16.03	6.38	7.83	12.54
Only local	Yes	No	No	13.73	21.66	56.43	19.32	7.3
Only national	No	Yes	No	28.9	9.99	15.32	42.01	72.21
Only foreign	No	No	Yes	0.14	1.17	0.64	0.61	3.99
Local–national	Yes	Yes	No	48.76	40.99	14.26	29.74	7.96
Local–foreign	Yes	No	Yes	0.45	1.99	1.53	0.56	0.67
National–foreign	No	Yes	Yes	1.92	1.58	1.57	1.97	6.36
All types	Yes	Yes	Yes	6.11	22.63	10.25	5.78	1.53

Note: Bank-type combinations frequencies are computed using sample weights.

Source: Aristei and Gallo, 2017.

To provide the reader with a more concrete example, Table 1.0 illustrates different scenarios. In this context, the percentage reported states how many companies in the sample have chosen the combinations of banks written on the left side of the Table. As we can easily see by comparing Italy with its European peers⁵, a strong preference for local-national banks emerges. Proof is that on the contrary, foreign banks account for a percentage that is significantly lower than other countries, in particular of Germany that has the closest banking system. France and the United Kingdom are characterized by the highest share of companies looking also at foreign players. This should not be a surprise since those countries are also historically, the two financial centers of Europe with a significant international presence and a tradition of worldwide relations.

⁵ Italy is commonly related with the European countries displayed in the mentioned table. In particular, Germany and Spain have been generally found to be the most comparable. Both have indeed what is called a bank-centric financial market model and a predominance of SMEs that characterize the business environment. Hence, their traditional comparison with the Italian system reporting the same traits as the ones mentioned.

Table 1.1 Multiple relationships, bank-type diversification and the number of banks.

Country	Multiple relationships (in %)	Diversification of bank types (conditional on multiple relationships, in %)			Number of banks		
		Any diversification	Local-national	Domestic-foreign	Mean	Median	Std. dev.
Italy	93.19	61.09	52.24	8.85	4.0	3	2.5
France	79.65	71.99	43.54	28.45	2.5	2	1.6
Germany	79.18	34.05	17.79	16.26	2.5	2	1.9
Spain	94.11	40.09	31.53	8.57	4.3	4	2.7
UK	28.68	35.14	10.89	24.26	1.4	1	1.0

Note: Participation frequencies and statistics on the number of banks are computed using sample weights.

Source: Aristei and Gallo, 2017.

Another aspect to consider when discussing optimization and lending is the number of relations established by a firm in order to reach its most efficient level of credit and riskiness. Once again looking at the Table above and considering the propensity to diversify between different banks' types, Italy in general presents multiple relations. The banks chosen as credit provisors are usually local or national in the majority of the cases, similarly to the dynamics present in Spain. The two countries also present the lowest rate of foreign diversification, coherently with what we have previously stated. Also, we can see that the United Kingdom's companies usually choose one bank and do not diversify among several players. This could be due to their long tradition as a banking centre for the whole Europe, providing a certain degree of independence to the system.

1.4.1 The case of relationship lending and credit availability

Banks organize their structure and locate themselves according to the type (or types) of loan they produce with more intensity. This behavior is related to the necessity of reducing the gap between credit needs and opaqueness. The way in which banks reply to this demand is through the gathering of information and the setting of specific contractual terms, in particular adopting expedient such as the interest rate or the collaterals required. The relation established between credit institutions and companies may help this pricing process that could well follow an adaptive pattern. If it is true that relationship lending favor credit availability to small firms, it should also hold that while acquiring new, more sophisticated information, banks update credit terms, making them more favorable. This also a form of incentive to companies asking for credit. Several theoretical models have appeared to provide a quantitative answer to how

relations evolve with time. A first school of thought states that while rates could increase over time, collateral requirements are expected to ease the longer a borrower entertains the relation with its creditors. Another set of research instead predicts an interest rate decrease, coherently with the reduce riskiness of the borrower after the information has been gathered for a certain time.

Banks in this sense address their role as a means of transferring information to the market. In fact, the existence of bank-borrower relationships increases firm value (Berger and Udell, 1995). Moreover, there is evidence that also the strength of the relation drive information to the market, with event studies focusing on the announcement of a new loan subscription versus the renewal of an existing position. The findings suggest that the latter is seen as more positive, proving again evidence of this informational role of banks. So, what we will likely observe is that borrowers will pay a certain price (namely interest) and more strict conditions on collaterals at the beginning of their relations with their lenders, and later terms will evolve relaxing the initial restrictions after the firm has demonstrated its ability in achieving positive NPV projects. Berger and Udell (1995) provided evidence of the value of long-lasting relationships. They tested both for collateral and interest rates evolution through time and finds that both results are being related to the duration of the relationship. Information is accumulated through time and allows to gradually implement terms and conditions, efficiently dealing with SMEs opaqueness.

Pricing is indeed not a direct function of supply and demand as it is for other markets. The interest rates charged, and the collateral required is defined not in response to market dynamic but rather to make up for the presence of adverse selection and moral hazard. The two combined together could narrow down the possibilities available for small businesses and in particular, make it difficult to establish a relation. This limit could be overcome with time and continuous interaction between the entities involved in lending processes. Long relationships indeed could lower costs and increase the availability of credit (Beretta and Del Prete, 2002). Duration is in fact, a powerful driver inside relationship lending. It allows the collection of information as well as subjective contextual elements reducing the risk and increasing capacity.

When addressing relationship lending, an important consideration should be made about the characteristics needed by a provider to profitably exploit relations as a competitive advantage. Several barriers have been found (Berger, Klapper and Udell, 2001) to come into action

limiting the ability of several typologies of financial institutions to effectively create tight relations.

Universal banks

Universal banks are institutions that offer all the main services addressable by banks, meaning retail banking, wholesale banking (together constituting commercial banking), and investment banking. The businesses provided cover a wide variety of functions and once the bank acquires the licenses needed, it could perform the range of services that finds more profitable.

Due to their typical large dimension, those services are hardly connected to relationship lending. This is due to the diseconomies of scale arising in the provision of services. Lending to small firms requires continuous interaction that is not present inside larger banks. They aim to create the leanest structure possible and to simplify - when this is possible - the already complex structure. Thus, disintermediation in terms of reduction of direct interaction with customers is needed. The several layers present inside those organizations are designed to work on large numbers instead of a few deeper relations. Therefore, they are structurally not designed to address soft information, and their internal reporting systems are calibrated on another type of data, quantitative, objective, and easy to transmit. Standardization and simplification are the main drivers of the resulting organizational structure. In addition to this, the geographical distance present between the bank headquarters and companies' location may likely be wider, further reducing the attractiveness of relationship lending by offsetting one of the fundamental elements influencing this technology. Empirical evidence suggests that those barriers prevent universal and generally large banks from lending to smaller businesses. The only credit allowed is based on transaction technologies and focused on a relatively safer firm characterized by less opaque business models.

Cross-border institutions

Institutions headquartered in foreign countries with respect to a certain considered company are less likely to lend to small and opaque businesses. The difficulty to extend credit relates to the factor highlighted in paragraph 1.3.1. There is usually a significant distance between decision-making centers and firms, both organizationally and geographically speaking. This situation puts them at a significant disadvantage when it comes to building relationship-based connections. Those disadvantages are similar to the ones seen for large institutions, but there

is more than that at play. When we are dealing with another country - also in the case of institutions - differences in cultural terms may arise. The environment in which the bank is inserted influences its set of values and the company's cultural, organizational, and regulatory settings. Differences increase the cost of understanding companies which value is already difficult to assess. Once again, the net effect depends on the market reaction to the foreign bank activity, also if in general, they face higher costs and thus are not to be considered efficient providers of lending based on relationship technology.

Distressed financial institutions

It should be clear that opaqueness is synonymous with increased riskiness or at least an increase in the costs of providing for the average financial institution. Therefore, banks in distressed situations have a natural discouragement in the provision of credit toward informationally opaque businesses. The reduction of credit towards those entities may be also connected to regulatory requirements, imposing a reduction of the exposure towards riskier firms. Other external pressure could be made by shareholders, governments, and in general relevant authorities involved in monitoring the banking business. Their concern may be linked once again to a difference in the basic language used to communicate information and ensure an adequate decision-making process. On the other side it should be noted that small firms will have more difficulties in walking away from distressed institutions and thus will remain connected to the entity until an external factor disrupt the relation both negatively (in the case of an imposed chasing or bankruptcy) or positively (in the case in which the small firm find rapidly another institution willing to provide credit). In conclusion, the net supply of credit depends on dynamic external factors and in general - also if there are some limitations – is not significant in terms of impact.

1.5 Summary

The lending function is articulated into different types of loans. To provide this credit, several lending technologies have been developed. In particular, we have discussed relationship lending and its ability to effectively provide an answer to the need for credit of SMEs, characterized by being informationally opaque. Through relationship lending indeed, banks can supply credit and match their informational need with the one expressed by the served firms. To gather information, some elements have proven to be especially relevant. Those are distance in geographical and organizational terms and loan officers or managers in charge of the relations. When the interconnection between structure, dimension, and lending technologies is optimized, credit availability follows.

2. The demand for lending

Through the previous chapter, we reviewed the lending process adopting the point of view of the supplier (the bank). Now, the flip side of the coin will be illustrated considering the demand side and its dynamics. The reasons underlying the choice of SMEs as the object of our study will provide the introduction of this chapter. Then, demand will be analyzed first in mathematical terms, where a brief review of the credit demand equation will be provided, and then historically, considering its development and evolution through time. Insights into the evolution of credit demand are possible considering two important types of research conducted at European level: Bank Lending Survey and Survey on the Access to Finance of Enterprises.

2.1 Public companies and private companies financing: two realities in comparison

Banks are systemically relevant entities in being the infrastructure needed for carrying out the economic function⁶. Their significance could be understood in connection with Small and Medium Enterprises (SMEs) activities. In fact, while larger, international enterprises benefit from having access to capital markets, SMEs do not. Their operations lack the dimension and structure required for those arenas and thus have to rely on other forms of financing. For the purpose of clarity, we will briefly review the different forms of financing available to private and public companies.

Public companies have access to capital markets and thus to a wide range of resources, they can raise finances in the form of debt and specifically of bonds quoted on stock exchanges. Debt financing is the main source of liquidity also for private companies, but a clear difference exists. Indeed, when debt securities are quoted, liquidity risk is significantly reduced since a debtholder can theoretically exit his position at any time by selling the securities on secondary markets. Thus, marketability is one of the main advantages that allow for raising longer-term debt⁷ (Damodaran, 2005). To a public company, the Cost of Debt corresponds to the interest paid which is in turn a function of its riskiness.

⁶ The economic function encases the actions executed by the several agents that constitute an economic system. In our writing we will consider the functions related to businesses, excluding the in-depth analysis of lending connected to public entities (i.e. Governments).

⁷ We are assuming that no issues of creditworthiness are present and that the considered company is an average one with access to coherent interests

Moreover, a public company can benefit also from equity financing. The moment in which equity begins to be publicly traded is the Initial Public Offering (IPO). Through those operations, companies are able to raise a significant amount of liquidity. After the first IPO, should the company need any additional resources, then other issues could be made with Secondary Offerings.

Although equity has the advantage of not impacting the bottom line of the company, since its remuneration (dividend) is distributed after accounting for all profits and losses, several significant costs arise from the fact of being listed. Moreover, possible issues regarding ownership dilution and takeover possibilities arise with the fact of having equity traded on the open market. Nonetheless, public companies have a wide variety of options that they could evaluate when resources are required.

A different kind of story is one of the private companies. Their portfolio of options includes (Rigoni, 2019):

- personal resources: loans granted to individuals. Relevant only at the very beginning of a business to set up the entrepreneurial idea.
- Friends & family financing: used mainly at earlier stages for start-ups that have not sufficient credit history to apply for bank loans or other types of financing.
- Venture Capital⁸: a form of investment that typically points to firms with a high growth potential that are developing their businesses but are still losing money. Therefore, Venture Capital applies to the early stages of a company and usually terminate its cycle with the exit of investors. This exit could take several forms as IPOs, sale to another company, buyback of the participation, or redistribution to old and new shareholders.
- Private Equity: similar to Venture Capital but addresses later stage and distressed companies.
- Business angels: usually wealthy individuals looking for opportunities to invest and gain a relevant payoff if the company grows significantly.

Their possibilities seem wider but the fact of not being public carries several downsides. In the first place, they are inevitably less liquid. Liquidity attracts capital since it reduces the risk of being trapped inside an unwanted low-yielding (or even losing) investment. Thus, other things

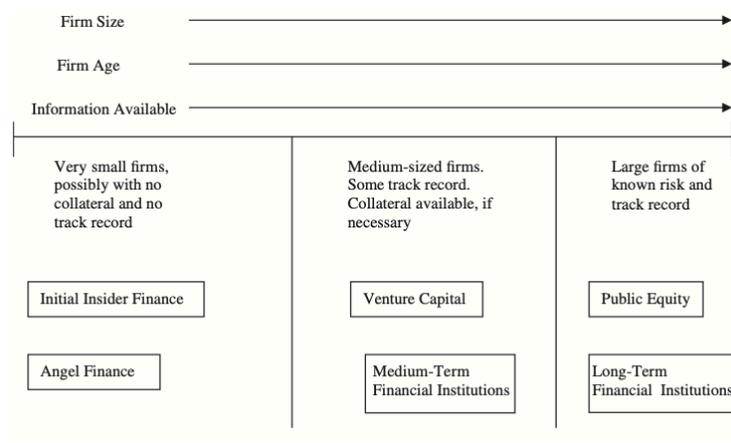
⁸ Source: <https://www.borsaitaliana.it/borsa/glossario/venture-capital.html>, as accessed by August 2020.

being equal, the higher the level of marketability the lower the cost. Another factor playing a crucial role in private companies' financing is the availability of information. This argument is particularly crucial for Italy (see chapter 3 for more details), characterized by SMEs that naturally present a lower level of information disclosure. Listed companies are in fact subject to the high requirement in terms of details to be provided quarterly and general compliance requirements.

As it could be understood by our previous discussion, private companies suffer from a limitation in the scope of possibilities available since public firm could decide to use a typically private form of financing while they could not turn to capital markets easily. To provide an example, a listed company could easily underwrite a loan and ask a bank to open a credit line, while a private company could not start selling its securities on an exchange overnight. Lesser possibilities imply higher rigidity in terms of financial structure. Moreover, we need to stress how the possibilities listed above are not always suitable and concurrently attainable. Indeed, each one of them should be matched with a particular period of the business cycle as illustrated in Figure 2.0 below.

It could be understood that many of the previously mentioned sources of financing are actually attributed to early-stage companies. When a firm wants to remain private after its full development only Private Equity and Bank Loans are the options available. This results in banks with their services being the main source of financing for private actors that typically are SMEs (OECD, 2015).

Figure 2.0 Financial growth cycle.



Source: Gregory et al., 2005.

2.2 Why SMEs as the object of this study

From the previous discussion, we have seen that private companies – which are typically SMEs - express a wider need for bank financing. Companies require liquidity and - assuming their rationality - they will naturally choose the most cost-efficient solution possible. In the case of SMEs, this solution is typically the local one as we have seen in the previous chapter since it minimizes the cost of gathering soft information through personal contact and observation.

To engage in lending relationships a variety of technologies developed over time. Their primary role is to protect banks and allow them to safely perform their part as credit providers. In fact, small companies rely heavily on banks and - more specifically considering the Italian case - on a small number of them. The strength of their relation is mutually important and benefits the national financial-economical ecosystem in which they are inserted. Moreover, always considering Italy, those relationships tend also to be durable in nature acquiring greater relevance for granting stability through time. This specific behavior is connected to the need for information on private firms as we will see later in this chapter. As we will remark, information is one - if not the one driver – influencing how banks organize themselves and the means with which they provide credit.

SMEs in this sense, are a scarce natural source of information. Since there are no publicity requirements of the same magnitude as listed companies, banks need to deal with their opacity in another way. This opacity is a problem that has long influenced corporate-banking relationships. Proof is that banks have been observed to be willing to provide lending and other financial services only in exchange for the acquisition of information about firm profitability, riskiness, and perspectives (Aristei and Gallo, 2017). This is especially true in the case of SMEs. Large firms have in fact access also to capital markets, confronting a wider portfolio of possibilities when deciding the type of credit to use. Conversely, those possibilities do not apply to SMEs that due to their small size and organization are not feasible candidates for listing. In this context, the lending technologies that we have seen in the previous chapter arise as a way to match information available at firm level with the ones required by banks. Due to this tight dependence of SMEs from the banking system, they result to be especially good candidates in studies concerning credit relations, as modifications are hereby amplified.

2.3 The demand for bank loans

2.3.1 Review of loan demand equation

Considering the theoretical framework behind the demand for bank loans, Fase (1995) identified two fundamental schools of thought, the neo-Keynesian and the neo-Fisherine. The former considers the firm balance sheet as the starting point to identify demand for credit. This approach is based on the maturity-matching hypothesis, indeed short-term commercial bank loans and long-term liabilities, including equity and long-term debt, are employed in order to provide the financing needed by the asset side of the firm's balance sheet (Fase, 1995). Therefore, in this view, the asset side should find proper financing in the liability side, and maturities of the twos should be matched as much as possible to provide an appropriate equilibrium between resources and their usages. In this setting, bank loans have the additional role of covering short-term discrepancies between the desired and the actual financial structure. Thus demand, in the neo-Keynesian view, depends on the composition of assets in terms of duration inside the firm balance sheet, cost of both short-term loans, and long-term financing.

The Fisherine approach instead, is related to utility maximization. In this view, loan demand depends on the utility given by loans with respect to other forms of financing. The methodology used to estimate loan demand is based mainly on individual credit, therefore is not particularly relevant in the context of this work, and our further analysis concentrated most on the corporation side.

Going back to the neo-Keynesian approach, the resulting loan demand equation (1) could be expressed as:

$$CL/P = \alpha SA^{\gamma_0} \exp(\gamma_1 r_B^* + \gamma_2 r_L) \quad (1)$$

Where CL/P being the equilibrium or optimal real stock of outstanding short-term debt of the private sector to commercial banks; SA the volume of expected sales, P the price level, r_L the yield on long-term government bonds and r^* the unobservable lending rate (Fase, 1995, p.102). The basic idea behind the equation is that the desired level of sales shapes all the asset side of the balance sheet (e.g. investments in PPE to extend the level of production) and consequently

the liability side. The term rL is included to account for the substitutability between long-term loans and other long-term forms of debt or equity, thus it should be viewed more as an indicator for the opportunity cost of using alternative sources of financing.

2.3.2 Bank Lending Survey: breaking down the demand for funding

The Bank Lending Survey (BLS) provides information on bank lending conditions in the euro area⁹. Inside the report, the first distinction that is operated, when analyzing firm financing needs, is between bank loans and credit lines. Bank loans are a type of financing where the total amount provided and the repayment schedule with fixed payment dates, are usually stated. Differently, considering credit lines, their most outstanding characteristic is flexibility. In this case, the borrower can draw and undraw funds up to a stated amount and interest is not fixed (or at least not only) and usually connected to the amounts of funds actually withdrawn (European Commission and European Central Bank, 2020).

Therefore, when we are analyzing the demand for credit it is relevant to separate loans that are usually underwritten to finance projects or other long term needs characterized by fixed, constant repayments from lending sources designed to support short term needs and the natural randomness in costs and revenues that distinguish business operations.

Credit lines as described, are a broad category to which several arrangements and conditions could be attached by the bank in order to control credit demand and drawdown of funds. The greatest feature of credit lines is their ability to support business needs and obligations as they become due. Credit lines do not require any further arrangement after being opened, thus reducing transaction costs. Of course, some limitations are present. The amount conceded is usually limited and this type of credit is not designed to cover exceptional needs in terms of quantity but just limited discrepancies between resources and obligations.

Differently, bank loans are characterized by being more stringent in nature. They are planned ahead with a defined repayment schedule which can cover also several years. The repayment could take various forms. It can be in installments during the whole duration of the contract or – less likely – in a single payment at the end of the period defined. Generally, interest is charged on the outstanding balance of credit conceded. The repayments have the effect of reducing the

⁹ Source: https://www.ecb.europa.eu/stats/ecb_surveys/bank_lending_survey/html/index.en.html, as accessed by August 2020.

remaining balance, thus resulting in a decreased interest charged. This is consistent with the consideration that the larger is the exposure the greater the risk, therefore the interest (compensation) required. One of the main differences between bank loans and credit lines is that typically the former has a maturity stated in the loan agreement while the latter has no maturity specified so the line is said to never mature. The purpose of bank loans could be found in the need to finance specific projects planned in advance by the considered company. In other words, it is the answer to a usually non-recurrent need connected to business development.

The distinction and explanation of the difference between the two main types of credit are relevant to understand the macro-reasons why a company requires financing. In the first place, because of oscillation and randomness linked to the uncertainty of doing business (credit lines)¹⁰ and because of specific investment that has planned to make in order to maintain or develop its capacity and business activities.

Going back to the Bank Lending Survey, it explicitly considers the following factor when analyzing the "*Financing needs/underlying drivers or purpose of loan demand for credit*" inside the euro area: fixed investment, inventories, and working capital, Mergers & Acquisitions and corporate restructuring, the general level of interest rates and debt refinancing/restructuring and renegotiation.

Assuming those elements as being the most relevant specifications of the two macro-categories identified before, we will address them separately to analyze their singular contribution in generating the demand for credit.

1. Fixed Investment

There are two types of assets in which a firm could invest, fixed assets and working capital (that will be analyzed in the next paragraph). To provide a definition we would describe fixed capital (or assets) as the assets and capital investments, such as property, plant, and equipment (PPE), that are needed to start-up and conduct business. These assets are considered fixed since they are not consumed inside the normal business cycle, but they are assumed to last for a certain number of years and provide continuous value. Therefore, in this category, we include all the assets that provide durable utility to the firm which will be exhausted after several years.

¹⁰ This factor is present regardless of the sector we consider since business is an activity that in order to produce a return needs to imply risks that derive from the uncertainty of conducting businesses.

The pace of technology changes has somehow modified this definition, since also if the utility of an asset has not been fully exploited, substitution may be optimal. The demand for fixed assets is thus influenced by technology along with the industry in which the firm operates and the business model that it has adopted (e.g. lean).

Researchers (see Ozkan, 2000) have found that firm size has a negative impact on the debt maturity structure. Moreover, results also support the maturity-matching hypothesis, meaning that firms try to match the timing of the asset structure with the ones of liabilities. In such a way durable investment is supported by long-term credit that for SMEs usually takes the form of bank loans.

2. Inventories and working capital

The other assets that could be acquired by a firm are inventories and in general short-term assets while working capital is the money available to meet current, short-term obligations¹¹. The management of short-term resources is fundamental to ensure equilibrium also in the long run. An investment in inventories and working capital above a firm's needs will have the effect of ensuring that the firm will not run out of resources to cover additional demand (eg. in industries characterized by seasonality this is particularly relevant to manage oscillations in demand). On the other side, the problems related to excessive inventories are additional costs to be sustained in order to store materials to which the risks of not being able to sell final products in the quantities that have been forecasted should be added. In this case, the firm will find itself with huge stocks that constitute a rigidity in the cost structure. Banks and in general financing providers are especially careful in considering working capital composition and the relevance of inventories in the constitution of short-term assets because of this rigidity.

A strategy adopted by firms in order to reduce the need for working capital and the risk connected to excessive inventories is the so-called lean production approach. The Harvard Business Review described it as a methodology that by eliminating redundancies and striving for efficiency in each step of the business process allows companies to "*develop, produce, and distribute products with half or less of the human effort, space, tools, time, and overall expense. They can also become vastly more flexible and responsive to customer desires.*"¹² But also, in

¹¹ Source: <https://www.bankofamerica.com/smallbusiness/business-financing/learn/what-is-working-capital/>, as accessed by September 2020.

¹² Source: <https://hbr.org/1994/03/from-lean-production-to-the-lean-enterprise>, as accessed by September 2020.

the buoyant context of lean management and production, there could be a moment in which additional working capital is needed by the firm. Those needs could be derived by seasonal unexpected peaks in the production, fund mismatch between obligations and finance project-related expenses¹³.

In this case, again, banks are needed to cover exceptional – but temporary – credit needs.

3. Merger & Acquisitions and corporate restructuring

As will be seen in chapter 3, financing is one of the steps that is considered inside an M&A transaction. Since the process of consolidating is particularly complex and count several steps where many actors – also hired externally – are involved, there are consistent costs to be sustained and thus financing is needed in order to allow the company to have all the resources needed to face those obligations without experiencing distress.

Another case is the one of restructuring. The European Restructuring Monitor (Hurley and Mandl, 2011) signal seven main types of restructuring in addition to the M&A case seen before. Those are bankruptcy, business expansion, internal restructuring, relocation, delocalization, and outsourcing. The first one relates to the case in which a company finds itself in trouble and need resources to restructure its financial structure in order to go out of the crisis. Business expansion instead is the introduction of additional activities to the business lines already present, internal restructuring refers to a consistent modification of the firm itself changing the way in which operation already present is made, relocation is the movement of activities in another region but within the same country while delocalization is the relocation of part of the business in a country different from the original one and outsourcing is the externalization of activities which are demanded to third parties.

4. Interest rates

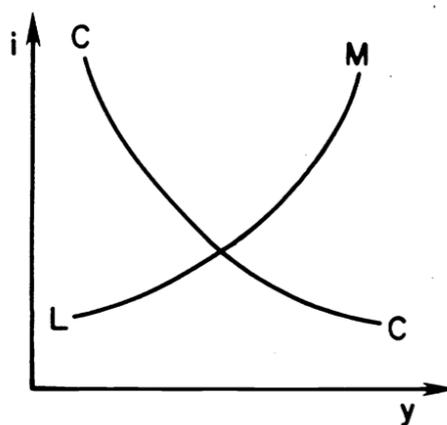
Modifying the assumption of the traditional IS-LM model, Bernanke and Blinder (1988) proposed a model for credit demand in terms of interest rates. They took the LM curve and relaxed the implicit assumption that there exist only money and bonds between which an asset-holder could choose. In particular, they did not assume that bonds and loans are perfect

¹³ Source: <https://www.bankofamerica.com/smallbusiness/business-financing/learn/what-is-working-capital/>, as accessed by September 2020.

substitutes because of informational asymmetries, differences in liquidity, or the high transaction cost of raising debt through bonds in the open market. Therefore, they added loans to the two previous categories, where lenders choose between bonds and loans depending on the interest rates applied to them and on GNP. Credit demand is impacted negatively from an increase in loan interest rates while reacting positively to increases in bond interest rates and on GNP.

The consequent "commodities-credit" curve (see Figure 2.1) is similar to the classic IS, with the difference of being shifted also by market policies or credit shocks. Therefore, when interest rates go up, other things being equal, demand for credit goes down as the cost of loans increases and vice versa.

Figure 2.1 CC-LM curve



Source: Bernanke and Blinder, 1988.

5. Debt refinancing/restructuring and renegotiation

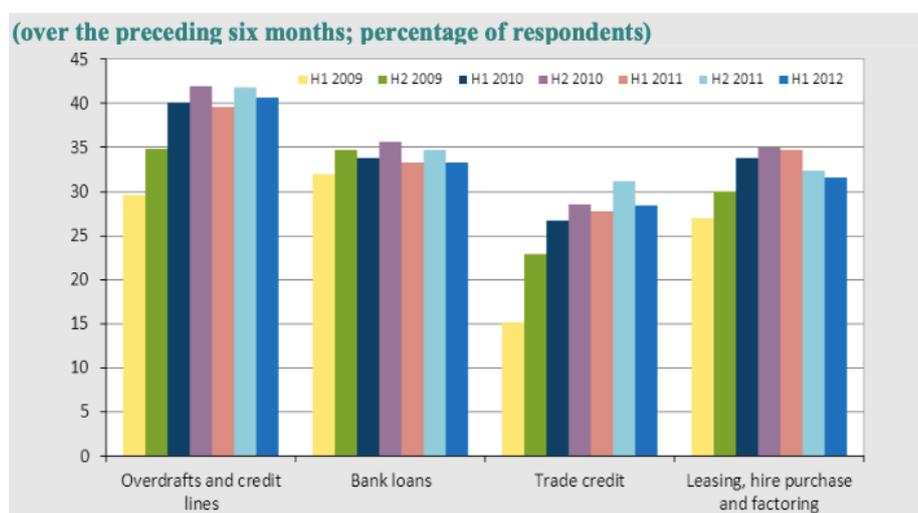
Debt reorganization, which comprehends restructuring and refinancing, allows a firm to refinance its debt thus taking advantage of the general situation when the interest rates conditions are more favorable or change debt terms entering a new contract or also switching from a fixed to variable rate and vice versa¹⁴. When debt is renegotiated loans are influenced in the measure in which terms and conditions are shifted from initial ones and new credit is given.

¹⁴ Source: <https://corporatefinanceinstitute.com/resources/knowledge/finance/debt-refinancing/>, as accessed by September 2020.

2.4 Survey on the access to finance of enterprises and credit demand evolution

The survey on the access to finance of enterprises (SAFE) has been carried out by the European Central Bank since 2009 and is carried out twice a year. It provides information on the latest developments in the financial situation of enterprises, and documents trends in the need for and availability of external financing¹⁵. SAFE reporting allows us to see what evidence told us about the demand for credit in Europe.

Figure 2.2 Sources of external financing of Euro Area SMEs.

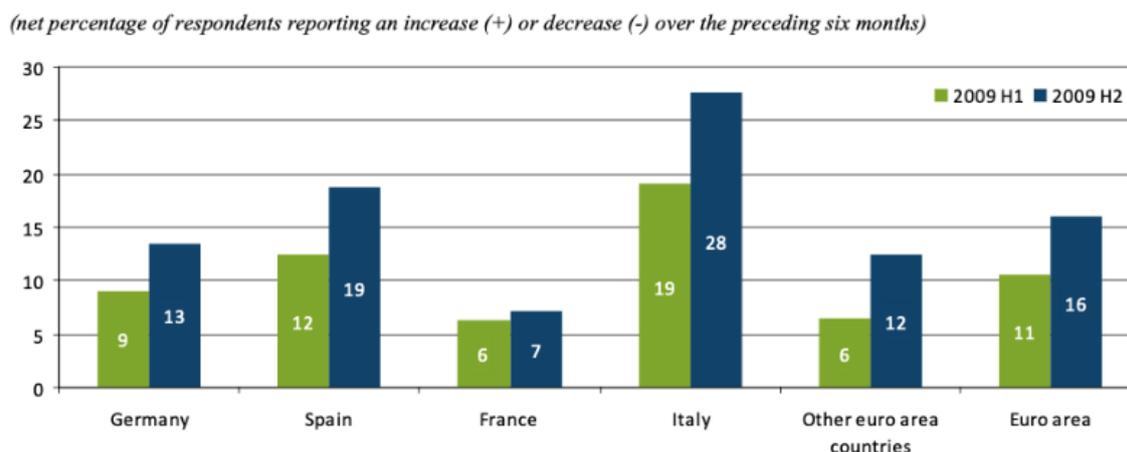


Source: ECB, 2012.

The survey started to be published right before the financial crisis. The situation reported was one where SMEs rely heavily on banks as the primary source of external financing. In fact, 32% of the respondent had used a bank loan in the six months preceding the survey, and 30% a bank overdraft or credit line. Also, trade-credit had a relatively important role back then. On the contrary, market-based sources of financing were largely underused (0.9% had issued debt securities and 1.3% equity). In the second half of 2009, after the Lehman crash, all the source of financing experienced an increase in demand with credit lines and trade credit as the larger impacted (+5% and +8%) due to an erosion in credit availability connected to increased skepticism for the eroded financial conditions.

¹⁵ Source: https://www.ecb.europa.eu/stats/ecb_surveys/safe/html/index.en.html, as accessed by September 2020.

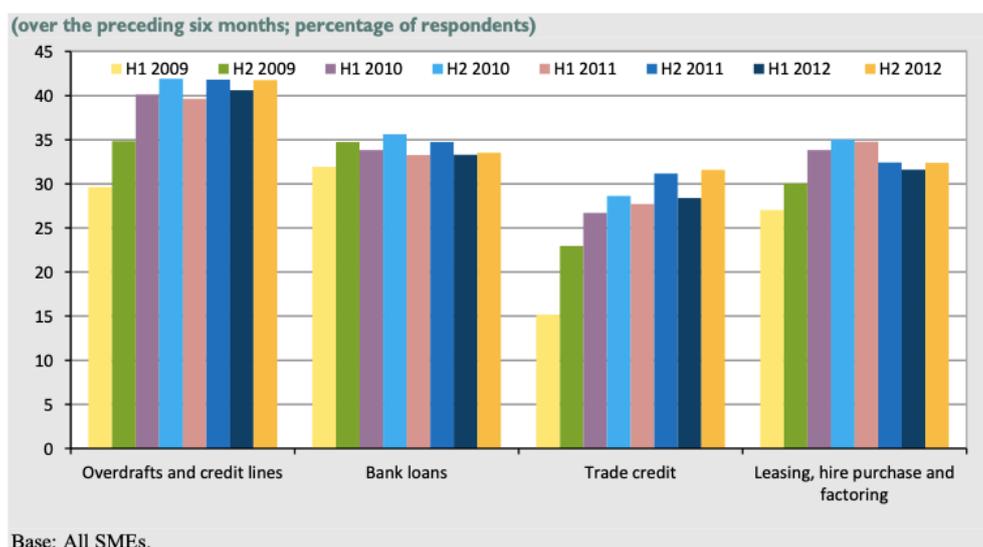
Figure 2.3. SMEs' need for bank loans across euro area countries.



Source: ECB, 2010.

It is relevant to notice (see Figure 2.3) the spike in needs for bank loans expressed by Italy in the second half of 2009. This could be linked to the high net percentage of SMEs in Italy reporting a decline in profitability (ECB - SAFE survey, second-half 2009). In the following period, the most relevant needs were the ones of short-term credit lines and financing (especially between March and September 2010), in reply to a mild renew economic activity (ECB - SAFE survey, March-September 2010). The demand remained in general homogeneous across sources throughout 2010 and 2011, with a modest slowdown prolonged throughout the year. Still, demand for bank credit remained SMEs preferred source of financing with around 35% ca. of respondents using bank loans and around 40% ca. bank overdrafts or credit lines.

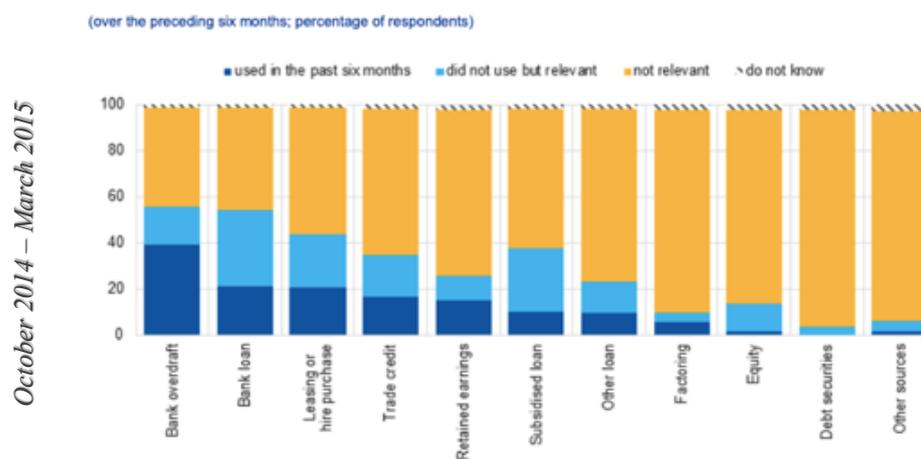
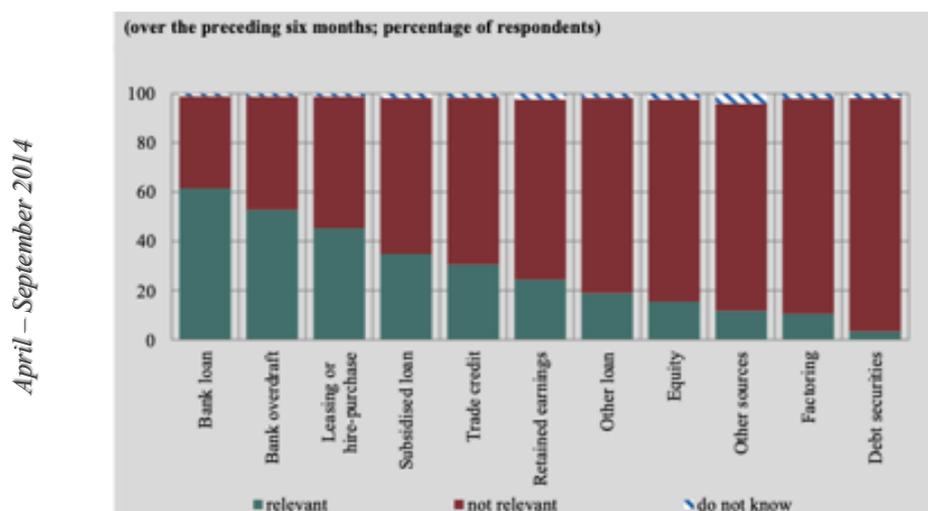
Figure 2.4 Sources of external financing of Euro Area SMEs.

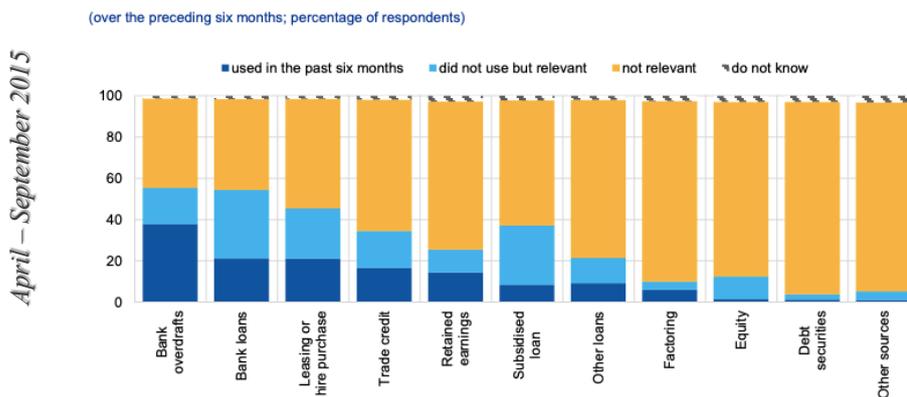


Source: ECB, 2013.

The first half of 2012 was characterized by a decrease in demand due to lower external needs. In the second half, we could detect an immediate rebound where the countries contributing the most to the increase in external funding were Italy and Germany, the two most bank-centric systems of the Euro-Area characterized by a multitude of SMEs that in the stated period reported a deterioration due to insufficient availability of internal funds (7%, up from 5% in the previous survey round), mainly stemming from SMEs in Italy (ECB - SAFE survey, October 2012 - March 2013).

Figure 2.5 Sources of external financing of Euro Area SMEs (period of analysis).





Source: ECB.

Throughout 2013 the most relevant development in the demand behavior is connected to SMEs in Greece and Italy continued to report the highest increase in their need for bank loans (15% and 12% respectively), which may reflect the demand for loans to finance working capital in an environment of still weak profits and squeezed liquidity buffers (ECB - SAFE survey, April 2013 – September 2013). Struggle with internal funds, continued also later in 2014 with a but with a slower increase.

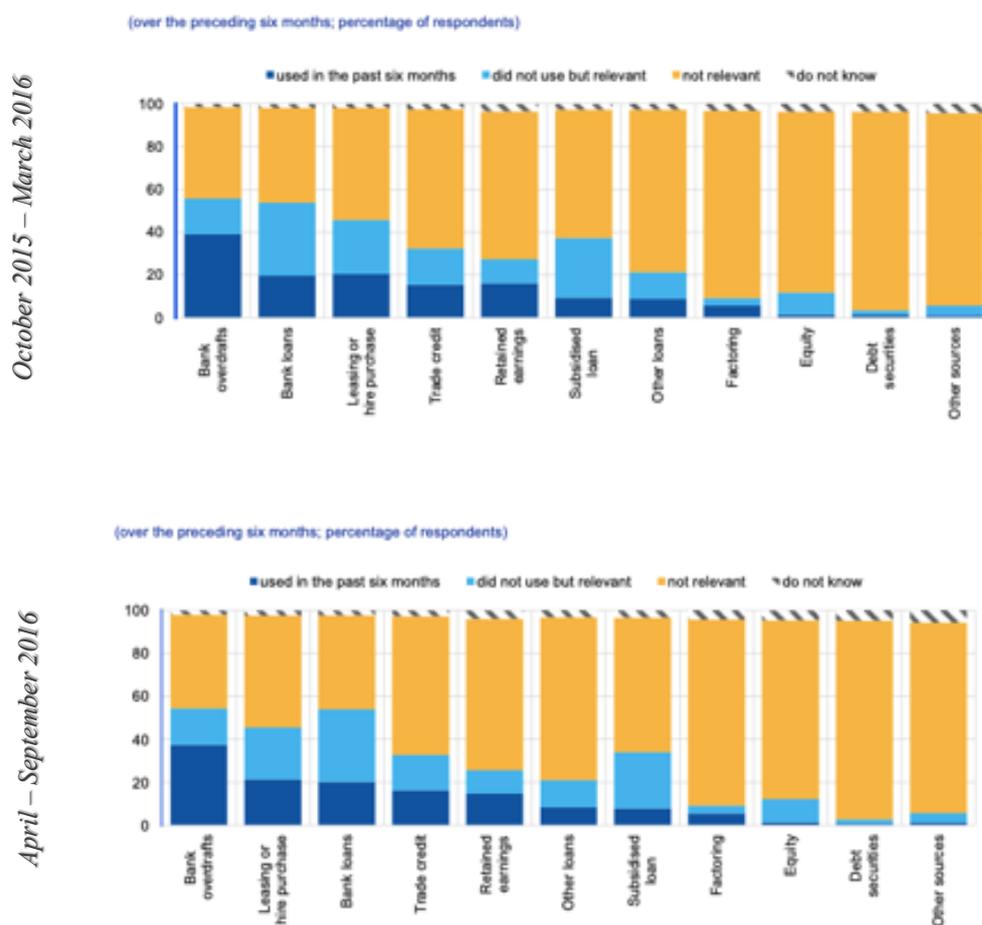
From 2014 a modification in the way in which the survey was presented allows us to notice another relevant element. Throughout the following years, bank loans and bank overdrafts are the most relevant sources of financing for enterprises, closely followed by leasing. In the period October 2014 – March 2015, 54% of SMEs considered bank loans to be relevant, while 55% included bank overdrafts. Furthermore, 37% signaled that grants and subsidized loans, which involve support from public sources in the form of guarantees or other interventions, were relevant for their financing (ECB – SAFE survey, October 2014 – March 2015). The percentage remained stable for the whole year continuing also in 2016 where demand for the banking-related product was fairly stable (+1% SMEs).

Numbers remained stable also in 2017 with slight oscillations between +1% to 3%, but with no major modification. By the end of the year demand for external finance non-related to banks experienced an increase with trade credit, leasing, and hire-purchase and other loans.

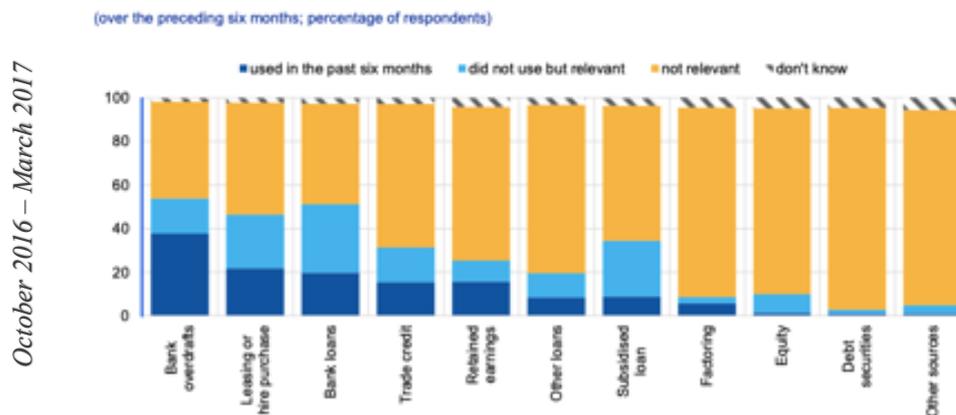
Between October 2017 and March 2018 acknowledging that "*SMEs tend to have long-term relationships with few banks toward which they tend to concentrate their borrowing*", questions regarding the type and duration of the relation between firms and banks were introduced.

The dimensions that were investigated regarded the number of relationships held by a single firm. The findings of the survey pointed to the evidence that there is a direct relation between firm size and the number of banks they have a relationship with. Indeed, SMEs have, on average, a relationship with less than 3 banks, with 29% signaling that they had a relationship with only one bank (ECB – SAFE Survey, October 2017 – March 2018). Another important finding is that firms remain connected with their principal banks for several years, due to the relative advantage they gain in term of credit availability thanks to the information acquired that are not otherwise at disposal of the general public. In addition, the amount of debt that was held by the main bank was negatively correlated with the dimension (32% of the SMEs declared that they had 75% of their bank debt held by the main bank¹⁶, this amount dropped to 16% for large enterprises. In the case of Italy, the study detected the presence of multiple relations (>3 banks on average).

Figure 2.6 Sources of external financing of Euro Area SMEs (period of analysis).



¹⁶ The main bank is here defined as the one that hold the highest amount of the firms' banking debt.



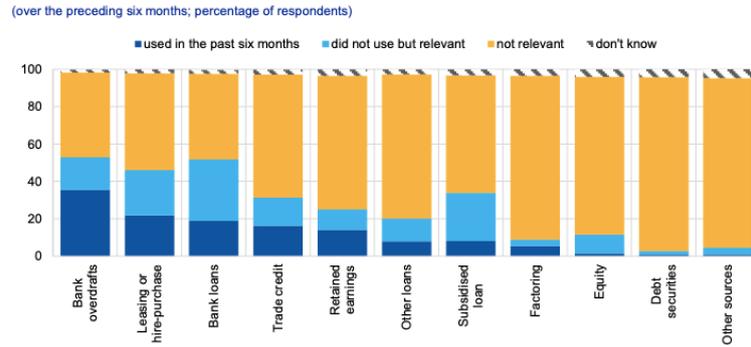
Source: ECB.

In the same period demand for both bank and non-bank financing increased. The latter continuing the trend initiated in 2017, showing greater diversification in the source of financing used by companies.

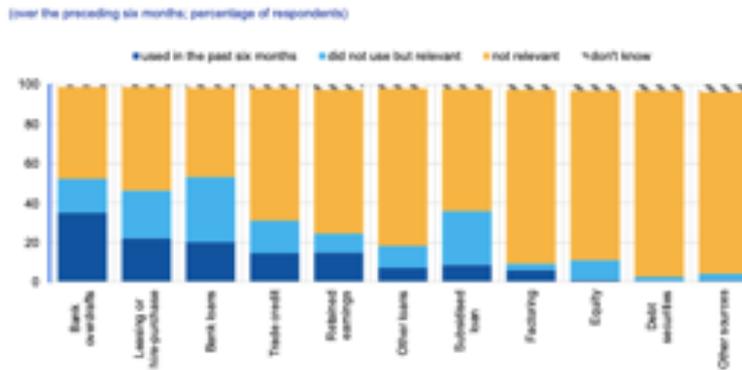
Until today, no major changes in demand have been detected with a natural oscillation between one period of observation and the other. The last SAFE survey detected a severe deterioration in the general economic conditions due to the COVID-19 crisis. The nature of this period was clearly unprecedented and lead to a steep increase in the request for banking-related instruments. Demand increased steeply from -1% to 8% in net terms, with Italy (12%), Portugal (14%), and Greece (23%) leading the way. In addition, a growing need for short-term credit lines was experienced. The negative conjuncture created a gap between demand and supply with the former increasing larger than the latter, leaving firms with concerns regarding their position. For the first time since 2014, companies reported weaknesses in their financial conditions to be a factor limiting access to financing. It is reasonable to think that the full effect of this unprecedented crisis will be seen only in the survey covering the period between April and October.

Figure 2.7 Sources of external financing of Euro Area SMEs (period of analysis).

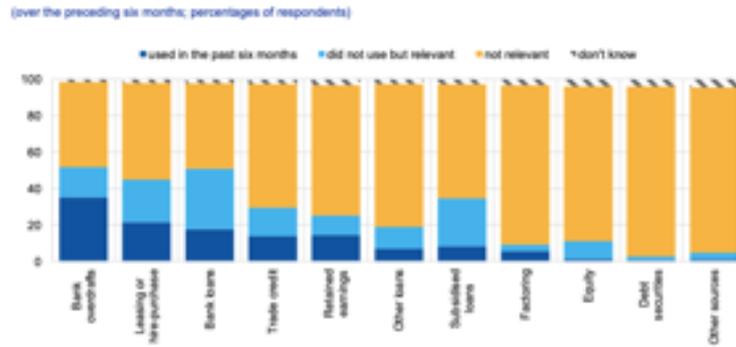
April – September 2017



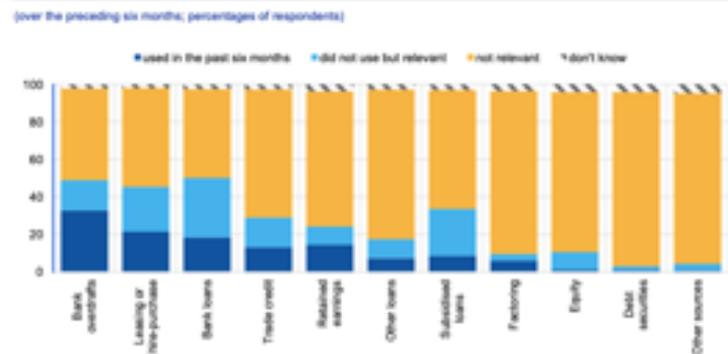
October 2017 – March 2018



April – September 2018



October 2018 – March 2019



Source: ECB.

2.5 Summary

We highlighted how private companies – which are – typically SMEs, express a wider need for bank financing. Their characteristics in terms of dimension and scope, do not allow access to types of funding that characterize bigger, public companies. Thus, the importance of the banking system to sustain those actors and their operations inside a certain economic system. Italy is an especially relevant example of the interconnection present between SMEs and the banking system as it will be seen in the next chapter. Since banks seem to be a fundamental stakeholder for SMEs and vice versa, we wanted to better understand the reasons behind the demand for credit. We have seen through the Bank Lending Survey carried out at European level, that usually companies require financing for fixed investment, inventories and working capital, M&A operations, or restructuring, due to changes in interest rates and to restructure or renegotiate debt. In the end, we analyzed the historical evolution of credit demand and discover that the centrality of banks has been proven for a long time also if other forms of alternative financing are slowly arising.

After reviewing first, the "supply" and then the "demand" side, we have finally the basis to review the process of consolidation and understand its impact on the dynamics displayed in those two first chapters.

3. Consolidation

We are now approaching the demand central to our research. How are those relations, depicted throughout the first two chapters, modified by consolidation? As we will see, M&A is an activity that requires a deep commitment by the organizations involved in the process since operations are complex and risky. For those characteristics, M&As have been widely criticized, notwithstanding they are important operations in particular for the financial system and its development. Consolidation allows to contain competition in a sector already saturated by big and small players and with thin margins, also as a consequence of low-interest rates. Moreover, consolidation – as we will see later in this chapter – is one of the methods available to capture innovations, both inside the financial system itself but also coming from other complementary industries.

This chapter has the purpose of highlighting how the process of M&A works and what are the reasons behind the decision to consolidate. Then, we will link those three chapters, by examining how credit relations are impacted by consolidation and what are the consequences of this process for SMEs' credit availability.

3.1 The European banking sector consolidation

Introducing the background in which the unitary market developed we need to remind our self that its roots could be found in the 1957 Treaty of Rome where six European Countries (Italy, Germany, France, Belgium, Luxembourg, and the Netherlands) gave birth to the first conglomerate of the European Economic Community. Although the Treaty made no formal arrangement to unify economic policies among member States, it sat the ground for a common market by abolishing custom tariffs and promoting internal competition, breaking geographic barriers, and general restrictions to free movement. From the second half of the 1960s, the process of economic integration and harmonization successfully initiated by the Treaty of Rome was taken even forward: the European Commission launched a series of discussions and negotiations about the co-ordination and eventual harmonization of the banking legislation (Mourlon-Druol, 2016, p.913). A Committee was then appointed with the mission of producing a comprehensive directive with a roadmap ultimately leading to monetary unification. The breakdown of the Bretton Woods monetary system (1971) and the oil embargo crisis of 1973

led to a drastic modification in the macroeconomic scenario, eventually changing dramatically the original plan developed by the Committee.

Those years were characterized by macroeconomic turmoil and severe inflation to which other elements of instability added up. In particular, we need to underline the growing importance gained by unregulated financial markets such as the Euromarkets where due to a sort of "arbitrage" possibility the inflation pressure was transferred between markets at a worldwide level. Those unregulated markets where nations, corporations, and banks had access to nearly infinite liquidity was the first signal of a globalized financial market where entities and events appear to be interconnected on a global scale with potentially disruptive consequences. National monetary policies became less effective and marked a switch from traditional Keynesian policies to a search for stabilization through limitations of inflation and a rebalancing of current and trade accounts.

The last element contributing to instability and increased liquidity was the undergoing process of "marketization" and the rise of liability management, an innovation based on the development of both domestic and international wholesale interbank markets (Battilossi, 2009, p.3). This infrastructural change is strictly connected to the already mentioned Eurocurrency market forming a virtuous cycle in terms of innovation but posing threats to the financial system if not managed correctly.

To deal with this completely new phenomenon banks were required to switch from traditional strategies to active liability marketization and a new dynamic form of assets and liabilities management. In this process, also factors related to the development of external technological infrastructure played a significant role. This added another element of innovation to the already uncertain scenario. In those years, significant advancement in Innovation Technology was made changing data processing and the way in which transactions and communications happened. The most relevant and direct implication was a reduction in informational barriers with a significant increase in market efficiency and a corresponding reduction in transaction costs taking advantage of newly arose economies of scale.

Considering the net impact of those factors on banks, disintermediation was the first and most relevant consequence generated by the abovementioned events. We define disintermediation as a practice that occurs when "funds are shifted from financing institutions to direct money market instruments to take advantage of higher open market interest rates that more than

compensate for the cost of transferring the funds" (Glasner, 1997, p.164). This situation was due to the unfortunate combination mentioned above of Bretton Woods and the oil crisis which altogether led to exchange rate depreciation and high levels of inflation worsened by the inability of National financial and monetary institution to apply traditional policies that found themselves ineffective in the wake of a completely new environment. In this scenario, an additional element cited above will be added: the Euromarket. Its presence boosted the level of interest rates consequently triggering the creation of money-market mutual funds, which provided a valid alternative to deposits having the same characteristics in terms of liquidity but earning higher interests (Dymski, 2016, p.36). The lost savings accounts were paired with another phenomenon related to the creation of the corporate bond and commercial paper market toward which firms turned rapidly, depriving banks of another major source of income and leaving them alone with long-term loans and mortgage that often yielded less than their actual cost. Bank's margins were dramatically eroded, and their business model resulted in obsolete in these stacked events. The reaction was a focus on liquidity and liability management and as noted by Kyrtis (2010) a shift was made from a concept of liquidity connected to the nature of assets towards another based on the issuance of liabilities to raise cash rapidly.

The late 1970s were characterized by other major changes in the macroeconomic and regulatory context in which banks operated. A first European Banking Directive was passed in 1977 and two years later the European Monetary system was created setting the ground for the long wanted monetary and economic unification.

Many efforts were made starting from the 1980s to give concreteness to all the so-called "Four freedoms" of the single market, in particular the free circulation of capital favoring cross-border banking. Achieving this ambitious goal required several steps in-between, especially considering the actual state of regulation and government power. Thus, a wave of deregulation and liberalization started to invest Europe opening national borders and leading to a more efficient capital circulation. Banks' strategic model had already experienced a first wave of innovations in terms of services and then a second one was just around the corner again. Until that moment indeed the internal structure adopted by banks had remained substantially unvaried. They were characterized by a strong local focus and ownership and governance structures where the stress was posed on stability rather than on dynamic corporate control possibilities. Those possibilities indeed could have enhanced efficiency and redistributed power between shareholders. At that time, Merger & Acquisitions (M&A) were not seen as the

way to improve efficiency, or at least the environment was not ready to accept and support the implications connected with such operations.

Table 3.0. Relevant events influencing the European scenario.

1957	<i>Treaty of Rome:</i> Treaty establishing the European Economic Community (EEC) and the European Atomic Energy Community (EAEC or Euratom). ¹⁷
1977	<i>First Banking Directive:</i> on The Coordination of Laws, Regulations and Administrative Provisions Relating to the Taking Up and Pursuit of Credit Institutions. This directive established the principle of home country control. ¹⁸
1989	<i>Second Banking Directive:</i> removed the remaining limitations to the establishment of branches in EEC Member States through the creation of a Single Banking License.
1992	<i>Treaty of European Union (Maastricht):</i> prepared for European Monetary Union and introduced elements of a political union (citizenship, common foreign and internal affairs policy). ¹⁹
1999	<i>Introduction of the Single currency:</i> 11 European Union countries created a monetary union with a single currency, the Euro. ²⁰
2010	<i>European System of Financial Supervision and Banking Union:</i> the ESFS is a multi-layered system of micro- and macro-prudential authorities that aims to ensure consistent and coherent financial supervision in the EU ²¹ while the Banking Union is founded on the single rulebook comprehensive of initiatives to create a safer financial sector for the single market. ²²

After the Single European Act, in 1989, we are half-way of the journey inside the European evolution, as it could be seen in Table 3.0, where relevant events are summarized. In that year, the Single Banking License was established through the second Directive, allowing banks to

¹⁷ Source: <https://www.europarl.europa.eu/about-parliament/it/in-the-past/the-parliament-and-the-treaties/treaty-of-rome>

¹⁸ Source: https://www.ecb.europa.eu/events/pdf/conferences/dermine_comp.pdf

¹⁹ Source: https://europa.eu/european-union/law/treaties_en

²⁰ Source: https://ec.europa.eu/info/publications/economy-finance/one-currency-one-europe_en

²¹ Source: <https://www.europarl.europa.eu/factsheets/en/sheet/84/european-system-of-financial-supervision-esfs->

²² Source: https://ec.europa.eu/info/business-economy-euro/banking-and-finance/banking-union/what-banking-union_it

access European markets with a significant cost reduction since a single authorization would have allowed an institution to operate also in other Member countries. A second proposition stated by the Directive is worth underlying, that is the home country control principle and a first attempt at harmonization in terms of large exposures, supervision, and solvency.

Prior to the second Directive, regulation was trying to protect the financial system, and investors from the unrest experienced some decades before with the Great Depression. But the resulting overregulated environment de facto reduced efficiency or at least created a static overruled environment in which also inefficient, badly managed banks could enjoy a presence in the market.

The newly introduced openness in the regulatory environment favored the phenomenon of cross-border competition thus improving efficiency and reducing market power (Berger et al, 2000). The benefits of a deregulated market were assessed in a well-known report, recently revisited, and produced by a commission lead by Mr. Cecchini. In the report "The Cost of Non-Europe in the Single Market²³" the commission assessed the potential gains related to a Single Market and they identified several improvements at macro and micro from which institution would have benefited in a deregulated environment, in particular, they stressed the relevance of cost and connected price reductions, unexploited economies of scale to combine technical and economic efficiency, reduction of monopoly profit favored by protective policies and efficiency from increased competitions.

Despite the mutations undergoing at European level, the first forms of deregulation impacting M&A and restructuring activities were still inside national borders. During the late 1980s and early 1990s, a restructuring and concentration process took place in a series of European countries (ECB, 2000, p.9) leading to the creation of entities able to compete in the newly created European arena. Concurrently, a wave of privatization took place switching from a government-centered system to private ownership and similar private legal structures. In addition to those two phenomena intended to strengthen the internal structure, we see externally an expansion toward LDCs²⁴ countries with which a historical connection was already in place.

²³ Colloquially referred to as the "Cecchini Report".

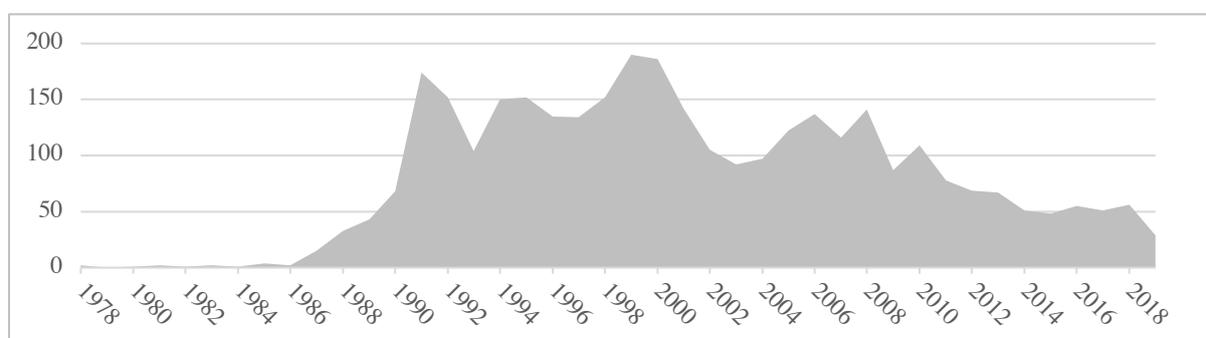
²⁴ Least Developed Countries: meaning emerging markets with which European actors had entertained relationships rooted back in the colonization period.

In the first year of the 90s, many events contribute to marking a clear divide with the past. In 1992 the Treaty of European Union (Maastricht) was finally signed, creating the Economic and Monetary Union (EMU) and taking a further step in the process of European unification. The EMU included the coordination of economic and fiscal policies, a common monetary policy, and a common currency, the euro²⁵. Between 1993 and 1994 the above-mentioned Second Directive came into force making the European market for banks concrete. The possibility to engage in cross-border operations opened enormous opportunities, allowing capitals to flow from and towards countries previously playing a marginal role in the International setting. This resulted in increased competition, with a direct comparison inside Europe border. Moreover, pressure was coming also from the other side of the ocean, where consolidation and the creation of large financial conglomerates were taking place in response to liberalization.

3.1.1 The first wave of intra-border consolidation

The first wave of consolidations was mainly intra-border between institutions serving the same sector signaling a need to absorb excess capacity and fill the home country market prior to moving beyond national boarder (Ayadi and Pujals, 2004).

Figure 3.0 Number of deals per year at European level.



Source: Thomson Reuters data, author elaboration.

Cross-border consolidation increased its pace in particular after 1999 with the adoption of the single currency leading to a more capital-oriented market. This type of disintermediation occurred by the adoption of a single currency and a harmonization in the monetary policy, gave rise to a specific type of merger namely conglomerates that are defined as *qualitatively different*

²⁵ Source: https://ec.europa.eu/info/business-economy-euro/economic-and-fiscal-policy-coordination/economic-and-monetary-union/what-economic-and-monetary-union-emu_en, accessed by July 2020.

from pure banking mergers since they lead to the creation (or expansion) of a group, which is active in several sectors of the financial industry (Kapopoulos and Siokis, 2005, p.71).

In the same period, other relevant elements contributed to the consolidation wave observed around Europe. In particular, we underline the importance attributed to technological changes and competition arising from other financial intermediaries. Technology in particular during the 1990s boosted the process of changes in the banking industry giving the IT infrastructure needed to acquire, track, and store large amounts of information on both financial instruments and customers. With the rise of electronic trading and a wider adoption of IT technologies, various banking functions experienced a radical change. Particular relevance has been given to internet banking, electronic payment technology, and information exchanges (Berger, 2003, p.4). Their importance depends on the influence on banks' margin and business models that eventually were again modified, along with the increase in the "easiness" with which consolidation could take place, thanks to the technological advancements made.

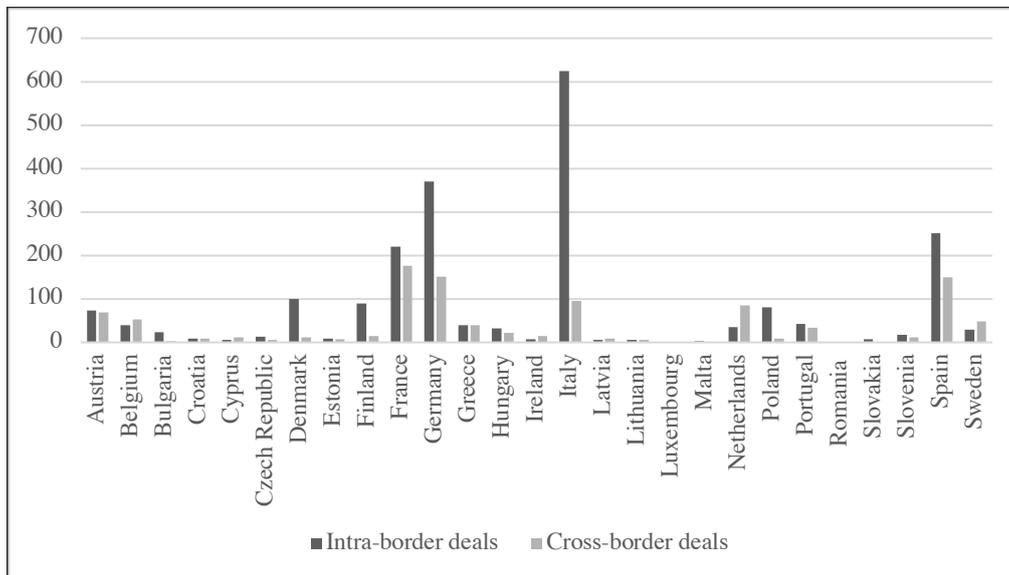
3.1.2 2009 and the second wave of consolidation

A period of relative calm followed the wave of cross-border consolidations that took place between the last years of the 1990s and the beginning of the 2000s. Then on September 15th, 2008 Lehman Brothers collapsed dragging down the whole financial system at a global level in a crisis never seen before, banks and financial institutions experienced systemic bankruptcy and many were falling down. A series of takeovers started in an attempt to restore those ailing entities and stabilize the structure of an economy in the midst of chaos. The consolidation in this period was mainly domestic with a few exceptions looking also outside national borders (EY, 2015, p.13). This was due mainly to a need to strengthen intra-national systems and avoid the toils that still exists for cross-border operations. In fact, despite the advancement made in term of harmonization and unification at the European level, regional peculiarities still existed as noted by Goddard et al. (2007, p.1914), in particular, due to:

1. differences in the economies and their level of advancement creating a fragmented picture inside Europe;
2. the difference in the fiscal system that was still remarkable and partially experienced a reorganization following the crisis;
3. the difference in the legal system allowing regulatory arbitrage between different countries;

4. cultural barriers;
5. language barriers.

*Figure 3.1 National and Cross-border operations - period of observation: 1978-2020
(aggregated data).*



Source: Thomson Reuters data, personal elaboration.

In the aftermath of the crisis a series of profound modifications completely reshaped the European regulatory and supervisory environment with the European System of Financial Supervision and the Banking Union being the most evident representations of this new normal.

Unification opened the way for a further consolidation outside the national border, also if no particular impact has been observed until nowadays, on the level of cross-border merger. An additional wave of international takeovers and reorganization could be expected after the COVID-19 crisis and the need for further technological advancement in the system, experiencing external competitive pressure from the dynamic Fintech companies. But, as we are writing, evidences are not already present in this term.

3.1.3 Future drivers and scenarios

We have seen that the banking business has been resilient and able to adapt through centuries of transformations, modifying itself in order to connect with a continuously evolving

environment. Digitalization has been progressively introduced starting from the 1990s through the 2000s and has now reached an advanced stage.

Digitalization applied to financial institutions was, in the beginning, a phenomenon mainly connected to the efficiency with which internal processes were carried out (i.e. automatization in transaction and information processing) while during the last years, starting around 2015 until nowadays, the innovation has shifted towards the service provided and the way in which they are provided. The paradigm is now centered on product innovation in all its form. New companies arose to connect with new needs in a faster manner than traditional banks - due to their size and regulation - have been able to do. Many companies have flourished - fooling the tight requirements imposed on financial institutions – and acquiring a significant competitive advantage. Those new Fintech companies challenge the status quo of supervision and regulation policies that were designed for completely different contingencies. Policymakers are working worldwide on the implementation of rules to encode those new companies and their dynamics, but there is still a lot to do and continuous evolution is likely to be seen in the next decades.

Fintech start-ups are now more than 24.000 worldwide²⁶, comparing to only 800 mapped in the April of 2015²⁷. In assessing the opportunities related to Fintech, Philippon (2017, p.2) stated that *"such innovations can disrupt existing industry structures and blur industry boundaries, facilitate strategic disintermediation, revolutionize how existing firms create and deliver products and services, provide new gateways for entrepreneurship, democratize access to financial services"*. His central point stems from the consideration that the actual financial system has resulted inefficient in adopting technologies to reduce costs since the unitary cost of financial intermediation has remained rather constant in a century, underling that no significant advancement has been made despite an obvious evolution of the system did happen.

In this stagnant situation the only element that can cause disruption should be external and of opposite magnitude to traditional financial institutions, as Fintech companies effectively are. Those newcomers have entered the market providing payment systems that leverage mobile advantages to which other opportunities have been progressively added, introducing lending and advisory in the form of wealth management-related services. In the previously mentioned

²⁶ Source: <https://fintechcontroltower.bcg.com>, as accessed by July 2020.

²⁷ Source: <https://www.mckinsey.com/industries/financial-services/our-insights/cutting-through-the-noise-around-financial-technology>, as accessed by July 2020.

study, McKinsey estimated that in absence of significant actions taken by banks, 10 to 40 percent of their revenues could be at risk by 2025²⁸ due to those incumbents.

In spite of the fact that banks remain the principal institutions for depositors, the crisis had the effect of removing the disillusion depicting financial institutions as "supreme entities" protecting savings giving a significant advantage to those Fintech start-ups communicating in a simple way (thus perceived as transparent) reducing costs by adopting dynamic business models cutting bureaucracy and providing seamless personalized customer experiences. The other two contextual factors constituted critical elements in the framework that allowed those companies' flourishing: the increasing availability of data and marginal decrease of computing power costs.

In particular, McKinsey mentions six attributes that could be crucial in giving Fintech companies a big cut in the financial industry. Those are:

1. Customer acquisition method: banks in this field have the clear advantage of having an already established solid and wide customer base but, new generations (X and Z) don't share the same traits as their parents, being fluid in their choices and thus not committed to a single brand. Nevertheless, the cost of acquiring new clients for newcomers is exceptionally high and constitutes a real barrier to entry.
2. Cost advantages in service provision: the irrelevance of physical presence and obsolescence of traditional transaction procedure has put pressure on bank margins and its traditional communication channel. On the other side, lean start-ups cut costs by avoiding physical presence and securing the first move advantage online also providing a time-efficient service not possible with usual processes.
3. Data usage: as mentioned above, innovative uses of big data allow an improved client profiling with implications that range from a reduction of lending risk to customized financial products and experiences, closely matching individuals' needs.
4. Segment-specific proposition: start-ups can focus all their energies in a particular segment becoming the efficient alternative to segment not sufficiently covered by traditional banks.

²⁸ Source: <https://www.mckinsey.com/industries/financial-services/our-insights/cutting-through-the-noise-around-financial-technology>, as accessed by July 2020.

5. Cooperation with existent infrastructure: a form of cooperation with existent financial institutions will benefit both parties creating significant synergies in the case of Acquisitions.
6. Regulatory gaps: are seen as an advantage to start-ups but could be an element of disruption for the segment later on. New Fintech companies have to build their Business Model in compliance with the existing framework in order to reduce the risk of later gaps.

Therefore, Fintech could reach customers and needs not covered by traditional megabanks achieving higher inclusion, also if this comes with costs and risks. The Fintech phenomenon is relevant in our analysis since product expansion/diversification and technology acquisition have been reported to account for 36% of the reasons driving M&A transactions (Deloitte, 2018, p. 4). The Table²⁹ below presents some of the major deals in this field. Also, half of the interviewed executives stated that they expected to acquire or engage in joint ventures with Fintech companies. Acquisition is especially attractive since first they provide a means to control a potential competitor and secondly, drive the strategic direction of the acquired target in order to make it completely coherent with one's own's view.

Table 3.1 Largest Fintech M&A deal announced since 2018 - ranked by deal value at announcement.

20 largest fintech M&A deals announced since 2018			Announcement	
Ranked by deal value at announcement			Date	Deal value (\$B)
Buyer (ticker)	Target (ticker)			
● Fidelity National Information Services Inc. (FIS)	Worldpay Inc. (WP)		03/18/19	35.36
● Global Payments Inc. (GPN)	Total System Services Inc. (TSS)		05/28/19	22.15
● Fiserv Inc. (FISV)	First Data Corp. (FDC)		01/16/19	21.79
● Investor group ¹	Thomson Reuters Corp.'s financial & risk business		01/30/18	17.30
● London Stock Exchange Group PLC (LSE)	Refinitiv Ltd.		08/01/19	16.55
● Investor Group ²	The Ultimate Software Group Inc. (ULTI)		02/04/19	10.97
● Carlyle Group LP (CG)	Sedgwick Claims Management Services Inc.		09/12/18	6.70
● Investor group ³	Dun & Bradstreet Corp. (DNB)		08/08/18	5.46
● SS&C Technologies Holdings Inc. (SSNC)	DST Systems Inc. (DST)		01/11/18	5.13
● Versoend Technologies Inc.	Cotiviti Holdings Inc. (COTV)		06/19/18	4.35
● Thoma Bravo LLC	Ellie Mae Inc. (ELLI)		02/12/19	3.70
● Mastercard Inc. (MA)	Nets A/S's account-to-account payment business		08/06/19	3.19
● Investor group ⁴	Blackhawk Network Holdings Inc. (HAWK)		01/16/18	3.06
● Worldline SA (WLN)	SIX Payment Services Ltd.		05/15/18	2.89
● Hearst Corp.	Fitch Group Inc.		04/12/18	2.80
● Investor Group ⁵	Verifone Systems Inc. (PAY)		04/09/18	2.69
● State Street Corp. (STT)	Charles River Systems Inc.		07/20/18	2.60
● PayPal Holdings Inc. (PYPL)	iZettle AB		05/17/18	2.22
● ION Capital UK Ltd.	Fidessa group PLC (FDSA)		04/20/18	2.12
● Investor Group ⁶	Travelport Worldwide Ltd. (TVPT)		12/10/18	2.07

Industry: ● Financial media and data solutions ● Investment and capital markets technology ● Insurance technology
 ● Payment processors ● Banking technology ● Payments infrastructure ● Payment service providers and gateways

Source: www.S&PGlobal.com.

²⁹ Source: <https://www.spglobal.com/marketintelligence/en/news-insights/latest-news-headlines/fintech-m-a-deal-tracker-8212-august-continues-record-breaking-year-of-megadeals-50076393>, as accessed by August 2020.

However, downsides to those operations remain and could be identified in (Wilson, 2017):

1. goodwill creation: with a negative impact on ratio relevant to regulators;
2. cultural differences: where young entrepreneurs are opposed to experienced bankers;
3. value gaps: the possibility to pay a premium not matched with the start-ups actual potential but driven by riskiness or momentaneous attractiveness.

So, Acquisitions are not the only way to go. Many different arrangements can be found from start-up incubator, venture funds devoted to technological advancement, rare home-made Fintech branch to partnership and acquisitions one thing for sure is that all major players are one way or another, constantly keeping an eye on this new arising segment.

3.2 The Italian system

After a long (but needed) overview of the evolution of the European environment, we now focus on the Italian story in order to provide a full understanding of how Italy has behaved inside the general European case. The specification provided will be needed also in view of the following chapter when we will finally have all the elements needed to analyze and understand the result provided by our empirical case.

3.2.1 The entrepreneurial environment and its influence on the financial system

Italy presents a ratio between total financial assets to GDP³⁰ of 1.5, below the European average, signaling its relatively small dimension. The Italian banking industry has been deeply influenced by the peculiar characteristics of the entrepreneurial and social system that it serves.

Also if there is no theoretical consensus about the reasons underlying a certain structure of the banking system, it is certainly a response to businesses' needs (and in general of the financial and commercial heritage), the characteristic regulatory framework, tax, political and social systems.

Considering the Italian Industrial scenario, its majority is made up of SMEs and Micro-enterprises with less than 10 employees. We should notice that also if the number of employees for every business and their relative size is smaller than other European peers, SMEs still cover

³⁰ The ratio total financial assets held by the banking system over GDP is one of the most common measure to provide insights on the relative dimension of the banking system of a certain country.

an important role in terms of employment. They provide 78.5 % of the employment in Italy, against a European average of 66.4% (European Commission, 2018) as seen in Table 3.2. Therefore, their role is clearly fundamental to the functioning of the Italian economy. Those entities are traditionally connected to a single family that manages the company one generation after another. This behavior hinders efficiency and a possible valuable element connected with the adoption of corporate governance policies aimed at incentivizing innovation and development also in financial terms.

Table 3.2 SME figures in Italy.

Class size	Number of enterprises			Number of persons employed			Value added		
	Italy		EU-28	Italy		EU-28	Italy		EU-28
	Number	Share	Share	Number	Share	Share	Billion €	Share	Share
Micro	3 565 046	95.1 %	93.1 %	6 661 193	45.9 %	29.4 %	201.2	28.6 %	20.7 %
Small	162 598	4.3 %	5.8 %	2 921 184	20.1 %	20.0 %	144.9	20.6 %	17.8 %
Medium-sized	18 465	0.5 %	0.9 %	1 808 802	12.5 %	17.0 %	125.3	17.8 %	18.3 %
SMEs	3 746 109	99.9 %	99.8 %	11 391 179	78.5 %	66.4 %	471.5	67.1 %	56.8 %
Large	3 221	0.1 %	0.2 %	3 125 454	21.5 %	33.6 %	231.7	32.9 %	43.2 %
Total	3 749 330	100.0 %	100.0 %	14 516 633	100.0 %	100.0 %	703.1	100.0 %	100.0 %

These are estimates for 2017 produced by DIW Econ, based on 2008-2015 figures from the Structural Business Statistics Database (Eurostat). The data cover the 'non-financial business economy', which includes industry, construction, trade, and services (NACE Rev. 2 sections B to J, L, M and N), but not enterprises in agriculture, forestry and fisheries and the largely non-market service sectors such as education and health. The following size-class definitions are applied: micro firms (0-9 persons employed), small firms (10-49 persons employed), medium-sized firms (50-249 persons employed), and large firms (250+ persons employed). The advantage of using Eurostat data is that the statistics are harmonised and comparable across countries. The disadvantage is that for some countries the data may be different from those published by national authorities.

Source: 2018 SBA Fact Sheet Italy – www.europa.eu.

This kind of conservative behavior is reflected in the relationship entertained with banks both at companies and personal level, with private clients not inclined to invest but rather oriented towards traditional deposit services.

The consequent financial system is one that results in being less developed than in other European countries. This is demonstrated also by the relatively small size of the financial sector (De Bonis, Pozzolo, and Stacchini, 2012). Its stock and debt market result in being underdeveloped and usually avoided by companies as a source of financing. In fact, the presence of mainly family-owned businesses that are traditionally not enthusiastic in opening up their capital could be noticed in Table 3.2 highlight also their relevance in adding value to the Italian economy as reflected in the 67.1%, well above the 56.8% European average. This centrality for the Italian system of companies not inclined to open up to capital markets is reflected in the 400 listed companies that as of August 2020 are present, compared to over 500 in Germany and 900 in France. Another factor that is worth observing is the stock market capitalization to GDP. In Italy, this ratio was 21,8% when last recorded by the World Bank in

2008. We could increase it by 10% or even more to account for time and growth but still, it will be difficult to compare it to the 84,9% of France (2018), 54,6% of Germany (2019), and 57,2% of Spain (2019).

The Italian heritage thus comprises a publicly-traded market that, as we said, was - and still is not – developed at the same level as other countries. Italy has long suffered the competition arising from the United Kingdom. Proof is that nowadays the Italian Stock Exchange is part of the London Stock Exchange Group in which it was incorporated by a merger back in 2007. Moreover, it should be noticed that of the all limited companies present in Italy only 1,32%³¹ are listed. Lastly, the legal system has not incentivized correctly the protection of minority shareholders and small investors (De Bonis, Pozzolo and Stacchini, 2012) further reducing the propension to that source of financing.

Italy has also been found to have one of the lowest ratios of own funds to total company liabilities (De Bonis, Pozzolo and Stacchini, 2012, p.3). This coupled with low access to public traded markets has resulted in the increase of bank debt relevance. Along with bank financing in recent years another form of debt financing has slowly started to be introduced. Those technologies, known as private debt or minibond, are similar to private equity operations but involve debt obligations. Through the use of intermediaries, companies are able to issue debt that is bought by investors. This newly introduced possibility is the first attempt to step away from traditional financing methods and find alternative ways to better meet firms' needs. The characteristic of minibonds is in fact the possibility to tailor the emission around a company's particular possibilities and demand, with ad-hoc products.

Still, banks are the first source of credit for firms attempting to find external sources of financing, and Italy is described indeed as a Bank-centric Financial market model.

3.2.2 The structure of the Italian banking system

A multitude of small territorial-linked credit institutions that dates back their origins to the pre-unitary period, characterize the Italian banking industry. An annual analysis (see Table 3.3) conducted by the Bank of Italy on the regional articulation of banks and financial institutions, can provide some evidence of how the Italian banking system is articulated.

³¹ Source: ISTAT survey on Enterprises, as of 2018 (last available).

Companies' credit relationships are usually unitary giving an element of stiffness to the whole structure of the credit industry that doesn't benefit from diversification at both parties' levels. Indeed, at the company level, entertaining long-term relations with a single institution could reduce contractual power in particular in periods of crisis, while at the banks' level being the only financier implies not being able to share the risks connected to more articulated operations with third parties. Moreover, it has been observed that since Italy does not have an advanced stock market, companies rely on loans to establish and grow their businesses (Bilotta, 2017, p.3). The characteristics underlined imply high operating costs and low efficiency, constituting some of the fundamental elements that have driven many operations observed within the sector in the last decades.

Table 3.3 Number of Italian banks by category.

Banks				Banks "S.p.A"				Cooperative rural banks			
Banks		Branches		Banks		Branches		Banks		Branches	
2018	2017	2018	2017	2018	2017	2018	2017	2018	2017	2018	2017
505	538	25.404	27.374	136	147	19.451	21.333	22	23	1.559	1.619

Source: Banca d'Italia, 2019.

Over the last ten years, we notice a progressive reduction in the number of institutions operating across the country in an effort to increase efficiency as demonstrated by the downward trend in the number of employees reported in the following Tables. The number of employees is considered a good representation of the presence of consolidation phenomena since employee leaving and human capital optimization is one of the most common consequences of that process. This tendency is embedded in a wider trend at the European level as previously highlighted in this chapter (see 3.1) pointing towards a more concentrated market.

Table 3.4 Number of banks, branches and employee at Italian and regional level.

Year	Italy			North-West			North-East		
	Banks	Branches	Employee	Banks	Branches	Employee	Banks	Branches	Employee
2018	505	25.404	278.223	169	7.861	109.287	142	6.613	66.951
2017	538	27.374	286.222	171	8.543	112.248	159	7.173	68.202
2016	604	29.027	299.645	186	9.086	113.607	192	7.622	73.181
2015	643	30.258	302.721	189	9.401	113.600	203	8.037	75.066
2014	664	30.740	303.595	193	9.450	111.033	210	8.301	76.913
2013	684	31.761	310.258	197	9.804	111.006	218	8.556	77.676
2012	706	32.881	315.238	197	10.111	112.643	228	8.888	77.785
2011	740	33.607	322.345	205	10.382	123.822	239	9.039	74.836
2010	760	33.663	326.367	214	10.367	125.118	241	9.104	76.077
2009	788	34.036	330.512	227	10.511	121.947	248	9.168	79.968

Source: Banca d'Italia, 2019.

Table 1.5 Number of banks, branches and employee at Italian and regional level.

Year	Center			South			Islands		
	Banks	Branches	Employee	Banks	Branches	Employee	Banks	Branches	Employee
2018	96	5.367	57.094	71	3.734	30.410	27	1.829	14.497
2017	103	5.749	58.351	75	3.925	32.149	30	1.984	15.277
2016	117	6.145	62.651	77	4.076	33.675	32	2.098	16.534
2015	131	6.396	63.264	87	4.198	34.069	33	2.226	16.726
2014	140	6.492	63.940	87	4.262	34.737	34	2.235	16.958
2013	139	6.676	67.418	93	4.392	36.398	37	2.333	17.709
2012	143	6.954	69.800	99	4.548	36.991	39	2.380	17.993
2011	155	7.102	68.651	102	4.675	37.417	39	2.409	17.417
2010	160	7.103	69.311	105	4.663	38.176	40	2.426	17.618
2009	162	7.161	71.246	109	4.721	38.151	42	2.475	19.146

Source: Banca d'Italia, 2019.

Another relevant element could be detected from the above-presented data: a clear divide between North and South with the former doubling the latter in terms of banks' presence. The issue connected to this finding is that it reflects a gap present in the real economy with the "industrialized" North significantly surpassing the "agricultural" South. Those inequalities constitute a form of weakness for the Italian economy, leaving the government with an extremely heterogeneous country to be ruled unitarily and efficiently. As of December 2018³², the average GDP in the North was €22.100, while €20.650 in the central regions and just €14.000 in the South. This picture reflects a vicious circle where the presence of fewer companies translates into lower occupation, contractual power, and salaries which coupled with a weak infrastructure system and general underdevelopment, doesn't attract capital and thus banking presence.

In the Italian framework, we need to underline two laws that modeled the conformation of the banking competitive arena we see today. The first one to be considered is the so-called Amato/Carli law (n. 218/1990) concerning the "*Regulation in relation to restructuring and asset integration of publicly-held credit Institutions*". This law was marked the final point of a banking system administered by government authorities and the beginning of a new era characterized by private actors. The privatization process involved several previously State-owned banks translating into public companies (Società per Azioni) and allocating their non-core activities (not strictly related to the banking function) inside Foundations. The whole process was inspired by corporate law and private governance structure. This reform was aimed at increasing the competitiveness of Italian banks in a European context where borders were increasingly flattened pointing towards the European Monetary Union and a common European market. The concepts brought by this regulation were further stated in the Consolidate Law of Banking (TUB) of 1993.

A second reform was then added in 1998 with the Ciampi/Amato law (n. 461/1998) substantially transforming the for-profit Foundations established in 1990 into non-profit entities that could have retained a sort of "economic vocation" but always remaining outside the lucrative area thus diminishing their significant influence. Coherently with evolutions undergoing in the same period at the European level, the policies adopted starting from 1990 are representative of the newly introduced unitarian spirit that led to a flourishing period of

³² Source: Istat.

consolidation inside the Italian framework partially reducing the fragmentation that has characterized the country for nearly a century.

During the financial crisis of 2009, all the weaknesses of the Italian system arose abruptly. The small nature of most enterprises makes access to capital markets difficult for the majority of them thus turning to banks and loans when in need of financial resources. During the period preceding the crisis, a significant increase in leverage has been reported with easy access to credit whereby banks allocated funds to companies with high debt (Bilotta, 2017, p.8). This tight connection between the two sides of the economic system produced a credit crunch in the following period with a steep contraction in the credit given and a ripple effect on the real economy along with the number of NPLs.

3.2.2.1 Italian perspectives

In the Italian context that we have described so far, consolidation is a process that is still taking place and will likely continue to do so in the future. The forces and motivations underlying the decision to merge and consolidate partially diverge from the ones characterizing the European discussion. Also if Italy had benefited – especially in the past – from modification in regulation and monetary policies at that level, there are some additional elements related to the peculiarities highlighted in the previous sections. Those motivations are mainly related to a search for efficiency in the case of Cooperative Banks (we will analyze them more in detail in the following chapter) and a need to stay competitive and increase margins inside the international scenario for S.p.A.

The system is still fragmented if compared with international actors. Therefore, also if the process will remain domestic, a need to continue consolidations both inside Cooperative Credit but also for S.p.A. ones, will persist.

3.3 Review of the Merger & Acquisition process

Consolidation is one of the central themes of our discussion that has been introduced since it is one of the key elements shaping the Italian banking and credit scenario. Thus, we start our study of bank consolidation by providing a few key definitions. Bank consolidation is the process by which one bank takes over or merges with another. A Merger or Acquisition (M&A) is the purchase of or combination of at least one business asset or entity into another (Pignataro, 2015, p.XI). As presented in Figure, an M&A operation is made of multiple steps. Those

transactions could take place in every industry, and the way in which they are specifically developed is strictly connected to the goals of the operation and the companies that are involved. Nonetheless, practitioners (see eg. Hanson (2001) or Bain & Company) identify ten steps that in one way or another characterize M&A transactions.

Figure 3.2 Step in the M&A process.



Source: www.corporatefinanceinstitute.com

1. Development of the M&A strategy

Citing an article by the well-known Management Consulting firm Bain & Company "Start early, then focus on money, people, power, culture and a few other key issues". Starting to plan the operation significantly ahead of day one is fundamental to ensure the operations' success. In order to draft a strategy for the deal, first of all, the purpose of the deal itself should be very clear to the Management of the potential acquirer. This knowledge implies a deep understanding of the prospect targets businesses, of their strength and weaknesses as well as their potential benefits to the acquirer. The assessment of those elements is aimed at identifying the upsides of the operation or what we identify as synergies. M&A should in fact by definition "add value" meaning that the combined entity once the deal is concluded should have a higher value than the two separate entities added together as standalone firms. Therefore, the strategy in some sense is what makes the merged company greater than the sum of its business units, and sets out the organizations' direction and goals, business portfolio, resource allocation, and growth plans (Deloitte, 2015, p.55).

A strategy is the product of an internal and external analysis that altogether suggest the actions to be taken in order to reach a certain stated objective. Strategy helps the Management of the acquirer to gain a complete overview of the operation and define all the steps needed to succeed, from target identification to Post-Merger Integration and closure.

To be successful, the development of a strategy in the context of banking M&A should be well integrated inside the overall long-term company vision. The acquiring bank should identify where inorganic moves are necessary to advance its strategy and then translate these moves into actionable deal theses that guide candidate scanning, prioritization, and progress review³³. Consolidation inside banks should be embedded in the investment strategy and capital planning process, but also include a divestiture strategy. Indeed, successful bank acquirers shape the assets for sale based on an understanding of their value to a more natural owner³⁴. What is especially relevant when dealing with banking M&A is the assessment of the risk profile of the operation and of the actors that should be involved like advisors and intermediaries.

2. Definition of the criteria to identify a proper target

This step consists of the explicit definition of what the company wants to focus on. The strategy definition could highlight several areas of improvement and possible types of synergies to look for when searching for a target. Nonetheless, a clear decision should be taken in order to identify the best target possible. The criteria to be used could be related to business considerations (e.g. products, business lines, client base), financial considerations (e.g. profit margins, level of indebtedness), or geographical ones like a physical presence in a certain region.

3. Target search

The procedure usually follows those steps:

- Identification of a pool of targets made by research on the sector in which the prospectus acquirer has planned to enter inside its strategy definition. This point is constituted by high-level research pointing towards an overview inside the sector of interest and its

³³ Source: <https://www.mckinsey.com/industries/financial-services/our-insights/banking-matters/realizing-m-and-a-value-creation-in-us-banking-and-fintech-nine-steps-for-success>, as accessed by September 2020.

³⁴ Source: <https://www.mckinsey.com/industries/financial-services/our-insights/banking-matters/realizing-m-and-a-value-creation-in-us-banking-and-fintech-nine-steps-for-success>, as accessed by September 2020.

potential. In this way, the acquirer can do the first screening and choose the preferred niche.

- Identification of a pool of candidates that are selected among the previously identified pool, screened by certain searching criteria. The purpose of this sorting operation is to breakdown the pool into sub-groups as defined by some characteristics such as revenues, market presence, geographical presence, and so on. The list of potential targets will still be long after those researches but will be now ordered into well-defined clusters.
- Identify a small group of proper targets. The most relevant issue in the process of finding the "perfect match" for an operation is that two constraints should be met. First of all, the prospect target should be in line with the strategy of the acquirer, fit its selection criteria, and provide the best match inside the long-term view of the acquiring company. Secondly, the target should be fairly priced. There is no sense in finding the perfect match if it is not affordable without putting the acquirer in potential distress. In addition, the target company should somehow be willing to make the deal or at least not pose excessive hurdles. For what concerns the strategic fitting, the criteria usually considered are (Deloitte, 2015): financial criteria (i.e. profitability), management preferences in terms of the transaction (e.g. acquisition of assets or shares), culture fitting, products, and commercial characteristics, R&D capabilities and facilities, infrastructures and particular expertise in the production process.
- Collect information on the identified target. At this point, the number of potential companies fitting all the above-mentioned constraints should be rather small. Therefore, a deeper analysis is now possible and needed. A good analysis should examine in detail financial information and check if the requirements are truly met.
- Sorting selected companies based on their overall fitting result. The fact of having a list organically ordered by the level of its match with the acquirer is a positive fact and it is absolutely not required to come up with just one name. Indeed, if the first selected target creates excessive concerns, the acquirer could walk away and move to the next company in its ordered list.

Target identification in the specific case of banks should rely on a continuous and dynamic implementation of potential candidates list. This allows us to evaluate properly all the alternatives in the market but requires an investment in continuous meetings to know the potential target. The success of M&As is in fact conditioned by adequacy between the target

bank and the initiator institution on cultural, organizational, and financial aspects (Slama, Saidane and Fedhila, 2012, p.211). Therefore, a singular effort contingent on the operation would not be enough in particular when considering operations involving banks. For what concerns the financial sector, some targets have been found to be more likely than others due to some characteristics. An ample digression is made by Slama, Saidane and Fedhila (2012) about what are the most likely companies to be acquired by banks. In their work, they identify bad management, size, regulatory environment, and business lines as discriminating factors.

Bad management is intended as an inefficient executive system, not able to produce value. In this case, there could be a potential for profit exploitation, since one of the characteristics of M&A is the removal of C-level duplications. The target will be relatively cheap with respect to its upside potential and therefore acquiring banks will point to those other financial institutions or firms in order to unlock their full potential by fundamentally eliminating bad managers. Size is related to the amount of financial assets possessed by a certain bank and the coherence with its obligations. When a mismatch occurs, potential profits arise as the price of the prospect target will be reduced. Moreover, size could be intended also in terms of possessed financial assets. The more assets a bank has, the higher will be its price, and consequently the lower the possibility to be a target, since entities able to acquire its business or part of it will be proportionally less. Inside the deal is important to set a minimum and a maximum price that the acquirer is willing to spend in order to acquire the target.

Considering also variables related to the context in which a bank operates, regulation influence target attractiveness. More specifically, banks or in general institutions that are located inside countries with stricter regulations, are more likely to be a target of banking acquisitions. Regulation indeed is often synonymous with transparency, which constitutes a highly valued characteristic inside the financial sector. Obviously, regulation as a variable influencing target identification has more power when dealing with cross-border merger than with intra-national ones. This because at the regional level discrepancies are not significant such that to gain a role in banking M&A. Another level on which regulation plays a role is within competitive law enforcement for the financial system and capital requirement and risk policies.

The last element influencing decisions about potential targets is the product portfolio or the business lines already present inside the acquiring bank. In this case, there are basically two strategies which are diversification or specialization (Ayadi et al., 2007).

4. Acquisition planning

When approaching the first candidates for the operation, further due diligence is carried out in order to define if the deal could be done at the condition drafted by the acquirer and grabs possible elements to be leveraged during the negotiations. Then, candidates are presented with a range of prices in order to create price competition and start testing the initial hypothesis.

5. Valuation

To address the pricing aspect of the operation, proper valuation should be made.

Figure 3.3 Major valuation methodologies.

Discounted cashflow Income approach	Market comparison	Net assets approach Balance sheet methods
<ul style="list-style-type: none">• Discount rate• Growth rate• Terminal value• Margin improvement	<ul style="list-style-type: none">• Price/earnings• Price/revenues• Price/net worth• Enterprise value/EBITDA• Enterprise value/EBIT	<ul style="list-style-type: none">• Net book value• Adjusted book value• Liquidation value

Source: Deloitte, 2012.

Several valuation approaches could be used - as it could be seen from the picture above - with different inputs requirements. A wide debate regards which models provide the most accurate estimate of a company's value, but no consensus has been reached yet on this topic. The valuation phase is aimed at finding the fair price of the target and further analyze its business perspective. Its aim is basically to find the true price of a company. This price will be expressed as per share and therefore - multiplying it by the number of outstanding shares - will provide the overall value (known as "Enterprise Value") of a company meaning how much a certain organization is worth inside the market. To reach this price, there exist fundamentally three approaches (also if many variations of them are present and could be used according to the industry to be valued). Those are the Discounted Cash Flow (DCF) method, Market multiples, and Net Assets approach as could be noted in Figure 3.3. Another famous method worth mentioning is the one using option pricing.

The DCF valuation method – as the name says – first evaluate the future cash flows of a company and then properly discount them to account for the time value of money. This approach is an intrinsic valuation, where the potential to generate liquidity is explicitly

considered. Instead, market multiples are based on the comparison with competitors or, to be more precise, with peers. The latter refers to a certain subset of companies that are most similar in terms of growth, risk, and business to the entity to be valued. The multiple to be used inside this valuation method, are ratios expressing relevant values that characterize the company. The idea behind multiples is that, inside an efficient market, similar companies should have similar results and prices. Lastly, the net asset approach relates to valuing a company according to how much its assets are worth net of liability which is finding net asset value (NAV) to determine what it would cost to recreate the business (Mohendroo, 2017, p.38).

A banks' balance sheet (see Appendix A) has some peculiar characteristics due to the nature of the business, which is connecting borrowers of funds with providers. What makes a bank different from other financial institutions is the possibility of accepting deposits, which constitutes a liability inside the banks' balance sheet. That special type of obligation has the characteristic to be requested at any time without previous formal requests. This implies that at any time they should always have the financial resources needed to cover deposits withdrawal, otherwise - if a bank-run occurs - institutions will default. To avoid those unpleasant situations, after the 2008 crisis stricter requirement has been enforced in terms of capitalization. Staying inside the liabilities side of the balance sheet another element to be underlined that characterize banks' balance sheet is the provision of various funds in order to ensure liquidity also when those extreme events occur. Those funds could be both required by law or be a precautionary and voluntary provision of the bank following counter-cycle and conservative principles.

On the other side of the balance sheet, assets are characterized by being relatively liquid, as they typically are constituted by various types of financial instruments which are reported as a percentage of their face value to account for some natural risks inherit in that special type of assets. The level and type of risks to which assets are subjected depend on the bank dimension and business focus. In this sense, larger banks with a high level of marketable assets with respect to non-marketable ones are seen as safer in terms of liquidity. In the case in which assets are classified between marketable and non-marketable ones, book values are much closer to market values than is the case for non-financial corporates, where most of the assets are carried at amortized cost (Bogdanova, Fender and Takáts, 2018, p.83).

The implications of such peculiarities on banks' valuation are the following. First, the use of both book methods (as NAV) and market ones (as Market multiples), can provide a better

assessment of the true value of the business. However, adaptation should be made for the sake of coherence, in order to make those ratios fit with the specificity of banks' business. In the view of Damodaran (2009) - a well-known voice in the field of valuation - financial service firms should be valued adopting equity valuation models, rather than enterprise valuation models, and using dividends (actual or potential) instead of free cash flow to equity.

6. Negotiation

After considering the results of the valuation the acquirer should be finally able to make an offer. Negotiations about the price along with terms begins, they have a crucial role for the duration of the whole operation. Every time new key information arises (if it has the potential to modify the terms and conditions of the deal) some form of negotiation should be made (Rezaee, 2001). Negotiations should allow for a certain level of flexibility to reach a compromise that fits both parts. Considering an M & A transaction two phases could be identified: preparing the letter of intent (LOI) and finalizing the arrangement (Razee,2001). A LOI is a non-binding agreement indicating the major aspects already negotiated by the parts involved. This document is a confirmation of previous negotiations - though non-binding - it explicitly states what are the fundamental elements of the futures contract which is the purchase and sale agreement.

Then the due diligence process follows.

7. Due Diligence

Due diligence is the process of examining thoroughly the information provided by the target to determine the accuracy and reliability of the information, the acquirer's final decision to buy the target, the purchase price, and how to finance the M & A transaction (Rezaee, 2001). This moment constitutes a deep-dive inside every aspect considered in the preliminary phase. The information gained prior to negotiations is further examined and evaluated both with a quantitative and qualitative analysis that covers both the company, its management, and the reference market. Aspects that are usually addressed are the analysis of all the information about both the business and the market, deepen the knowledge of the business and key aspect that could be especially relevant in the process, and assess all the risks connected with the operation also in light of the information gained through the previous phases. There are commonly three types of due diligence that are carried out: legal, operational, and financial. Covering all those subjects at a deep level is a very time-consuming process and requires many

actions, usually grouped in what practitioners call check-list. An important element is the financial due diligence which is aimed at assessing the financial solidity of the target bank also through direct interviews with relevant figures inside the target.

8. Purchase and sale agreement

The deal should be structured considering the needs expressed by both parts, otherwise, frictions could arise in particular in the form of opposition from the target management, possibly leading to an increase in costs. The steps that an acquirer should make in order to define an adequate strategy for the execution of the deal are (Deloitte, 2015):

- Implement a scenario analysis underlining the financial and operational consequences of possible problems arising throughout the transaction.
- Define how the deal will be done from a technical point of view. This means identifying the details of which assets will be acquired and how they will be taken, or - considering an acquisition of share - from which shareholder the share will be taken. The choice of assets versus share acquisition depends on considerations involving management agreement on the overall transaction as well as legal and tax costs. Indeed, assets acquisitions possibly result in increased costs since the legal property of each one of them should be transferred from the target to the acquirer. Those operations could not be performed at the drop of a hat but should be approved by the target management obviously prior to the operation itself.
- Define people's management and how possible litigation arising from different elements of the deal could be faced and solved. Litigations could be legal, financial but also arising from key figures inside the firm (i.e. the Board of Directors and the C level of the company).
- Management continuity should be address and properly negotiated. Compensations as well as the role covered inside the consolidated firm are long-discussed while evaluating the trade-off between business and culture continuity and efficiency. It may well turn out that there are positions duplicated inside the combined entity, therefore an assessment of the best person for a certain position should be made considering also how the continuity in the culture present inside the target entity will be affected by a change. In fact, the manager of a certain company will understand the values and how operations are carried out, better than an individual coming from outside the

organization. But it could well turn out that the manager of the acquiring entity results in being a more suitable fit on a technical level because, as an example, of its previous experience and skills. In that case evaluation of potential upsides and downsides should be performed.

- Consideration, meaning anything of value that is promised by one party to another³⁵, is reviewed as well in order to examine its implications. The fact of offering cash payment instead of notes or stock ones differ mainly on the liquidity side. Since liquidity is a topic to be carefully monitored, negotiations follow about the type of consideration to be used.
- Financial covenants are set and agreed upon by both parts in order to allow some possibility to modify initial terms. In fact, financial covenants are constituted by a certain ratio or values – obviously concerning financial performances – that the acquirer has to meet. If one or more covenants are violated during the operation, then additional liquidity will be required. The reason underlying the introduction of those elements inside negotiations (and later in contracts) is that the price initially defined for the target company through due diligence and valuation might turn out to be incorrect. Therefore, this option allows for possible errors or modifications in the initial values.
- The final step in strategy structuring is the tax side of the transaction. When relevant amounts are involved, a proper tax scheme could make the difference between an average transaction and one with relevant value. Multiple points of the deal include the need for some tax considerations, from the jurisdiction in which is best to perform the transaction to the possibility of tax exemptions for a certain type of operations, every detail should be carefully considered. Tax returns of the past eight to ten years should be reviewed to acquire relevant information. Since the consolidation of the two banks could be made by assets or share acquisition, further considerations are needed depending on the type of transaction on which the part have agreed upon. Asset transactions could be tax-free while share acquisition is generally taxed since they involve cash.

When all these elements have been clarified, both the target and the acquirer should be able to draft the final contract where all the points highlighted by the strategy are inserted. This final

³⁵ Source: <https://corporatefinanceinstitute.com/resources/knowledge/deals/consideration/>, accessed by September 2020.

document is known as the purchase and sale agreement. It is drafted by the acquirer's attorney to address the new issues that may arise during the due diligence process and to confirm the terms and conditions of the acquisition. The content of a definitive purchase agreement depends on the structure of the M&A transaction (Rezaee, 2001).

9. Financing the deal

All those phases and the deal itself has a cost. The financial side of the deal is fundamental to support each step. The financing possibilities available are basically two: equity or debt. From those really basic elements, several variations and tailoring are made in order to fit the consolidating banks' needs. Moreover, it should be noted that equity gives a minority interest in the company while debt requires a constant obligation because of its repayment. The financial structure depends on the size of the transaction, purchase price, and the nature and quality of both the target and the acquirer (Rezaee, 2001, p.94). Price setting in the valuation phase is the starting point to define which sum will be paid and therefore financed. Rezaee (2001) defined the total amount of financing is based on the following formula (2):

$$\text{Financing needed (equity/debt)} = \text{Purchase Price} + \text{transaction expenses} + \text{total fund needed} - \text{equity that could be raise-asset convertible into cash} \quad (2)$$

10. Making the deal done

When everything is in place execution follows. This moment has been long-planned and several professionals – usually external to the organization itself – provide their expertise in specific areas to ensure that everything flows as planned. When the deal is formally concluded another dimension opens up. The two entities indeed also if legally combined require an additional step to become fully integrated at all levels: Post-Merger Integration (PMI).

3.3.1 Final authorizations

Points six to eight and ten are substantially uniform across banking and other sectors. There are differences of course, but they are not as marked as the one highlighted. Parenthesis should be made to consider the specific authorization needed in a merger when the entities involved are financial institutions. Due to the systemic importance of the banking businesses, specific regulatory and supervisory requirements are introduced in order to protect not only shareholders but also all the stakeholders involved in the financial - economical system.

Supervisors and regulators will evaluate the combined entity in prudential terms. This means analyzing its compliance with requirements for the protection of shareholders, liquidity, capital, large exposures (ECB, 2000). The focus of supervision usually is posed on the target and the combined entity, while there could be cases in which also the dynamics of the merging process itself are evaluated. The accounting of goodwill and funds availability is a relevant aspect to be carefully considered along with minority shareholders and corporate governance clauses. In order to gain a deep and complete understanding of all the heterogeneous elements, information like documents required by company law and possibly a legal opinion on compliance with the corporate law, copy of the formal decision by the Board of Directors, an evaluation made by external auditors of if new the entity meets all the regulatory requirements (BIS, 2000), studies on concentration and market structure after the M&A, could be done or requested. In relation to market issues, what is evaluated are possible distortions of competition provoked by the prospective consolidating entity.

When cross-border mergers are considered, there are additional complications that need to be addressed due to the contemporary presence of two entities and related countries with their respective banking standards that could have different – and sometimes also conflicting – rules. At European level, a wide harmonization has been made to provide more stability to the overall system. The result of this process could be found in the Banking Union and all the supervisory authorities under the European System of Financial Supervision, established after the crisis.

3.4 Post-Merger Integration

Post-Merger Integration is defined as the process that unfolds in the aftermath of the deal closure to reconfigure merging firms by redeploying, adding, or divesting resources, lines of products, or entire businesses, in order to achieve the expected combination benefits (Bodner and Capron, 2018, p.2). Shrivastava (1989) identifies three main areas on which PMI should focus in order to successfully create a united entity. Each level is further constituted by three layers: coordination, control, and conflict resolution. Coordination allows us to gain awareness of the characteristics of each company and evaluating possible aspects that could apply - also if with some adjustments - also to the newly constituted company. Control refers to the need to monitor that processes are carried out properly and that quality is ensured among outputs of different departments. Finally, conflict resolution is the elimination of duplicated elements and contradictions.

Figure 1.4 Post-merger integration tasks.

	Coordination	Control	Conflict Resolution
Procedural	<ul style="list-style-type: none"> • Design accounting systems and procedures 	<ul style="list-style-type: none"> • Design management controlling system 	<ul style="list-style-type: none"> • Eliminate contradictory rules and procedures • Rationalize systems
Physical	<ul style="list-style-type: none"> • Encourage sharing of resources 	<ul style="list-style-type: none"> • Measure and manage the productivity of resources 	<ul style="list-style-type: none"> • Resource allocations • Asset redeployment
Managerial and Sociocultural	<ul style="list-style-type: none"> • Establish integrator roles • Change organization structure 	<ul style="list-style-type: none"> • Design compensation and reward systems • Allocate authority and responsibility 	<ul style="list-style-type: none"> • Stabilize power sharing

Source: Shrivastava, 1989.

As shown in the picture above, the first level to be harmonized is the procedural one. This means merging operating, managerial and strategical procedures finding a balanced mix that could apply to the newly constituted entity. This action of leveling the way in which business is performed has the purpose of establishing a common ground where communication and operations flow uninterruptedly between both different divisions and organizational levels. The presence of discrepancies and contrasting ways in which operations are carried out lead to increased costs in terms of time and money. On the contrary setting unified rules, gives a "common language" to all the people inside the organization.

Next, physical integration follows. It includes tangible assets like property, plant, and equipment (PPE), production technologies, and general physical elements of the company. But also, intangible assets are considered here (R&D is an example). In general, also product lines are counted inside this phase, in the specific case of banks, product lines are integrated mainly on a theoretical level reorganizing which types of services will be provided and the various tariffs and costs that will be applied to the clientele which is basically addressed at the previous point when considering SBU integration.

The last level of harmonization, and also the most complex one, is related to cultural elements. Since it entails peoples' management, several frictions may arise. It includes modifications of the organizational structure and the creation of a new corporate culture. The first one will be addressed by eliminating duplicated roles, in particular among executives, and a revision of how responsibilities are shared and to whom they are assigned, also in light of how SBU has been modified. Changes in structure have a deep influence on the company since they change the relationships between people both vertically (through different levels) but also horizontally.

An important link to be underlined is the one structure with information flow. The company should find the organizational design that allows the most efficient stream in order to reduce inconsistencies and inefficiencies among different SBU. Poor attention to communication may cause disruption in particular inside delicate phases of a company's life as M&A is. This is because people are central to every organization and if the information does not flow properly, engagement could go down due to a sense of lack of leadership. Decision making is fundamental when integrating two companies, as managers could have different styles in leading because their acts are involuntarily influenced by their belief and frames. Therefore, different and even conflicting frames of reference are present, and integration has the aim of facilitating communication between managers by ensuring that they rely on their decisions on the same ideas (Shrivastava, 1989). This process takes time and could not be achieved without an active interest in developing a new culture and new values that could be shared by all the people inside the organization. Otherwise, the risk is to lose key staff and thereby potentially losing the ability of the deal to deliver the forecasted value (Deloitte, 2015).

3.5 The reasons underlying the choice of consolidating

We have now understood that M&As are very complex operations involving specific risks in every single phase in which the deal is subdivided. Moreover, usually, the monetary involvement is significant with relevant exposures and expenses arising inside the process. A multitude of small actors such as accountants, lawyers, investment bankers, funds and so on, give their specific knowledge to build a small block of this enormous building constituted by the consolidation of two or more entities. Due to their complexity and the disbursement required, their ability to produce advantages has long been questioned. Indeed, they are no stranger to harsh comments like the one of Damodaran (2019)³⁶, labeling them "*the most value destructive action a company can take*". Stepping aside from those extreme positions, multiples reasons on why consolidation could be beneficial or at least pursued by companies could be found.

Although specific evaluation should be made according to the considered case since differences could be found over time, across countries, across industry segments, and even across lines of business within a segment as noted by BIS "*Consolidation in the financial sector*" Working

³⁶ Source: https://blogs.cfainstitute.org/investor/2019/02/28/aswath-damodaran-on-acquisitions-just-say-no/#_prclt=PbPOXsRa, as accessed by September 2020.

Paper (2001). The distinction made a divide between motives that depend on the acquirers' internal needs and environmental factors.

3.5.1 Internal motives

The first one – internal motives – cover the aspect related to the creation of internal synergies. There could be companies willing to acquire a target due to the need of increasing the scale and scope of their operations and therefore reduce costs, or because they are willing to increase their market power for example. This type of reason is further divided into cost savings, revenue enhancement, and other motives.

3.5.1.1 Cost savings

Economies of scale

There are several ways in which consolidation can help an organization to reduce costs. The most obvious one is the possibility to exploit economies of scale. Those cost savings arise when a company is able to produce more efficiently, usually as a consequence of a wider dimension. This happens because when an organization increases in size, costs are spanned over a larger asset base. The integration of financial service providers into larger institutions can create cost scale efficiency gains through spreading fixed costs over more units of output, taking better advantage of technology, issuing securities in larger sizes, and many other ways (Berger, 2000). In general, when considering banking consolidation one of the major sources of saving is the reduction of the labor force due to the duplication of functions, especially at the executive level. Nonetheless, several obstacles are encountered - especially in the European context – to the optimization of human resources (Amel et al., 2004). Findings (BIS, 2001) indicate that economies of scale are an important factor, influencing the consolidation decision for firms that operate within the same country and industry segment.

Economies of scope

Economies of scope are when the production or the simultaneous presence of two products/services, reduces the overall cost of offering them. They occur when producing a variety of goods or services combined is more cost-efficient than producing each good separately or a smaller range of products. The several services offered by a bank could for example share the same technological infrastructure or the databases used in particular during

KYC analysis and general assessment of a clients' solidity or during the bank credit procedure. Those contingencies are such that the cost proportionally decreases. Efficiency comes also from the expertise in a certain field (e.g. business lines, technologies used in the commercial process, information about clients) that the target could possess. Sometimes especially for what concerns technologies and information or the relationship with certain clients, the acquisition is more efficient than investing time and resources in building the same network internally.

3.5.1.2 Revenue enhancement

Another element on which consolidation can have an impact are revenues. It might be the case that the combined offering of two services (in our case of banks) carries more value than the two standalone. This could be due - for example - to the easiness with which clients could find several solutions all inside the same bank instead of having multiple accounts to cover various needs. Moreover, the integration of a higher variety of services allows to tailor the offering consistently with clients' needs. But products are not the only commercial element to be influenced by consolidation. Geographical presence usually increases with consolidation. Indeed, the acquirer not only incorporates the target company but also all its regional branches and point of sales. An increased geographical presence could allow to expand the client base since many clients will find it easier to reach the bank. We refer to chapter 1 for the discussion about geography and its influence on credit relations. Easiness to reach the clientele and products that better fit clients' needs may lead also to increased market power. This is due also to the acquisition of the target client base that directly increases the market share possessed by the combined entity. According to BIS analysis (2001), the enhancement experienced by the product portfolio, and synergies between existent and newly introduced lines, are primary factors fostering domestic cross-segment mergers.

3.5.1.3 Other motives

An increased scope of operations and the presence of a wider range of business lines, as well as potential customer base enhancement, have the effect of decreasing risk thanks to diversification via pooling effect. Moreover, also if changes in company culture and in organizational structure are particularly difficult to implement with success, they could be beneficial. The acquirer might gain additional capabilities in terms of executive expertise in particular of key people in charge of strategy definition and execution. This results in a consequent increase in efficiency due to better capabilities in terms of managing the company.

3.5.2 External motives

Aside from motivations underlying consolidation that are linked to the specific context in which - in our case – the bank operates, other element linked to the environment could favor the decision to engage in M&A activity. Environmental factor, though not alone, have a significant influence and should not be regarded as secondary. Research and empirical evidence have well proved by now, that M&A activity is concentrated in what are called "waves". Looking at the distribution of the number of Merger or Acquisitions per year we could find peaks concentrated in certain periods, while moderate to none activity in others. The environment, in other words, provides the fertile ground for those operations. External motives are constituted by the following elements: technology innovations, regulation, and external pressures.

Technology innovations

Advancement in technology made collectively and not only by the single entity, enhance M&A activity because of their positive impact on cost. The development of a certain technology requires high R&D costs that not all banks are able to achieve. But there comes consolidation with its double effect on revenues and costs. If a company from a certain sector (could be both inside the banking industry but also outside) test technology with success and start specializing in a field that could be relevant for the bank, then a proper strategy might be the one of acquiring the considered company in order to incorporate the innovation. This action reduces the cost opportunity of time spent in developing the technology, the cost connected to research, and the risk of possible failures. Moreover, when a certain advancement is made and adopted by the overall market, its cost decrease. This situation allows also smaller players to access certain technologies and advance on the innovational side. In addition to that, consolidation also lets companies spread their costs over a larger customer base, reducing the fixed costs related to R&D (BIS, 2011). The presence of an increasingly technological capability helps to reduce possible downsides linked to size enhancement connected to consolidation. If communication and information flow is positively influenced by the newly introduced innovation, then the risk of diseconomies linked to size is mitigated.

Regulation

Regulation and modifications inside normative codes usually play a central role in shaping the context in which economic activities are developed. As we have seen at the beginning of this

chapter, regulation had played a fundamental role in prompting M&A activity at the European level. In the past decades, multiple deregulations have removed the barriers once present to consolidation. Rules concerning market power and monopoly along with regulations of the banking activity had the result of favoring a wide wave of M&A inside several states in the European continent. Nowadays, limits are significantly reduced both for national but also for cross-national consolidation.

External pressures

When a sector expands, competition naturally increases as a direct consequence of having more competitors in the same arena. Indeed, profit margins decrease due to pricing pressures connected with the willingness of gaining more market share at the expense of the other players. Profitability is key for shareholders since they gain from the company's value creation. Therefore, they will put pressure from the inside to increase margins. Two opposite forces are therefore present, one pushing from the outside and drawing down profit, while the other coming from the inside and expecting their increase. A way to solve this dilemma is by acquiring competitors. In this way, in addition to possible upsides listed before, there will be the elimination of at least some competition that may likely have a positive impact on the acquirer bottom line.

CEO and top management compensation

Aside from the presented factor, another aspect should be underlined when examining motives for consolidation. This is the compensation of acquirer management. A lot of criticism is present around this topic, in particular in the aftermath of the 2008 financial crisis, and cap to bonuses has been introduced in various regions to limit possible excessive incentives. Nevertheless, there is wide evidence (see for example Bliss and Rosen, 2000 or Anderson and Becher, 2001) that consolidation has a positive effect on CEO compensation, thus constituting a form of incentive for them towards favoring those operations. The increase appeared to be linked in particular to the increased size of the managed entity. In fact, a wider organization requires increasing skills due to its complexity. As noted by Anderson and Becher (2001), a relation between firm size and compensation levels is consistent with markets for managerial labor in which the largest firms bid up the compensation of highly skilled executives because their managerial product is higher at such firms. Thus, since their effort is compensated (or at

least should be) properly, an increase is usually experienced and another motive for consolidation could be found.

3.6 The consolidation of the banking system and consequent modifications in credit relations

The consolidation undergoing at European and Italian levels since 1980 has long made researchers question its true ability to increase efficiency. What is most looked at is its capability to cut costs and transfer this positive effect to the borrower, along with credit availability in particular when considering SMEs. When consolidation takes place, the complexity of the merged entity increases. This development could create a mismatch between SMEs needs and the new framework with which they find to confront themselves. Due to external dynamics and interactions, consolidation does not have a net negative impact, but its influence depends on a multitude of external and internal elements dynamically dealing together. For example, due to market forces, it could be the case that also if a larger institution will tend to lower its lending to small businesses, other providers will increase the credit extended to those firms due to the market opportunity created. Therefore, it is difficult to assess a-priori if Mergers and Acquisitions (briefly M&A) are positive or negative for small business. Moreover, it has been proved that the interests charged have the tendency to be lower when a market is dominated by large banks rather than small ones (Berger et al., 2001). Thus, a review of the relevant literature shows dispersion and a requirement for deeper analysis since there is no scheme in which all the operations could be fitted in.

Possible reasons underlining the willingness to engage in such operations could be found in cutting inefficiencies through the production synergies and branches acquisition. By definition, an M&A operation creates value (synergies³⁷) either by reducing inefficiencies or creating a positive impact on existing products/services. This implies that many times M&A is used as a means to cut overlapping function between two banks and incorporate the business parts that fit strategically better. Sometimes acquisitions are also made with the specific purpose of acquiring branches in a certain strategic region, not already or not enough covered by the acquiring bank. Lastly, we need to remind ourselves that the banking industry is heavily regulated, with several authorities monitoring and intervening in operations' judgment. In fact,

³⁷ Synergy is the word that describe the concept for which the combined value of two companies after a merger, will be greater than the sum of the two standalone parts.

there are cases in which restructuring is not an option but is a requirement made by antitrust and related institutions to allow the deal itself.

The analysis of the impact of M&As on bank lending behavior – as introduced above - is quite complex. The influence that those operations have regard multiple features of a bank, therefore a subdivision of the effects could be made in order to give a clear explanation of how the modifications act. The following distinction will be made first between static effect - that includes the size effect – and dynamic effects, those furtherly divided into restructuring, direct, external, and timing effects.

1. The size effect

The first effect has a static nature and it is a natural consequence of merging two entities. The newly constituted entity will be indeed characterized by a balance sheet with increased assets, coming from the two merging banks. Not only assets will add together, but also the resulting market positioning in the market will experience the same course. The literature considering this argument (see Beretta and Del Prete, 2002; Montoriol-Garriga, 2008; Peek and Rosengren, 1998; Berger et al., 1997) has reached a fairly solid consensus around the negative impact produced by consolidation on SMEs credit availability. When banks increase their size, relationship lending technologies become less attractive as institutions seek new clients rather than consolidating previous relations. In this case indeed, other ways of conducting (and rating) them become more attractive, usually at the expense of small and medium businesses. The result observed is a contraction in small business loans for each dollar of assets (Berger et al., 1998). In addition, after the deal, borrowers have a lower probability of starting a relationship with the newly combined entity due to information asymmetry and the adoption of credit scoring or other transaction-based quantitative rating systems.

The other issue concerning size is related to increased market power due to a summation of the individual quotas. That produces a reduction of competition and an increase in concentration. This adds to the already weak contractual position of small businesses to which higher fees are required due to strength in the market position and power that banks find themselves with. A way to test for a decrease in competition and related pricing power increase is through the analysis of interest rates. Since they constitute the most relevant part of the cost of financing, an increase in the required rate all things being held equal would signal an increased pricing power while a decrease could also depend on it. In general, the theory suggests that interest rates

tend to decrease when the relation with the bank is maintained (Berger and Udell, 1995). In this case, synergies are partially shared with borrowers.

2. The restructuring effect

Restructuring produces a dynamic effect on the combined entity since it gives the starting propulsion for further modification inside a certain organization. Restructuring results in an increased organizational size to which different financial conditions are applied and a stronger market positioning. The effect of restructuring depends on the policies and strategies adopted in the integration phase as well as the purposes of the Merger itself.

A first scenario is the one in which the combined institutions have merged to reduce excess bank capacity. What we will observe is a reduction of the total assets due to the selling of redundant businesses that exceed the actual demand. That contraction in the total assets has a naturally positive impact on small businesses, toward which smaller institutions are more inclined to lend. Other modifications connected with restructuring are changes in portfolio composition. This is due to changes in risk management techniques, changes in operating efficiency, or changes in risk preferences (Berger et al., 1998, p.194). Those changes likely impact the conditions of credit offering and availability. This because – as an example – the first requirement for cost efficiency inherited in the definition of M&A value creation, often implies the elimination of branches in the same region due to a duplication of the presence for the combined entity. The elimination of redundant or inefficient branches could lead to an increase in physical and organizational distance. This phenomenon – as we have seen before in chapter 1 – could imply a re-distribution of decision center which in turn may cause credit rationing.

This inevitably creates damages for the economies of those smaller companies, finding themselves dealing with new conditions and – sometimes – also with the closure of certain accounts. As we have already highlighted the relevance of relationship lending and of long-standing connection between banks and businesses, the entity of the problem of account closing for small businesses should be clear.

We may notice that not in all cases M&A operations produce this result. As seen above, when the goal of an operation is acquiring branches in a certain strategic region, then consolidation favors information gathering and specifically soft ones. The result is that a relative advantage for SMEs is created, potentially reducing their direct or indirect costs of financing. When

consolidation has the consequence of increasing the branches near a certain firm, the credit provided declines less dramatically (Beretta and Del Prete, 2002). There are situations where the bank takes a "strategic approach", valuing relations and soft information more than diversification. In those cases, the increased presence and proximity could be a means to enhance factors favoring relationship-building and credit. In particular, an understanding of the peculiar local features of a region result especially relevant in countries - such as it is Italy - characterized by heterogeneity in the socio-economic environment. Geographic presence along with policies favoring decentration in decision-making could help small businesses (or at least not hinder them) to access credit and develop strong relations with their lenders. Those who are able to capture that advantage experience lower interest and benefit from entities characterized by greater efficiency.

Also, regulation could have a relevant influence in shaping actions, and the most common operation resulting from that type of restructuring is the divestiture of some business lines or branches, where an excessive market concentration would result after the Merger. If this is the case, a third bank - external from the originating deal – will acquire clients, business lines, or branches of one of the merging entities.

3. The direct effect

The direct effect comprises the net impact on small business lending of the operation as a consequence of reducing or augmenting the focus on SMEs financing. Its impact is taken independently from the size and the further implications of restructuring and comprise only the difference between a bank's lending after consolidation and the lending of another institution that share the same characteristics of the considered bank, but has not undergone a recent M&A (Berger et al., 1998).

The direct effect consists basically of the decision management have made regarding the lending strategy. From that decision derive a series of implications that involve changes in the business at all levels from organizational to commercial aspects. The result could be a modification in the lending policies adopted or decision-making policies that favor decentration, with related changes in the procedure implemented to acquire, evaluate, and monitor loans. Those effects do not relate only to prospective clients but have their influence also on existing ones, toward which more or less credit could be granted. But every cloud has

a silver lining and if a lender manages to retain its relationship with the combined institution it would likely benefit from a more efficient bank, able to extend credit in an improved manner.

We can see how the three effects (direct, size, and restructuring) are deeply connected and constitutes elements of the same process, which is the reorganization of the combined institution. Those strategic decisions are made well before the operation actually takes place and are designed to cover all the implications of the transaction in order to significantly reduce risks. Combining two business means not only add two pieces together but mixing people and business cultures, a process hardly without frictions. This is why dynamic and static effects are strictly correlated with one another.

4. The external effects

External elements influence credit relation in the measure in which both banks and firms are part of an interconnected system. Assuming no reaction from other players is simply not realistic. A consolidation shapes the competitive environment, influencing the opportunities available for other players (Berger et al., 1998). As an example, competitors could take advantage of the reorganization of the personnel. Indeed, an unlucky but very common consequence of mergers are layoffs and labor modifications, due to cuts made for redundant functions. Officers and branch managers experiencing those situations can take an existing client with them. In fact, since officers – as seen in chapter 1 – are fundamental actors inside the relations between firms and the bank, they could have built a relation with their client companies' management that overcome the organization. This because through time officers are likely to develop a personal relation with their client which in turn will be ready to follow them if they switch to another organization. Officers may decide to join the competition or start a venture of their own, thus eroding some market power from the consolidated entity. It has been observed that officers could carry their portfolio of clients with them and start a *de novo*³⁸ bank with the previously served customers (Berger, Goldberg and White, 2001).

A second external effect that could be detected is that "new-entrants factor". M&As with their reduction in market presence due to the consolidation of two entities, eventually create space for new ventures and players. We could consider the banking sector as a zero-sum game where when one player reduces credit, another enters to supply the uncovered demand. In fact, an

³⁸ A *de novo* bank is a financial institution that has been created less than five year ago. It is subjected to particular supervisory requirement and could be described as the "start-up of banks".

increased probability of market entry arises with consolidation operations. New entrants could be mainly of two types. The first are officers and other players opening a de novo bank as an answer to the need for resources arose after an M&A operation has occurred. Another set of entrants are previously existent banks that, due to their characteristics, can efficiently supply the customer left behind by merged entities. Recent entrants tend to lend more to SMEs and also the fact of entering a certain market does appear to be highly correlated with significant innovation and an increase in efficiency (Berger et al., 1999).

5. Timing considerations

In addition to the previous factors, another dimension should be taken into account, which is timing. The first static effect, size, has its influence until the integration is terminated. The other three dynamic effects instead could take years before losing their relevance to the firm as we briefly explained above. Managers and researchers find themselves divided when confronted with indicating the period after which influences of the integration are assumed to cease. The former opts for a three-year period while the latter find five years as a more appropriate timeframe.

3.7 Small business lending after consolidation

After breaking down the static and dynamic effects of consolidation on credit supply to SMEs we look at the joint effect of those factors specifically focusing on what those factors produce jointly in the aftermath of the deal.

Several researchers have investigated the net effect of consolidation on credit relations especially looking at SMEs. Their findings are that those companies engaged in relations with the target are the ones worse off and likely experience credit termination after the deal. This is no surprise since Acquirers are the ones conducting the deal and, also if they do have to make modifications of their structure to integrate correctly, they are still the "base" entity to which pieces are added. They decide on the Post-Merger Integration strategy and could see several clients as obsolete for diversification purposes. It has been found (Beretta and Del Prete, 2002) analyzing firm financed by several entities, that in a three-year period the share of credit provided by banks that experienced consolidation drops significantly with respect to others who do not. This proving the existence of diversification strategies in credit provision. But there is an opportunity cost in opting for this path. Banks have to face a trade-off between that

strategy and the cost of gathering new information on opaque SMEs. Therefore, it is likely that small credit institutions will be the more efficient producer of locally intensive information businesses thanks to their closer relation with communities and people in charge of conducting the credit relations. Proof is, that a negative correlation between the size of the institution and the share of the credit portfolio consisting of business loans that are small has been observed (Peek and Rosengren, 1998).

The advantage is not only linked to the strength of the relation but also a deep understanding of the socio-economic environment is that characterize branch managers. Needless to say, the skillset required to institutions providing credit to those businesses is dramatically different from the ones for banks oriented towards larger companies. In addition, the contraction of credit could be a consequence of the increased number of opportunities in lending to larger enterprises, which "crowds out" small business loans in the use of increasingly costly funds (Berger, Goldberg and White, 2001). In their study, Berger et al. observed that also the disruption caused by extraordinary operation (such as M&As) causes flows that external competitors are able to exploit. In the Post-Merger phase, due to the adjustment undergoing, clients are likely to experience some disadvantages (eg. Due to the integration of the two IT systems there could be interruptions or mismatching in databases and problems related to personnel's training). For those reasons, in several cases, customer runoffs have been detected after an M&A (Berger, Goldberg, and White, 2001).

In general, since it is widely accepted that bigger institutions are less focused on small business lending the common result is that the acquirer of the consolidated entity will be less inclined to lend towards small businesses as they are not able to profitably extend credit to those entities.

Instead of focusing on SMEs - after an increase in size through M&As - other activities arise due to economy of scale and of scope providing new competitive advantages. Big banks attract big companies as they are more efficient in producing their services. But consolidation does not have a stand-alone direct impact on credit availability. What has been found to be relevant (Beretta and Del Prete, 2002) is multiple-relations involvement in the same operations. This means that a contraction is registered specifically when two banks financing the same company, merge together, and form another entity. The idea is that duplication in the lines of credit provides an incentive toward simplification and diversification rather than an increase in the resulting position of credit available. This relates to another fundamental concept which is concentration risk. Concentration leads to a reduction of the clientele served, increasing the

relative exposure towards one single client. Thus, in the case of distress, problems may arise for the bank. In particular, after the 2008-2009 crisis, banks are particularly skeptical in taking on risks not needed or easily justifiable (OECD, 2009). In addition to their carefulness, also restrictions imposed at national and supra-national levels have contributed to set constraints to banks' activities. Evidence confirm in fact that the main driver when considering credit reduction is diversification.

Looking at the diverse impact of M&A has been found to bring more severe consequences into action. Modifications in credit are more likely to happen in that case due to modification in dimension, cost, and organizational structure. We should notice that, although those differences exist and statistically speaking are significant, they are not wide, suggesting a limited impact of the methodology used for the deal.

Special information needs are particularly sensible to consolidation phenomena. Considering the Italian case, an element that will be highlighted also in later chapters is the difference between North and South. Certain regions have been proved to be more critical than others (Coccoresse, 2004). In those cases, rationing is even more likely to be experienced after consolidation due to idiosyncratic risk inherited by external factors. Consolidation influences those types of firms because of the shock produced to relations established that are critical to overcoming the barriers that we have just underlined. To generalize the concept highlighted, we could state that businesses characterized by special informational needs are the most impacted by operations due to their critical dependence on well-determined elements of stand-alone organizations. Other situations that could be reconducted to this specific contingency are firm in financial distress or potentially at risk. For those entities, the reduction is stronger than the previously highlighted categories.

In general, the literature agrees on the common finding that M&As reduce credit if the involved entities are large (or at least one is). Whereas, when the considered institutions are small, then an increase in lending to SMEs tend to be found. After several years of consolidations, banks nowadays are mostly medium and large. Therefore, when we speak of banks M&As is also natural to refer to a contraction in credit supply also if several factors need to be considered prior to arrive at such a conclusion.

3.8 Summary

We have now seen the ten steps of a typical M&A process, ranging from the draft of an acquisition strategy to the final execution of the deal itself. To fully exploit the benefit included in the structuring phase, when evaluating possible synergies derived from the operation, we have seen how PMI is a fundamental moment. PMI has been identified as the process of reconfiguring merging firms by redeploying, adding, or divesting resources, lines of products, or entire businesses (Bodner and Capron, 2018). Altogether, an M&A operation requires extremely specific expertise in order to successfully manage its complexity and it is no strange to hire many external consultants in the process. Due to those costs connected with the operation increase and this is the reason why their ability to create value has been questioned. Nonetheless, there are several motives, both internal and external that drive M&A waves. The consolidation inside the banking system has a deep influence on credit relations. The merge of two banks in fact implies also the merging of two different client bases and of their respective branches. We analyzed the combined effect on credit relations dividing factors between static and dynamic effects. In conclusion, we examined how, in particular, small business lending is modified after consolidation. All the discussion covered inside those three chapters allow us to introduce the empirical case that will be covered in the next part where a first introduction to the history of consolidation inside Europe and then Italy

4. BCC Pordenonese Monsile: merger and credit supply in practice

4.1 The BCC development: banks for the territory.

A Cooperative Credit Bank - Banca di Credito Cooperativo (BCC) – is a form of banks under Italian law, which has the peculiar characteristic of being in the form of a cooperative company. They are a class of enterprises based on mutualistic and social principles, serving the territory in which they operate. Indeed, another element characterizing those companies is their composition, made of stakeholders which are the direct expression of the local communities³⁹.

Cooperatives banks were previously known as for rural and artisan banks ("Casse rurali e artigiane" or CRA), born in Germany at the of the XIX century as a form of credit based on ethical and local development principles. In Italy, the first CRA was established in 1883 on a previously existent model, invented by the German politician Friedrich Wilhelm Raiffeisen. They were immediately associated more with banks than with cooperative companies, thus defining a certain autonomy that was later accentuated by a different regulation to specifically rule the CRA system.

Relevant moments for the development of such banks were the reconstitutions of the Italian confederation of rural banks and the foundation of the Institute for the rural and artisanal banks (ICCREA). The purpose of this institution was to sustain the development of BCCs and CRAs by coordinating their actions e having a credit, intermediary, and financing role. With the goals of emancipating them from banks by providing the means to coordinate actions⁴⁰. The group is still working today as one of the major players in the context of cooperative credit and include also the companies under our analysis: BCC Pordenonese and BCC Monsile, now merged in a single entity named BCC Pordenonese Monsile.

The name Cooperative Credit Bank arrived in 1993 with the Testo Unico Bancario (TUB). The new regulation introduced some major changes, allowing BCC to provide all the services offered by banks. Moreover, the TUB opened the way for a more diversified shareholder structure allowing the participation of all actors, both private and legal person, that operates or

³⁹ Source: https://it.wikipedia.org/wiki/Credito_cooperativo, as accessed by September 2020.

⁴⁰ Source: <https://www.gruppoiccrea.it/Pagine/ChiSiamo/storia.aspx>, as accessed by September 2020.

have their headquarters in the relevant region. Two years later, in 1995, ICCREA Holding was created and appointed as the group leader of the Cooperative Banking Group ICCREA. The Holding – still working nowadays - has the purpose of providing BCCs with a competitive product and service offering both for their operations and their clients. The capital of ICCREA Holding is participated by the various BCCs on the territory. In addition, ICCREA Holding is in turn part of the UNICO Banking group, the association reuniting all the Cooperative banks of Europe⁴¹.

Due to their peculiar nature, some important regulatory specifications characterizing BCCs should be highlighted. The fundamental normative basis is stated inside the second section of the TUB, inside articles from 33 to 37-ter, explicitly referring to BCCs. The articles establish a special relation between the bank and its reference region, stating that, in order to be a shareholder, candidates should be engaged in continuous relation with the reference territory of the bank itself. An important reform was introduced in 2016 by the D.L. 14th February 2016, n.18 when BCCs were deeply reviewed in order to restore their ability to compete with other major players and thus increase their capital solidity (Banca d'Italia, 2017). In order to accomplish those goals, regulation required the participation to a Cooperative Banking Group in order to be allowed to practice the banking activity and also be inserted in the Cooperative association register. In addition, associates should not be less than 500 and the quotas possessed by each shareholder could not be higher than one thousand euros in order to avoid excessive concentration of liquidity. Moreover, banks can define at a statutory level the minimum amount of share to be bought by prospective shareholders in order to effectively gain the possibility to enter the corporate structure.

In 2016, ICCREA Bank and ICCREA Holding merge into a single entity, setting the former as its group leader in consideration of banking license. That operation allowed the newly created entity to effectively adhere to ECB requirements.

Finally, in 2019 two major Cooperative Banking Groups were created, one with ICCREA as its group leader (gathering together 142 BCCs) while the other referring to Cassa Centrale Banca. The rise of two major reference points, present on a national level, implied the rise of duplication of branches inside several regions. That situation created the input for a wave of

⁴¹ Source: <https://www.iccreabanca.it/it-IT/Pagine/storia.aspx>, as accessed by September 2020.

merger that allowed (and is still allowing) BCCs to join forces in order to reduce inefficiencies and increase their competitiveness with respect to bigger banking entities.

4.1.1 BCC Pordenonese Monsile

The BCC Pordenonese Monsile was born on the 22nd of January 2020, from the merger of BCC Pordenonese and BCC Monastier del Sile, both already included inside the previously mentioned ICCREA Group. The merger was authorized by the ECB (14th November 2019, ECB-SSM-2019-ITICC-117 and ECB-SSM-ITICC-119) and the two BCCs shareholders' assembly. Reading directly from the BCC site, they reported the following statement regarding the operation:

"The project of unification, through an increased size allows to take as a unitary factor the excellence of both institutions, creating wider economies of scale and scope, with an amplification of the commercial network and the services offered in areas not already covered. The newly created institution can count on dimensional indicators connected with relevant collection and employment capabilities, credit assets for €2.5bn – which makes it the third cooperative credit entity among those operating between Veneto and Friuli Venezia Giulia – and strengthened patrimonial profitability, and solidity indexes.⁴²"

Thus, in January the new entity was finally created with 58 branches operating inside the Pordenone, Treviso, and Venice regions. This cross-regional unification allows the bank to gain efficiency by promoting the cooperation between Friuli and Veneto, enhancing the value of the entrepreneurial environment present in both regions.

This inter-regional element is one of the main peculiarities of the operation. Indeed, for ICCREA Group, this was the first merger involving two different regions. Due to the generally circumscribed scope of the operations of BCCs - also dependent on their statutory requirement prescribed by the TUB and the Bank of Italy – they are not allowed to have the opportunity of geographical diversification and the connected enrichment of which traditional banks could take advantage. Therefore, in some dimensions, we could compare an inter-regional merger between BCCs with a cross-border merger between traditional banks.

⁴² Source: https://www.bccpm.it/template/default.asp?i_menuID=29685, as accessed by October 2020.

Although the two BCCs presented several similarities due to their affiliation with ICCREA, a spread presence in different territories, and other differences connected to the infrastructure and the product offering, were present. Those elements were the basis for the construction of synergies and increased efficiency is given by the merger.

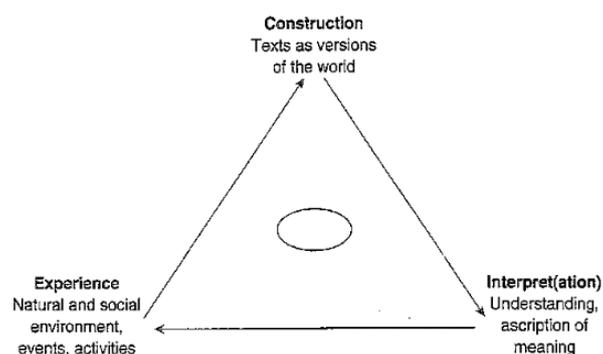
4.2 Research methodology

4.2.1 Review of qualitative research approaches and theoretical basis

Inside our work, we adopted a qualitative research approach. Qualitative research is based on collecting and analyzing nonquantitative data. Through the use of language, it allows its users to extrapolate different visions and gain insights about peoples' perceptions of certain research topics or problems. This method describes the reality '*from the inside out*', *from the point of view of the people who participate* (Flick, von Kardorff and Steinke, 2004, p.3). It is mainly used in social studies as a means to understand the insider development of operations and patterns that could be drawn from individuals experiencing a certain event. Four basic theoretical assumptions are made in order to move forward by allowing researchers to build analysis consisting of the interpretation of individual constructions of experiences. Flick, von Kardorff and Steinke (2004, p.7) stated the following assumptions:

1. Social reality is understood as a shared product and attribution of meanings.
2. Processual nature and reflexivity of social reality are assumed.
3. 'Objective' life circumstances are made relevant to a life-world through subjective meanings.
4. The communicative nature of social reality permits the reconstruction of constructions of social reality to become the starting point for research.

Figure 4.0 Understanding between Construction and Interpretation.



Source: Flick (2009).

Since participants are asked questions about their realities, they will provide a personal acknowledgment, thus providing evidence of what consequences a certain event has had in their life. Therefore, individuals – as represented in Figure 4.0 - build their construction of experiences and translate those meanings into words that in this framework are a representation of realities filter by ones' prior belief. The act of researching is inherited in the interpretation and understanding of those senses.

Qualitative research should not be intended as an unambiguous and straightforward method. Like all types of research, it is partially shaped according to the means of the research itself. Also, the type of approach that will be used from collecting data to the following analysis will influence the types of qualitative approaches that will be taken. Traditionally the division depicted in Figure 4.1 will be made, where the one taken by the current work is highlighted.

Figure 4.1 Research perspective in qualitative research.

	Research perspective		
	Modes of access to subjective viewpoints	Description of processes of creation of social situations	Hermeneutic analysis of underlying structures
Theoretical positions	Symbolic interactionism Phenomenology	Ethnomethodology Constructivism	Psychoanalysis Genetic structuralism
Methods of data collection	Semistructured interviews Narrative interviews	Focus groups ethnography Participant observation Recording of interactions Collection of documents	Recording of interactions Photography Films
Methods of interpretation	Theoretical coding Qualitative content analysis Narrative analyses Hermeneutic procedures	Conversation analysis Discourse analysis Genre analysis Document analysis	Objective hermeneutics Deep structure hermeneutics Hermeneutic sociology of knowledge
Fields of application	Biographical research Analysis of everyday knowledge	Analysis of life-worlds and organizations Evaluation research Cultural studies	Family research Biographical research Generation research Gender research

Source: Flick, von Kardorff and Steinke (2004).

In the context of an analysis centered on organizations and their operations, the modes of access to subjective viewpoints translate in a description of how every individual has experienced the researched event, which in our case is the merger between BCC Pordenonese and BCC Monastier del Sile. The qualitative analysis takes advantage of induction from the words used and sees them as a mirror whose reflection makes the unknown perceptible in the known (Flick, von Kardorff and Steinke, 2004). While people interviewed provide their understanding of this event, they indirectly give evidence of how the organization has been able to coordinate

individual experiences into a single corporate event. Organizations are indeed the result of the contributions provided by its members and are established as a means to coordinate human activity toward a certain objective, building, and structures that are able to last and survive the lifetime of single individuals.

4.2.1 Interview subjects and methodology

The aim of the current work is to investigate, through the use of empirical qualitative methods, whether the evidence provided inside the first chapters related to the dynamics between demand and supply of credit and its modifications, is effectively present and applies to real cases. Moreover, the use of qualitative analysis allows us to further investigate possible deviations from theory and their possible correlation with the particular environment in which our case is inserted.

To understand how credit relations are affected by consolidation we interviewed four members of the Management of the newly created entity. The interviewed subjects were already part of the two merging banks prior to the operation. Therefore, no external element (or point of view) has been added, the experience reported are indeed the ones of people who have experienced how operations were carried out inside one of the twos separated entity prior to the merger and later saw the changes inside the consolidated bank BCC Pordenonese Monsile.

People interviewed were equally divided between the two branches of BCC Pordenonese and BCC Monastier del Sile, two interviewees from the former and two from the latter. The role they covered prior to the consolidation of the two banks inside BCC Pordenonese e Monsile are depicted in the second column of the Table presented below (see Table 4.0). In order to start understanding the modifications introduced also in the internal structure of BCC Pordenonese Monsile through the merger, the roles of interviewees also after the consolidation are reported in the third column.

We will number our subjects as stated in the following Table and refer to them accordingly. Therefore, the name of the interviewed subject will not be disclosed in the present work.

Table 4.0 Roles of interviewees inside BCC Pordenonese Monsile and prior banks.

	Role prior to the merger of BCC Pordenonese Monsile.	Role after the merger of BCC Pordenonese Monsile.	Original reference bank
1	Area Manager	Head of Corporate division	BCC Pordenonese
2	Executive sales manager	Sales Manager West Pole	BCC Monastier del Sile
3	Executive sales manager	Sales Manager East Pole	BCC Pordenonese
4	Head of Execution and Organization	Vice General Director	BCC Monastier del Sile

Source: own elaboration.

The interview was held as a semi-structured interview which involved three open questions (see *Appendix B* for the full text of the questions proposed during the research) that have been previously sent to the interviewees in order for them to articulate answers and provide a wider insight of their experience. On average the duration of each interview was about 30 minutes. All the interviews were first recorded and later transcribed and analyzed in order to provide full attention to details deriving from the answers and impressions given by single subjects.

The use of semi-structured interviews allowed to guide the interviewed subjects towards the elements that were relevant for the current works, without imposing tight bounds but also allowing to maintain a certain degree of control of the conversation and of the topic discussed.

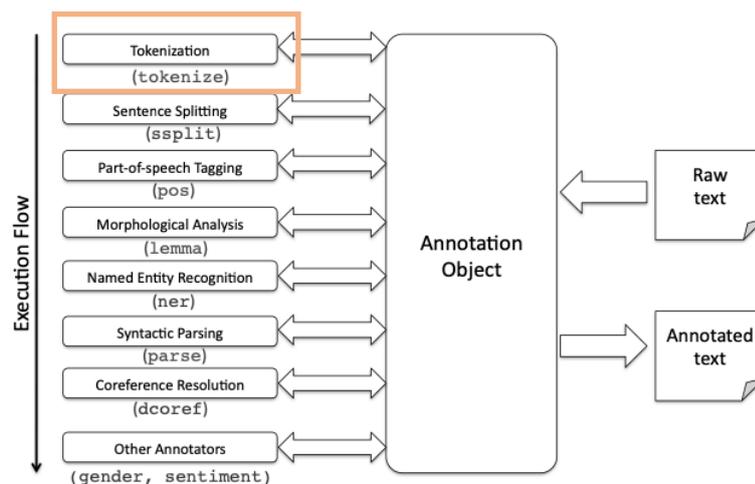
4.3 Evidence from the interviews

The first part of this empirical analysis is aimed at selecting the most relevant theme from our qualitative data (the interviews). In this case, a hybrid method had been adopted. First, we examine data through a text mining analysis, in order to give a quantitative backup to our theme selection. Second, we provide additional themes that did not emerge from the previous analysis but that is consistently observed inside the answers of our interviewees. In fact, we are aware that also if a text mining approach could provide interesting insights into how natural language represents reality, a machine could not substitute the perception acquired through dialogue.

4.3.1 Descriptive NLP word analysis for theme identification

The first analysis was performed using the Natural Language Processing (NLP). This methodology has the purpose of quantifying natural language and providing significant, quantifiable insights of texts and words. NLP is considered a subfield of Artificial Intelligence (AI) and a mix of other subjects such as linguistics and computer science. In order to analyze the text of the answers provided by our interviewees, the pipeline displayed in Figure 4.2 has been followed. The code that has been run (see *Appendix C*) had first the purpose of dividing each word in a process that is known as “tokenization”. This involves splitting the original text into one-token-per-row vectors. The output was then cleaned from “stopwords⁴³” and divided again through tokenization. Then, words were counted, sorted and properly filtered. Finally, the output was displayed through the use of a ggplot graph function.

Figure 4.2 NLP Pipeline and toolkit.



Source: Manning et al., 2014.

The answers were analyzed independently from one another, providing frequencies for each of them. In the next part we will reconcile this vertical analysis with a more horizontal approach where answers related to a single question will be compared across-subjects.

The answer we would like to find are the response to the following questions, as underlined by Manning and Schütze (1999):

⁴³ Stopwords are the most used words in a certain language. For example, they involve articles and other constructs which are used to connect words and concepts inside a certain phrase.

- What kinds of things do people say?
- What do these things say/ask/request about the world?

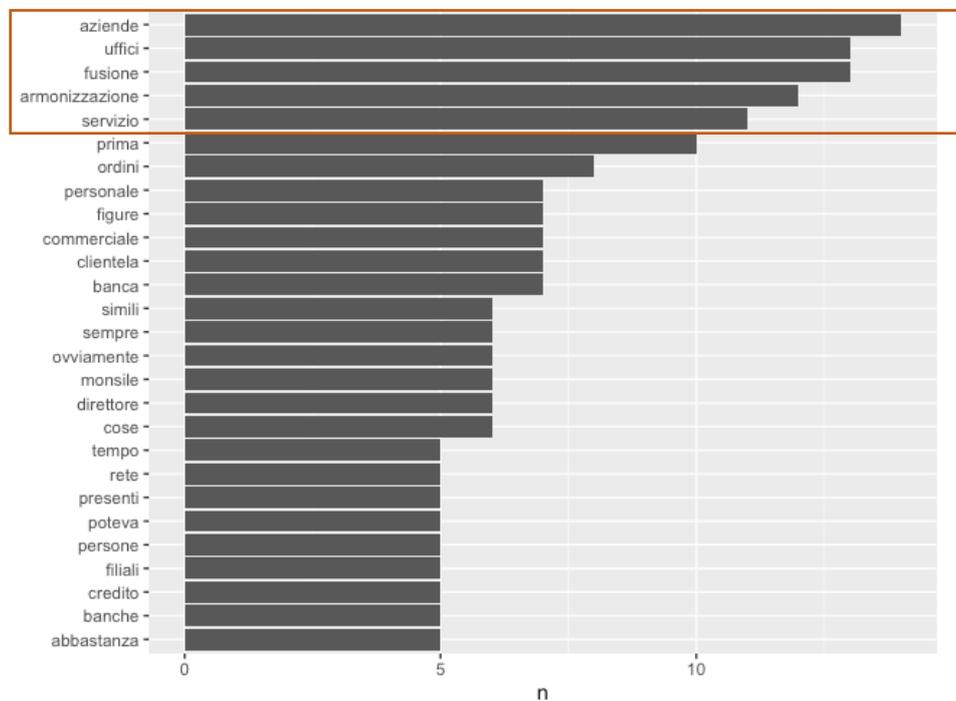
4.3.1.1 Question 1

"1. With regards to the recent merger experienced by BCC Pordenonese Monsile, which are the internal modification that you have been detected both in terms of structure and internal processes? Who are the relevant actors inside this process? "

Question 1 (see also *Appendix B*) asked our interviewees about internal processes. The purpose of this question was to understand how internal reorganizations take place and who are the actors with a significant role inside this process. Since it has been shown in paragraphs 1.3 and 3.7 that mergers influence internal structures and, in several cases, leads to an increased distance between firms and banks due to personnel reorganization and cuts, our aim was to examine those dynamics.

Interview 1.

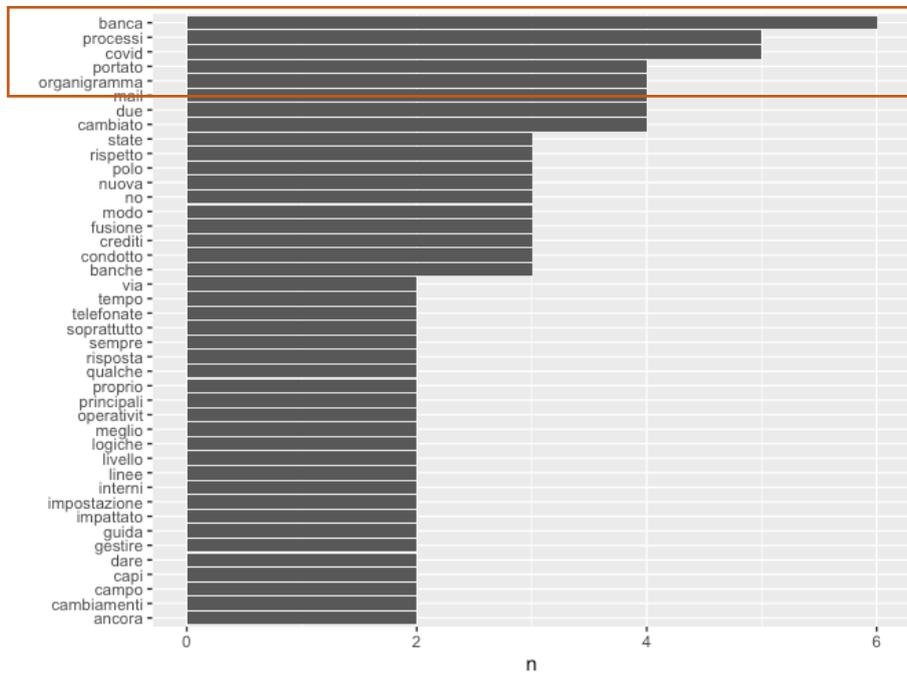
Figure 4.3 NLP results for Interview 1.1.



Source: own elaboration.

Interview 2.

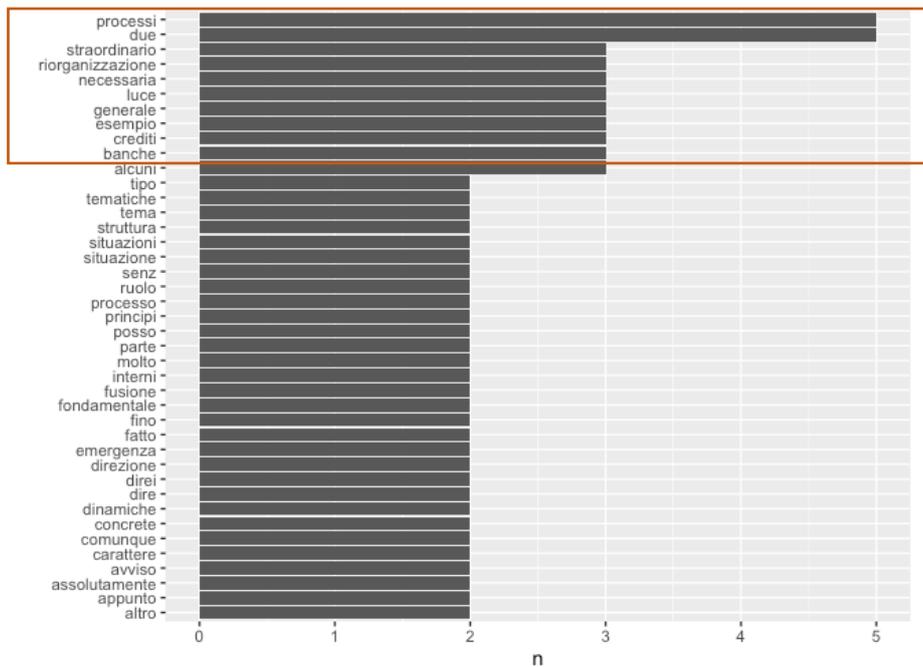
Figure 4.4 NLP results for Interview 2. 1



Source: own elaboration

Interview 3

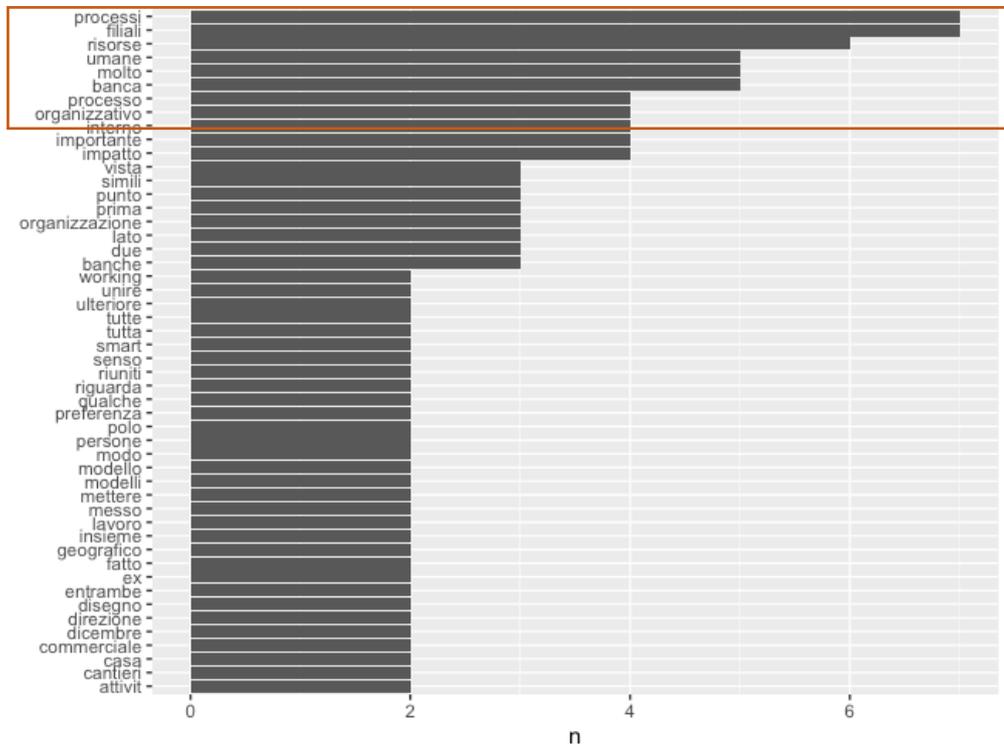
Figure 4.5 NLP results for Interview 3.1.



Source: own elaboration.

Interview 4.

Figure 4.6 NLP results for Interview 4.1.



Source: own elaboration.

In order to summarize the words that emerged from the first question we will reunite them in the following Table.

Table 4.1 Words related to question number 1.

Question 1	
Interview	Words
1.	Companies, offices, harmonization of the organization, services
2.	Bank, processes, organizational structure, Covid
3.	Processes, extraordinary, reorganization, credit, bank
4.	Processes, human resources, branches, bank, reorganization

Source: own elaboration.

Analyzing the answer at a cross-sectional level we discover that although the emerged themes were similar as could be noticed looking at Table 4.1 and at the above-reported graphs, the way in which topics were presented showed some differences across interviewees.

Considering the **reorganization** theme and connected words, in particular, interviewee 1 reported it as a harmonization, stating that

Merger and post-merger integrations are referred to as "harmonization". This idea is especially relevant since it provides evidence on how the experience of the merger has been perceived. In fact, the two banks had a similar structure prior to the operation, therefore the integration was more a "harmonization" and an optimization of elements that were already present in similar ways.

While the first interviewee saw the merger as a harmonization, interviewee 2 describe the event as a reorganization.

"For what concerns the theme of functional processes, obviously there were some modifications connected to the merger. In certain fields, they absorbed processes of the two previous banks, while in other cases they were rewritten in the occasion of the merger to better manage criticalities."

Nevertheless, the idea that the merger did not imply overwhelming changes is present and could be deducted from the overall answers provided by interviewees.

Another perspective was then introduced with interviewee 3. In his view, all the internal organizational aspects of the merger were influenced by an "extraordinary" fact, the Covid emergency. Indeed, *"There was an extraordinary factor – Covid – that have frozen most of the reorganizational processes, and all that I could tell you will be inevitably vitiated from this element."*

The reorganizational aspect was touched by this emergency and in his view *"amplified the original intentions of the bank in particular in terms of credit department and supply"*.

The credit department was in fact central both in the merging process and in the management of the Covid crisis. Due to the lockdown several activities had indeed to postpone their loan payments and receive support to keep liquidity flowing in order to pay suppliers and employee.

Therefore, this division acquired an even central role that will be likely maintained also after the merger.

Lastly, the discussion of interviewee 4 mainly touched branches and human resources.

In fact, during the merger, an important restructuring in terms of the distributional model (from which the centrality of the word "branches" result) took place where the hub-and-spoke model of one bank has been integrated with the traditional one of the other, in order to take advantage of their respective strengths. Also, **human resources** were touched by that modification and redistribution of skills and resources followed. An interesting aspect is that also interviewed 4 describe all this reorganization as a "harmonization"

"We can say that nowadays we are half-way and we believe we will finish by December 2020 to harmonize all the processes and redefine them inside a repository."

Another element arising from the present question that has to be underlined is that in interviews 2,3 and 4 the word "bank" is significantly present, while in interview 1 it showed a lower frequency. In this sense, it is interesting to notice that interviewee 1 is the person in charge of the corporate division, a position that may have influenced the focus of his point of view.

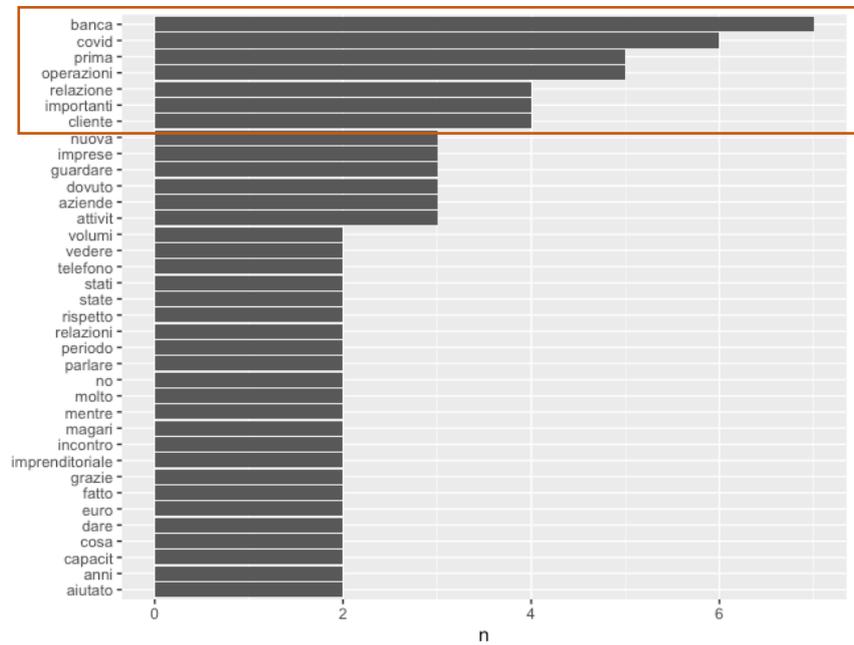
4.3.1.2 Question 2

"2. For what concerns the relations with your clients, the introduction of BCC Pordenonese Monsile has brought about modifications to the relations with client companies? In particular, how your ability to reply to the needs expressed by the firm in the region covered has been changed?"

Question 2 was centered on the relation with client companies, and how they were impacted by the merger. Moreover, it was specifically requested how this operation modified the BCC ability to reply to the needs of their client firms. The aim of this question was to understand if – as theory would suggest in the majority of cases – there would have been a change in focus with increased attention to larger firms and more transaction-based lending technologies.

Interview 2.

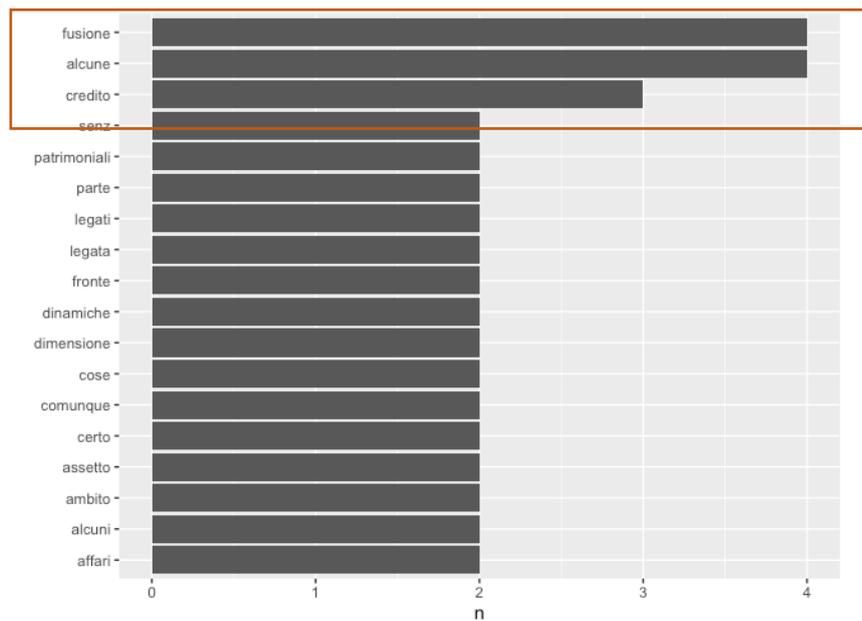
Figure 4.7 NLP results for Interview 2.2.



Source: own elaboration.

Interview 3.

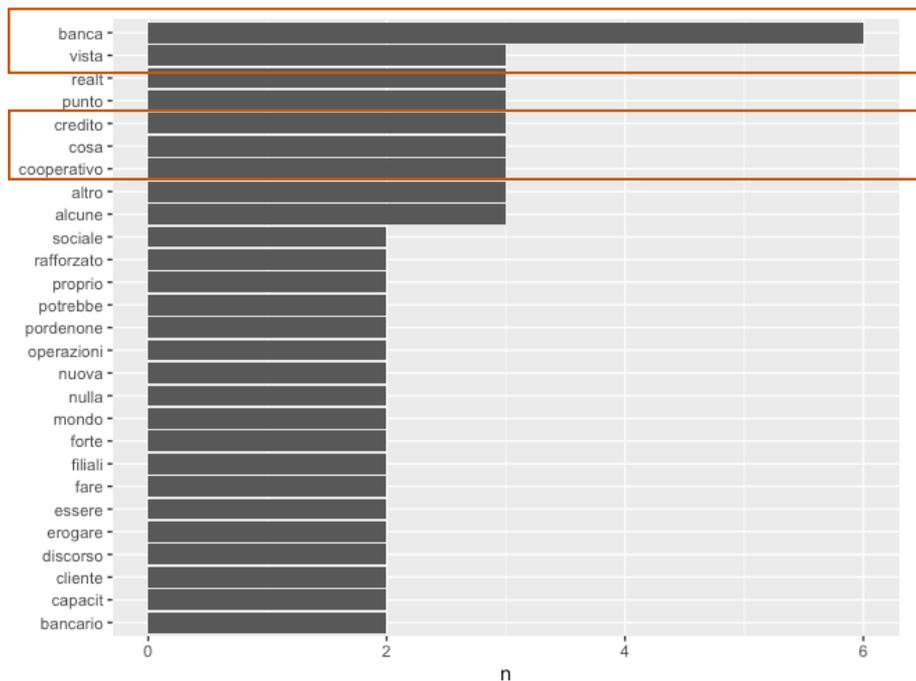
Figure 4.8 NLP results for Interview 3.2.



Source: own elaboration.

Interview 4.

Figure 4.9 NLP results for Interview 4.2.



Source: own elaboration.

The words that emerged as relevant inside the NLP analysis are hereby summarized in the following Table.

Table 4.2 Words related to question number 2.

Question 2	
Interview	Words
1.	Reference points
2.	Bank, Covid, operations, clients
3.	Merger, credit
4.	Bank, credit, cooperative credit

Source: own elaboration.

The answer provided by interview 1 to this question was particularly concise, therefore no significant result could be detected through NLP and the correspondent graph. Hence, the picture will not be reported here.

A common word that emerged was the one of **credit** touched in different ways by all the interviewees, mainly referring to credit supply.

In the second question interviewee 2 stressed the role of the bank in supporting companies during the Covid crisis. **Relationships** and **clients** were mentioned several times, showing a certain degree of centrality when discussing how credit availability was influenced by the merger.

"There was a need to be present for enterprises and support all the entrepreneurial world."

"Moreover, there was the ability to look both at larger enterprises – the SMEs of relevant dimension – with operations not done in other periods, but also to micro-businesses and operations of €3000/5000."

In this sense, we could already see how the answer provided suggest that we should discard our initial hypothesis of credit contractions as a consequence of the merger. The BCC ability to support companies was linked to the relationship already established. This observation is of absolute relevance since it somehow confirms what we have seen throughout our theoretical review about the importance of relations for smaller banks and SMEs (as the ones considered in our case are).

Therefore, credit supply was mostly associated with the **Covid** contingency and the ability of the new bank to better support companies.

The word credit appeared in both interviews 3 and 4 but two very different points of view were taken here. Interviewee 3 reported

"From the merger – for reasons connected to credit constraints – BCC Monsile has benefited more since the operation has reinforced this side also in terms of amounts and product portfolio available."

Instead, interview 4 referred to credit considering that *"In a cooperative credit setting, a bank that can make more profit is also able to provide more benefits to the community in which it operates. If cooperative credit is able to strengthen its capital with mergers, it may also become more a bank for the territory."*

Thus, while in the first answer interviewee 3 discussed the specific case of BCC Pordenonese Monsile, interviewee 4 somehow generalized the idea that credit supply has been increased through this merger, stating that a similar situation could also happen in other operations that involve in general Cooperative Credit banks. This situation is connected to the heritage of those banks that are deeply rooted inside mutualistic values and regional development.

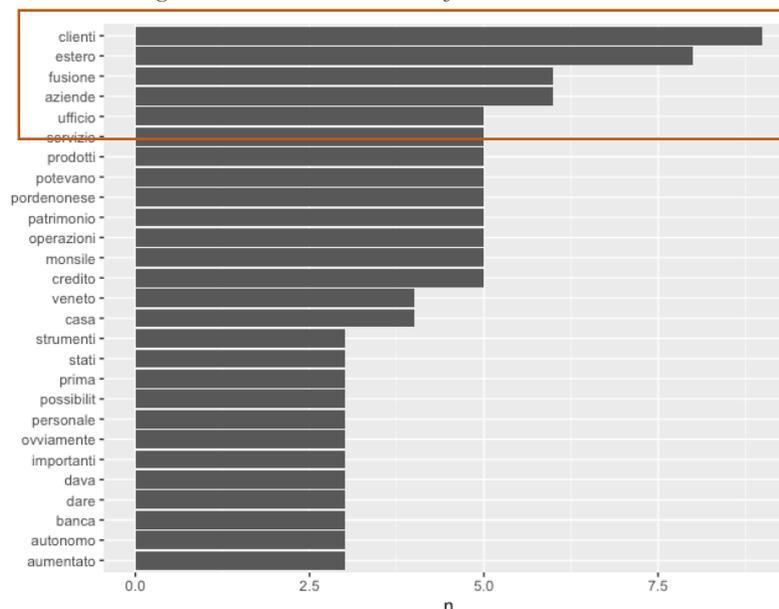
4.3.1.3 Question 3

"3. Which are the characteristics of the new bank that have a greater impact on the relations with companies? As an example, the modification in the dimension following the consolidation of BCC Pordenonese Monsile has had an influence on the typology and dimension of firms served?"

The final question had the aim of analyzing the connection between the new bank characteristics and modifications in relation to companies. The idea at test here was if SMEs experienced credit rationing as a result of BCC Pordenonese Monsile increased dimension and scope.

Interview 1.

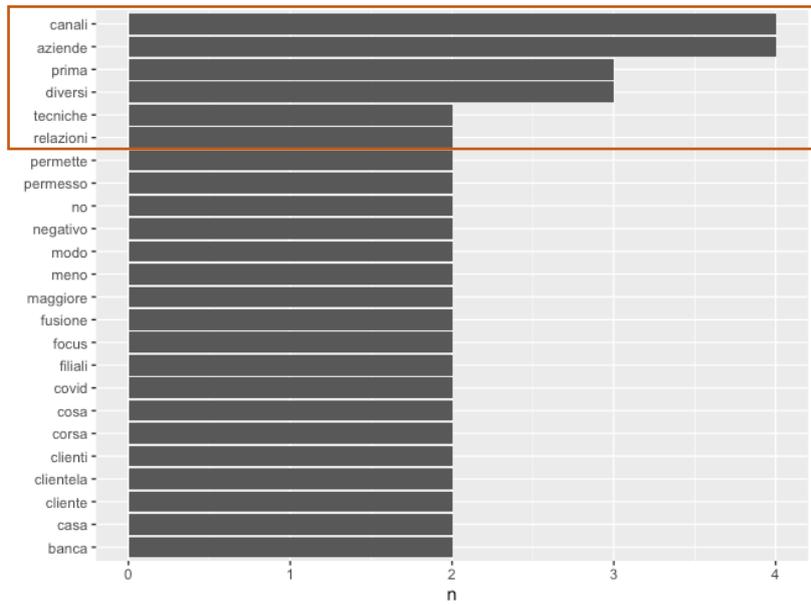
Figure 4.10 NLP results for Interview 1.3.



Source: own elaboration.

Interview 2.

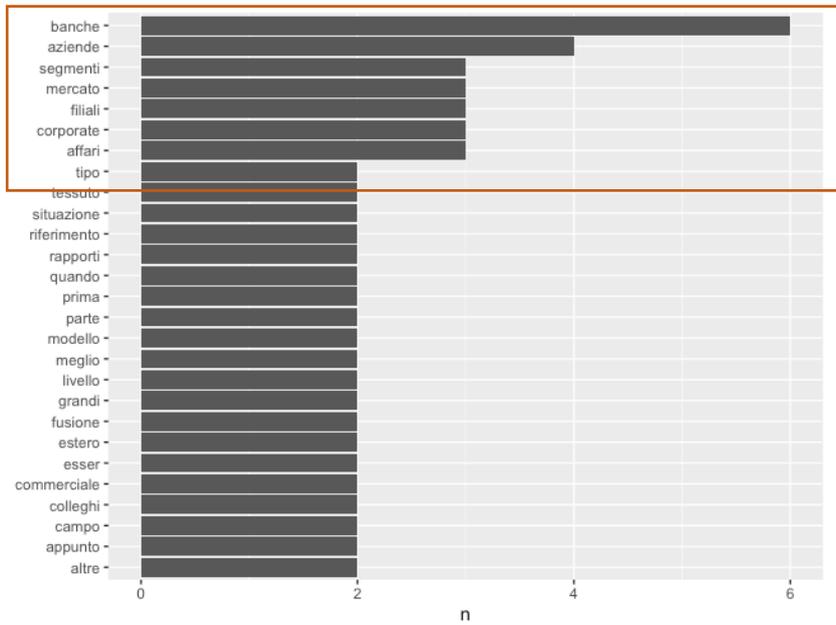
Figure 4.11 NLP results for Interview 2.3.



Source: own elaboration.

Interview 3.

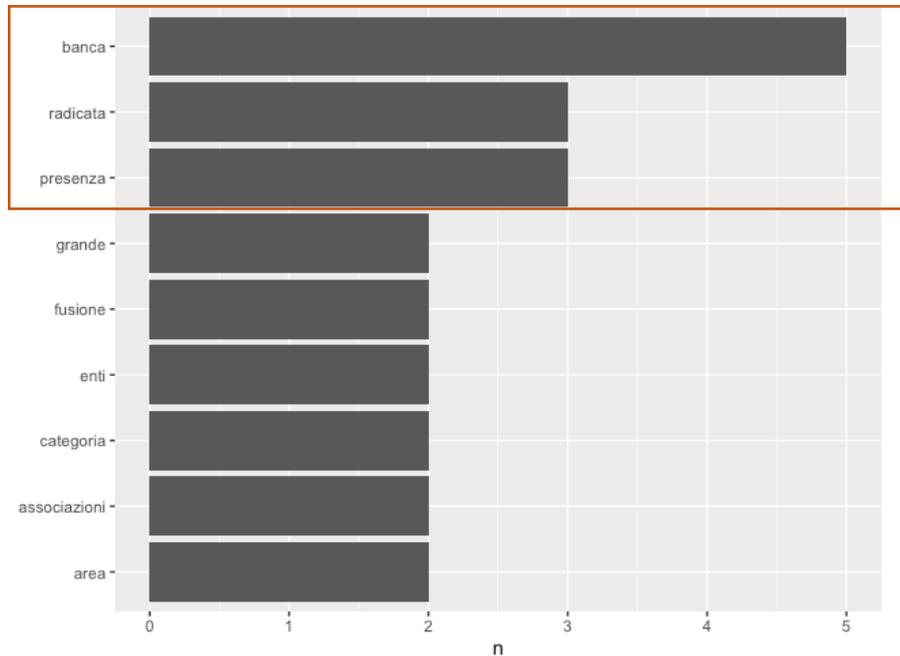
Figure 4.12 NLP results for Interview 3.3.



Source: own elaboration.

Interview 4.

Figure 4.13 NLP results for Interview 4.3.



Source: own elaboration.

In the last question the word that emerged with higher frequency and that result in being significant are reported in Table 4.3.

Table 4.3 Words related to question number 2.

Question 3	
Interview	Words
1.	Clients, merger, companies, office, services, products
2.	Channels, companies, relationship
3.	Banks, companies, market, branches
4.	Bank, presence

Source: own elaboration.

Companies were a recurrent word inside this answer. Clients were therefore central when discussing the mergers' effect and influence. This concept was connected to credit availability and supply in interview 1

"The possibility to provide credit to our clients increased and in several cases in which the two separate banks were at their maximum for a single client or group of companies, the merger allowed to increase that amount, supplying more credit also to creditworthy companies that we were not able to serve before. They benefited from the merger."

In this case, again, the feeling that our interviewee had was that the ability of the bank to provide credit was enhanced in the consolidated BCC Pordenonese Monsile. This because the new bank has the ability to do a wider scope of operation (see for example providing some operation with foreign countries) and also an improved ability to provide higher amounts of credit thanks to the presence of an increased amount of assets.

Instead, interviewee 2 discussed companies in connection with the relevance of already established relations.

"There wasn't a run to search for new companies but rather to consolidate existent relations."

Again, the connection between the bank and the company is described in relationship terms, underlying the relevance of a continuous exchange of information between the two. And also in this case credit is being described as enhanced by the merger.

"We have a dimension that allows us to follow both the small client and the structured company. It is not the case that we did not have those realities before, but I would say that after the merger there was an increased focus on them."

The element of the new bank that influenced the most the relation with the corporation was the newly introduced segmentation as described by interviewee 3. In this new system, the relations are still held by branches that remain central to administer the relation with clients, but the introduction of the corporate division allows a better understanding of clients' needs especially when dealing with a more complex request or bigger companies.

"For example, considering companies, the corporate division has been created. This unit addresses companies with over € 12 million revenues and therefore a further subdivision of segment and reference niche has been made accordingly. This for sure allows being more present in the future."

The introduction of a higher level of specialization inside the different segments does not imply an "industrialization" of the process itself and a switch from relationship-based to transaction-

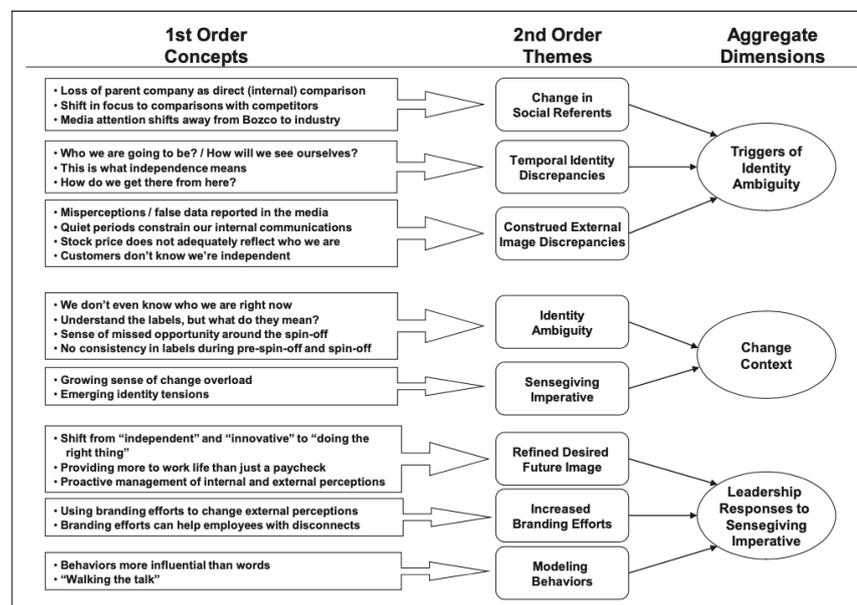
based lending technologies. Instead in our specific context, it has the aim of improving the ability to provide credit and thus supporting SMEs.

Lastly, interviewee 4 remarked the importance of Cooperative Credit Banks inside the region they cover and therefore stressed, how the ability of the combined entity to "be present" for SMEs and in general for their territory is now increased thanks to a more capillary presence. This factor will likely influence in a very positive way not only companies but also local communities.

4.3.2 Gioia methodology for qualitatively rigorous theme selection

Considering the result of this NPL analysis we merged them with a more qualitative but still rigorous approach, through the Gioia methodology. This method of analysis is based on the research provided by Gioia, Corley and Hamilton (2012) to provide rigor inside qualitative research. Their approach is based on an iterative selection where concepts are gradually filtered to arrive at a few comprehensive themes. An illustration of the process is given in Figure 4.1.

Figure 4.14 Data structuring in qualitative analysis.



Source: Corley and Gioia (2004).

In our case, the process is presented in reverse order, first presenting the general themes emerged and then attach all the first and second-order concepts attached to them. Hence –

considering Figure 4.1 – this means that we will start from the right and preceding to the left while presenting the results.

4.3.2.1 Relationship

Relationships emerged several times during the analysis of the interviews. In Table 4.4 we report the identified most relevant contributions to the concept of relation that are going to be analyzed more in-depth.

Table 4.4 Quoted answers regarding relationships.

Question	2nd order themes	Quoted answer
1.	Stability/continuity in the relation.	<i>“Cooperative credit has always privileged stability in the relation, so it is fundamental to have also stable contact. It is a different approach from bigger banks that look at relations as a threat.” (Interviewee 1.)</i>
2.	Stability/continuity in the relation.	<i>“It was the proof that confirmed that our prior relation was solid because it allowed us to close deals with just a few phone calls.” (Interviewee 2.)</i>
1.	Stability/continuity in the relation.	<i>“We tend to privilege the stability of the relation since this aspect remain central in the conduction of the relation with the client and we see that is rewarding. Also because it allows to have a higher knowledge of the client.” (Interviewee 1.)</i>
3.	Stability/continuity in the relation.	<i>“There wasn’t a run to search new companies but rather to consolidate existent relations. The clientele is the same, but we are able to follow them more closely.” (Interviewee 2.)</i>
2.	Stability/continuity in the relation.	<i>“Like there was a continuity for our clients. In the sense that branches are the same and we just reinforced them with special consultations.” (Interviewee 4.)</i>
2.	Credit supply and relations.	<i>“We had to acquire also relevant deals bigger than the ones we were used to. Those were acquired thanks to the relations established before (Covid).” (Interviewee 2.)</i>
3.	Credit supply and relations.	<i>“Also, the corporate companies and others continue their commercial relations inside branches. But in terms of product proposal they are now followed by specialized colleagues, that should be a benefit.” (Interviewee 3.)</i>
3.	Credit supply and relations.	<i>“Corporate companies have an assigned consultant, so the switch is to be more present in terms of market [...] since now those colleagues have more expertise and are assigned to various niches.” (Interviewee 3.)</i>

Source: own elaboration.

As theory widely suggested, relationships are especially relevant when dealing with banks and firms of small dimension. Relationship lending is based on what we call soft information. Soft information is usually qualitative in nature (Liberti and Petersen, 2018) and includes contextual information and data arising from a **continuative relationship**. This type of lending is the one effectively adopted by BCC Pordenonese Monsile, as could be easily detected by the answer reported in Table 4.1.

“We tend to privilege the stability of the relation since this aspect remain central in the conduction of the relation with the client and we see that is rewarding. Also because it allows to have a higher knowledge of the client.” (Interviewee 1.)

“Cooperative credit has always privileged stability in the relation, so it is fundamental to have also stable contact. It is a different approach from bigger banks that look at relations as a threat.” (Interviewee 1.)

If relationship lending is used in its more natural context, which is making up for the lack of information inside SMEs, then long-term relationships arise where companies can provide proof of their soundness through time. This allows to face also difficult situation of potential distress as the one produced by Covid.

“We had to acquire also relevant deals bigger than the ones we were used to. Those were acquired thanks to the relations established before (Covid).” (Interviewee 2.)

This consideration is especially relevant if we consider the implications for the economic environment. The bank by being able sustain companies also in situation of distress, contribute to the safeguard of the entrepreneurial system of a certain territory.

As we have seen in paragraph 1.3.3, those relations are usually conducted by an officer that acquire a primary role inside the conduction of the relation. Officer (or branches' Directors) are the link between customers and the bank, establishing and developing relations with clients. Here is the place where soft information is truly generated. Therefore, **changing those references - as it happens with merger and reorganizations – could cause potential discontinuity** in the relation or the loss of clients. BCC Pordenonese Monsile successfully

tackled this potential issue and in addition introduced a more analytical segmentation of companies' niches in order to strengthen its ability to provide consistent expertise to clients.

“Like there was a continuity for our clients. In the sense that branches are the same and we just reinforced them with special consultations.” (Interviewee 4.)

“Also, the corporate companies and others continue their commercial relations inside branches. But in terms of product proposal they are now followed by specialized colleagues, that should be a benefit.” (Interviewee 3.)

“There wasn't a run to search new clients but rather to consolidate existent relations. The clientele is the same, but we are able to follow them more closely.” (Interviewee 2.)

Therefore, the reorganization seems not to have impacted companies negatively but instead they will likely benefit from the changes introduced.

The revision of the distribution model with the introduction of the above-mentioned segmentation, implied a revision of the distribution of Human Resources. Important attention was posed to skill and reference retention in our case. This because the advantages are not only linked to the strength of the relation, but also comes from the deep **understanding of the socio-economic environment** that characterize branch managers.

“With the new segmentation this reference has been often changed due to personnel transfer during the merging process from one area to others and across different territories that has been reorganized.” (Interviewee 1.)

Although there a modification was surely present, Interviewee 1 further states that *“Also if some initial disorientation, once fully operational will likely offer a better service.”*

4.3.2.2 Capital and credit supply

The increased amount of assets, its influence on capital requirements and the respective ability to supply more credit, emerged in various interviews as we have already seen inside the NLP

analysis. In Table 4.5 we report the identified most relevant contributions to the concept of capital and credit supply that are going to be analysed more in depth.

Table 4.5 Quoted answers regarding capital and credit supply.

Question	2nd order themes	Quoted answer
2.	Capital requirements and credit supply.	<i>“We have substantially increased our capital [...], since we have limits connected with supply and concentration of the exposures that are calculated on the banks’ capital, obviously our ability to provide credit has increased.” (Interviewee 1.)</i>
3.	Capital requirements and credit supply.	<i>“For what concern companies, I believe that they might have benefited (from the merger), because the bigger is a bank, the higher is its ability to supply credit. So, from this point of view we are more able to support SMEs because the smaller you are the more difficult is to stay competitive.” (Interviewee 4.)</i>
2.	Capital requirements and credit supply.	<i>“The new bank, having an asset structure that is more than two times what we had before, [...] with the new bank we start to look also to companies that we didn’t reach out before.” (Interviewee 2.)</i>
1.	Credit availability and supply.	<i>“(The merger) created a credit availability and possibilities to supply credit, on completely different levels from the two original banks.” (Interviewee 3.)</i>
3.	Credit availability and supply.	<i>“The merger has allowed an increase in amounts available, supplying more credit to creditworthy clients that we were not able to serve before.” (Interviewee 1.)</i>
2.	Credit availability and supply.	<i>“We have the possibility to think about project that previously were seen in a cautionary way.” (Interviewee 2.)</i>

Source: own elaboration.

Several **limitations in terms of capital requirement** are now present for banks. After the 2008 crisis a wave of regulations shaped the financial panorama at a global level and several policies were introduced both in at European and National dimension. Therefore, when providing credit, banks are particularly bound by those constraints and several times deny credit in reason of limitations or to avoid excessive concentrations.

In paragraph 3.6 when dealing with the implication for credit of consolidation, the first static effect that has been reviewed was the size effect. To recall the concept, it relates to the

observation that the newly constituted entity will be indeed characterized by a balance sheet whit increased asset, coming from the two merging banks. But the important consequence of this is that literature considering this argument (see Beretta and Del Prete, 2002; Montoriol-Garriga, 2008; Peek and Rosengren, 1998; Berger et al., 1997) has reached a fairly solid consensus around the negative impact produced by consolidation on SMEs credit availability. When banks increase its size, relationship lending technologies become less attractive as institution seek new clients rather than consolidating previous relations.

Nevertheless, this seems not to be the case for our BCC Pordenonese Monsile.

“We have substantially increased our capital [...], since we have limits connected with supply and concentration of the exposures that are calculated on the banks’ capital, obviously our ability to provide credit has increased.” (Interviewee 1.)

“For what concern companies, I believe that they might have benefited (from the merger), because the bigger is a bank, the higher is its ability to supply credit. So, from this point of view we are more able to support SMEs because the smaller you are the more difficult is to stay competitive.” (Interviewee 4.)

“The new bank, having an asset structure that is more than two times what we had before, [...] with the new bank we start to look also to companies that we didn’t reach out before.” (Interviewee 2.)

“(The merger) created a credit availability and possibilities to supply credit, on completely different levels from the two original banks.” (Interviewee 3.)

As it could be noticed, **all the interviewees agreed on the observation that the merger resulted in an increased credit supply capacity**. And other clues sustaining the correctness of this hypothesis in our particular case are also present.

In fact, with the merger, several specific products that prior to the operation could have been offered only to the clients of one of the banks, now could be presented also to the others. Moreover, **services that where present only in one of the twos, are now extended and fully integrated in the merged entity** and therefore again could be used by all the resulting clients.

“We widened our product portfolio because products that previously we could not offer to the Pordenoneses’ clients are now present, and they could have access to them.” (Interviewee 1.)

4.3.2.3 Internal organization and credit supply

The modifications made in term of distribution model, segmentation of clientele and connected reorganization in term of human resources, emerged several times during the analysis of the interviews. In Table 4.6 we report the identified most relevant contributions to the concept of capital and credit supply that are going to be analysed more in depth.

Table 4.6 Quoted answers regarding internal organization and credit supply.

Question	2nd order themes	Quoted answer
1.	Commercial model review.	<i>“There has been a revision of the commercial model with a different segmentation of clientele with the creation of specialists roles.” (Interviewee 1.)</i>
1.	Commercial model review.	<i>“Before, companies were serviced by branches and typically by the director, or the smaller ones by some officer. [...] The new model that has been implemented is based on a division of clients in niches in the optics of a higher specialization.” (Interviewee 1.)</i>
1.	Commercial model review.	<i>“There has been a revision in all the function, while the distribution channel has remained similar. Function are similar but the division of areas have changed along with the connected roles.” (Interviewee 2.)</i>
3.	Commercial model review.	<i>“An analytical division has been introduced with the creation of the corporate segment [...] with subsequent subdivision of other niches. This will for sure help in replying to firms’ needs.” (Interviewee 3.)</i>
1.	Distribution model review.	<i>“The two banks had two different distributional model. One with traditional branches and the other with few of them and several bank counters. Also here we opted for a hybrid model.” (Interviewee 4.)</i>
1.	Territorial division.	<i>“We divided branches between two poles, the Est one (ex Monastier) and the West one (ex Pordenonese). Inside them we defined various “territories” that comprehend 5/6 branches each [...] inside a certain economic district or a certain geographic area.” (Interviewee 4.)</i>

Source: own elaboration.

As mentioned before, with the merger a profound revision of clientele segmentation has been introduced. When considering internal modifications connected to merger, theory – similarly to what happens with assets - the elimination of redundancies, could lead to an increase in the physical and organizational distance. This phenomenon – as we have seen before in chapter 1 – could imply a re-distribution of decision center which in turn may cause credit rationing.

Again, this was not the case for BCC Pordenonese Monsile since this case entered into the circumstances of a **merger based on the purpose of acquiring branches in a certain strategic region**, not already or not enough covered by the acquirer.

As highlighted in chapter 3, this contingency creates a special case were **credit supply is more likely to be increased rather than declining**. This seems indeed to be the case for BCC Pordenonese Monsile.

“We divided branches between two poles, the Est one (ex Monastier) and the West one (ex Pordenonese). Inside them we defined various “territories” that comprehend 5/6 branches each [...] inside a certain economic district or a certain geographic area.” (Interviewee 4.)

“An analytical division has been introduced with the creation of the corporate segment [...] with subsequent subdivision of other niches. This will for sure help in replying to firms’ needs.” (Interviewee 3.)

“Before, companies were serviced by branches and typically by the director, or the smaller ones by some officer. [...] The new model that has been implemented is based on a division of clients in niches in the optics of a higher specialization.” (Interviewee 1.)

The paradigm reported here, is that a better segmentation and division of territories allows a more specialistic understanding of clients and thus an improved ability to enhance the bank-firm relation (which in turn we know impact credit availability).

4.3.2.4 Covid

The Covid influence on operations is a concept that can be identified several times during the analysis of the interviews. Naturally it had a deep influence on both the normal operations and the execution of the merger itself. In Table 4.7 we report the identified most relevant contributions to the concept of Covid influence that are going to be analysed more in depth.

Table 4.7 Quoted answers regarding Covid.

Question	2nd order themes	Quoted answer
1.	Influence on relations and communication with clients.	<i>“Several colleagues found themselves to deal with other counterparties inside the bank that they have not met in person but just through e-mails.” (Interviewee 2.)</i>
2.	Influence on relations and communication with clients.	<i>“The fact of the pandemic did not help out because, as an example, asset managers were assigned in the beginning of April and were not able to go to companies to present themselves, they have to do it on the phone.” (Interviewee 1.)</i>
3.	Influence on relations and communication with clients.	<i>“The relation with the client did not change, but it also strengthened it through other channels. [...] For relations it has been good because for absurd they came out strengthened.” (Interviewee 2.)</i>
1.	Influence on the merging process.	<i>“The Covid crisis amplified the original intentions of the bank especially when dealing with credit that was the most impacted by the crisis.” (Interviewee 2.)</i>
2.	Influence on the merging process.	<i>“We could not disregard the presence of Covid, because the merger took place at the end of January and we had to stop. [...] For me Covid is the one that dictated deadlines” (Interviewee 2.)</i>
2.	Influence on the merging process.	<i>“On the Covid side, other banks that were not undergoing this reorganizational process have been more ready. Also if we were faster under others points of view, we were tied by the merging process.” (Interviewee 3.)</i>
1.	Influence on the merging process.	<i>“to consider internal changes in processes we have also to consider that the merger took place in the middle of the Covid crisis.” (Interviewee 2.)</i>
1.	Influence on the merging process.	<i>“There was an extraordinary element that froze the majority of the processes. All that I could tell you will be influenced by that. “ (Interviewee 3.)</i>

Source: own elaboration.

Covid has been a central theme that obviously have been mentioned a lot. This is of course related to the extraordinary nature of the event but also to the coincidence that it happened exactly in the middle of the merging process.

The pandemic influenced both the relations with clients and the way in which they were carried out and the merging process itself. Obviously the most relevant influence detected in relations was the impossibility to see clients, which inside the context of relationship lending is especially relevant to keep the connection and the information flowing.

“Several colleagues found themselves to deal with other counterparties inside the bank that they have not met in person but just through e-mails.” (Interviewee 2.)

“The fact of the pandemic did not help out because, as an example, asset managers were assigned in the beginning of April and were not able to go to companies to present themselves, they have to do it on the phone.” (Interviewee 1.)

But the net influence, aside from the momentaneous difficulties, seems to be positive as it induced a **technological advancement** that would have took more time to be accepted and internalized in normal conditions. In fact, in the view of Interviewee 2 *“The relation with the client did not change, but it also strengthened it through other channels. [...] For relations it has been good because for absurd they came out strengthened.”*

On the other side, the merging process was deeply influenced by the necessity to deal with extraordinary requests connected with the lockdowns and then focusing on the implementation of the integration.

“There was an extraordinary element that froze the majority of the processes. All that I could tell you will be influenced by that.” (Interviewee 3.)

“We could not disregard the presence of Covid, because the merger took place at the end of January and we had to stop. [...] For me Covid is the one that dictated deadlines” (Interviewee 2.)

Therefore, considering also the purpose of the present work this influence could have modify some of the outcome, indeed it remain of great interest to see that net of everything we consider, the merging process has been perceived in a positive way by all the interviewees.

4.4 Summary

BCCs are born as a direct reply to the needs expressed by the firms in a certain territory. Their history is rooted in a tradition of mutualistic and cooperative principles, providing an efficient answer to SMEs credit demand and the reference territory in which they are inserted. In recent years, with the TUB, the BCCs have undergone a deep reform that introduced the possibility to provide all the services offered by banks along with a more diversified shareholder structure. An important reform was also introduced in 2016, requesting participation inside a Cooperative Banking Group. After reviewing the general history and introducing the ICCREA group, we focused on the BCC Pordenonese Monsile history to provide the general framework in which the merging operation under our analysis was inserted. The methodology of our research was then introduced. Inside our work, we adopted a qualitative approach based on collecting and analyzing nonquantitative data in the form of speeches. The types of analyses that we adopted were of two kinds. The first one through the use of machine learning and the Natural Language Processing analysis, highlighting relevant words and the different contexts in which they were used. Then a Gioia methodology was used, and its theme-based perspective concluded the analysis made.

Conclusions

The present work is aimed at understanding the modifications in terms of credit availability experienced by companies – and in particular SMEs - when banks change their structure through processes of consolidation. In particular, we wanted to understand whether changes in the internal structure and in the dimension of banks truly cause a contraction in credit supply towards SMEs, cutting off relationships and their connected lending technology.

The lending function is in fact carried out through different lending technologies, fundamentally divided into two main groups, transaction-based and relationships-based. The fact of adopting a certain lending technology has been found to be closely related to banks' and firms' size. In fact, since we considered SMEs characterized by being informationally opaque and providing information that is soft in nature, they will be perfect candidates in the adoption of relationship lending technologies when assessing credit applications. Indeed, a opaque business is the one for which clear and readily available information is not present. In this sense, they are not easy to see through and the most efficient way to acquire information is through the development of a continuous relation where the officers are able to understand the business and gain all the contextual information that otherwise would be lost. In addition, where public companies could afford several kinds of technologies and types of financing, private companies could not. SMEs in particular see their possibilities restricted due to their dimension and scope. The presence of a certain degree of dependence has been underlined also through the historical evolution of credit reported inside the SAFE Survey. This subordination of SMEs to the financial system is of any good and leave them particularly tight to the financial system when in need of extra resources.

Those resources, as stated inside the Bank Lending Survey, are demanded by SMEs to finance fixed investments, inventories and working capital, M&A, and corporate restructuring operations, and debt refining or renegotiation. Another element that naturally influences the demand for credit is the interest rates applied with credit demand impacted negatively from an increase in loan interest rates while reacting positively to increases in bond interest rates and on GNP.

In a period -like the one, we are experiencing - characterized by ease of regulatory bound to the circulation of capital and particularly low-interest rates, the theme of consolidation presents itself as a central one. In order to support the financial system, allowing it to efficiently supply

credit by continuing to reply to firms' demand and support the economic environment, modifications at the systemic level are needed. In fact, erosion of bank margins has been undergoing due to interest rates and increased competition, to which an acceleration of technology innovation has been added in recent years. When a circumstance of that type present itself, consolidation could provide the answer to share costs, enhance product offering, increase market presence, and, as result, improve the bottom line.

A wave of M&A is in fact taking place inside several countries, including Italy, previously characterized by a more widespread banking system. The Italian context shows this consolidation trait with special force due to its peculiar characteristics. In fact, Italy presents a relatively small dimension of the financial system, with a banking industry deeply influenced by the peculiar characteristics of the entrepreneurial and social system that it serves. Considering the Industrial scenario, its majority is made up of SMEs and Micro-enterprises with less than 10 employees. As a reply to this environment, a multitude of small territorial-linked credit institutions that dates back their origins to the pre-unitary period arose. Also if there is no theoretical consensus about the reasons underlying a certain structure of the banking system, it is certainly a response to businesses' needs, the characteristic regulatory framework, tax, political and social systems.

Over the last ten years, we notice a progressive reduction in the number of institutions operating across the country in an effort to increase efficiency, a tendency that - as we have seen – is embedded in a wider trend present as European level. The centrality of the consolidation process therefore results.

M&A is generally divided into 10 steps that characterize most of the transactions. Those operations are especially complex and involve several critical moments. Those criticalities imply risks that often induce questioning the true utility of consolidation. Still, there are several motives recalled by theory and practitioners. Economies of scale and scope are the most cited motives, where also external element such as regulation, technology innovation, and general external pressure play their relevant role.

Consolidation through M&A, although needed and justified by the reasons highlighted above, implies profound modification for banks that undergone that process. The organizational structure, human resources, and clients experience the higher level of repercussions, with a natural impact both on credit relations already in place and on prospective ones.

Several researchers have investigated the net effect of consolidation on credit relations especially looking at SMEs. Their findings are that those companies engaged in relations with the target are the ones worse off and likely experience credit termination after the deal. It has been found that in a three-year period the share of credit provided by banks that experienced consolidation drops significantly with respect to others who do not. Banks, when merging and increasing their dimension, have to face a trade-off between an expansion strategy and the cost of gathering new information on opaque SMEs. The result is that likely bigger entities will disregard SMEs since small credit institutions will be the more efficient producer of locally intensive information thanks to their closer relation with communities and people in charge of conducting the credit relations.

Hence, we asked ourselves how those elements apply to a reality – as the one of BCCs – traditionally bounded to the territory and SMEs that due to its heritage has been a wider use of the relationship lending technology.

Our empirical analysis which can be traced back to the studies on SMEs financing was conducted through semi-structured interviews aimed at testing several aspects of merger and credit that emerged as critical during the review of the theory. The methodology of research that has been chosen is different and innovative with respect to the methods traditionally adopted in investigating the phenomenon of lending.

The research project hereby presented, stem from the analysis of the theoretical and empirical literature regarding the bank-firm relationship and wants to broaden the traditional approach to qualitative inquiry, adding an element of innovation through the implementation of an Natural Language Processing (NLP) analysis that focuses on specific words used by interviewees while replying to the questions provided. The NLP constitutes the first level of analysis that has been integrated through the Gioia methodology analysis that broadened the element that emerged.

The fundamental source of information implemented inside the empirical analysis is the semi-structured interviews carried out with four members of the management in the newly constituted BCC Pordenonese Monsile.

The interviewed subjects were already part of the two merging banks prior to the operation. Therefore, no external element (or point of view) has been added. The experience reported are the ones of people who have experienced how operations were carried out inside one of the

twos separated entity prior to the merger, and later saw the changes introduced inside the consolidated bank BCC Pordenonese Monsile. People interviewed were equally divided between the two branches of BCC Pordenonese and BCC Monastier del Sile, two interviewees used to work inside the former prior to the consolidation while two were from the latter.

Through an in-depth analysis of interviews and the terms adopted by the respondents, it has been possible to identify trends and themes that repeatedly were mentioned inside interviews, thus disclose themselves as central for the interviewed subjects.

The first level of analysis was performed using the Natural Language Performance (NLP). In this phase we defined words that were present the most inside our interviewees' answers assuming that the ones with higher frequency are also the ones that result in more significance from their point of view. Analyzing the answers at a cross-sectional level we discovered that although the emerged words were similar and sometimes even coincided, the way in which topics were presented showed some level of differentiation across interviewees. In fact, different people showed the tendency to highlight and stress different facets of the same concept. This situation could be considered as normal since it discloses the individual vision that we also discussed when presenting the review of qualitative approaches using construction and interpretation (recall Flick, 2009).

The bank was of course central in most of the answers of our interviewees although some deviations were present, in particular in relation to interviewees that were more involved with companies. In this respect, it is interesting to notice that most of the answers seem to be correlated with the position held by our interviewee. This fact induces a double reflection. On one side, it allows to shed lights on the different point of view provided by people in different positions, on the other it would be of great interest to carry out further analysis inside a homogeneous group or structuring the questions in such a way that this 'position effect' could be circumscribed, providing a more "objective" observation.

Relationships and clients were also central. The word emerged through different variations inside the NLP analysis, somehow confirming the hint provided by theory. Indeed, the bank effectively recognizes the centrality of relationships in the conduction of activities with clients. Research for stability and continuity is searched in those relations and although an initial shock has been reported, no negative implications seem to be projected in the future. In fact, once again, the break has been reported in term of relations and changes in reference points (loan

officers and managers) that shows their centrality. Clients are reported as "not used to changes and modifications" a situation that favors stability in the relationship but that also introduces an element of cultural rigidity. This observation in a way could be seen as evidence corroborating the picture of the entrepreneurial environment that we have depicted inside our theoretical review.

Nonetheless, the observation that relations are seen as valuable suggests that no negative shock to credit supply will likely take place. In the eyes of the bank, the merging operation was motivated by a need to increase efficiency and remain competitive in an increasingly complex environment. In fact, the reasons motivating the operation that has been provided by the interviewees highlight essentially the centrality of cost reduction through economies of scale and the research for increasing the presence inside reference regions. Hence, the merger has had the clear purpose of providing more credit and services to companies and in the words of our interviewees "be more present" for enterprises.

The result of an increased physical presence, of synergies in term of product portfolios and an increased capital level, are seen as favoring credit supply due to a greater ability to exchange information and provide a wider array of services, which in turn allows increasing the level of credit provided to creditworthy firms. There seems to be, in this sense, a discrepancy between theory and practice. Recent research has widely suggested that when a merging operation occurs (or other major restructuring operations), companies are the ones worst off in terms of credit. Obviously, it is not always the case that credit rationing results after consolidation, in particular considering the reasons behind also the BCC Pordenonese Monsile merger, still, most of the evidence is against what emerged in our specific case.

Multiple questions stem from this consideration. Is it possible that BCCs constitute a niche that is characterized by dynamics not completely captured by research applied to another form of banks? And if this is the case, what are the elements that provide this differentiation in terms of operations and drivers?

Lastly, we need to address the theme of the emergency due to Covid-19 that naturally emerged several times throughout the conduction of interviews. This extraordinary event and its influence on the merging process have inevitably influenced the result of the present analysis and all the result of our specific case should also be viewed in the context of the present situation. Nevertheless, it should be noted that also in this case interviewees seem to have

replied in a positive way to the challenges posed by Covid. Although difficult, the impossibility to meet directly with clients and visit their enterprises regularly has opened the way for other means of communicating. In this sense, Covid appears to constitute an element of disruption for technological adoption, especially for client enterprises. In fact, the need for credit coupled with the restriction imposed, induced a rapid change in their behavior, surpassing the barriers of skepticism that are normally present. This allowed to find new channels where the bank-firm relation could take place and the implications are all to be discovered.

The consequences of Covid on the relations held by BCC Pordenonese Monsile could be hardly detected now but a future element of research may be actually prompt from the previous discussion. Questions that remain open are how relations – once deeply based on physical presence – will evolve in response to this external element of disruption and how Covid has influenced the dynamics of the merger in terms of final results.

The present research constitutes and analyzes a single case that has been hereby used for the purpose of testing if the evidence provided by theoretical models and research effectively found their correspondence in reality. Our project has allowed an understanding of the merging dynamics of a certain "niche" in the Italian banking system, Cooperative Credit Banks. The net effect of this merger that we could detect from the analysis carried out, is a positive one for companies and credit availability, a situation that may be well linked to the nature of those banks and their heritage based on regional development and enrichment.

Hence, the present work is not to be seen as an ending line but as a means to foster future research. In addition to the question stemming from the various theme discussed above, a final inquiry should be noted. What we want to ask ourselves in light of the evidence provided by this research is if there exists an optimal point for cooperative banks dimension after which the positive effects detected throughout our empirical analysis lose their appeal and credit rationing for SMEs appears. The majority of the theories regarding SMEs credit availability and financing usually consider databases coming from the other side of the Ocean. The USA indeed provides longer historical series, useful for accuracy in the research, that tend to overshadow inputs coming from the European experience. Therefore, we need to reflect on the possibility that there exist other models – based on regional evidence - to define the optimal dimension of bank and firm in relation to credit availability.

Indeed, the evidence that emerged from our research seems to highlight that there could be regional contexts in which dynamics other than the ones considered in general theory comes into force. The relevance of the socio-economical context in which firms and banks operate in Italy – and in particular in the territories of BCC Pordenonese Monsile – seem to be central in the definition of the bank-firm relation outcome. The role of relationships inside those realities is still of absolute importance as our interviews suggest, providing to the bank the means to assess the creditworthiness of companies while providing support in moments of crisis. This element is particularly relevant because especially in a moment characterized by uncertainties and rapid modifications, the solidity of relations seems to provide a way through instability thus protecting access to credit for SMEs and therefore allowing the natural development of the economic system.

Appendix A

Example of a bank balance sheet. The present prospectus is the one of BCC Pordenonese for the Fiscal Year 2018.

	Voci dell'attivo	31 dicembre 2018
10.	Cassa e disponibilità liquide	7.933
20.	Attività finanziarie valutate al <i>fair value</i> con impatto a conto economico	12.676
	a) attività finanziarie detenute per la negoziazione;	
	b) attività finanziarie designate al <i>fair value</i> ;	
	c) altre attività finanziarie obbligatoriamente valutate al <i>fair value</i>	12.676
30.	Attività finanziarie valutate al <i>fair value</i> con impatto sulla redditività complessiva	161.845
40.	Attività finanziarie valutate al costo ammortizzato	1.236.148
	a) crediti verso banche	113.204
	b) crediti verso clientela	1.122.944
50.	Derivati di copertura	21
60.	Adeguamento di valore delle attività finanziarie oggetto di copertura generica (+/-)	973
70.	Partecipazioni	0
80.	Attività materiali	20.671
90.	Attività immateriali	2.347
	di cui:	
	- avviamento	2.300
100.	Attività fiscali	14.443
	a) correnti	1.880
	b) anticipate	12.563
110.	Attività non correnti e gruppi di attività in via di dismissione	1
120	Altre attività	15.769
Totale dell'attivo		1.472.827

	Voci del passivo e del patrimonio netto	31 dicembre 2018
10.	Passività finanziarie valutate al costo ammortizzato	1.313.564
	a) debiti verso banche	139.966
	b) debiti verso la clientela	951.733
	c) titoli in circolazione	221.865
20.	Passività finanziarie di negoziazione	0
30.	Passività finanziarie designate al <i>fair value</i>	0
40.	Derivati di copertura	1.173
50.	Adeguamento di valore delle passività finanziarie oggetto di copertura generica (+/-)	0
60.	Passività fiscali	2.603
	a) correnti	490
	b) differite	2.113
70.	Passività associate ad attività in via di dismissione	0
80.	Altre passività	46.892
90.	Trattamento di fine rapporto del personale	4.347
100.	Fondi per rischi e oneri:	3.130
	a) impegni e garanzie rilasciate	1.547
	b) quiescenza e obblighi simili	0
	c) altri fondi per rischi e oneri	1.583
110.	Riserve da valutazione	748
111	<i>di cui relative ad attività operative cessate</i>	0
120.	Azioni rimborsabili	0
130.	Strumenti di capitale	0
140.	Riserve	91.514
145	<i>di cui acconti su dividendi</i>	0
150.	Sovrapprezzi di emissione	1.543
160.	Capitale	306
170.	Azioni proprie (-)	0
180.	Utile (Perdita) d'esercizio (+/-)	7.007
	Totale del passivo e del patrimonio netto	1.472.827

Appendix B

The following questions has been proposed as a starting point in the interviewing process. The original questions where written in Italian which has been used also as the langue of discussion with people interviewed in this research. The questions have been sent prior to the interview in order to acquire more complete answers with greater level of details.

ENGLISH VERSION:

We have thought of the following three questions, one connected with internal processes which aims at reconstructing processes and subjects involved, and two inherent bank-firm relation. Each one of them provide an example to facilitate the discussion but the interviewed will be incentivized to talk freely also about other relevant matters.

1. With regards to the recent merger experienced by BCC Pordenonese Monsile, which are the internal modification that you have been detected both in terms of structure and internal processes? Who are the relevant actors inside this process?
2. For what concerns the relations with your clients, the introduction of BCC Pordenonese Monsile has brought about modifications to the relations with client companies? In particular, how your ability to reply to the needs expressed by the firm in the region covered has been changed?
3. Which are the characteristics of the new bank that have the greater impact on the relations with companies? As an example, the modification in the dimension following the consolidation of BCC Pordenonese Monsile have had an influence on the typology and dimension of firms served?

Average time expected for the interview: 30 minutes

ORIGINAL VERSION:

Abbiamo pensato a 3 domande, una relativa ai processi interni che mira a ricostruire processi e soggetti coinvolti e due relative alla relazione con le imprese. Ciascuna di queste due porta un esempio per facilitare la discussione, ma l'intervistato sarà incentivato a parlare liberamente anche di altri aspetti.

1. In base alla recente esperienza di fusione vissuta da BCC Pordenonese Monsile, quali sono i cambiamenti interni che ha rilevato a livello sia di struttura che di processi interni? Quali sono stati gli attori principali in questo processo?
2. Per quanto riguarda invece i rapporti con i vostri clienti, la nascita di BCC Pordenonese Monsile ha comportato modifiche nella relazione con le imprese clienti? In particolare, com'è mutata la vostra capacità di rispondere alle esigenze delle imprese del territorio da voi coperto?
3. Quali sono le caratteristiche della nuova banca che hanno avuto un impatto maggiore nella relazione con le aziende? Per esempio, la variazione di dimensione avuta con il consolidamento di BCC Pordenonese Monsile ha influito sulla tipologia e dimensione delle aziende cui vi rivolgete?

Tempo medio previsto per l'intervista: circa 30 minuti

Appendix C

The following process has been used to perform Natural-language Processing (NLP) analysis of the interviews.

STEP 1.

The following R code has been ran.

```
1. library(dplyr)
2. library(ggplot2)
3. library(readtext)
4. library(tidyr)
5. library(tm)
6. library(tokenizers)
7. dom1<-readtext("~/desktop/dom1.txt")
8. summary(dom1)
9.
10. tok<-dom1 %>%
11.   unnest_tokens(word, text)
12.
13. r1 <- removeWords(tok$word, stopwords(kind = "ita"))
14. r1
15. words <- c("", "quindi", "pi", "altri", "stata", "stato", "diciamo", "me",
16.           "altra", "perch", "cio", "poi", "stare", "po", "ovvero", "cos", "poi",
17.           "pu", "qui", "a", "secondo", "quindi")
18. removeWords(r1, words)
```

This code had the purpose of dividing each word. The process is known as “tokenization” and involve splitting the original text into one-token-per-row.

STEP 2.

The output was copied inside Word in order to clear it from possible “stopwords⁴⁴” not detected by the programme. The output of the first two step is a set of words, cleaned out from non-relevant element as stopwords are.

⁴⁴ Stopwords are the most used words in a certain language. For example they involve articles and other construct which are used to connect words and concepts inside a certain phrase.

STEP 3.

The following R code has been ran.

```
1. new<-readtext("~/desktop/new.txt")
2. summary(new)
3.
4. newtok<-new %>%
5.   unnest_tokens(word,text)
6.
7. newtok %>%
8.   count(word, sort = TRUE) %>%
9.   filter(n>1) %>%
10.  mutate(word = reorder(word,n)) %>%
11.  ggplot(aes(word,n))+
12.  geom_col() +
13.  xlab (NULL) +
14.  coord_flip()
```

This code had the purpose of dividing again each word through tokenization. Then, words were counted, sorted and properly filtered. Finally, the output was displayed through the use of the ggplot graph function.

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References

- Agarwal, S. and Hauswald, R. (2010) 'Distance and private information in lending', *Review of Financial Studies*, 23(7), pp. 2758–2788. doi: 10.1093/rfs/hhq001.
- Amel, D. *et al.* (2004) 'Consolidation and efficiency in the financial sector: A review of the international evidence', *Journal of Banking and Finance*, 28(10), pp. 2493–2519. doi: 10.1016/j.jbankfin.2003.10.013.
- Anderson, C. W., Becher, D. A. and Campbell, T. L. (2004) 'Bank mergers, the market for bank CEOs, and managerial incentives', *Journal of Financial Intermediation*, 13(1), pp. 6–27. Doi: 10.1016/S1042-9573(03)00027-5.
- Aristei, D. and Gallo, M. (2017) 'The determinants of firm–bank relationships in Italy: bank ownership type, diversification and multiple banking relationships', *European Journal of Finance*, 23(15), pp. 1512–1543. doi: 10.1080/1351847X.2016.1186712.
- Aristei, D. and Gallo, M. (2017) 'The determinants of firm–bank relationships in Italy: bank ownership type, diversification and multiple banking relationships', *European Journal of Finance*, 23(15), pp. 1512–1543. doi: 10.1080/1351847X.2016.1186712.
- Aswath Damodaran, Stern School of Business, 'Marketability and Value: Measuring the Illiquidity Discount', (July), pp. 1–60.
- Ayadi, R. *et al.* (2013) 'Mergers and Acquisitions in European banking higher productivity or better synergy among business lines?', *Journal of Productivity Analysis*, 39(2), pp. 165–175. doi: 10.1007/s11123-012-0309-8.
- Behr, P., Norden, L. and Noth, F. (2013) 'Financial constraints of private firms and bank lending behavior', *Journal of Banking and Finance*. Elsevier B.V., 37(9), pp. 3472–3485. doi: 10.1016/j.jbankfin.2013.05.018.
- Banca d'Italia (2019) 'Banche e istituzioni finanziarie: articolazione territoriale', *Statistiche*.
- Beretta, E. and Del Prete, S. (2002) 'Temi di discussione', *Banca d'Italia Working Papers*, 35(442), pp. 1–28. doi: 10.1162/JEEA.2008.6.6.1109.

Beretta, E. and Del Prete, S. (2013) 'Banking Consolidation and Bank-Firm Credit Relationships: the Role of Geographical Features and Relationship Characteristics', *Review of Economics and Institutions*, 4(3), pp. 1–46. doi: 10.5202/rei.v4i3.125.

Berger Allen N *et al.* (2002) 'Does Function Follow Organizational Form? Evidence From the Lending Practices of Large and Small Banks'. Available at: <http://www.nber.org/papers/w8752>.

Berger, A. N. (2000) 'The Integration of the Financial Services Industry: Where Are the Efficiencies?', *North American Actuarial Journal*, 4(3), pp. 25–45. doi: 10.1080/10920277.2000.10595922.

Berger, A. N. and Frame, W. S. (2007) 'Small business credit scoring and credit availability', *Journal of Small Business Management*, 45(1), pp. 5–22. doi: 10.1111/j.1540-627X.2007.00195.

Berger, A. N. and Udell, G. F. (1995) 'Relationship Lending and Lines of Credit in Small Firm Finance', *SSRN Electronic Journal*, 68(3), pp. 351–382. doi: 10.2139/ssrn.124708.

Berger, A. N. and Udell, G. F. (2002) 'Small Business Credit Availability and Relationship Lending: The importance of Bank Organisational Structure', *Economic Journal*. doi: 10.1017/CBO9781107415324.004.Psillaki,

Berger, A. N. and Udell, G. F. (2006) 'A more complete conceptual framework for SME finance', 30, pp. 2945–2966. doi: 10.1016/j.jbankfin.2006.05.008.

Berger, A. N. *et al.* (1998) 'The effects of bank mergers and acquisitions on small business lending.', *Journal of Financial Economics*, 50(50), pp. 187–229.

Berger, A. N. *et al.* (1999) 'The Dynamics of Market Entry: The Effects of Mergers and Acquisitions on De Novo Entry and Small Business Lending in the Banking Industry', 53(9), pp. 1689–1699. doi: 10.1017/CBO9781107415324.004.

Berger, A. N. *et al.* (2000) *Globalization of Financial Institutions: Evidence from Cross-Border Banking Performance*, *Finance and Economics Discussion Series*. doi: 10.17016/feds.2000.04.

Berger, A. N. *et al.* (2019) *Small Business Lending*, *The Oxford Handbook of Banking*. doi: 10.1093/oxfordhb/9780198824633.013.15.

Berger, A. N., Goldberg, L. G. and White, L. J. (2001) 'The Effects of Dynamic Changes in Bank Competition on the Supply of Small Business Credit', *SSRN Electronic Journal*. doi: 10.2139/ssrn.282513.

Berger, A. N., Klapper, L. F. and Udell, G. F. (2001) 'The ability of banks to lend to informationally opaque small businesses', *Journal of Banking and Finance*, 25(12), pp. 2127–2167. doi: 10.1016/S0378-4266(01)00189-3.

BIS (2001) 'Report on consolidation in the financial sector', pp. 65–124.

Bliss, R. T. and Rosen, R. J. (2001) 'CEO compensation and bank mergers', *Journal of Financial Economics*, 61(1), pp. 107–138. doi: 10.1016/S0304-405X(01)00057-5.

Bodner, J. and Capron, L. (2018) 'Post-merger integration'. *Journal of Organization Design*. Galle, A. and (2009) 'Competition and the Financial Crisis', *Organisation for Economic Co-operation and Development*, (February).

Bogdanova, B., Fender, I. and Takáts, E. (2018) 'The ABCs of bank PBRs', *BIS Quarterly Review*, (March), pp. 81–95. Akkus, O., Cookson, J. A. and Hortaçsu, A. (2016) 'The determinants of bank mergers: A revealed preference analysis', *Management Science*, 62(8), pp. 2241–2258. doi: 10.1287/mnsc.2015.2245.

Chen, Q. and Vashishtha, R. (2017) 'The effects of bank mergers on corporate information disclosure', *Journal of Accounting and Economics*. Elsevier B.V., 64(1), pp. 56–77. doi: 10.1016/j.jacceco.2017.05.003.

Coccorese, P. (1998) 'Assessing the competitive conditions in the Italian banking system: some empirical evidence', *PSL Quarterly Review*, 51(205), pp. 171–191.

Coccorese, P. (2004) 'Banking competition and macroeconomic conditions: A disaggregate analysis', *Journal of International Financial Markets, Institutions and Money*, 14(3), pp. 203–219. doi: 10.1016/j.intfin.2003.07.001.

Cole, R. A., Goldberg, L. G. and White, L. J. (2004) 'Cookie cutter vs. character: The micro structure of small business lending by large and small banks', *Journal of Financial and Quantitative Analysis*, 39(2), pp. 227–251. doi: 10.1017/s0022109000003057.

Cotugno, M., Monferrà, S. and Sampagnaro, G. (2013) 'Relationship lending, hierarchical distance and credit tightening: Evidence from the financial crisis', *Journal of Banking and Finance*, 37(5), pp. 1372–1385. doi: 10.1016/j.jbankfin.2012.07.026.

D'Auria, C., Foglia, A. and Reedtz, P. M. (1999) 'Bank interest rates and credit relationships in Italy', *Journal of Banking and Finance*, 23(7), pp. 1067–1093. doi: 10.1016/S0378-4266(98)00131-9.

D'Italia, Banca (2020) 'Banche e istituzioni finanziarie: articolazione territoriale'.

Damodaran, A. (2005) 'Marketability and Value: Measuring the Illiquidity Discount

Damodaran, A. (2009) 'Valuing financial service firms', *Stern Business*, (April), pp. 1–34. Available at: <http://people.stern.nyu.edu/adamodar/pdfiles/papers/finfirm09.pdf>.

De Bonis, R., Pozzolo, A. F. and Stacchini, M. (2012) 'The Italian Banking System: Facts and Interpretations', *SSRN Electronic Journal*, (Section 1). doi: 10.2139/ssrn.2126074.

Degryse, H. and Van Cayseele, P. (2000) 'Relationship Lending within a Bank-Based System: Evidence from European Small Business Data', *Journal of Financial Intermediation*, 9(1), pp. 90–109. doi: 10.1006/jfin.1999.0278.

Deloitte (2012) 'A guide to Mergers and Acquisitions in the UK', *Deloitte Consultancy: Investing in the UK A guide for South African businesses*, pp. 55–75. Available at: http://www.deloitte.co.uk/investingintheuk/pdfs/southafrica/uk_investingintheuk_sa_sixaguidetomergersandacquisitionsintheuk.pdf.

ECB (2000) *Mergers and acquisitions involving the EU banking industry - facts and implications*.

Eurofound (2012) *Public instruments to support restructuring in Europe*.

Fase, M. M. G. (1995) 'The demand for commercial bank loans and the lending rate', *European Economic Review*, 39(1), pp. 99–115. doi: 10.1016/0014-2921(93)E0071

Fazzari, S. M. and Petersen, B. C. (no date) 'Working capital and fixed investment: new evidence on financing constraints'.

Flick, U. (2009) 'An Introduction To Qualitative Research', *SAGE Publications*.

Flick, U., Kardorff, E. von and Steinke, I. (no date) 'A companion to qualitative research'. Available at: file:///C:/Users/youhe/Downloads/kdoc_o_00042_01.pdf.

Gioia, D. A., Corley, K. G. and Hamilton, A. L. (2013) 'Seeking Qualitative Rigor in Inductive Research: Notes on the Gioia Methodology', *Organizational Research Methods*, 16(1), pp. 15–31. doi: 10.1177/1094428112452151.

Giovane, P. Del, Eramo, G. and Nobili, A. (2002) 'Disentangling demand and supply in credit developments: a survey-based analysis for Italy', *Banca d'Italia Working Papers*, 35(442), pp. 1–28. doi: 10.1162/JEEA.2008.6.6.1109.

Goddard, J. *et al.* (2007) 'European banking: An overview', *Journal of Banking and Finance*, 31(7), pp. 1911–1935. doi: 10.1016/j.jbankfin.2007.01.002.

- Gregory, B. T. *et al.* (2005) 'An empirical investigation of the growth cycle theory of small firm financing', *Journal of Small Business Management*, 43(4), pp. 382–392. doi: 10.1111/j.1540-627X.2005.00143.
- Hagendorff, J. and Keasey, K. (2009) 'Post-merger strategy and performance: Evidence from the US and European banking industries', *Accounting and Finance*, 49(4), pp. 725–751. doi: 10.1111/j.1467-629X.2009.00306.
- Haleblian, J. and Finkelstein, S. (1999) 'The influence of organizational acquisition experience on acquisition performance: A behavioral learning perspective', *Administrative Science Quarterly*, 44(1), pp. 29–56. doi: 10.2307/2667030.
- Hand, D. J. and Henley, W. E. (1997) 'Statistical classification methods in consumer credit scoring: A review', *Journal of the Royal Statistical Society. Series A: Statistics in Society*, 160(3), pp. 523–541. doi: 10.1111/j.1467-985X.1997.00078.
- Liberti, J. M. and Mian, A. R. (2009) 'Estimating the effect of hierarchies on information use', *Review of Financial Studies*, 22(10), pp. 4057–4090. doi: 10.1093/rfs/hhn118.
- Liberti, J. M. and Petersen, M. A. (2018) 'Information: Hard and Soft', (August).
- López-Espinosa, G., Mayordomo, S. and Moreno, A. (2017) 'When does relationship lending start to pay?', *Journal of Financial Intermediation*, 31, pp. 16–29. doi: 10.1016/j.jfi.2016.11.001.
- M., Tsolas, I. E. and Margaritis, D. (2010) 'Evaluation of credit risk based on firm performance', *European Journal of Operational Research*, 201(3), pp. 873–881. doi: 10.1016/j.ejor.2009.03.032.
- Magee, J. D. (1911) 'The Italian Banking System', *Proceedings of the Academy of Political Science in the City of New York*, 1(2), p. 431. doi: 10.2307/1171684.
- Manning, C. and Schutze, H. (1988) 'Foundations of Statistics', *Biometrics*, p. 631. doi: 10.2307/2531884.
- Manning, C. D. *et al.* (2014) 'The Stanford CoreNLP Natural Language Processing Toolkit.', *Aclweb.Org*, pp. 55–60. Available at: <http://macopolo.cn/mkpl/products.asp>.
- Merton, R. C. and Bodie, Z. (1995) 'A Conceptual Framework for Analyzing the Financial Environment', *In The Global Financial System: A Functional Perspective*, (May), pp. 3–31. doi: 10.2139/ssrn.6638.
- Muller, P. *et al.* (2019) *Annual Report on European SMEs 2018/2019 - Research & Development and Innovation by SMEs*. doi: 10.2826/500457.

OECD (2015) 'New Approaches to SME and Entrepreneurship Financing', *New Approaches to SME and Entrepreneurship Financing*. doi: 10.1787/9789264240957-en.

Paul, S. (1986) 'POSTMERGER INTEGRATION', *Journal of Business Strategy*. MCB UP Ltd, 7(1), pp. 65–76. doi: 10.1108/eb039143.

Peek, J. and Rosengren, E. S. (1998) 'Bank consolidation and small business lending: It's not just bank size that matters', *Journal of Banking and Finance*, 22(6–8), pp. 799–819. doi: 10.1016/S0378-4266(98)00012-0.

Pennacchi, G. (2000) 'Comment on Incentives for Banking Megamergers: What Motives Might Regulators Infer from Event-Study Evidence?', *Journal of Money, Credit and Banking*, 32(3), p. 702. doi: 10.2307/2601203.

Petersen, M. A. and Rajan, R. G. (1994) 'The Benefits of Lending Relationships: Evidence from Small Business Data', *The Journal of Finance*, 49(1), pp. 3–37. doi: 10.1111/j.1540-6261.1994.tb04418.

R. and Marquez, R. (2006) 'Competition and strategic information acquisition in credit markets', *Review of Financial Studies*, 19(3), pp. 967–1000. doi: 10.1093/rfs/hhj021.

R.Murro, P. and Rationing, C. (2014) 'Lending Technologies in Italy: an Example of Hardening of Soft Information?', (December 2010), pp. 1–27.

Rezaee, Z. (2004) *Financial Institutions, Valuations, Mergers, and Acquisitions: The Fair Value Approach*. Available at: http://books.google.com/books/about/Financial_Institutions_Valuations_Merger.html?id=jslsIEZSvh0C&pgis=1.

Rym, A. and Pujals, G. (2004) *B Anking C Onsolidation in the Eu O Verview and P Rospects*, Ceps.Sant'anna, S. and Sanches, J. (2016) 'Between the lines', *Literary Review*, 59(2), pp. 150–163.

Sandelowski, M. (2001) 'Focus on research methods real qualitative researchers do not count: The use of numbers in qualitative research', *Research in Nursing and Health*, 24(3), pp. 230–240. doi: 10.1002/nur.1025.

Scott, W. (2001) 'www.econstor.eu'. Boot, A. W. A. (2000) 'Relationship Banking: What Do We Know?', *Journal of Financial Intermediation*, 9(1), pp. 7–25. doi: 10.1006/jfin.2000.0282.

Sharpe, S. a (1990) 'Asymmetric Information , Bank Lending and Implicit Contracts : A Stylized Model of Customer Relationships', *Journal of Finance*, 45(4), pp. 1069–1087.

Shrivastava, P. (1986) 'Postmerger integration', *Journal of Business Strategy*, 7(1), p. 65. doi: 10.1108/eb039143.

Slama, M. Ben, Saidane, D. and Fedhila, H. (2012) 'How to identify targets in the M&A banking operations? Case of cross-border strategies in Europe by line of activity', *Review of Quantitative Finance and Accounting*, 38(2), pp. 209–240. doi: 10.1007/s11156-010-0224-x.

Strahan, P. E. and Weston, J. P. (1998) 'Small business lending and the changing structure of the banking industry', *Journal of Banking and Finance*, 22(6–8), pp. 821–845. doi: 10.1016/S0378-4266(98)00010-7.

Udell, G. F., Uchida, H. and Yamori, N. (2008) 'Loan Officers and Relationship Lending to SMEs.', *Federal Reserve Bank of San Francisco Working Paper Series*, (July).

Williamson, O. E. (1988) 'Corporate Finance and Corporate Governance', *The Journal of Finance*, 43(3), pp. 567–591. doi: 10.1111/j.1540-6261.1988.tb04592.

Zollo, M. and Singh, H. (2004) 'Deliberate learning in corporate acquisitions: Post-acquisition strategies and integration capability in U.S. bank mergers', *Strategic Management Journal*, 25(13), pp. 1233–1256. doi: 10.1002/smj.426.

Web References

Bank of America, *What is working capital – and why is it important?*,

<https://www.bankofamerica.com/smallbusiness/business-financing/learn/what-is-working-capital/>

Borsa Italiana, *Glossario finanziario – Venture Capital*, <https://www.borsaitaliana.it/borsa/glossario/venture-capital.html>

BPP, www.bpp.it

Corporate Finance Institute, *What does Consideration mean?*,

<https://corporatefinanceinstitute.com/resources/knowledge/deals/consideration/>

Corporate Finance Institute, *What is Debt Refinancing?*,

<https://corporatefinanceinstitute.com/resources/knowledge/finance/debt-refinancing/>

ECB, *Euro area bank lending survey*,

https://www.ecb.europa.eu/stats/ecb_surveys/bank_lending_survey/html/index.en.html

ECB, *Survey on the access to finance of enterprises*,

https://www.ecb.europa.eu/stats/ecb_surveys/safe/html/index.en.html

Economic and Financial affair, 2020, *One currency for one Europe*, European Commission,

https://ec.europa.eu/info/publications/economy-finance/one-currency-one-europe_en

European Commission, *A rulebook for all financial actors in the EU*, https://ec.europa.eu/info/business-economy-euro/banking-and-finance/banking-union/what-banking-union_it

European Commission, *What is the Economic and Monetary Union? (EMU)*, https://ec.europa.eu/info/business-economy-euro/economic-and-fiscal-policy-coordination/economic-and-monetary-union/what-economic-and-monetary-union-emu_en

European Parliament, *European System of Financial Supervision (ESFS)*,

<https://www.europarl.europa.eu/factsheets/en/sheet/84/european-system-of-financial-supervision-esfs->

European Parliament, *Treaty of Rome (EEC)*, <https://www.europarl.europa.eu/about-parliament/it/in-the-past/the-parliament-and-the-treaties/treaty-of-rome>

European Union, *EU treaties*, https://europa.eu/european-union/law/treaties_en

ICCREA, *Storia*, <https://www.iccreabanca.it/it-IT/Pagine/storia.aspx>

ICCREA, *Un gruppo che guarda al futuro facendo tesoro del passato*,
<https://www.gruppoiccrea.it/Pagine/ChiSiamo/storia.aspx>

Ishaan Seth, Zane Williams, Max Flötotto, Oliver Engert, Sean O’Connell, 2019, *Realizing M&A value creation in US banking and fintech: Nine steps for success*, <https://www.mckinsey.com/industries/financial-services/our-insights/banking-matters/realizing-m-and-a-value-creation-in-us-banking-and-fintech-nine-steps-for-success>

James P. Womack and Daniel T. Jones, March-April 1994, *From Lean Production to the Lean Enterprise*, Harvard Business Review, <https://hbr.org/1994/03/from-lean-production-to-the-lean-enterprise>

Jean Dermine, 2002, *EUROPEAN BANKING, Past, Present and Future*, ECB,
https://www.ecb.europa.eu/events/pdf/conferences/dermine_comp.pdf

Miklos Dietz, Somesh Khanna, Tunde Olanrewaju, and Kausik Rajgopal, 2016, *Cutting through the noise around financial technology*, <https://www.mckinsey.com/industries/financial-services/our-insights/cutting-through-the-noise-around-financial-technology>

Paul McCaffrey, 2019, *Aswath Damodaran on Acquisitions: Just Say No*, CFA Institute, https://blogs.cfainstitute.org/investor/2019/02/28/aswath-damodaran-on-acquisitions-just-say-no/#_prclt=PbPOXsRa

Syed Fariq, Javaid Rachel, Stone Stefen and Joshua Rasay, 2019, *Fintech M&A Deal Tracker – August continues record-breaking year of megadeals*, <https://www.spglobal.com/marketintelligence/en/news-insights/latest-news-headlines/fintech-m-a-deal-tracker-8212-august-continues-record-breaking-year-of-megadeals-50076393>