6
Social Lending in Europe: Structures, Regulation and Pricing Models

Mario La Torre and Fabiomassimo Mango

6.1 Introduction

Social Lending (SL)[1] links borrowers and lenders on website markets, creating virtual financial communities. SL is in fact an alternative credit market that uses website platforms to link borrowers and lenders without the interpolation of traditional financial intermediaries.

This web credit market was originally promoted in 2005 to support microcredit programmes in developing countries, involving large groups of investors resident in industrial countries in social initiatives.

The efficacy of these solutions immediately cleared the way to similar initiatives in all so-called developed countries, especially in response to the financial crisis and the emergence of new pockets of poverty and financially excluded people. In Europe, SL has developed not just in order to channel funds to poor people, but more to meet the needs of those customers who are victims of financial exclusion or simply don't want to use the traditional banking channels.

In short, SL platforms aim to grant funds to customers who do not have, or who do not want, access to traditional financial markets. Are these SL platforms able to charge less than banks and financial intermediaries?

The basic SL pricing model lets borrowers and lenders establish the price of the loan. The more sophisticated platforms ask for minimum entry requirements and fix a set of rules for loan pricing. The pricing methodologies may differ from one platform to another because of different degrees of pricing ethics behind the philosophy of the platforms.

The aim of this chapter is to analyze the pricing model adopted by the more advanced forms of SL platform. The analysis focuses on the

European SL market, with a particular focus on the Italian experience, and aims to estimate the final price charged to borrowers.

To attain this aim, it was first necessary to outline the main SL features by building a taxonomy of the main platform typologies; this has been done by observing the operational models adopted by all 33 European platforms currently (2011) active in Europe. The analysis of the pricing methodologies adopted by the selected platforms has been conducted starting from a SL pricing model proposed by the authors. To estimate the price charged to borrowers, the chapter surveyed 19 out of the 33 European platforms; the results show a great variability in the interest rate charged to customers which, in many cases, including that of Italy, is below the average interest rate applied by the traditional financial intermediaries on personal loans.

Nevertheless, the lack of regulation has allowed a great diversification of pricing models and, at the same time, a lack of transparency into the pricing methodologies adopted; there is evidence of a significant variability in the fees and commissions applied to clients. An overview of the SL regulatory framework in the main European countries allows better comprehension of the phenomenon. In this respect, the chapter also contains some possible regulatory proposals that could foster the transparency of the European SL market.

6.2 The nature of social lending

The credit market on the web

Social lending is an alternative credit market that leverages the Internet.

In computing and telecommunications the term ‘peer-to-peer’ (P2P) is an informatics network – usually computers – that does not have hierarchical nodes in the usual form of client or server, but rather a number of peer nodes of equal status that can act as both clients and servers to other nodes in the network. This network model is the antithesis of client–server because it allows every node to start or complete communications and transactions. The classic established P2P example is the file-sharing network (ftp).

The SL market is represented by internet sites developed to bring together, in different ways, the demand with the supply of credit: whoever needs a loan will meet those who have the intention of investing or donating money; investors and donors can access personal information about the applicant and even ask questions in a virtual personal conversation. In SL, P2P defines a web credit market where private borrowers ask private investors or donors for loans of small amounts.

SL's aim is, therefore, to bring together the demand and the supply of credit according to the intention of the operator promoting the initiative. The platform, in fact, is a device that establishes:

- information that needs to be provided by a participant intending to be admitted to the marketplace;
- a degree of freedom by borrowers and lenders in the closing of an agreement;
- methods of access to services;
- information to disclose to the market.

In short, the parties interested in closing a contract must do so by accepting the rules and the minimum requirements imposed by the platform, remaining free to carry on a dialogue with other actors.

In its more entrepreneurial form, SL can be classified as a marketplace characterized by either complete disintermediation, or alternatively by a 'soft intermediation' that anticipates the presence of traditional intermediaries outside the platform.

All things considered, SL cannot be considered as a new type of business; markets have always existed as places to exchange goods and services; through SL, the financial market is merely using a new channel to connect th supply and the demand.[2] Nevertheless this marketplace, characterized by a new kind of disintermediation, is often not recognized by regulatory authorities, with the consequence of generating opportunistic behaviour by operators and consequently by lenders in terms of requested interest rates. The costs and risks of this new market are still unknown.

Some features of social lending

It is estimated that the total amount of money loaned through this alternative to traditional credit markets is about US$650 million in 2007, and it is expected to exceed US$6 billion by 2011.[3] However, supervising authorities, especially in Europe, have not yet begun to monitor the SL market and the amount of loans generated by this new credit channel.

In fact, it is still hard to monitor the P2P flow of funds; this is partly because the financial resources generated by SL often pass through the

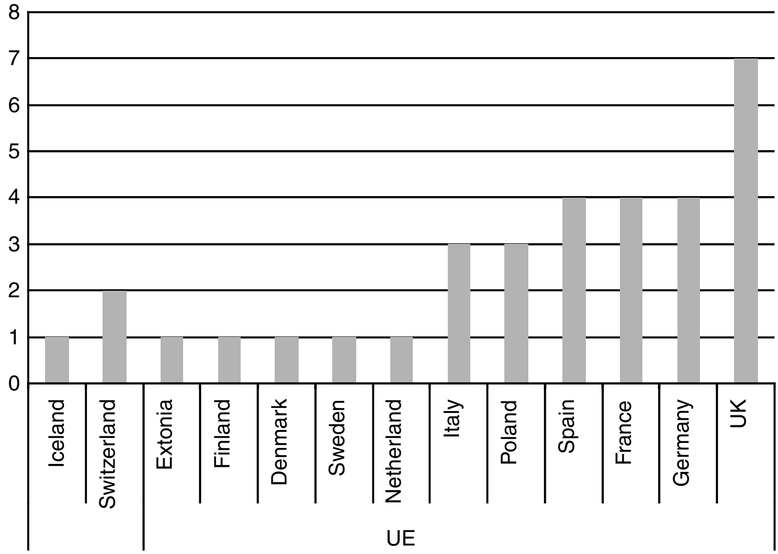

Figure 6.1 Distribution of SL platforms active in the UE

banking system and do not appear in the financial balance sheets of the platforms.

SL's expansion is, however, highlighted by the number of platforms created since the origin of the phenomenon; to date, 39 platforms have been started in the European Union, distributed approximately in proportion with the populations of the countries concerned (Figure 6.1).

The determinants of social lending: poverty, financial exclusion and investment opportunities

The origins of SL are in a way related to microfinance and microcredit. Microcredit, in its early phase, was an instrument of economic development created in order to allow poor people in developing countries to gain access to credit. Nowadays, microcredit initiatives have been widespread even in so-called advanced economies in order to support the 'new poor', more correctly classified as the financially excluded. The new identity of microfinance has extended its scope to take in all those who are victims of financial exclusion.[4]

All this notwithstanding, the most relevant criticism that Microfinance Institutions (MFIs) must face is their limited capacity to attract financial resources to use in the supply of microcredits and financial services for their poor and financially excluded clients.

In fact, MFIs obtain the necessary resources to finance initiatives by means of international donors or with the moderate economic support of financial intermediaries, mostly based in the areas where the MFIs intend to operate. The collection of funds demands a range of complex and burdensome processes, and MFIs are characterized by a limited capacity to attract investment, and difficulty in matching those who need loans and those – in either developed countries or developing ones – who would like to support microcredit projects. All this delineates a scenario in which the demand for microcredit and microfinance products often exceeds the supply, especially in developing countries.

For the above reasons, we have over the last few years experienced various 'structured microfinance' initiatives:[5] microfinance-collateralized debt obligations, microfinance investment funds and microcredit securitization programmes are examples of microfinance innovations aimed at collecting more funds.[6]

To these initiatives others have been added, beginning from 2005, which utilize the SL formula. One such SL feature is strictly related to microfinance and mainly refers to those platforms operating in favour of poor people based in developed countries and, more recently, in favour of financially excluded customers living in industrialized countries. Some reasons for this expansion are certainly due to the recent crisis experienced by traditional financial markets which, by altering the relationship of trust in banking institutions, has allowed these types of initiative to proliferate. This form of SL can be defined as 'demand-driven'.

Other SL initiatives have also been promoted which, even though structurally similar to the others, do not only have the objective of sustaining poor people or financial excluded customers but also promise investors a superior profitability to that offered by banks. This kind of social lending is also supply-driven and, therefore, we can define it as market-driven; the loans granted do not constitute a donation, and are not created out of solidarity, but promise a higher interest rate on investment to that offered by conventional banking systems, and greater flexibility than that of a traditional loan.

To sum up, it is possible to state that in the international scene, some SL platforms co-exist that promote socially relevant projects and there are others that in addition aim to offer new investment opportunities to lenders, sometimes keeping intermediation costs low for borrowers. In the first case, the main product offered can be classified, in most of the cases, as pure microcredit, while the market-driven SL is more oriented to traditional small loans.

A taxonomy of social lending

A basic taxonomy of SL models can be envisaged by taking into account four specific variables: the goal of the platform; the financial intermediation model adopted; the nature of the beneficiaries and their territories; and the products offered.

The goal

The first and most elementary diversity can be applied to the goal that the SL wants to achieve: the institution that manages the platform can either have a strictly social goal or be orientated towards profit while still maintaining an ethical and social function. In terms of the goal, it is possible to distinguish between non-profit and profit-oriented platforms.

The non-profit-oriented platforms are generally demand-driven and do not charge any fee to either borrowers or lenders; moreover, lenders do not receive any interest from the loan. These kinds of platforms are sustainable thanks to grants coming from institutional donors or spontaneous donations offered directly from their lending partners. The first non-profit oriented experience of online SL platforms, in November 2005, is attributable to Kiva (USA) which was created precisely in order to provide microcredits to developing countries; and then other platforms were created using Kiva as a model for operating in developing countries.

Profit-oriented platforms, in most cases, are market-driven; they usually charge fees and/or interest to borrowers; in some cases, they also charge fees to lenders. Lenders receive interest on loans.

The market-driven profit-oriented platforms generally operate in developed countries; these platforms have the principal goal of offering credit to bankable and non-bankable clients, that is these platforms are an alternative to banks operating with a profit motive.

For the lenders, market-driven SL represents a diversification strategy of their investments; for the borrowers, it is often the only opportunity to get access to credit or, in many cases, a way to get a lower rate of interest than those fixed by banks and financial intermediaries.

The first profit-oriented experience of online SL platforms, in March 2005, is attributable to Zopa UK.

The increased attention towards a sustainable ethical finance is generating integration of the two models discussed; there is in fact on one side, a development of profit-oriented platforms operating in developing countries, and on the other an increasing number of platforms operating in developed countries aiming for profit rates below the market average. This semi-profit model is spreading to most European countries; this is especially true in the case of platforms that do not pay interest to lenders, and do not charge interest to borrowers but merely low fees to cover operating costs only.

The financial intermediation model

Within this taxonomy, the platforms can be also classified with respect to the financial intermediation model adopted. More precisely, it is possible to distinguish direct from brokered SL; in direct SL, the platforms act as an intermediary putting borrowers and lenders into direct contact with one another; in brokered SL, the platforms make use of traditional financial intermediaries to gain access to potential borrowers and to channel funds from lenders to borrowers.

Nature of beneficiaries and their territories

Non-profit demand-driven SL is usually devoted to poor people located in developing countries, whereas profit market-driven platforms operate mostly in industrial countries, and their grants are supplied to victims of financial exclusion or to those borrowers who display a willingness to pay lower rates for small debts.

The products

Non-profit, demand-driven social lending usually consists of microcredits, while profit-oriented, market-driven platforms grant traditional small loans, mainly for consumers; this is also because many industrial countries do not have a specific regulation for microcredit.[7] In this respect, it is possible to state that profit-oriented platforms can in most cases offer both consumer and other loans which are similar to microcredits, with respect to the small amounts, the absence of any collateral, and the micro-entrepreneurial project financed.

In conclusion, SL platforms, depending on their goal, build up their programs selecting different types of borrowers, located in different geographical areas, using different financial products and financial intermediation models (Table 6.1).

Nevertheless, the development of the SL market is leading to a more complex taxonomy which can be envisaged only with a deeper analysis of the operational models adopted.

Table 6.1 A taxonomy of social lending platforms

	Goal	
	Non-profit *Demand-driven Platforms*	Profit /Semi-profit *Market-driven Platforms*
Financial Intermediation Model	Direct and brokered	Direct and brokered
Nature of the Borrowers	Poorest of the poor and poor people	Victims of financial exclusion or dissatisfied
Territorialization	Developing countries	Industrial countries (mostly)
Product	Microcredits	Loans of small amount

6.3 Operational models of social lending

To better define the SL platform's operational model, a focus on the financial intermediation model and the monetary cycle adopted would be very useful.

Shaping social lending financial intermediation models

To correctly distinguish between direct and brokered SL, it is important to understand which institution selects the potential borrowers, and who is responsible for the credit policy (including the technical form of the loans, the interest rates and fees applied, they repayment schedule). With reference to these two aspects, it is possible to distinguish three different SL models: the Strongly Pure SL and the Pure (or Pass-Through) SL, which can be defined as direct models; and the Hybrid SL (brokered).

The Strongly Pure SL (direct)

For those institutions that operate on the Strongly Pure SL model, the web platforms are made to represent a virtual and autonomous credit market for potential lenders and borrowers. The goal of these platforms is to facilitate transactions in all respects, especially with regard to loan terms, and by virtually annihilating geographical distance. Under this model, borrowers and lenders have direct access to the platform and can establish the loan conditions; there is no recourse to traditional financial intermediaries, or to mon-governmental organizations (NGOs), or

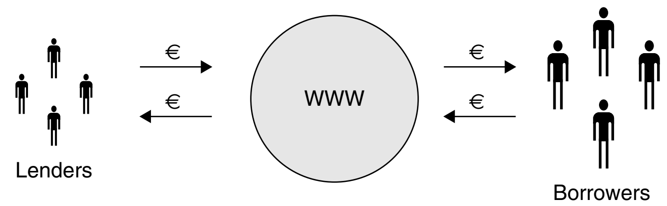

Figure 6.2 Strongly Pure SL (direct model)

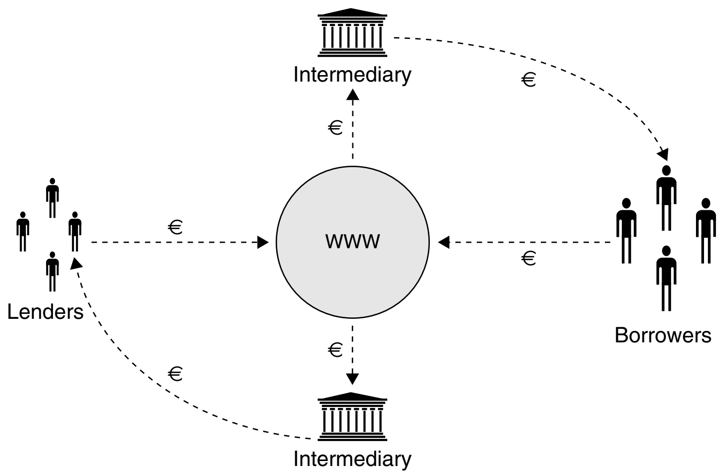

Figure 6.3 Pure or Pass-Through SL (direct model)

other MFIs. The entire process takes place within the dedicated web platform (Figure 6.2): lenders and borrowers meet on the platform and agree the technical and economical features of the loans. The monetary cycle is a direct one: investors lend directly to borrowers and borrowers pay the lenders back. The platform offers technical support throughout the process.

The Pure or Pass-Through SL (direct)

In the pure SL model, the need for an intermediary is justified by the need to channel the flow of funds (Figure 6.3). Here, borrowers and lenders meet on the platform and are free to agree the loan conditions, but the monetary cycle is managed by a bank or financial institution; lenders and borrowers are still clients of the platform, but the flow of funds passes through the intermediary. Use of this model can be generated

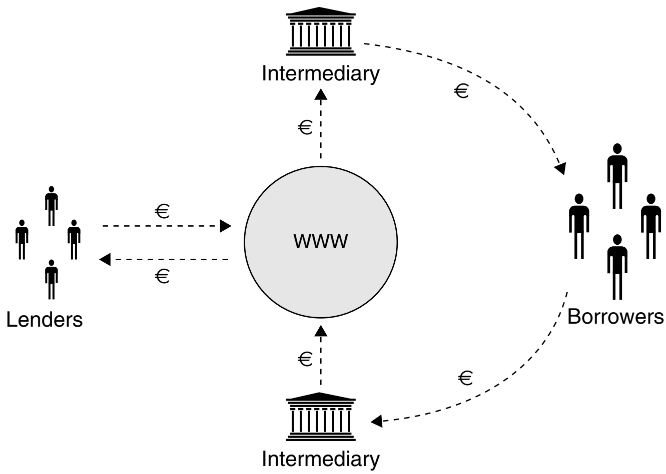

Figure 6.4 Hybrid SL (brokered model)

by the urgency of solving technical obstacles or by the need to comply with financial regulation, especially in those countries in which granting credit and collecting deposits is considered as banking activity and can therefore be performed only by banks.

The Hybrid SL (brokered)

In this context, traditional financial intermediaries and, more often, the MFIs move in and take over part of the credit process by becoming a substitute for the platform and its clients. It is the financial intermediaries who are usually in charge of selecting the borrowers and granting loans (Figure 6.4) while the funding is provided by the platform, which has the role of attracting potential lenders. In the Hybrid SL model, financial intermediaries not only offer specific infrastructures to support the platform, but also manage the credit process; they do this by selecting the borrowers, fixing the economical conditions of the loans, granting the loans and, in some cases, protecting lenders from defaulting borrowers. The platforms collect money from potential lenders and grant loans to their financial partners (mostly MFIs) which use this funding to provide loans to their clients. Platforms usually adopt a set of eligible criteria for an intermediary to become their partner; the most sophisticated platforms have their own rating models for evaluating partners. Platforms also require their partners to ensure that the loans granted meet specific requirements and require monitoring and reporting activity.

The brokered model was created from the necessity for SL platforms to overcome criticisms of lending in developing countries, including the difficulty of selecting borrowers and assessing their creditworthiness, or technological shortcomings due to the frequent total lack of internet connections and the lack of computer literacy in the population. The platform delegates to the local MFI the activity of selecting borrowers and their projects and performs all the credit activity, taking advantage of the MFI's expertise. Under a financial perspective, the platform uses the money collected by investors to grant a loan to a partner. The partner uploads his clients' projects onto the platform and is obligated to use the loan received to finance the projects selected by investors. In this model, the financial intermediation activity is carried out on two levels: the platform grants a loan to the partner and the partner finances the final beneficiaries.

In addition to the three categories of operating models described, it is possible to identify an Improper SL; here we find all those platforms that perform only some of the stages of the financial intermediation process, supplying support services for direct financing between borrowers and lenders, or investment solutions for retail investors.

Within this context, there are platforms that manage personal loans but do not intermediate between supply and demand; this happens when investors have already contacted borrowers and turn to the platform to manage all operational and financial procedures (for example, the collection of accounts, computation of rates etc.). In other cases, the platforms offer the opportunity to invest small sums of money; the portal works in the same way as a traditional investment fund, investing the savings in a basket of initiatives related to retail customers; in this case, the lender does not know who or what project will be financed, and the investment can be perceived only as an indistinct portion of the platform's total investment.

How SL platforms work: the selection of the projects, the price of the loan and the monetary cycle

Depending on the financial intermediation models, it is possible to identify different methods of selecting the projects to be funded and different monetary cycles adopted by the platforms.

Strongly Pure and Pure or Pass-Through SL (direct model)

In the Strongly Pure and Pure SLs, the potential borrower (applicant) can, once registered on the site, post a request for funding: the request must contain all necessary information on the beneficiary, the project and the amount required to achieve it, according to a typical self-certification formula. Clearly, the more detailed the information (on some platforms it is even possible to post photographs and videos) the easier it is for potential investors to evaluate the project, and therefore the more attractive it becomes to them.

On another part of the platform, potential investors can scrutinize all the requests for financing, and the conditions proposed by the applicants, and they decide which project to invest in and ultimately how much to invest. It should be clarified that financing from a single investor does not have to cover the entire amount requested by the borrower, but can cover only a part, depending on the minimum amount set by the platform. The platform sets a deadline for the completion of the funding, and if the amount is not reached, the investors are reimbursed the amount paid. In this way, it is then possible for the investors to diversify their total investment into a number projects, and thus mitigate their risk.

Non-profit oriented platforms do not apply any fees or interest rates to borrowers; lenders have only the right to have their capital invested refunded.

Profit-oriented platforms may use different pricing methodologies to set the price of the loans. Fees are always set by the platform, while in a few cases the platform also fixes the interest rates. In the majority of direct SL platforms, however, it is the applicants themselves who set the maximum interest rate that they are willing to pay for finance. The higher the rate, the faster the loan gets processed.

Usually, the rate paid by the borrower is the result of a low-bid auction: the maximum rate is set by the applicant and the bids are made by each investor on the basis of their own decisions and according to the scoring assigned by the portal. Once the auction has ended, the cost borne by the beneficiary should reflect the match between the demand and the supply of the financing.

Some platforms provide a score (or other information such as credit history) for each applicant: this scoring can be developed internally by the platform or performed by an external company. In this way, the potential lender, in addition to being able to access information about the project being provided by the applicant, can estimate the probability of default by that borrower.

There are variants of the classic SL model described: on a few platforms, it is only the lenders that propose the terms and conditions for loans, and the borrowers must choose between the conditions offered by the market that match their needs best.

The clearing of the financial transaction – as well as the financial and administrative management of the flow of funds (loan payments and reimbursements) – is managed by the platform or, in the Pass-Through model, by the intermediary; in rare cases, it is left to the parties themselves.

Hybrid SL(brokered)

In the brokered model, the operational aspects described are adapted to the specific form of approach. The web platform attracts investors who can then select the project to be funded. Projects are generally selected by an MFI or an NGO, which is a partner of the platform and which is located in the same country as the borrowers. The platforms select their partners from organizations that have expertise in microfinance, their selection criteria usually requiring a minimum size of loan portfolio and a minimum number of active borrowers.

In this way, investors have the advantage of being able to rely on institutions in the area that can certify the validity of the project and, finally, ensure a low default rate for the initiatives. Platforms, for their part, shorten the distance between developing and developed countries, so as to facilitate socially responsible investors who want to invest in projects that would never otherwise be funded except through traditional microcredit channels.

The platform works as follows: potential borrowers meet with an MFI which is a partner of an SL platform, and request a loan; the MFI grants the loan to the borrower from its own funds (though occasionally the MFI will grant the loan to the borrower only after receiving the money from the platform); for each loan granted the MFI uploads the loan request to the platform; investors select the projects they want to finance; the platform uses the money collected from lenders to fund the MFI.

MFIs are generally rated by the platform and they can receive different amounts of funds from the platform depending on their rating; MFIs with a higher rating can receive more and so can finance a larger number of borrowers.

At Stage Two, borrowers pay back the loan to the MFI which in turn sends the funds back to the platform. Lenders can then decide whether to make another loan, or keep their money in their platform account, or withdraw from it.

In this model, it is the MFI that fixes the interest rate to be paid by borrowers and that manages the loan. The platform can fix a set of lending criteria – such as the amount of the loan and the borrower's profile and location – and usually asks the MFI to perform due diligence on the loan portfolio and to periodically report the delinquency rate.

In the case of brokered platforms, the distinction between non-profit and profit SL can be further refined. In this model, beneficiaries are always asked by the MFI to pay interest on loans; however, non-profit platforms are those who do not normally charge any fees to MFIs nor pay any interest to lenders, whereas profit-oriented platforms may charge their MFIs for the funding and may pay interest to lenders. There are also platforms that charge fees to their MFIs only to cover operational costs; in this perspective, the platform would fall into the semi-profit model.

The operational model of the sample observed

In order to analyse the incidence of SL in Europe, we have surveyed all the platforms based in Europe (operating both within and outside the EU). Thirty-three platforms have been found to be up and running, there are two failed platforms (both in Holland), and three suspended platforms (two in Italy, one in Poland), and finally there was a first attempt to use P2P model in the insurance field in Germany (Table 6.2).

Operational models adopted in Europe

The operational models adopted in Europe reflect the taxonomy previously described: there is a clear preference for Strongly Pure and Pure lending platforms (Figure 6.5), which are all profit-based (Figure 6.6). At the level of collecting deposits and lending, these platforms function in their home country or with offshore branches (which are their own separate legal entities) located in other European countries (for example Zopa in the UK and Italy, and Boober in the Netherlands and Italy).

The majority of the platforms set their interest rates by auction; in five cases (Prestiamoci in Italy, TrustBuddy in Sweden, Pret dihion in France, Studienaktie in Switzerland and Prodigy Finance in the UK) a fixed interest rate is set by the platform itself, and the interest rate, which is fixed in relation to the amount and maturity, represents the annual nominal interest rate; in another two cases (Smava in Germany and Fixura in Finland), potential borrowers base the auction on a scoring system. All the profit-oriented platforms charge fees to their borrowers.

As for the brokered SL lending platforms, four of the eight included in the survey collect funds mostly in the country of origin, while the projects are usually based in developing countries; to grant the loans, these platforms make use of MFIs as well as NGOs and non-profit institutions based in the territory.

Table 6.2 Social lending platforms in Europe

Country	Platform name	Goal of the platform: Profit and semi-profit	Goal of the platform: No Profit	Intermediation model adopted: *Direct model*: The Strongly Pure SL	Intermediation model adopted: *Direct model*: The Pure SL or Pass-Through SL model	Intermediation model adopted: *Brokered model*: The Hybrid SL	Nature of the beneficiaries: Poorest of the poor and poor people	Nature of the beneficiaries: Victims of financial exclusion or other	Territorialization: Developing countries	Territorialization: Industrial countries	Microfinance institution or local partner: Present	Microfinance institution or local partner: Not present
Denmark	Myc4	•				•	•		•		•	
Estonia	Isepankur	•			•			•		•		•
Finland	Fixura Ltd Oi	•			•			•		•		•
France	Pret d'Union	•		•				•		•		•
	Friendsclear	•				•		•		•		•
	Babyloan	•				•	•		•		•	
	Veecus	•				•	•		•		•	
Germany	Friendsurance	•			•			•		•		•
	Smava	•			•			•		•		•
	Auxmoney	•			•			•		•		•
	Youcredit	•			•			•		•		•
Iceland	Uppspretta	•			•			•		•		•
Italy	Prestiamoci	•			•			•		•		•
	Boober It	•			•			•		•		•
	Zopa It	•			•			•		•		•
Netherlands	Frooble		•	•				•		•		•

Country	Platform name	Goal of the platform		Intermediation model adopted			Nature of the beneficiaries		Territorialization		Microfinance institution or local partner	
		Profit and semi-profit	No Profit	*Direct model*		*Brokered model*	Poorest of the poor and poor people	Victims of financial exclusion or other	Developing countries	Industrial countries	Present	Not present
				The Strongly Pure SL	The Pure SL or Pass-Through SL model	The Hybrid SL						
Poland	Kokos	•			•			•		•		•
	Smava	•			•			•		•		•
	Finansowo	•			•			•		•		•
Spain	Lubbus	•			•			•		•		•
	Comunitae	•			•			•		•		•
	Partizipa	•			•			•		•		•
	Can	•				•		•		•		•
Sweden	TrustBuddy	•			•			•		•		•
Switzerland	Studienaktie	•				•		•		•		•
	Cashare AG	•			•			•		•		•
UK	Fundcircle	•			•			•		•		•
	Lendwithcare		•			•	•		•		•	
	Ratesetter	•			•			•		•		•
	Yes-secure	•			•			•		•		•
	Zopa UK	•			•			•		•		•
	Big Carrot	•			•			•		•		•
	Prodigy finance	•				•		•		•	•	

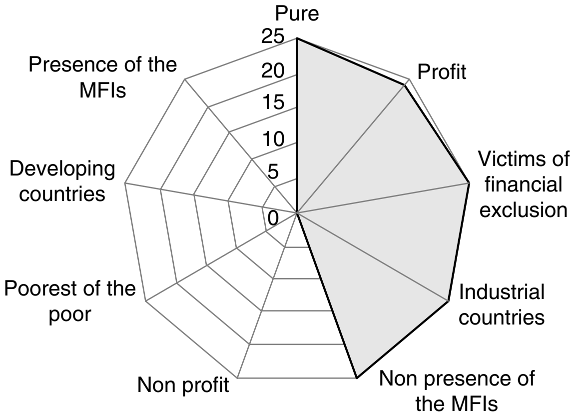

Figure 6.5 Distribution of pure platform in EU

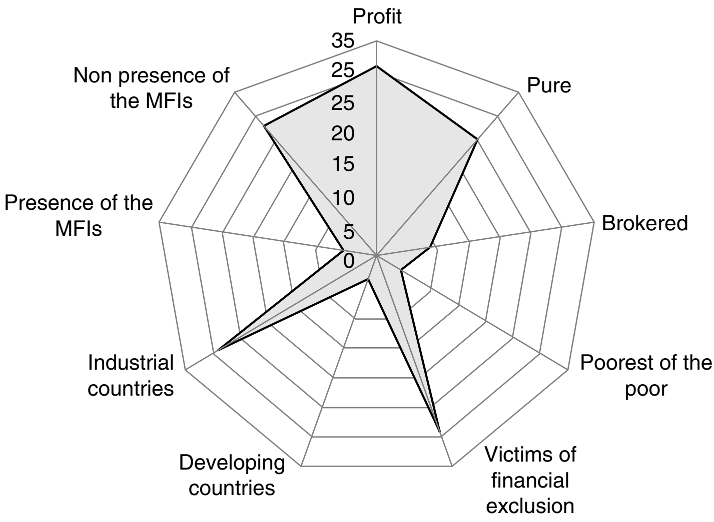

Figure 6.6 Distribution of profit-based platforms in EU

Four out of eight brokered platforms (Figure 6.7) operating in developing countries, leaving the local financial partner to determine the economic features of the loans (interest rate, life of the loan, reimbursement schedule, etc.). An exception is represented by Myc4, a

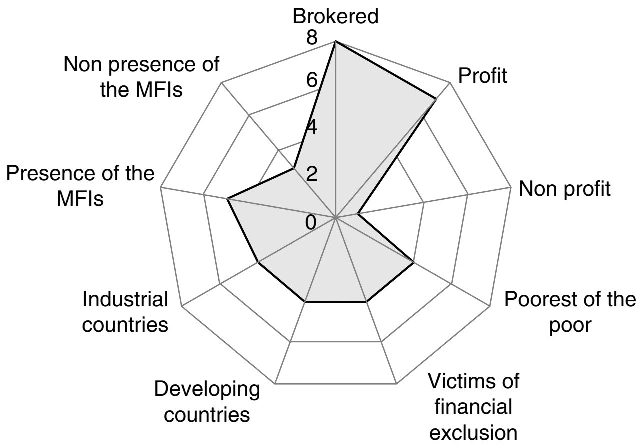

Figure 6.7 Distribution of brokered platforms in EU

profit platform that works in developing countries using an auction mechanism for pricing.

With the exception of Myc4, brokered SL platforms can be described as semi-profit intermediaries: they do not usually pay interest to lenders and do not charge interest to their partners; borrowers pay interest to the MFI, but in most cases the platform only charges operating fees to the MFI.

Interesting examples of the brokered model are Kiva and Babyloan. Kiva, operating in the USA, is a non-profit platform; it does not pay any interest to social investors, who may pay optional fees to cover platform operational costs. Babyloan, based in France, can be classified as semi-profit; this is because even if it grants interest-free loans to its MFIs, the funds transferred are subjected to a management fee calculated according to the outstanding loans at the end of each quarter.

Friendsclear is another interesting case, since this platform operates in partnership with the French banking group Credit Agricole. The platform is only a marketplace; the amount collected for the project is granted to the borrower directly by the bank itself, which applies the terms and conditions that have been established by the platform (also, the interest rate is set by auction). In practice, all the financial activities reserved to banks are carried out by Credit Agricole, in order to comply with French financial regulations. Credit Agricole, furthermore, evaluates the creditworthiness of the applicants, and can also decide whether or not to deny their requests.

Operational models adopted in Italy

SL platforms have also developed in Italy, following events in other European countries. in Italy there were three platforms: Zopa Italy, Boober Italy and Prestiamoci. The first two initiatives had already been active in other countries, and moved into Italy as part of a strategy of geographic expansion.. Since 2007, when Boober and Zopa entered Italy, no other foreign platform has entered the Italian market. The third Italian platform is Prestiamoci, completely designed, built and active in Italy.

All three SL platforms in Italy use (or used – Zopa and Boober's activity are currently (2012) suspended) the direct model. Zopa and Boober used the auction mechanism to set the interest rate paid by the borrower. whereas in Prestiamoci it is instead the platform that sets the interest rate.[8] Borrowers already registered on the platform have only to fill out a form in which they insert the amount they would like to borrow: the effective annual interest rate is automatically calculated, representing an indicator of the total cost of the credit. The effective annual interest rate includes the annual nominal interest rate and all the fees covering the other operating and administrative costs borne by the borrower, and so this rate provides a measure of how competitive the loan is in comparison to traditional lending.

Finally, it should be underlined that all three platforms are located in Italy and operate within the Italian borders for both the collection of funds and the granting of loans; they are profit-based organizations. In Italy there is no history of SL lending platforms that channel funds to borrowers in developing countries.

6.4 The regulation of social lending

In recent years, there has been a notable growth in SL lending platforms in Europe, with a logically consequent increase in the client base. The development of an alternative credit market – and, above all, the rapidity with which new platforms are created while those already active are growing – has created the need for specific regulations covering SL. In many countries, both in and outside Europe, the SL market is still not regulated. Taking the medium- to long-term view, however, it is necessary to evaluate the risks for the financial system and the lenders deriving from a lack of regulation. Bankruptcy of SL platforms has already happened in Holland, and this may not be an isolated event.[9]

Analysis of existing regulations may help in understanding the need for rules and in offering suggestions for ways to improve the legal framework. Before proceeding with the analysis of current legislation in European countries and in Italy, it would be opportune to clarify the possible approaches in regulating SL.

Approaches to the regulation of social lending

Currently at the international level, there are four possible approaches to the regulation of Social Lending markets: a *prohibitive* approach; the provision of being obligatorily *supported by a bank*; the obligation of an *assisted constitution* from supervisory authorities; the provision of a *specific regulation* for Social Lending.

The prohibitive approach, understandably, is the most radical and testifies to a total aversion to this type of activity.

Support by traditional banks could be interpreted not as a regulatory approach but as an action of moral suasion by the supervisory authority; many SL platforms, not being able to operate in an autonomous way due to regulatory provisions that usually reserve financial intermediation for banks and financial intermediaries, are pushed into developing a partnership with national banks or other regulated institutions. If this is the case, the regulatory authority does not worry about developing a specific regulation for social lending, since the activity of the platform is, albeit indirectly, regulated by the legal framework foreseen for banks and financial intermediaries. This approach naturally fosters the brokered SL model; in this case, it is up to the management of the platform to preserve the typical characteristics of a P2P mechanism and to avoid the presence of a bank distorting them.

Another possible approach is the assisted constitution, which from the outset of the constitution phase consists in the collaboration between the platform and the regulatory authority in order to define the operational model that fits better with the existing legal environment. This methodology could be lengthy and costly and is not feasible in very large countries with structured financial markets in which there is economic space for many SL platforms. According to this approach the regulatory authority in Italy has chosen to assimilate the SL platforms into the Payment Service Institutions, according to Directive 2007/64/CE, which regulates payment services at the community level.

Finally, perhaps the most recent regulatory approach foresees the realization of a specific regulatory framework for SL

In regard to platforms that operate internationally, the setting of a specific regulation is much more complicated and leads to the same approach as that adopted for regulating financial conglomerates: in addition to the country of origin, it is also necessary to consider the regulations in the countries in which the platforms operate through their own offices or by means of agreements with other institutions.

The regulation of social lending in Europe

No EU country has specific regulations for SL, but the Italy and France have recently adopted a regulatory model for national SL platforms in line with the existing regulatory framework.

In the *United Kingdom*, European pioneer in SL and with most active platforms (nine), there is no regulation of this sector. To underline this fact, Zopa UK declares explicitly on its site that it is not subject to the regulatory provisions of the Authority Financial Services (AFS).[10] This absence of regulation can be explained by the fact that these types of financial platforms do not perform a financial intermediation activity but instead represent a virtual marketplace managed by a specific company. In these virtual markets it is the lenders and borrowers who set the conditions of their agreement within the framework set by the platform. Zopa itself has proposed the creation of a new class of intermediaries with their own characteristics and rules; however, this request has not yet been accepted by the AFS or the Bank of England. There have been some cases of regulatory actions by the AFS, but these have only been in cases where the investors have been obliged to take out insurance policies to cover the default risk: for the AFS in this instance this is part of a class of regulated intermediaries: the insurance companies. Nevertheless, the majority of the platforms active in the UK are registered with the Office of Fair Trading (OFT) and licensed for credit with the Financial Services Authority, according to the Payment Service Regulations 2009.

In *Germany*, as in the UK, there is no set of specific regulations, but the legal framework has instigated a different approach: the body responsible for supervising banks, insurance and financial associations (BaFin) has established that the authorization to conduct banking activities – Art. 32 of the law on credit intermediaries (KWG) – is in effect whenever commercial activities are created or when pursuing a profit. In effect, whoever would like to offer financial intermediation activities as a non-profit institution is free to do this; but if a profit is generated by this activity, the company must obtain the authorization of the BaFin. The three active platforms in Germany, all working on a profit basis, have attempted to avoid applying for this authorization by partnering with traditional banks: the distribution process is passed on to these banks and the banks themselves protect lenders from defaulting borrowers.[11]

In *France*, until recently, the situation was very similar to the German one, and the majority of the active platforms were, even there, affiliated with banks. At a meeting on 5 September 2011, the Supervisory Authority (Autorité de Contrôle Prudentiel – CPA) approved Pret d'Union as a credit institution to provide investment services. Obtaining this approval took two years of intense work in order to meet the criteria for granting authorization referred to in Articles L. 511–9 and following the Monetary and Financial Code.

As far as *Spain* is concerned, the situation is one of complete freedom: there are no restrictions on the opening of P2P lending portals. The Spanish credit system does not recognize the SL companies as financial intermediaries and, as in the UK, they are recognized solely and exclusively as a marketplace.

Iceland is a case of assisted constitution: Uppspretta, the only active operator on the island, was founded in cooperation with the Central Bank of Iceland; since the supervisory authorities do not expect other platforms to enter the market, further specific regulation does not seem necessary.

The regulation of social lending in Italy

Important SL platforms have been present in Italy since 2006: specifically, as mentioned above: Zopa, Boober and Prestiamoci.

The first two platforms to become operative within Italian borders were Zopa and Boober, active since 2006 and 2007 respectively. Neither platform was created in Italy but both were already active in their countries of origin (the UK and Holland). In a later phase, the third platform – Prestiamoci – appeared on the market; this platform was created and operated in Italy.

As far as Zopa is concerned, an Italian consortium bought the trademark and the technology from a British company. The Italian company is completely independent and from startup in 2006 was registered on the list of financial intermediaries according to Article 106[12] of the TUB (Banking Regulation Law, D.Lgsl. 385/93).

Boober's approach was different from that of Zopa: this platform opened in Italy thanks to Centax, an operator registered on the list of financial intermediaries according to Article 106 of the TUB, which, due to an equal joint venture with Boober International, was able to operate a P2P in Italy.

When Zopa and Boober entered, the stipulations set by Italian regulators for entry into the financial sector clearly required their enrolment onto the official list of financial intermediaries; it was necessary for an intermediary to be on the list contained within Article 106 in order to propose such an innovative product, whether by means of collaboration with an external platform or by creating its own web site.

The platform Prestiamoci decided to operate in collaboration with Banca Sella; funds raised from investors are managed by the bank and then granted to the applicant under the conditions set by the platform.

Since 2009, regulatory criticisms have arisen with respect to Zopa and Boober. The Bank of Italy suspended their activities, and subsequently deleted the two companies from the list of financial intermediaries.[13]

The criticism of Boober was related to Centax and its activity, and not strictly related to the SL business.

The Zopa case is, however, interesting; the Central Bank justified its decision by applying the concept of a violation based on the TUB.[14] Zopa was specifically accused of accumulating savings illegally, since the funds deposited by the investors were not granted immediately to the borrowers but were given out only when the full amount needed for the loan had been collected. In the interval, the funds remained controlled by Zopa; this means that Zopa was, in fact, performing a collection of savings activity that was reserved for banks, according to Law 385/93 (TUB).

This situation was resolved only in 2011: the company was asked by the Bank of Italy to change the contractual terms with its clients and make another application for registration in a new list of payment institutions held by the Bank of Italy. This new registration is possible thanks to a new European regulatory framework – Directive 2007/64/CE – which regulates payment services at the community level, through the establishment of a new EU financial body, the Payment Service Institution. The management of Zopa was obliged, therefore, to choose a form of company which perfectly reflects the peer-to-peer activity performed by the platform: in April 2011 the enrolment request was accepted by the Bank of Italy and shortly afterwards, with some specific updating (contractual migration of existing lenders, updating of the information on the website) as requested by the Bank of Italy, Zopa was able to renew its functioning under the new identity of Smartika.

So, since the enrolment of Zopa into the payment institutions, a regulatory model for direct SL in Italy has come into force: direct SL can be performed, regulated and supervised according to the rules set out for Payment Service Institutions, introduced by European directive 2007/64/CE and now regulated by recent changes to the Italian banking law (TUB).

Some proposals for regulatory actions

The lack of a specific SL regulatory framework in Europe calls for intervention in order to achieve some legislative harmony. Following are some proposals intended to optimize the regulatory approach for social lending.

The variables considered are related to the *minimum requirements* for the establishment of SL platforms, to the *management of personal data*, to the *management of typical risks*, and to the definition of the essential requirements of the *operational structure*.

Minimum requirements

According to the operational model of many of current platforms, their activity is not, in any strictly defined sense, a purely financial intermediation activity, but only a virtual meeting place between demand for and supply of personal finances. Surely, SL platforms are not comparable with traditional financial intermediaries, especially with reference to the amount of managed funds.

It would, however, be useful to explore the necessity of minimum standards for such platforms, in the first place defining a specific juridical form and the minimum capital requirements. Capital needs of SL lending platforms may be substantially different from those required by banks and financial intermediaries.

In addition, it would be useful if platforms recognized by regulators were listed in a specific register held by the competent supervising authority.

This approach has been recently used in Italy where Zopa has been required to apply for recognition as a Payment Service Institution; this provision requires its enrolment in a register held by the Bank of Italy and represents a significant first step towards the recognition of direct social lending platforms. This means that under Italian banking and financial regulation direct social lending can, while respecting specific operating constraints, be performed by payment service institutions, according to Directive 2007/64/CE.

This model could be adopted across Europe and could result in being taken as a standard solution for direct EU social lending.

The regulation of a brokered SL, on the contrary, will depend on the national regulatory framework of the intermediary used by the platform to channel the financial intermediation activity. Furthermore, it might be useful to foresee specific requisites of the activity as those that refer to the goals of the financing, the type of beneficiary, and the maximum amount of these loans. Countries where a specific legislation for microcredit is in force could extend this legislation to SL. In Italy, Articles 111 and 113 of the new banking law (TUB) have recently regulated microcredit and introduced a new category of financial institution – the Microcredit Institution – licensed only for microcredit activity. The goal, as well as the technical and economical features of the loans granted by SL platforms, makes it reasonable to consider the option of social lending as an activity of microcredit institutions when the requirements set by Articles 111 and 113 are met.[15]

Data management

SL lending platforms represent a financial sector in which the processing of personal data is of critical importance. In many European countries there are already laws governing privacy and the treatment of personal data, which are highly effective in preventing the icorrect use of such data in a fraudulent way, including by SL platforms. Where there is no law that regulates these aspects specific action should be taken to protect SL platform clients' data.

Risk management

The most significant risk in SL is the *credit risk* borne by the lender; in the case of borrower default, the SL lender does not benefit from the prudential regulation instruments that are in place for traditional financial intermediaries and which guarantee the sum invested as a deposit. Moreover, SL platforms often collect funds in developed countries and invest in developing ones, so the potential credit risk is quite high. If most of the loans in a specific project remain unpaid,[16] the platform then has no choice but to declare bankruptcy; in this case, the investors lose their total investment. In SL, the credit risk is usually born by lenders, regardless of the operational model adopted – there are very few cases of adoption of the brokered model, in which the financial partners of the platform not only channel the funds but also bear the credit risk. For this reason, it is fundamental that there is a specific prudential regulation of P2P lending; in the case of credit risk, the approach used for banks would not be economically sustainable for SL platforms and, above all, it would not fit the nature and the size of the business. Instead, provision of a guarantee fund that would absorb the losses from eventual failures of SL platforms would be useful: these funds could be formed either by single companies to cover the loans inside their own platform, or could be a type of consortium on a geographic basis that is formed by obligatory membership of all the platforms active in a specific country.

It might be possible to combine or substitute the creation of a guarantee fund by the provision of obligatory insurance on each loan issued: many platforms already provide this guarantee for their investors to increase the perception of the security of their investments. In case of default, the investors are paid back by the insurance they have taken out.

The use of a scoring system and, more simply, systems of assessment of the creditworthiness of the borrower would favour an accurate, ex-ante estimate of the credit risk. As for scoring systems, many platforms already make use of them, both adopting internal rating models or outsourcing these functions to external, specialist companies. By enrolling the platforms onto a specific register, creating specific collaterals, and promoting cooperation among all the platforms in terms of information, the supervisory authorities would have, in the medium-to-long term, a flow of data enabling the creation of a database that could be used to estimate the probability of default of classes of clients and would foster the definition of reliable rating models.

As for the systems that verify the identity and veracity of the information provided by the borrower on the platforms, these come under systems of *operational risk* prevention; for intermediaries such as microcredit operators, this is usually the risk of fraud. This risk arises from the possibility that the borrower does not provide correct information or even that the borrower/project does not exist, or that the money requested is never used for the project stated in the request. To reduce this risk, the regulator should have a specific department, either within the SL company or independent of it, to investigate and monitor the credibility and existence of the borrowers, as well as the actual existence of the project in which the borrower states they intend to invest the funds.

A final factor which should not be undervalued in an efficient regulatory framework is that of transparency and information disclosure to the public: the conditions in transparent contracts should be clear and precise on how the platform functions, on the costs and the requested fees, and the potential risks for the lenders and borrowers. It would be desirable, moreover, to introduce an obligation to provide authorities with annual reports on the platform's performance prepared according to common standards.

Operational structure

It can easily be affirmed that the stability and wise management of an SL platform depends, to a great degree on its operational structure. Many problems related to SL have been resolved in Europe through the collaboration of SL platforms with traditional banks and through recourse to the brokered SL model. On the one hand, this operational strategy brings with it various advantages in terms of risk management, credit scoring and credit risk; if the SL platform fails, its investors may be protected by the bank as long as the funds invested are considered as saving deposits. On the other hand, this approach has the disadvantage of contradicting the fundamental principles of P2P lending – intermediation without banks. This criticism could be defused if the bank concerned did not affect the ethical principles inspiring the platform's credit policy and if the presence of the bank did not raise the costs for the borrowers.

The possibility of maintaining a direct SL model (mainly Pure SL) can be based on a more articulated structure that would allow the participation of diverse actors (Figure 6.8):

1. the platform is merely a marketplace for borrowers and lenders;
2. a specific division of the company devoted to the analysis of the veracity of personal data, the reliability of project, and what the borrowed has declared (reducing the risk of fraud); the same structure must in addition manage the security of data within the platform;
3. a specific division of the company (or an external company) dedicated to the scoring of the creditworthiness of the borrower (reducing the risk of default);

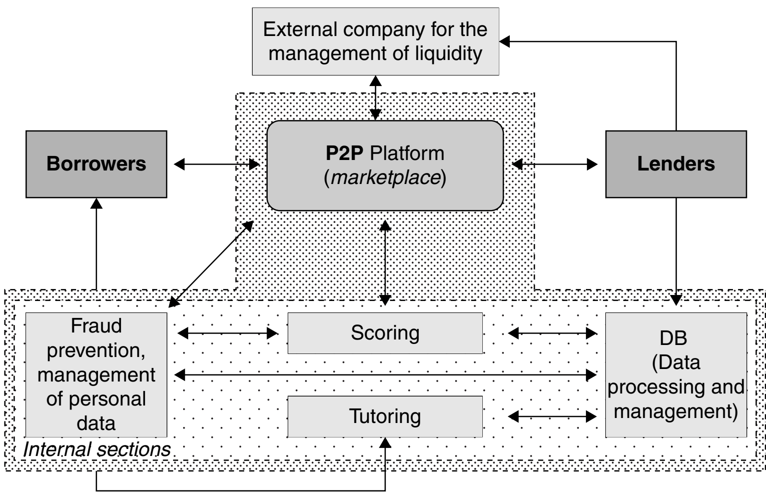

Figure 6.8 An operational model for social lending

4. external companies, also financial intermediaries, dedicated to manage liquidity during the time when the funds are first collected and when the total is attained and actually paid out to borrowers;
5. external companies, also financial intermediaries, providing external collaterals and insurance products;
6. a division of the company that, at the request of the borrower, is devoted to providing them with assistance and tutoring;
7. a division of the company dedicated to the processing of personal data, which also cooperates with other P2P lenders for the creation of a common database.

This business model might in some way be assisted by regulatory provisions, but it is ultimately the market which must promote and implement it.

6.5 The pricing of social lending

The pricing variables of social lending

A qualitative analysis has been performed on the surveyed SL European platforms, with the chief aim of highlighting the pricing methodologies applied to SL borrowers. In direct SL, the pricing methodologies are those adopted by the platforms; in brokered SL, in most cases, it is the financial partner who sets the price of the loan.

The pricing methodologies are usually based on a set of common variables:[17]

1. the platform interest rate (the base rate);
2. the risk premium;
3. the borrower score (or the estimated probability of default (PD));
4. the auction mechanisms to set the interest rate;
5. the operating and administrative costs of the platform;
6. the incurred costs for the services provided by external partners.

The *platform interest rate* is the benchmark rate, measured periodically, that the managers of the platform use as the base rate for determining the effective interest rate to apply to the borrowers. The analysis of the selected platforms reveals different methodologies for defining the platform interest rate:

- in direct SL (both Strongly Pure and Pure) the platforms directly set the interest rates which are generally at levels consistent with those applied to initiatives of high social value; in this regard, the anti-crisis

measures put into effect by different European states can be treated as a useful benchmark for setting SL interest rates or simply for measuring the pricing ethicality; for example, the interest rates applied in Italy for mortgages specifically offered to families bearing financial stress can be considered as a valid alternative to a classical risk-free rate, such as a rate on government bonds of equal maturity.
- In the brokered SL it is not the platforms which establish the interest rate but the local MFIs as platform partners; these institutions generally set not only the interest rate but also the total costs of the loan. For these reasons, the degree of disclosure on pricing models is relatively low, but it is reasonable to deduce that an MFI will apply pricing models that are typical for microcredits and not specifically for SL. The MFI itself, therefore, keeps track of the creditworthiness of the borrower and applies an interest rate suitable for their independent pricing policies. The platform, on the other hand, provides only the funds that come from small savers or donors who have been contacted, generally, by means of the ethical nature of development programmes; in these cases investors are usually entitled to receive only the reimbursement of the principal and not any interest.

The *risk premium* requested by investors depends principally on the capacity of the platform to select and promote initiatives, and it reflects the visibility/importance for the specific project to be financed, as perceived by lenders. For platforms that are active primarily in countries with developed economies, the risk premium is directly proportional to the estimated creditworthiness of the borrowers, when measurable. In cases in which the interest rate level is instead left open to free negotiation between parties, the risk premium is determined by the variables that influence the match between demand and supply.[18]

In the SL, *borrower scoring* is used only in the most advanced and entrepreneurial platforms, or those orientated towards profit.

Every borrower is rated as a measure of their creditworthiness and this allows potential borrowers to be organized into classes, leading to the classification of a debt whose interest rate combined with the total cost will be the expression of the pertinent risk class.

The *auction mechanism* for loans pricing is used in many profit-oriented platforms; in this case, the platform permits the investors to invest money in a specific project, allowing them to participate in an auction that include a cap on interest rate fixed by the borrower; on this basis, it is the auction mechanism that links demand and supply.[19] This mechanism is often associated with scoring models. In this latter case, the platform imposes on the borrower specific interest rate gaps, set in relation to the class of borrower creditworthiness; the borrower can then fix his own cap on interest rate within the gap of his specific class of creditworthiness: for example, a Class C borrower could have the maximum rate fixed on a threshold of 11 per cent to 14 per cent, while a Class A borrower – classified thus as the result of a higher score – could use a less expensive rate, perhaps between 6 per cent and 9 per cent. In some cases, the platform will require a borrower in a very low class to pay a premium in addition to the auction interest rate, because of the high risk taken on by the investor.

The *platform operating and administrative costs*, including the *costs incurred for services provided by external partners*, must be considered in any profit and semi-profit SL pricing models. With the exception of non-profit platforms, borrowers, and sometimes lenders, have to pay a fee which is based on different components:

- flat fee to enter the community;
- variable fee, to cover administrative costs, usually calculated in percentage of the amount of money requested and also depending on the life of the loan;
- guarantee fee to cover the investor's losses in case of default;
- risk premium;
- additional fees (obligatory or optional) connected to services eventually provided to the lender, like insurance on the loan.

Finally, there are categories of platforms that leave it up to the borrower or the lender to decide the total cost of the loan, which their counterpart can then choose whether or not to take up; other platforms exist where the only variables that influence the cost are the life and the amount of the loan.

Analytically, it is possible to relate the specified pricing models to four simplified formulas:

$$\text{APR} = \text{price of microcredit set by the platform partner} \quad (1)$$

$$\text{APR} = t_{equ} + c_{ent} + c_{var} + c_{ser} \quad (2)$$

$$\text{APR} = t_{auct} + c_{ent} + c_{var} + c_{ser} \quad (3)$$

$$\text{APR} = t_{auct\_scor} + c_{ent} + c_{var} + c_{ser} + K_e \quad (4)$$

where:

APR = annual percentage rate;
t_{equ} = platform interest rate (equilibrium interest rate);
t_{auct} = auction interest rate;
t_{auct_scor} = auction interest rate combined with the use of scoring;
c_{ent} = entry fees;
c_{var} = variable commissions and/or spread percentage set by the platform, frequently in relation to matured interest;
c_{ser} = other commission for additional services;
K_e = cost of capital (investor rate of return).

It should be noted that all the pricing formulas (with the exception of Formula 1 when adopted by non-profit platforms) are associated with the presence of the entry fee and the payment of variable commissions, albeit with very different configurations from platform to platform.

SL pricing in Europe: evidence from the sample

The pricing methodology adopted

The results show that the 33 European SL platforms use different pricing methodologies, depending on their financial intermediation model (direct or brokered), principally adapted to the monetary cycle that distinguishes them.

It is therefore possible to ascribe the diverse SL typologies that have been identified to the diverse methodologies of pricing, with reference to the platforms surveyed in our sample (Table 6.3). It is worth highlighting the fact that one non-profit platform is also included: Lendwithcare does not charge any fee, and borrowers pay the price fixed by their platform partner.

Average interest rates applied to SL borrowers

The analysis has been conducted on 19 out of the 33 EU platforms that ensure a minimum level of disclosure on the price charged to customers. The analysis does not take into account the final fees charged by SL platforms to their partners or to lenders.

The data represented is in some cases average rates (or the minimum and maximum) reported by the platform; in other cases it averages rates processed from selected samples, or even the result of simulation performed on the platform.

Table 6.3 Distribution of pricing formulas adopted by SL platform in Europe

	Platform	Formulas	N.
Profit and Semi-profit	*Direct*	Alternatively, pricing formulas 2, 3, 4, with a greater prevalence for formulas 3 and 4; the majority of the platforms fall into this category.	24
	Brokered	There is a prevalence for formulas 1 and 2 where the interest rate is fixed by the platform partner; in only two cases (*Myc4* and *Studienaktie*) the interest rate is set by the platform	7
No Profit	*Direct*	The pricing formula does not exist[a]	1
	Brokered	There is a unique case (*Lendwithcare*), the rate is fixed by the MFI according to formula 1	1

Note: [a]The table includes *Frooble* – the only free financial platform in Europe according to its website.

The results show an average rate applied to borrowers equal to 14.0 per cent; the average rate of return for investors is equal to 8.8 per cent (Table 6.4).[20] It should be noted that the data shows a significant variability of the values among the different platforms observed.

The results show that profit-oriented SL can be an interesting opportunity for both lenders and borrowers. As an example, in the Italian market usurious rates are often higher than 14 per cent and financial intermediaries specializing in personal loans may charge interest rates of more than 20 per cent. (Table 6.5).

The pricing of social lending v. the pricing of traditional lending

Why traditional pricing does not apply to SL

A direct comparison between traditional pricing and social lending pricing is complex, given the numerous variations.

Credit risk can be defined as 'the possibility that an unexpected variation of the creditworthiness of a counterpart generates a corresponding unexpected variation of the current value of the relative credit exposure'.[21] From this definition emerges the point that the credit risk is due to the volatility of the expected and unexpected loss. In this sense, the two components of loss – expected and unexpected – need to be considered in the determination of the optimal price, together

Table 6.4 Average interest rate applied by the platforms of the sample

Country	Platform name	TAEG borrower rate	ROI lenders rate	Interest rate
Denmark	Myc4		13.00%	Auction
Estonia	Isepankur	27.38%	15.34%	Auction
Finland	Fixura Ltd Oi	24.62%	11.74%	Set by borrowers
France	Pret d'Union	6.68%	5.73%	Set by platform
	Friendsclear	8.33%	6.50%	Set by bank partner
	Babyloan	27.00%		Set by local MFI
	Veecus			Set by local MFI
Germany	Friendsurance			Set by insurance company
	Smava		7.30%	Auction
	Auxmoney	13.39%		Auction
	Youcredit			Auction
Iceland	Uppspretta			Auction
Italy	Prestiamoci	9.72%	7.50%	Set by platform
	Boober It	10.07%		Auction
	Zopa It			Auction
Netherlands	Frooble			Agreement between the parties
Poland	Kokos			Auction
	Smava		7.30%	Auction
	Finansowo			Auction
Spain	Lubbus		11.23%	Auction
	Comunitae		11.09%	Auction
	Partizipa			Auction
	Can			Acquaintances – Bank
Sweden	TrustBuddy		12.00%	Set by the platform
Switzerland	Studienaktie			Set by the platform
	Cashare AG	10.00%	1.00%	Auction

Table 6.4 (*cont.*)

Country	Platform name	TAEG borrower rate	ROI lenders rate	Interest rate
UK	Fundcircle		8.30%	Auction
	Lendwithcare			Set by local MFI
	Ratesetter	9.00%	7.30%	Auction
	Yes-secure	20.50%	13.25%	Auction
	Zopa UK		10.7%	Auction
	Big Carrot			Auction
	Prodigy finance	8.00%	6.00%	Set by the platform
	Average	14.0%	8.88%	

with the operating costs, eventual guarantees and the cost of the funding.

Analytically, this is:

$$I_P = \frac{[TIT + PD * LGD + co + (K_e - TIT) * ULR]}{[1 - PD * LGD]}$$

where:

I_P = average rate;
TIT = internal rate of transfer or cost of funding;
PD = probability of default;
LGD = loss given default;
ELR = estimated loss per client/product in the time period of one year (PD*LGD)
Co = operating costs;
K_e = cost of capital;
ULR = regulatory capital requirements.

Traditional pricing models are, however, difficult to apply to all the methodologies of SL pricing models that have been outlined, for different reasons:

- The cost of accumulating funding is significant in the context where social lending operates. While traditional financial intermediaries collect funds by means of different financial instruments (bonds, inter-bank loans, bank deposits, etc.), the SL platforms don't collect

Table 6.5 Average interest rates and usurious rates in Italy (from 1 July to 30 September 2011)

Categories of operation	Amount in Euros	Average rates (%)	Usurious rates (%)
Open bank credit account	up to 5,000	11.24	18.05
Open bank credit account	beyond 5,000	9.27	15.5875
Overdraft without protection	up to 1,500	14.65	22.3125
Overdraft without protection	beyond 1,500	13.94	21.425
Personal credit	–	11.2	18
Other financing to families and companies	–	10.96	17.7
Credit finalized for retail purchase	up to 5,000	12.2	19.25
Credit finalized for retail purchase	beyond 5,000	10.55	17.1875
Revolving credit	up to 5,000	17.65	25.65
Revolving credit	beyond 5,000	12.63	19.7875
Loan costs deducted from salary	up to 5,000	13.61	21.0125
Loan costs deducted from salary	beyond 5,000	11.04	17.8

Source: Bank of Italy.

funds but channel funds to third parties and make money (when profit-oriented) by applying fees and commissions and from taking a quota of the interest income produced.

- For the majority of platforms, the probability of default by a specific borrower is not easy to estimate, since often the beneficiaries of the loan, being victims of financial exclusion, do not feature in any established databases used to calculate borrowers' creditworthiness; this is less so in platforms operating in industrialized countries where the scoring system has been adopted.

- The estimated loss per client cannot, and should not, be taken into account during the preliminary phase of investigation but only in the credit recovery phase.
- As of today, there are no SL platforms which have procedures to set funds aside to meet unexpected losses, as in the case of supervised financial intermediaries.
- Moreover:
  - the pricing is often influenced by free negotiation between the parties;
  - operating costs are not necessarily connected to the costs effectively incurred by the platform;
  - the risk premium is not contemplated in all the forms of SL.

A model comparing traditional pricing and SL pricing

An attempt to adapt traditional lending pricing models to SL has been carried out with specific reference to SL pricing Formulas 3 and 4, which set the price by using the auction mechanism with individual scoring.

Formally, therefore, the calculation of the price for these platforms can be expressed as follows:

$$I_P = \frac{[t_{auct\_scor} + co + (K_e - t_{auct\_scor}) * ULR]}{[1 - PD * LGD]}$$

$$t_{auct\_scor} \leq t_{auct\_scor} \leq t_{auct\_scor}$$

where:

$t_{auct-scor}$ = auction interest rate combined with the use of scoring;
$t_{min-auct-scor}$ = minimum interest rate (floor) applicable to the auction mechanism in relation to the class of scoring
$t_{max-auct-scor}$ = maximum interest rate (cap) applicable to the auction mechanism in relation to the class of scoring

The $t_{auct-scor}$ is the interest rate that forms as a result of the auction negotiations, taking into account the borrower's score, hence their class. In this sense, the auction interest rate takes into account the probability of default and the relative average loss (given by the default rate of the membership class), as well as the auction mechanism which allows spacing between a floor and a cap established by the institution in relation to the statistics concerning historical information about the loans issued.

6.6 Conclusions

SL is an interesting social and financial phenomenon, with many operating and financial intermediation models that reveal different goals. Today, SL is not only a way to guarantee access to credit for poor and financially excluded clients, but also a new opportunity for investors and borrowers. The typical absence of a bank, or any other financial intermediary, could produce cost savings and could ensure more favourable economic conditions for borrowers and lenders.

The chapter surveyed all the 33 European platforms, analysing their pricing models and estimating the final cost charged to borrowers; the analysis focuses on SL in Europe in general and in Italy in particular.

The results show a great variability in the interest rates charged to customers which is in many cases below the average interest rate applied by the traditional financial intermediaries on personal loans, as in the case of Italy.

Profit-oriented SL platforms ensure attractive average rates of return to lenders.

Nevertheless, the lack of regulation has allowed a great diversification of pricing models and, at the same time, a lack of transparency of the pricing methodologies adopted; the results show a significant opacity in the fees and commissions applied to clients.

Besides this, the credit risk produced by these platforms, even though far from generating systematic consequences at present, merits attention because it generates significant losses due to a growing number of investors attracted to the opportunities created by SL.

It is necessary, therefore, that on one hand control and systematic monitoring of SL platforms in the European Union should be developed, together with shared regulatory supervision; and on the other transparent pricing policies which fit the specific reality of SL need to be implemented.

The pricing model and the regulatory proposals suggested in this chapter could represent a first step towards a more sustainable and transparent European SL marketplace.

Notes

Even though the chapter is a combined effort by the authors, paragraphs 6.3 and 6.4 are by Mario La Torre, and paragraphs 6.2 and 6.5 are by Fabiomassimo Mango.

1. By the term Social Lending we mean all expressions of the phenomenon, also known as: Peer-to-peer (P2P) Social Lending, Person-to-Person (P2P) Lending, Person-to-Person Investing.
2. Tutino (2001).
3. Chen et al. (2011).
4. La Torre and Vento (2006).
5. Leone (2012).
6. Dorfleitner and Priberny (2010); Isa (2011); Sanyoura and Espejo (2011).
7. In those countries in which a specific regulation for microcredit is in force, the difference between a microcredit and a traditional loan is established by law.
8. At the date of writing this, the interest rate is fixed at 7.5 per cent or at 10 per cent depending on the kind of loan requested, and represents the annual nominal interest rate, not the final cost of the loan.
9. Some platforms that are inactive or suspended in Europe are: Boober (NL), Ireloans (IRL), Monetto (Poland), Quakle (UK), Boober (IT).
10. Independent Body, non-governmental; represents the only regulator of financial services in the UK. This authority was created by the financial market legislation contained in the *Financial Services and Markets Act 2000* (FSMA).
11. In spite of these measures, the German Green party has asked for a parliamentary inquiry specifically on SL and on the platforms utilized: questions have been raised regarding the risks, eventual defaults and the operational practices adopted. The Ministry has responded to these questions by stressing that there is no need for additional regulatory measures, declaring that the federal court has never received reports of abuse or deceit in connection with the exercise or use of the platforms. For this reason, the German government does not foresee at this time any need to introduce minimum legal standards for P2P lending companies.
12. According to Article 106 they are all those involved in the granting of loans, acquisitions of supplying of payment services and currency trading.
13. For *Zopa*, see: Bank of Italy, Resolution 123900, 4 February 2009; Ministry of Economy, Decree 258/385, 26 June 2009; for *Boober* see: Ministry of Economy, Decree of 14 July 2009.
14. The provision states: 'the company acquires the ownership and availability of funds given to it by the lenders, violating the requirement of separation of this availability of third parties from that of the company …realizing an *illegal activity of the collection of savings*, with the risk for the lenders that the funds are not immediately exchanged between lender and borrower, as it should be in the concept Social Lending, but, instead, these funds remain controlled by *Zopa*'.
15. See the new Articles 111 and 113 of the banking law TUB (Legislative Decree 385/93 and subsequent changes).
16. It has happened in the Ivory Coast with the Myc4 platform.
17. Not necessarily all present simultaneously.
18. In this latter case, probably the most interesting, it is likely that the actors formulate their proposals according to John Nash's famous Game Theory. That is likely to be the case considering that under certain conditions there is always an equilibrium which is attained when each individual who participates in

a given game chooses their own strategic moves to maximize their own pay-off, assuming that the behaviour of rivals will not change due to their own choices.

19. Each investor can offer money at their own interest rate; if, for example, a borrower proposes a loan of a 1000 with a rate cap of 12 per cent and there are four investors interested in offering 250 each, and they offer this sum respectively at 7–8 to 10–12 per cent, the rate would be 9.25 per cent. In the case of an offer above that sum, an offer with a lower interest rate is preferable (according to the classic mechanism of a Dutch (descending price) auction).
20. The average rate for borrowers is calculated on 11 platforms, while the average rate for the lenders is calculated on 16 platforms.
21. Resti and Sironi (2008).

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