LOUVAIN
School of Management

UNIVERSITE CATHOLIQUE DE LOUVAIN
LOUVAIN SCHOOL OF MANAGEMENT

Peer to Peer Microfinance: The Case of Zidisha.org

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Project-based Master's Thesis,
submitted by:
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With the view of getting the degree of
Master in Business Engineering

ACADEMIC YEAR 2010-2011

When choosing a subject for this Master's thesis a variety of subjects was available. With some guidance from professor Armin Schwienbacher, I chose to embark on a study of how the novel technologies of social lending could impact microfinance. After his departure from the Louvain School of Management I was fortunate to be further supervised by professor Christophe Majois who allowed me the freedom to further explore this subject at my own pace and according to my own interest.

Now, at the end of these laborious months of reading and writing I wish to thank prof. Majois for his supervision and valuable advice in my research, as well as Mrs. Julia Kurnia, the founder and director of Zidisha, for the time and openness she accorded me in the various instances when I interviewed her. Further I want to thank both my parents and my girlfriend for their support, not only during these last months but even more so for their relentless backing on all my projects these last years. People without whom I would never have been able to undertake my studies of Business Engineering at the Louvain School of Management. And finally also Mrs. Elisabeth Debandt for her help in translating this thesis' summary in French.

I wish the reader much enjoyment when going through this thesis and hope its content will be both interesting and inspiring to him.

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1 Introduction

“Peer to peer microfinance...” Many a reader will wonder what on earth this means, and even fewer will ever have heard of Zidisha.org; much like many of the people we talked to when mentioning this thesis. Although we still struggle to be as short and clear as possible, the explanation usually goes like this:

> *“Microfinance you all know: 'Muhammed Yunus', 'Grameen Bank', 'poor entrepreneurs', etc. It is the practice of helping the poor in developing countries to 'enterprise' themselves out of poverty by giving them access to credit. Peer to peer implies going directly from person to person, actually doing things without intermediaries. So basically, peer to peer microfinance is doing such microfinance but instead of getting funded by banks or other large institutions, the money comes from people like you and me, here in the West, who go on a website and choose to directly fund entrepreneurs in developing countries.”*

Subsequently the question on what it is exactly that we are researching is never far away. We then explain that we are investigating whether this new system of individuals using their Western savings to invest in developing countries' small businesses, should actually be seen as a new form of charity, or whether it belongs more in the realm of investments and business. We explain that our interest is in knowing whether it can be interpreted as a threat to banks and microfinance institutions or whether it is simply an alternative to charitable donations to Oxfam, CARE and the like.

As will be clear from the second chapter in this thesis, a variety of platforms exists, all offering different peer to peer microfinance options. Rather than trying to investigate all of these superficially, we chose to focus on a single one, Zidisha, which – to our knowledge - is the only one that offers the real peer to peer alternative; directly linking the rich saver to the poor borrower. This platform can do so because, unlike the general consensus which assumes *“that the borrowers not only lack the necessary computer skills to communicate with lenders themselves, but also that they cannot be trusted to repay loans, as residents of wealthy countries do, without constant visits by loan officers”* (Kurnia, 2010a); Zidisha links computer-literate borrowers to socially conscious lenders who offer direct peer to peer microfinance loans at

affordable rates for the first. Our main interest is in finding out how they are able to do this, when everyone thinks it is impossible.

In order to answer the question on what is truly behind these peer to peer microfinance platforms, this thesis will first explain what peer to peer or social lending actually is, what historical antecedents exist for it and which different types exist. We then move on to research the importance of trust in a credit relationship and how this is impacted by different systems of enhancing it. In the fourth chapter we investigate the motivations of both lenders and borrowers in social lending in general and peer to peer microfinance in particular. Then, in the final chapter we use all of this knowledge to investigate the Zidisha platform, trying to figure out its members' intentions and how it will or will not impact the future of social lending.

2 Social Lending

2.1 What is it?

Very basically we can say that social lending (or peer to peer lending, both are actually synonyms) is the grouping of small amounts of money from many lenders to fund a project without (traditional) intermediaries. When trying to define peer to peer lending one cannot omit to talk about the recent impact of the internet and how this profoundly changed the way we handle borrowing and lending today. Peer to peer lending has actually always existed; it is the practice of people lending to each other without the intermediary of a bank. As such it is actually older than banks themselves. Rather than being a one-to-one service such as banks and other traditional forms of credit, it is a many-to-one service where many people fund a small piece of the eventual loan to the one borrower. Therefore it is inscribed in the crowdsourcing movement where individuals turn to the general public for ideas, work, feedback, etc. (Garcia, 2010). In the case of social lending this means using the 'crowd' to obtain financing for any project you have in mind. Although close to crowdfunding and microfinance, it needs to be differentiated from both. First, rather than trying to get funded through *credit*, crowdfunding tries to have many people buy some form of equity and thus make an investment in a yet-to-be-proven idea (Lambert & Schwienbacher, 2010). Second, it is also related to microfinance in the sense that it funds small entrepreneurial projects for people who lack access to formal finance. Nevertheless, unlike social lending's peers supporting each other, the funds for these microfinance loans usually come from *institutions* rather than the 'crowd'.

Klafft (2008) defines peer to peer lending as *"online platforms where borrowers place requests for loans online and private lenders bid to fund these in an auction-like process."* Clearly in this definition we can see how 'online' and 'internet' are key terms in explaining the way it works. Many different websites exist and each of them has its own variation and therefore constitutes a different system. We will come back to this later on in this chapter when we evaluate some examples (see section 2.3) Nevertheless, the basics of it are as follows: a borrower needs to get funded for some reason and either does not want to go to the bank, or cannot receive a loan from it. He then has a few options left: he can try to borrow it from his friends or family (the well-known 3F: Friends-Family-Fools); he can go to a so-

called moneylender which offers him money 'without questions asked' at a very high interest rate; or he can go to one of the online lending platforms and apply for a loan. If he does the latter and fills out an application form on one of the social lending websites, it will subsequently be evaluated in some way; either by a local institution (e.g. a microfinance institution), the organization behind website itself, or fellow members on the platform. Once the request is accepted and published online, members prepared to lend to him express their willingness to do so. When at the expiration date of the loan request enough financiers are found, the amount requested is wired to the applicant. In order to minimize their risk, lenders normally only lend small portions of the requested loan and usually interact with many different borrowers as a means of diversification. After being funded, the borrower gradually repays the loan plus interest over time. At the end of the loan, lenders usually have some system to evaluate the borrower and give feedback on his repayment performance. This way, borrowers build up credibility and credit history on the online platform and future lenders base their funding decisions on this feedback (much like feedback mechanisms on eBay or Amazon.com). This system exists both in developed and developing countries, in the case of peer to peer microfinance we are talking about peer to peer lending on a microfinance scale. It means lending to disadvantaged borrowers from developing countries who ask for the loans to start a business in order to supplement their small income with its proceeds.

Most of these platforms however, although they call themselves social lending platforms are not actually the pure form of social lending where peers lend money amongst each other and the power to do so is with them. Usually the platforms act as intermediaries who screen the applicants and collect the funds in order to then channel them through to the borrower. As such they replace the banking institution which collects the public's funds in savings accounts and then lends them to loan applicants. Only very few sites exist where money travels directly from the lender to the borrower and the website is only the portal through which contacts are made. As mentioned previously, the specifics of a couple of these platforms are discussed in section 2.3 of this chapter, but first we look at a bit of history to rediscover the roots of social lending.

2.2 Where Does it Come From?

Social lending and microfinance share more than just a few modern websites that combine both ideas; they have a common history in friendly societies, microloan funds, credit unions, cooperative banks, etc. The idea of mutual support and empowering the poor through loans goes back a long way and is present in different societies. In this section we will analyze some of these predecessors, namely the friendly societies of 17th and 18th century England, as well as the Irish microloan funds as initiated by Jonathan Swift in the early 18th century. We want to stress that these are just two examples and many other 'origins' can be identified, including the German cooperative movement as initiated by Raiffeisen in 1870 (Mann, 2006), as well as various 'local' ROSCA initiatives[1] that still exist today. We chose these two approaches because they show some clear lessons for current day microfinance institutions as well as prospects for their evolution in a changing environment. We do not want to omit the tremendous importance of dr. Yunus' addition to microfinance by founding his Grameen Bank in 1976. However, this thesis focuses on the aspect of social lending in microfinance and we therefore chose not to spend too much time on microfinance 'pur sang'.

2.2.1 Friendly Societies

> *"To provide for a rainy day, to set aside some tithing from the harvest time of health and strength to meet the requirements of an hour when both may fail, is the duty of every man who values the glorious privilege of being independent."* (Anonymous, 1869, as cited in James, 2001)

The first friendly societies were established in England in the 1630s and 1640s, having evolved from the medieval guilds that grouped people of similar trades and provided benefits of mutual association. Their main purpose was to offer insurance to its members against sickness and death, not only by providing financial assistance in dark times but also by giving mutual support and attending members' burials for example. Basically the insurers mutually insured themselves and the others by paying monthly fees to the society (Gorsky, 1998; Everett, 2010). The idea is pretty similar to social lending: peers gather in groups to support

1 Rotating Savings and Credit Associations, this widespread predecessor of group-based microfinance has been around for many years in many different forms, examples include Susus in Ghana, Chit funds in India, Tandas in Mexico, Arisan in Indonesia, Cheetu in Sri Lanka, Tontines in Western Africa and Pasanaku in Bolivia. (Mann, 2006) Basically these are groups of local people that meet regularly and collect a fixed amount from each member during every meeting; each time one member is then allowed to take home these collective funds as a loan from the group to then repay them plus interest during the following meetings.

each other when their need is greatest. It all starts from the assumption that me helping you now will lead you to help me when I most need it.

Friendly societies existed from the 17th up until the 19th century and thus survived some remarkable social shifts. Upon their creation the mind-set was still primarily focused on the collective and the thought that *"power and productivity could be increased through collectivism"* (Hulme, 2006). The important thinkers of that time include for example Hobbes (1588-1679) who warned against a pursuit of individual interests, leading to a *"war of all against all"* (Gorsky, 1998). This philosophy can easily be recognized in the ideas of mutual support and collective solidarity; the sacrifice of the individual's concern for the good of the community. As their number increased the state tried to govern these friendly societies, which led to the Friendly Societies Act of 1793, offering various privileges in exchange for registration.

On the other hand the end of the 18th century brought thoughts of individualism and responsibility for oneself which culminated amongst others in the French Revolution (Hulme, 2006). This seemingly contradictory evolution did not cause the disappearance of the friendly societies, since now that everyone was 'master of oneself', the need to insure against misfortune was greater than ever. At the same time the Industrial Revolution affected the social fabric of a changing society and caused many rural workers to migrate to the cities and work in the new industry (Gorsky, 1998). This urbanization caused the friendly societies to flourish, given that the working class newcomers in the cities could no longer rely on bonds of kinship but had to seek association with others, both to insure themselves and to build bonds of friendship in these new environments. Therefore friendly societies are also linked to civil society and are seen as a nursery for civic engagement and democracy. However, as Gorsky (1998) put it, their key role lay not in creating social capital, but rather in popularizing the principle of insurance for sickness and unemployment.

Eventually the friendly societies were overcome by their own success; even though they were built on collective action and mutual trust, their growing size soon led them to acknowledge the problems of adverse selection and moral hazard (see following chapter) and therefore even these societies had to employ club doctors to assess whether a member was really entitled to the benefits he claimed. This extra cost, combined with their aging membership, two world wars, the advent of commercial insurance and state-initiatives for the poor reduced the appeal of these societies for the working poor. Although officially still part of English law (Hudson,

2001), they are more regalia of a time past, rather than active societies with the purpose of mutual support and financial assistance.

2.2.2 Irish Loan Funds

A century after the friendly societies, across the Irish Sea, another early innovation reminds us of today's microfinance institutions (Everett, 2010). In those days the poor also lacked access to finance and it was Jonathan Swift, an Irish nationalist and author of *Gulliver's travels*, who in the early 1800s founded a £500 fund to lend to *"poor industrious tradesmen"* (Sheridan, 1787). Small sums of 5 to 10 pounds were loaned out and repaid in weekly installments of 2 to 4 shillings, without interest. To overcome the problem of possible non-repayment, borrowers were required to have two neighbors guarantee the loan, both of whom would be notified in case of late-payments. On top of that Swift took all three of them to court in case repayment was not made. Apparently this strategy worked very well since Swift is said not to have suffered any losses from this enterprise (Hollis & Sweetman, 2001).

Soon after, other wealthy individuals and institutions followed and founded their own microloan funds, of which the Dublin Musical Society is a prime example, having by its 20th birthday made loans to over 5000 different borrowers (Hollis & Sweetman, 2001). This increase incited the state's attention; when after a famine in 1822, funds were left from charitable donations, these were entrusted to the Irish Reproductive Loan Fund Institution. To ensure the funds were well managed and used for their charitable purpose, managers were not allowed to receive any salary or allowance. Legislation was further passed that (1) permitted the funds to charge interest on the loans and (2) did not require the funds to pay stamp tax. These two measures considerably expanded the market for loans to the poor. It allowed charities to also accept deposits, pay interest on them and re-loan them at a profit, thus turning them into quasi-banks. Although some legislation that was passed in 1824 also liberalized the banking system, these still did not come to serve the poor because of the latter's lack of collateral and the English bank managers' absence of acquaintance with the local situation. The loan funds' ability to charge interest, combined with the large demand for credit from the population allowed them to make substantial profits. In turn this induced the government to pass laws to create the Loan Fund Board that oversaw their operations. This did not stop their expansion which led them to serve almost 20% of the Irish population by the 1840s (Hollis & Sweetman, 1998). Although started as reproductive loans, by now they also had a poverty

relief function, helping destitute borrowers to smooth their cash flows and thus overcome the uncertainty caused by poverty. A borrower was obliged to have two co-signatories and was required to follow quite stringent terms on his loan (20-week loan, weekly repayments, etc.) We can notice how the system had not evolved very much since the time Swift started it a century earlier, the only difference being that borrowers now paid interest on their loans.

Nevertheless, also the Irish Loan Funds eventually went into decline. Hollis and Sweetman (2001) hypothesize three reasons for this: (1) an unfavorable change in legislation reducing the allowed interest rate funds could charge and thus impacting their margin; (2) the Great Famine, primarily affecting the funds' target market of the poor and (3) competition from banks. Especially this last one is of interest to us since we can imagine a similar evolution in microfinance. What actually happened was that the loan funds offered the poor a way to apply for bank loans: they developed a credit history. This took away the informational advantage the funds had over the banks and thus exposed them to far more effective competition. At the same time the funds still had considerable higher tier problems. Corrupt management and clerks, rather than defaulting borrowers, were mainly responsible for most of the funds' losses. As a government inquiry in 1896 noted: *"in the majority of societies, the management [...] has passed into the hands of men who are merely moneylenders."* As a result of this inquiry, the renewal of loans was prohibited, which put the funds at a further disadvantage vis-à-vis banks.

Hence, although the Irish loan funds were very capable of tackling the prospect of defaulting borrowers, it was faulty management and increased competition from banks that eventually led to their demise.

2.2.3 Lessons for P2P Microfinance

Nonetheless, a discussion often met with regard to the current-day microfinance initiatives in developing countries also surfaced in the 19th century. The question was essentially whether these working-class members of the friendly societies were in fact able of governing and organizing themselves. It was especially the middle class of those days that was amazed how these *'meanest and rudest of citizens'* were in fact capable of self-discipline through *'their admirable regulations and constitutions'* and were thus worthy of independence from outside control (Anonymous, 1742, as cited in James, 2001). Similarly, today's NGOs are trying to

help out, seeming to think it is their duty to re-invent ROSCAs and other social assistance schemes already in existence in developing countries. However, they need to stay aware of the possible higher tier problems they might encounter with their local partners. As with the Irish Loan Funds, the bad loans did not cause them to experience losses, rather it was mismanagement from the institutions that cost the most. The Irish Loan Fund Board tried to tackle this problem by not allowing the funds' managers to receive any compensation but clearly this measure did not work well enough. We see similarities with today's for-profit microfinance institutions (MFIs) whose managers are being accused of unfair practices and self-enrichment rather than truly helping the poor.

Hulme (2006) makes the link between these old examples and modern day Social Lending schemes where a *"trend towards individualism is also juxtaposed with a new desire for community"*. 18th and 19th century Britain evolved to become a more individualistic society with notions of self-help and mastery of one-self, while still valuing collective action and *"sacrificing individual concern for the good of the community"*. Similarly, in the case of social lending, although the importance of 'community' cannot be omitted, lenders and borrowers alike are reminded of the importance of responsible behavior. Rather than strengthening the rules to get borrowers to repay their loans, peer to peer lending platforms try to appeal to the values the community is based upon. They do not call upon *"'brotherly' values of kinship but on the inherent 'responsibility' of its members"*. This is due to one very important aspect and that is the virtual world in which the exchanges currently happen. Whereas friendly societies were based on physical location and regular meetings, the current social lending members live far apart and have much less in common (Hulme, 2006). This makes it all the more important to have both punitive means of extracting the money from borrowers and positive means of instilling values and responsibility on them.

A reason for the Irish loan funds' success was the initial inability of the banks to compete with them at their level. The latter lacked the local knowledge needed to overcome the lower tier problems associated with lending to the poor without collateral, and did not have enough bank branches spread out to the smallest villages to also attain this knowledge. We notice how this local presence and some way of knowing whom to trust was a very important competitive advantage for the small funds. Later on, as the paupers got some credit history through paying back their 'Swift' loans, the funds lost their informational advantage and the banks were able to take over. Quite similarly, some peer to peer microfinance websites are able to take over from the local microfinance institutions once the poor have gotten a credit history.

Another controversy these days is the high interests charged on microfinance loans, as explained in the New York Times article “Banks making big profits from tiny loans” (MacFarquhar, 2010). We do not find any such evidence in these historical examples and can suggest two reasons for this: (1) in both instances the people's mindset on these loans or societies was one of charity, rather than business and (2) the state governed these institutions and set maximum interest rates, rather than letting the free market decide. In the course of this thesis we will reconsider both of these aspects and comment upon them at the appropriate time.

2.3 Organizational Landscape

The organizational landscape in social lending is very diverse, there are sites that offer national loans, while others focus on international microfinance loans. Some of them offer no interest rates to lenders, other offer fixed rates and a third kind have an auction system for setting the rate. Some offer the possibility to loan to specific borrowers, others are simply ways of pooling funds which are then disbursed through another organization; there are sites that put financing decision power in the hands of the investors, some pre-scan applications and some already funded loans which are subsequently refinanced by lenders. Finally sites exist that are for-profit organizations, whereas others have a non-profit set-up. In this section we will give some examples of different social lending platforms and explain how they work and differ from one another. In appendix 2 you will find an overview with more data on each of these platforms. Whereas we tried to have examples of each type, we certainly do not pretend to give an exhaustive overview of the totality of websites that exist, which is not the aim of this thesis either.

2.3.1 National, For-Profit Platforms

First, we have the national, for-profit platforms as they have appeared in developed countries. One of the oldest is Propser, a US based firm which does basic peer to peer or social lending: it connects lenders and borrowers. It lets the latter apply for loans online which will or will not be funded by the investors. As is implied in the title, this is true for the national market, meaning that if a German lender would want to invest his money in an American loan, for legal reasons this would not be possible. To find out which interest rate the borrower will have to pay, this website uses a 'Dutch Auction'. It means that everyone can bid on an individual loan request and set the interest rate they want to achieve. At the end of the bidding period, the lowest rates bid win the right to fund the loan at their proposed rate. After funding the loan, monthly installments are automatically deducted from the borrower's account and sent back to the lender. People can hold their loans either until they are paid back in full, or trade them on the websites' Folio Investing Notes Trader.

A very similar approach is seen in UK based Zopa. But whereas Prosper uses an auctioning system to set the loan's interest rate for pre-specified loans, Zopa preferred a different approach: a lender first sets some desired parameters (rate, level of risk and time period in

which he/she wants to be repaid), after which the platform itself tries to link these to existing borrower demands. Once this is done, the money is dispersed to the borrowers. After lending out the full amount, monthly repayments are made and after 36 to 50 months the lender is repaid in full including interest. Recently Zopa also moved more in the Propser direction by allowing people to also bid on what they call 'listings'.

A similar interesting player is RateSetter, a UK platform launched in October 2010. This platform differentiates itself in two ways: there is no auctioning of funds through lowering interest rates but rather queuing of borrowers and lenders at rates they set themselves. Secondly, given that an investor cannot choose himself the actual person he is lending to, the website also has some form of insurance by ways of a 'Provision Fund'. This covers borrower default and late payments, thereby sharing this risk amongst all lenders. A final example is LendingClub, an American platform offering fixed rates to borrowers and lenders which are calculated based on credit score, debt-to-income ratio and other measures of credibility.

We could continue for quite a while mentioning all platforms that exist today (adding Smava, Communitae, Fairplace, etc.), but we would be sure to miss quite a few of them, and the list would quickly become outdated in this emerging market. We therefore prefer to limit us to these proven recipes and draw some conclusions on these kinds of platforms, after which we can move on to peer to peer microfinance platforms.

Generally speaking, what we see in all of the above platforms is that they offer loans to individuals at what they claim to be 'better rates than the market' and do so anonymously, meaning that you as a lender have no idea about the identity of the person who's borrowing from you, let alone have any feedback from them on the way the loan has impacted their lives. In order to offer their lenders additional certainty that they will get paid back, all these platforms do a screening of the potential clients and demand some minimum standards of credit rating and history. These ratings are of such a kind that only people with fairly good credit are able to get such 'cheaper loans' and so they clearly do not target the very poor. However, this is also not the way these websites try to market themselves; rather, they speak of themselves as 'diversification tools for investors' portfolios' and as a way of 'cutting out the middle man', thereby offering better rates to everyone. Finally, the business model behind these platforms is to charge small fees on money transactions, as well as some kind of borrower registration fee; their financial sustainability comes from their large turnover and networking effects which help them to grow continuously.

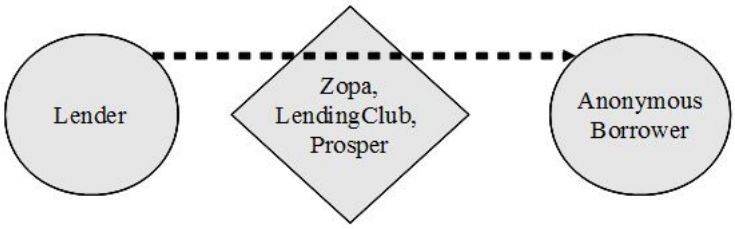


Figure 1: National, For-Profit Social Lending scheme

In the above scheme you see the relationship between lenders and borrowers in this kind of platform: money flows through these platforms from lender to borrower, but besides that there is little interaction.

2.3.2 Peer to Peer Microfinance Platforms

In today's world a peer does not necessarily have to be your neighbor or someone living close by anymore; he does not even have to speak your language, have the same skin color or live in the same country, the internet has allowed us to explore a much bigger world than our grandparents could. This has also impacted our involvement with people from far away, and our willingness to support them where we can. This rationale has now been taken one step further by what we have chosen to call 'peer to peer microfinance platforms'. Instead of allowing you to lend money to John or Elisabeth to consolidate their credit or do some house improvements, these platforms let you lend money to Nkuyata and Sanou to buy cattle or car accessories. These websites try to empower entrepreneurs in developing countries by offering Western lenders the opportunity to supply them with the credit to invest in their businesses. In this paragraph we will explore some of the websites offering this opportunity today, later on, in chapter 5, we will analyze one platform more in depth, namely Zidisha.

2.3.2.1 Kiva. Babyloan, Rang De: Refinancing Micropreneurs

The oldest peer to peer microfinance platform is called Kiva and was established in the United States as early as in April 2004. It has since been a model for many other platforms such as Babyloan (France) and even Rang De, an Indian platform focusing on providing loans to the Indian poor. The system is quite simple: Kiva is in contact with several field partners all over the world which are currently funding microfinance projects but lack the funding to scale up

and reach more customers. Kiva then looks for individuals in developed countries that want to provide interest-free loans to these institutions and help them reach their social goals. Lenders select projects online that they want to refinance. This means the loans have already been disbursed to micro-entrepreneurs and the choice of funding is therefore not made by the lender but rather by the field partner itself. Kiva sends these funds to the microfinance institutions who can subsequently lend these funds to other borrowers; the lenders' payback however depends on the projects they have chosen and whether or not these entrepreneurs perform well. In return for this free loan, the field partner puts information about the borrowers, their performance and how the loans impact the people's lives on the internet portal.

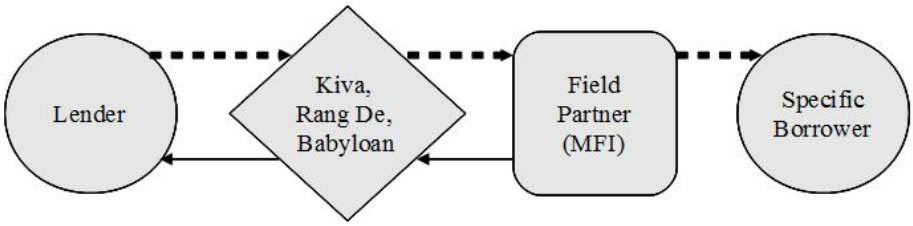


Figure 2: The Kiva social lending system

In the schematic above you see the flow of money as represented by dashed lines going from the lender, through two intermediaries to the borrower. The reverse flow of information to the lender as seen in the full arrows starts from the MFI rather than the borrower himself. Although the Western lender makes a free loan to the MFI, this does not imply any obligation for this organization to also give low interest rates to its borrowers. In fact, Kiva borrowers end up paying an average of 35,25% in interest to Kiva field partners (Kurnia, 2010b). Unlike Kiva and Babyloan which offer no return to investors, Rang De, being established in an emerging market, chose to offer its lenders a 2% return on their investments. The further functioning of their operations is pretty much the same as Kiva though. Whereas Rang De's business model is based on small fees charged on the borrowers' repayments, Kiva and Babyloan are fully dependent on donations and volunteers. When making a loan to a Kiva entrepreneur, the website suggests you also make a donation (15%) to support the organization's operative costs. Besides this monetary help, they also very much depend on volunteers to help translate borrower statements, keep the website up to date, etc.

2.3.2.2 MyC4: Bidding on Mesoloans

While Kiva and the like are focused on refinancing small loans to poor entrepreneurs, MyC4's main target market are established companies in developing countries that do not have access to bank credit; they aim for the Third World SME market. This translates in typically larger loans for already established enterprises. Another difference between this Danish platform and other ones is that they chose to let the investor decide whether or not a project is worth to be financed. It is only after a loan has been fully funded online, through a Dutch auction system, that it will be disbursed to a local administrator (usually an MFI) who then on-lends it to the borrower as chosen by the Western lender. Another organization, the provider, which usually is a local NGO, will then make sure information is provided on the MyC4 platform to inform the investor about local conditions. MyC4 is a for-profit organization and its business model is based on a 6% fee on repayments and additional provider and administrator fees; given that it also gives a return to investors, its borrower interest rates are substantial. Meaning the interest paid by the lending business, through the sum of all these fees, is usually found in the 40 to 70% range.

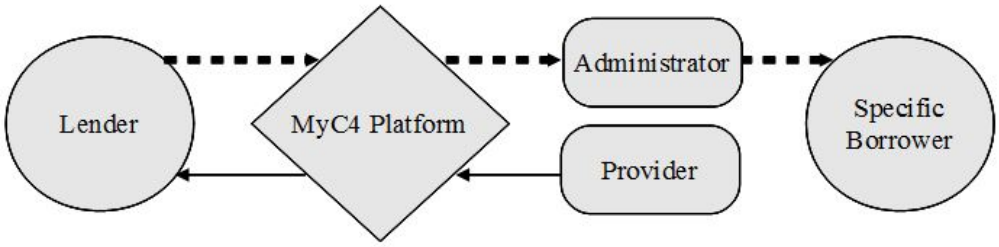


Figure 3: MyC4 social lending scheme

2.3.2.3 MicroPlace: A Broker for Microfinance

MicroPlace is a very different story from the others; it is part of Paypal Inc. rather than an independent entity and it does not offer the possibility to select specific borrowers. It is a broker-dealer that collects funds and on-lends them to local MFIs that use the funds as they wish. So rather than selecting Nkuyata and Sanou you select the parameters that you like (Green loans or fair trade? 2% or 3% return? Quick repayment or 3 years from now?, etc.). These lead you to microfinance institutions that offer such projects. However, since you did not select specific borrowers, you cannot get feedback on their performances either; although

the website features some stories of successful entrepreneurs, these are generic and thus do not necessarily reflect the impact your money has had. MicroPlace is therefore the least peer to peer of the social lending platforms listed here.

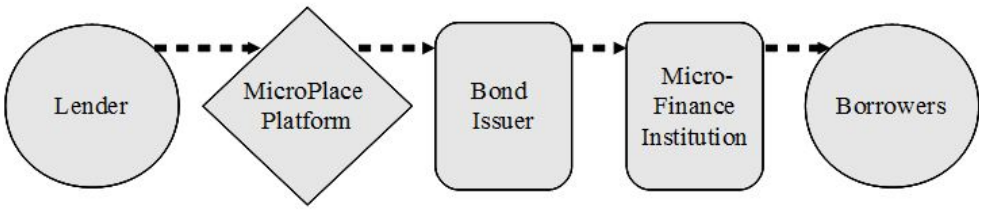


Figure 4: MicroPlace social lending scheme

2.3.2.4 Zidisha: Real P2P Microfinance?

Finally, we have Zidisha. This platform is the only true peer to peer microfinance website which we came across in our research. It offers lenders the opportunity to directly send funds to developing nations' entrepreneurs, without any intermediaries. It is a direct financing tool that gives the investor decision power on whether or not loans will be disbursed and at which interest rate they will be funded. And these are the borrowers themselves who are responsible for putting information online about their performance and any difficulties they might encounter. This different approach is due to the fact that they started off from a different assumption than other platforms; they target the computer-literate entrepreneurs in developing countries that already have credit history through previous microcredit. It is the next step, where the poor, after having built up a credit rating through successfully repaying previous microfinance loans, now have access to cheaper credit. All Zidisha does is connect the peers and verify the borrowers' credit history.

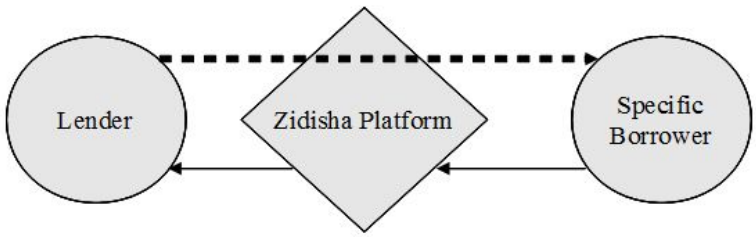


Figure 5: Zidisha social lending scheme

In Chapter 5 we will come back to this platform in more detail. Before that we will first look at some issues related to social lending: debt, trust and the participants' motivation.

18.

3 Debt and Trust

Obviously, when talking about credit and finance one cannot omit to talk about debt and trust. How do lenders make sure their money will be repaid? What forces borrowers to actually repay? We feel this is even more important when talking about social lending and microfinance, markets in which there is no collateral, usually no history of previous repayments, and in the virtual world of social lending, there is not even any physical proximity between borrowers and lenders. How then do borrowers and lenders overcome this apparent gap between them? Do they simply leap into the unknown, hoping for the best? Or is a more advanced strategy involved?

In this chapter we will explore the main differences between relationship and transactional debt; as well as some issues of trust with the institutions (higher tier) and the borrowers (lower tier). We explore different costs involved, the impact distance and groups have on lenders' trust and conclude again how this impacts peer to peer microfinance.

3.1 Types of Debt

Agarwal and Hauswald (2007) explain how banks have two sorts of debt they offer to borrowers, the first one, *relationship debt*, depends on private information the bank has through its relationship with the client; the second one, *transactional debt*, also called arm's length debt, is granted based on public information and does not require any relationship between the bank and the borrower. In this paragraph we will explore both types of debt and try to identify what type peer to peer microfinance offers.

Relationship debt, as is implied by its name, is debt offered to a borrower based on his or her relationship with the lender. It is dependent on private, usually soft information that only this potential lender has about the borrower. As in any relationship, this interaction is usually not limited to only one transaction, but it is of a more repetitive nature. Because of this preferred relationship, the funder can 'get to know' the borrower and learn some details that others do not know about, thus acquiring proprietary knowledge about the borrower. This leads to a greater ease for the borrowing party to receive the loan and get the necessary funding, but at a cost: the lender can extract a higher rent, knowing the true risks he takes and knowing what

the borrower can afford to pay (Agarwal & Hauswald, 2007). The lender can enforce repayment through his relationship, which is built on trust and which supposes the borrower wants to keep his good reputation with the bank and other lenders (Ashta & Assadi, 2009a)

On the other hand we have transactional debt; it is purely based on public, hard information available to all competing lenders. This leads to heavier competition amongst possible providers of money driving down interest rates. However, because of the lack of additional information for the creditors, it is harder to get the actual funding, (Agarwal & Hauswald, 2007). Since the lender cannot rely on his relation and the reputation of the borrower; he needs to rely on external mechanisms and putting in place controls to enforce repayment: receiving collateral, third party coercion and extraction, etc. (Ashta & Assadi, 2009a).

Given that a transactional lender is conscious of the extra knowledge a relationship lender possesses, the threat of adverse selection[1] for him increases. This will lead the first to stay away from the bidding process. Of course, if he would not refrain from this competition he would be trapped in the winner's curse: if he does get to fund the loan, i.e. 'winning' from the insider, there would probably be a reason why this more informed lender did not want to fund the loan. Therefore he cannot win: if he as an outsider wins (gets to fund the loan), he loses because of the higher odds of default; if he loses, he simply does not get to fund a loan which the relationship banker found good enough to support (Von Thadden, 2004)

In their 2003 paper, Hauswald and Marquez researched the impact information technology has on this model and banking competition in general. They hypothesized the improvements in information technologies might have two opposite effects. On the one hand, because of better processing techniques for all the information the relationship banker has, the information gap between insiders and outsiders should increase, leading to less competition and higher interest rates. However, as the internet and better communication technologies create more spill-overs, there would be faster dissemination of this 'inside' knowledge to the outside, taking away the informational asymmetry and driving down interest rates. This latter also leading to a second perverse effect where *"easier access to information, by preventing banks from profiting from previously private information, results in less borrower screening."* (Hauswald & Marquez, 2003, p. 933). Even though they did not conclude which of these effects has the upper hand, both of these effects can have an important impact on the social lending market.

1 A more elaborate explanation will be given in section 3.2.3 of this chapter, for now it suffices to say that it is generally speaking the risk of borrowing to someone who later defaults on the loan.

We can understand how microfinance can generally be understood to offer relationship debt: there is no public information on the borrowers since there are no records of previously repaid credit. It therefore all depends on the relationship of the banker with his clients, or perhaps of knowledge he gathers through contacts of the clients, as is often used in group banking. There is also little collateral being offered which could be used to enforce the loan, making it even more dependent on trust and goodwill. We notice how this reminds us of the Irish Loan Funds (see Chapter 2). Because of their close proximity and local presence, the funds were able to reliably lend out small amounts to poor Irish borrowers, while the bigger banks could not because of their absence in the area. Later on however, when public information on previous loans became available, banks could join the competition and try to outprice the loan funds. Of course they should have been caught in the winner's curse: only funding the unreliable borrowers, while the funds were able to keep the best ones. Unfortunately, counterproductive legislation and the funds' mismanagement stopped them from exploiting this advantage and eventually led to their demise. This seems to us an important lesson for the current MFIs; while they are currently creating a credit history for the 'unbankable', they need to stay aware of upcoming competition for these 'newly bankable'.

When looking at social lending however, we notice the dual traits it possesses. At first it seems to be purely transactional lending: there is no relationship between the borrower and the lenders, no physical proximity and no promise for future repeat funding. However, it has some relational characteristics as well: it is not merely based on hard information, but involves people's stories, pictures and other means of wooing the lenders. For this reason, social lending sites are even being compared to dating sites (Hartley, 2010; Manjoo, 2006). This soft information however, which used to define relationship lending and their insider advantage for the bank, is now being dissipated using improved information technologies to everyone bidding. There are no insider bidders anymore and competition drives the interest rates down, as was suggested by Hauswald and Marquez (2003). Therefore social lending continues to offer transactional debt, but includes private information in determining its lending terms. Nevertheless, although there is no relationship with specific lenders, a lock-in is created with the social lending platform. A registration fee needs to be paid when first starting with the platform and any positive feedback on current loans cannot be transferred to another website. However, this does not take away the previous conclusion that the loans between the peers themselves have a clear transactional aspect.

Given that microfinance offers relationship debt and social lending offers transactional debt, we need to ask ourselves what does peer to peer microfinance offer? Actually, it depends on each platform; for those that use a local MFI as an intermediary, the website is closer to microfinance and engages in relationship debt. On the other hand, platforms such as Zidisha allow direct interaction between lenders and borrowers, and although they do incorporate the soft information aspect in their bidding process; they are actually closer to arm's length lending by offering open market competition and no insider information amongst the lenders.

3.2 Issues of Trust

3.2.1 Introduction

Trust is key to any credit relationship; or as Kendric (2004) put it: *"Banking is fundamentally a business of trust. If we don't have our customers' trust, we won't have their business"*.

Although we all agree on the importance of trust in credit relationships, many definitions of trust exist. Mayer et al., (1995) spoke of the party's willingness *"to be vulnerable to the actions of another party, based on the expectation that the other party will perform [...], irrespective of the ability to monitor or control that party"*. Gambetta (1988) defines it as *"the subjective probability by which an individual A expects that another individual B performs a given action on which its welfare depends"*. As is clear from both of these definitions, trust always involves two parties, a first one that needs to have confidence in another one to perform a given action. Trust also incorporates an element of expectation or probability, the possibility of the event going as planned or failing to do so. This inherent uncertainty is what makes it so important to the provision of credit. However, as Tan and Thoen observe in their 2001 paper "Towards a Generic Model of Trust for Electronic Commerce", these definitions only incorporate trust in the counterparty, something they call 'party trust'. They note that a creditor not only needs to trust his borrower to repay him, but also needs to have faith in the control mechanisms in place to enforce this party trust. So not only do control mechanisms exist to enhance a lender's trust; before these will actually increase a person's trust threshold, he or she needs to have faith in the controls themselves. This is a concept they call 'control trust'.

Besides this difference between party and control trust, we can also look at these two types of trust involved in banking or credit differently: the first one is trust in the institution offering the loan or doing the handling of the payments and legal requirements. In the case of social lending this would be trust in the lending platforms to behave in the way they say they do. This can be termed macro trust (Hulme, 2006), or higher tier trust (Hollis & Sweetman, 2001). This is related to our previous elaboration on control trust: trust in the institution and in the controls it puts in place to ensure repayment of the loan. Second there needs to be trust in the recipient of the loan and his ability and willingness to repay the loan. For social lending we are talking about trust in the borrowers to actually repay their loans and/or use them for the purpose they state as why they need the funds. Hulme (2006) speaks of micro trust, whereas Hollis and Sweetman call this lower tier trust. This 'borrower' trust is very similar to

the party trust as mentioned previously in Tan and Thoen's model (2001). In this chapter we will further explore these two levels of trust and practices that might challenge and/or enhance them.

3.2.2 Higher Tier Problems

A first problem of social lending in general and peer to peer microfinance in particular is the funders' trust in the institutions involved. They need to both trust the online platform and the local partners based in developing countries. This has been made obvious in recent years when, after all the good news on microfinance, a United Nations year in 2005 and a Nobel Prize in 2006, a critical article written by MacFarquhar in April of 2010 was a cold shower for the microfinance establishment. Not only did it shock the man in the street by exposing the average interest rate paid to microlenders, it also revealed the even higher rates charged by some local microfinance partners which are supposed to link borrowers with these social lending platforms. Both were very quick to counter any allegations (Narayanen, 2010; Shah, 2010), but the immaculate image of microfinance had been destroyed. Two years earlier Lewis had already warned for this dichotomy in MFI's missions to both alleviate poverty and provide a return to its investors, concluding that *"in the end, the mission of microfinance is to make a difference in the lives of poor families […], not to build a new asset class based on profiteering"* (2008). The controversy concerning microfinance continues today, but peer to peer platforms are becoming more and more careful whom to partner with in the field and making sure no such allegations can be formulated about them in the future anymore.

As with any novelty, social lending websites also had to overcome the other form of higher tier problems, the initial mistrust of anything new. To overcome this, most websites adopted two strategies: internalize brand trust in other products and gain trust by understanding. To show their good faith and trustworthiness, most websites used some sort of seals and accreditation. In the absence of trust in the platforms themselves, they invoked the users' trust in other established brands and rating agencies, using their so called brand trust (Hulme, 2006). Later on, when more users became active on the platform, they benefited from what we can call communality trust: the mere faith we have in a product, simply because others (peers or not) trust it as well. Tan and Thoen (2006) give the example of how credit cards, with the expansion of the internet, also had to get accepted as a means for online payment. Credit cards, as they existed before the internet's massive expansion enjoyed some form of

communality trust, inherited from their widespread use. When subsequently they entered a new environment and moved online, they could no longer rely on this and had to try to gain 'trust by understanding'. They needed to foster control trust in the mechanisms they used to secure online payments; it was necessary for the customers to understand all the safety measures of encrypting card details, adding home address, etc. Eventually, through using established companies that were willing to accept this new form of payment and increased adoption from customers, some form of communality trust has reappeared in this market. We see clear similarities with the social lending platforms that make a big effort to meticulously explain all the different steps they take to ensure the safety of their operations and thus have customers understand their operations. There are also second-round effects, having newer organizations use more established platforms as references to describe their model, trying to invoke the nascent communality trust in social lending. (*"How's MicroPlace different from Kiva?"* FAQ MicroPlace website)

Luckily, despite a lapse of institutional trust in the partners P2P microfinance platforms chose, they themselves have not been questioned yet. Currently (and probably for good reason) there is still a high level of trust in the good intentions of sites such as Kiva, MyC4 and MicroPlace, and their management. However, close monitoring needs to remain in place if history is any indication. The Irish loan funds' collapse can to a large extent be attributed to the fund managers' misbehavior in the 1840s (Hollis & Sweetman, 2001).

3.2.3 Lower Tier Problems

Besides higher tier problems of trust in the organizing institutions, there is the obvious lower tier problem of trust in borrowers themselves. Even more so since in social lending and P2P microfinance we cannot rely on the traditional methods of collateral and coercion contracts. A highly diverse literature has been assembled on this topic, speaking of moral hazard and adverse selection, social capital, the impact of groups on loan repayment, the influence of lender-borrower distance, etc. In this section we will be exploring these topics and try to come up with a general approach to lower tier problems for P2P microfinance.

3.2.3.1 Moral Hazard and Adverse Selection

Lower tier problems of trust in the other party mostly come from the information asymmetry that exists between two parties that are engaged in any kind of contract. The 'buyer' has less information about the product or service than the person selling it, while at the same time the 'seller' cannot know the true intentions of the buyer. These two issues are called 'moral hazard' and 'adverse selection' and are being explored in the field of contract theory. This information asymmetry does not only exist in credit relationships, but also in such diverse domains as healthcare (e.g. Arrow, 1963), accounting (e.g. Demski & Feltham, 1978), political sciences (e.g. Mitnick, 1992), labor relationships (e.g. Spence, 1973) and many others. In this section we will explain the difference between these two concepts and how they impact the credit relationship.

Chassagnon and Chiappori (1997) explained the difference between adverse selection and moral hazard using an insurance context as:

> *"Adverse selection refers to situations where, before the contract is signed, one party has an information advantage upon the other. […] Moral hazard, on the other hand, occurs when the outcome of the relationship depends, in a stochastic way, on a decision that is privately made by one party and not observable by the other."*

It needs to be stressed that whereas adverse selection occurs before any contract is signed, moral hazard is a potential danger after the parties have engaged in a contract. Adverse selection is the danger of not knowing what the other party might be hiding; for a lender this implies not knowing whether or not the borrowing party will simply be able to repay the loan, leading the first to offer fewer loans than optimal. Akerlof (1970) explains this nicely in his widely cited practical example of lemons in the used car market, where a buyer does not know whether the second hand car will actually be a good one or a bad one (a so-called 'lemon'); only the seller knows. However, since it is in the interest of all car salesmen to tell you their car is a good one, the price gets driven down and eventually all that remains in the market are bad cars. He also gives a less well known example of the moneylenders in the credit markets in developing countries, where he notes the big difference in interest rates city banks and rural moneylenders offer. He concludes no one conducts arbitrage between them because doing so would lead one to *"attract all the lemons and thereby make a loss"* (p. 499). As a reason why the moneylenders do not have this problem he puts forth two conditions which actually imply a minimization of the information asymmetry between them: (1) an easy way to enforce the

contract and (2) a personal insight in the borrower's character. Stiglitz and Weiss (1981) continue on this idea of credit rationing and show how either a higher interest rate or higher collateral requirements actually attract more 'lemons' and consequently decrease the expected return for lending parties. This in turn leads the banks to ration the credit, leading to a sub-optimal solution where not everyone who wants credit and is willing to pay for it, can have access to it.

Moral hazard on the other hand means not knowing whether the funded party will actually do as promised and not engage in different behavior after being granted the loan. A common example in the field of health insurance is the tendency for fully insured patients to engage in more risky behavior or visit doctors and specialists more often than if they would not have been insured (Dembe & Boden, 2000). For a lender this means that the high interest rate might induce a borrower to engage in more risky projects than would be desired, thus endangering his ability to repay the loan. Secondly, a borrower might also be induced to claim he cannot repay the loan and rather keep the money (Assadi & Ashta, 2009)

As we noted, the classical way of solving these issues is demanding collateral and rationing the credit supplied, based on the subjectively assessed ability to repay. This however is exactly what led to the inability of the poor to receive loans, therefore microfinance and social lending had to find other ways of tackling these principal-agent problems. We explore those in the remainder of this chapter.

3.2.3.2 The Impact of Groups on Loan Repayment

Grouping borrowers is a first way microfinance uses when trying to tackle these lower tier risks. There are three theories behind the high repayment rates of groups in microfinance: first, there is a *relational* reason, implying fellow group members can impose social sanctions on defaulters and even eject them from local social life as an ultimate sanction. Second, an *informational* reason: group members self-select into homogenous groups and thus only allow people to join who - to their best knowledge - will be able to repay the loans. And finally the often-cited reason that members are *jointly-liable* and others thus take over loan payments when a group member cannot afford it at the moment a payment is due. According to Cassar et al. (2005) the first two reasons have the largest effect on the repayment rates in microfinance; a fact also confirmed by other authors. Karlan (2007) finds that *"stronger social connections of the group lead to higher repayment and savings."* Everett (2010) shows

this is even true for virtual social lending groups; his research showing that being member of such a group can have a significant impact on loan repayment only if a foothold in the real world is retained. For the virtual groups in Everett's research without such a real-world connection, the opposite was true: they even performed worse than individual borrowers. The reason why groups usually outperform individual lenders is the insider bidder effect. As mentioned earlier, when group members have additional inside information on a borrower, it helps them to overcome the information asymmetries and thus avert the problems of adverse selection and moral hazard.

Interestingly, we notice how in social lending, relationships actually drive down interest rates, rather than resulting in a higher rate than transactional banking. This stems from the fact that even when lending is based on relationships and inside information, insider bidding itself is valuable information which is quickly disseminated to a highly competitive environment of lenders. Therefore everyone who wishes to fund a small part of the loan knows whether insiders are or are not bidding on the loan. In case a bank would possess inside information, it could try to extract a higher interest rate while lending the loan. In the case of social lending, an individual that has inside information will be willing to fund part of the loan but by not funding it all there can be no rent extraction. The act of funding a fellow member's loan leads to a clear signal for other lenders that this inside – and therefore better informed - party trusts this borrower and causes a bidding spree on the loan, eventually driving down the interest rate. This effect is even more important in the case of group leaders' inside bidding (Berger & Gleisner, 2009). By doing so, peer to peer systems actually put the cost of investigation on debtors, rather than creditors, allowing them to cut out the cost of the banking intermediary.

However, not everyone is as convinced of the benefits of group lending. Williams (2004) fears bad risk will eventually drive out good risk, the available credit will attract dishonest people not actually aimed at repaying the loans. This will scare away honest borrowers who are barely able to pay their own interest and therefore cannot afford to take on the potential surplus payments for defaulting group members. This again stresses the importance of real connections between group members.

In P2P microfinance however, there are no groups, or certainly no groups that possess inside information on the borrowers.[1] Therefore there cannot be any insider bidding between

1 Some websites like Kiva have lender teams that group investors with similar backgrounds or interests. (see Hartley, 2010) However, these group members do not lend to each other and consequently do not have any inside information on the loans they bid on, this therefore does not convey any signal to other lenders and hence does not drive down interest rates.

Western lenders and developing countries' borrowers. The only benefit such websites can obtain from having the borrowers apply 'as a group', is the relational aspect where social sanctions may apply when due to a group member's default the whole group cannot reapply for future loans anymore.

3.2.3.3 The Influence of Distance

When talking about social lending the influence of distance between lenders and borrowers is obviously a major concern. Some research has been conducted on this topic, and while most of it is on the distance between banks and borrowers, we can still find some valuable findings in there. Hauswald and Marquez (2003) note that the *"quality of lender's information generation process is decreasing function of bank-borrower distance"*, while Agarwal and Hauswald (2007) tell us that consequently the likelihood of obtaining a loan is also negatively related to the physical distance between them. Similarly, in research on group lending (Karlan, 2007) distance between group members is a good predictor of default rate. Usually, this physical distance can simply be understood as a measure of the bank's screening ability of its borrowers, as well as to assess possible social interaction between group members.

Petersen and Rajan (2002) on the other hand found that the distance between small American firms and their lenders had actually increased from 1973 to 1993, while at the same time their interaction with their lenders had become more impersonal and less face to face. They give several reasons for this, the most important being the growing use of information technologies both in communication and in research; leading to a growing offer by 'infomediaries' that are able to process more hard information and do not need to be close to the borrower. This implies that, in the United States, with the increased use of information technologies, a long physical distance between a borrower and its bank was less of a barrier in 1993 than twenty years earlier. A trend they say that only accelerated since then. Or, in their words: *"technology is slowly breaking the tyranny of distance".* We see a parallel with developing markets where, through widespread adaption of mobile phones and novel banking techniques, even when located in the most distant and remote places, one can now be easily connected to any institutions much farther away than previously imaginable (Morawczynski, 2008)

Nevertheless, as physical distance is usually used as a proxy for social interactions and the possibility of social sanction, any system that wants to replace hard credit rating information with soft social information will have to ensure such social ties can be forged. Since,

*"decisions about whom to repay when you're in financial troubles is less about law and more about social relationships" (*Elizabeth Warren as cited in Manjoo, 2006). We will look further into these social ties in the next paragraph.

3.2.3.4 Social Capital

A final way to overcome lower tier problems is by using the personal ties that exist between individuals, i.e. by using social capital. Putnam (2000) speaks of *"connections among individuals – social networks and the norms of reciprocity and trustworthiness that arise from them. In that sense social capital is closely related to what some have called 'civic virtue'."* Clearly when lending to your friends and family such social capital is of a major importance; these are the 'norms of reciprocity and trustworthiness' that will entice them to repay your loans in due time. It is, as said previously, through social relationships that a borrower can prioritize repayments to different creditors, rather than by looking at the law. This is also very true for group lending, where for loan repayment, personal trust and homogeneity of the group members is even more important than general trust in society or simply knowing each other (Cassar et al., 2005)

We need to stress however that social capital is not just mere friendliness of a society's members towards one another. As is implied by the term capital, it is related to economic capital and profit, where some members can gain from it at the expense of others (DeFilippis, 2001). In a lending relationship the more profit the one party makes, the less the other can make and these are the differential power relations that exist in society and that will impact the gains from social lending. Therefore, it is crucial that all members find that participation in the scheme both serves their personal interest and society's best interest. This is done by showing how both borrowers and lenders get better interest rates through 'cutting out the middle man', and by stressing the community benefits your loan creates 'by helping someone like you' (e.g. Zopa, 2011). Hulme (2006) reminds us that social capital remains an academic ideology and that *"the extent to which people can connect financial matters with community formation"* continues to be a challenge peer to peer platforms need to overcome.

3.3 Adaptation to P2P Microfinance

In this chapter we have seen how debt and trust impact social lending schemes and other credit relationships. We analyzed the difference between relationship and transactional debt and saw how peer to peer microfinance, through incorporating the soft information it obtains from relations with borrowers, can overcome some of the information asymmetries and thus offer transactional debt to people with neither collateral nor a formal credit history. We discovered how a danger exists for both higher tier and lower tier problems and whereas the first do not seem to pose too much of a problem for the specific P2P microfinance platforms, the second is much harder to overcome in a virtual community. Using microfinance's classical ways of overcoming this does not seem viable because of the large transaction costs involved in monitoring groups and the large distance between lenders and borrowers. Nevertheless, some form of social interaction or supervision remains vital. Even more so since, even if legal means of coercion would be in place, the highly fragmented ownership of loans would cause a 'tragedy of the anti-commons'. This means that since everyone has an incentive to free-ride on the others' efforts to recoup their investments, no one will make those investments and eventually borrowers get free funding, eventually leading to the demise of the scheme (Heller, 2008). Therefore true peer to peer lending without any intermediaries or platforms is too much exposed to moral hazard and adverse selection. In our case study of Zidisha in chapter 5 we will try to discover a way to resolve these issues in P2P microfinance.

32.

4 Lenders' and Borrowers' Motivation

After having looked at what peer to peer microfinance actually means and how the issues of trust impact it, we will now look at what actually motivates both lenders and borrowers. In a first section we try to understand why lenders choose to fund these loans rather than invest their money elsewhere, in less risky environments. In the second part we wonder why borrowers actually want to apply for funds online and what makes them value microfinance in general and social lending in particular.

4.1 Lenders' Motivation

A classic argument behind an economic agent's motivation for performing any action is of course that self-interest drives the *homo economicus* to maximize his wealth and well-being. In the case of social lending this would mean that, for peer to peer lending to exist, some sort of financial gain needs to be associated with it. This is also what some authors argue, mostly pointing at the advantages of portfolio diversification and the benefits of 'cutting out the middle man', leading to better rates of return. On the other hand, most authors – and lenders themselves for that matter - agree that financial profit is not or certainly not the sole motivation of lenders involved in social lending. On the contrary, contributing to some form of community is seen as a key driver of people's decision to support social lending schemes. Besides investigating both these trains of thought, in this section we also try to understand the difference between charity and philanthropy in order to correctly identify the appropriate term.

4.1.1 Financial

Undoubtedly social lending can be used to get a decent return on your investments, something that can be achieved in several ways. Steelman (2006) gives us some examples by analyzing how Prosper lenders can use social lending websites for financial gain. First of all social lending can help to get a higher rate of return on their *savings,* this can be achieved in two ways: either by lending to highly-rated individuals which offer modest returns but a low risk of non-repayment as well, or by lending out a lot of small amounts to high-risk individuals

"hoping that, say, 80 percent of the people wind up making good on their payments" (McCrensky, as cited in Steelman, 2006). Besides trying to gain from their own savings, some lenders are actually 'blenders' (Rose, 2007) and try to conduct arbitrage between the low rates they can get with their high credit scores and the high rates others have to pay. This can be done in a financial perspective, trying to truly profit from it, but also as a way to provide a public good: borrowing money to be able to offer loans to those that would normally not be able to get them. Klafft (2008) tries to make it all a little bit more concrete and lists some rules lenders have to keep in mind to improve the profitability of their online loan portfolio. He suggests lenders should only invest in borrowers with (1) non-delinquent accounts, (2) a debt-to-income ratio lower than 20% and (3) no credit inquiries in the last 6 months. This, according to his research would ensure the lowest possible risk and the highest likelihood of higher-than-average returns.

Peer to peer lending can also be interesting financially in a different way, as a tool for diversification. As suggested above, lenders ideally choose an appropriate mix of varying loans in their social lending portfolios. But besides diversifying 'internally', some researchers stress the potential peer to peer lending shapes for further diversifying a person's full financial portfolio. Although riskier than a savings account, lenders do not see it as more risky than the stock market. Therefore, rather than only diversifying their stock portfolios, social lenders might well be diversifying their full financial portfolios, adding social loans as a different asset class besides stocks, bonds, real estate, etc. (Stern, 2006). An added advantage in this diversification strategy is that loans to individuals for the purpose of debt consolidation, home improvements or business start-up are taken to be unrelated to Wall Street, thereby strengthening the diversification strategy (Kim, 2008). It needs to be reminded that the assumption that social lending is about as risky as the stock market is taken for platforms that are already screening all applicants to weed out the worst credit scores. Therefore the risk of social lending on such platforms is not the same as just lending to any random person asking you for money.

Of course the huge difference between platforms and their diverse approaches to social lending (Dutch auction, fixed rate; return or no return, etc.) yield many different motivations from lenders. In his 2006 research on internet based social lending, Hulme did a comparative interview research between Zopa lenders and users of mainstream banks to compare their motivations for using a social lending scheme. It showed that two thirds of Zopa members were motivated by financial gain, and one third used it to diversify their portfolio. This seems

to stress the importance of financial returns for those investing in national, for-profit platforms. Nevertheless, if two thirds say financial gains motivate them, this also implies that one third of Zopa lenders in 2006 did not feel motivated by these financial gains. In the same survey, a little over a quarter also said to *"rather invest in people than in institutions"*. We will pay more attention to this aspect of community and what non-financial motivation lenders might have in the next paragraph (4.1.2).

As for the peer to peer microfinance platforms, it is hard to imagine how Kiva lenders can be motivated by financial gains, given that the website offers no return on the money invested. One might expect the same to be true for all these microfinance websites. On the other hand, MyC4 and Zidisha, who besides being investors in microfinance also offer the potential of financial return, are a little trickier to analyze. Take for example a short conversation between two Zidisha lenders as published on the website in July 2011; the first one clearly looking for some form of return, whereas the second one is more motivated by philanthropy:

> *"- i would like to invest money, but the interest rate of 3% is very low. if i invest here, i would loose my money [...]* (sic)
>
> *>> Zidisha is not about investing money, the purpose is to help entrepreneurs in low-income countries to expand their business. The primary motivation should be philanthropy."*[1]

As we can notice from this short interaction, the lending crowd in social lending platforms is not homogenous in their motivations. Although a single focus on financial gains is probably restricted to only part of the lenders on platforms such as Prosper and Zopa, it is clearly not totally absent from the other platforms either. Nevertheless, as Narayanan (2010) the CEO of online broker MicroPlace put it in her reaction to the New York Times article on microfinance, the purpose of peer to peer microfinance is not *"making money off the poor",* but rather empowering them to lift themselves out of poverty. We notice how both in for-profit social lending schemes and in peer to peer microfinance there are other reasons that motivate lenders. We have grouped these under the 'community' denominator and will explore them further in the following paragraph.

1 Interestingly it should be noted that even those lenders who explicitly mention philanthropy as their motivation still request a 7,9 or 8% interest rate to be paid by the entrepreneur.

4.1.2 Community

Besides monetary motivations, most lenders are also motivated by what has been grouped under the 'community' title. It is the intrinsic motivation of lenders, coming from their sense of helping 'the community' consisting of all possible peers also active on the social lending platform. It is the psychological reward you get from helping another and the sense of belonging. When comparing peer to peer lending to the lending a bank offers, the peer to peer alternative is a lot more personal. It does not only take into account the numbers that should reflect a borrower's ability to repay a loan (credit score, debt-to-income ratio, etc.). Additionally, borrowers can explain their situation and foster understanding, a person that needs money after graduation before starting her job at $140,000 per year is not what you would normally call bad credit, no matter what her credit score is like. Other stories can move a lender profoundly. Who can resist lending to a single mom who just wants to be able to offer her kids Christmas presents this year? And some stories just make total sense, but cannot be sold to the bank: simply borrowing money and repaying the loan to improve your credit score for your next, bigger loan? (Manjoo, 2006). People recognize the stories they read and feel compelled to help the applicants, or as Stern (2006) put it: *"Prosper works because the stories are real, the story almost makes you feel drawn to her"* (about a middle-aged woman asking for a loan to help her get rid of a 'life of debt'). Therefore, besides the fact that the stories give additional information that is overlooked by the traditional providers of credit, they also make it explicit that you are dealing with real people and not just some screen name on an anonymous website (Kim, 2008).

Nonetheless, however beautiful the stories might be, given that borrowers know the power of their stories, they might abuse this power as well. Steelman (2006) found that shortly after the launch of peer to peer lending, bloggers had already analyzed the most 'successful' profiles in order to find the best wooing mechanisms. Therefore the personal information currently on websites always needs to be analyzed stringently. Also, no matter how compelling the story might be, providing additional debt is not always the best solution. As Manjoo (2006) put it when talking about a person trying to borrow money to consolidate his debt: *"Were you a lender with a deep sense of social mission, you might give him money just out of charity. But he also looks like someone who needs some serious financial discipline."* This balance between charity and business sense is thoroughly being researched in the so-called for-profit social lending platforms, such as Zopa, Prosper, LendingClub, etc. Before making commitments to provide the money, these lenders usually scrutinize the borrower's profile

and ask personal questions to the borrower, paying attention to any abnormalities in his application and trying to figure out why he or she really needs the money.

This sort of behavior is a lot harder in the case of re-financing platforms such as Kiva, where the decision to fund in the first place was not with the lenders. And these loans pass by a microfinance institution which screened their application and put it online, thereby effectively making the lenders' reality check redundant. For Zidisha, where the funding decision is with the lenders, and no intermediary is present, we notice how lenders have recently become more active in asking questions about loan details and business plans, thereby possibly moving in the Zopa and Prosper direction where the lenders are much more restrictive in whether or not they will award the money to an entrepreneur. The age of the platform and the relative scarcity of borrowers however make it hard to make any predictions about this evolution.

Other means of fostering the needed sense of community are also being deployed on peer to peer networks; most of them have a feature to form groups, usually based on some common trait: a common interest (Apple aficionados), graduates of a same school, coming from a specific state or country, etc. The idea behind this is that lenders will be more prone to lend to ‘people like them’, while at the same time borrowers will make a bigger effort not to betray this trust and default on their loans because of the connection they feel. Kiva, where finding a real-life connection between borrowers and lenders is improbable to say the least, found an interesting solution by forming ‘lending teams’. The hope is that group members’ pride will cause some sort of funding competition and attract more investments. According to Hartley's study (2010), this is also true as *“Lending Teams lend more money per loan”*.

4.1.3 Philanthropy and Charity

As can be noticed from our earlier accounts in this section, peer to peer lending and especially microfinance are often linked to the words of philanthropy and charity. And since indeed there is a great deal of helping others and supporting the community involved in peer to peer platforms, we feel it is important to make a distinction between them as to be able to point out exactly what is being considered. Even though we all sort of know what both terms mean and have a feeling for the specifics of each of them, it is very hard to explicitly differentiate between them. Looking at the explanations in a dictionary does not offer much help either:

> Charity: *money or gifts given to help people who are poor, sick, etc.,* or*, kindness or sympathy that you show to other people.*
>
> Philanthropy: *the practice of giving money and help to people who are poor or in trouble* (Longman Exams Dictionary, 2006)

Although indeed both definitions support our belief that charity and philanthropy are acts of doing good and giving to the poor, they lead us to believe that there is no difference between them and that they should be treated as synonyms. Others however have gone a lot further in explaining distinctions. Some notice a mere linguistic difference in the usage of these words. Others however see a much more profound difference between charity and philanthropy. Hulme (2006) relates charity to Catholicism, where giving out of pity for the poor is a way of earning salvation 'in the next life'. This non-invasive way of emotional giving is strictly opposed to the Protestant approach linked to capitalism where *"the acquisition of money is a fundamental duty of every person".* Additionally, misfortunes and troubles that happen to a person are defined by his state of grace that has already been predetermined in God's eyes. Therefore, as Hulme continues to recount Weber (1958) when explaining Protestant ethics, charitable giving motivated by pity can be interpreted as a way of questioning God's will. On the other hand Protestant doctrine says that it is everyone's duty to diffuse their personal wealth as *"a means of enhancing the glory of God"* (Hewa, 1997). Consequently, charity, in the sense of emotional giving to the poor based on pity, was replaced by philanthropy with a much more rational approach and a greater level of intervention in the lives of the poor. Philanthropy is much more than giving to the poor but needs to be interpreted as donations to increase the well-being of the grantee and most importantly, occasions in which the donor has a much greater degree of control and actively intervenes in the use of his givings (Hulme, 2006). This also explains why Ealy (2005) calls modern philanthropy an *"Anglo-American phenomenon"* which emerged because of *"the economic prowess of industrial capitalism"*.

Although it is now clear that social lending in general is clearly more about philanthropy than about charity, a discussion behind its true motivations evidently surfaces. Two schools of thought exist on this matter: either a person's motivation is seen to be in reciprocity, where charity can be completely rational for an egoist in case there is the benefit of expected reciprocity in a similar but inverted situation in the future (Hammond, 1975). Else it is classified as altruism, giving the donating individual a return of widely being publicized as a 'charitable person' (Stoba, 2011). Brammer et al. (2006) instead of looking at an individual's

motivations, researched firms' motivations for their philanthropic activities, now commonly known as 'corporate social responsibility'. They identified different forms of philanthropy, which can help us to differentiate between lenders' motivations for social lending. A first one, known as corporate or *strategic philanthropy* aims to impact the firm's strategic position and its bottom line, besides also addressing issues in the non-business community through their benevolent giving. This positive impact can be highly diverse, ranging from an improved public image for the company and enhanced worker productivity to a maximization of managerial utility and a beneficial tax regime. This is how most firms use philanthropy and try to profit from it. Opposed to this is *altruistic philanthropy* which solely aims at enhancing people's lives and whose motivation lies in altruism. The Kiva platform, whose stated aim is to empower people with loans in order to alleviate poverty, is a good example of this, the more so since they offer no interest on their loans. In between these two extremes we find *'strategic altruism'* (Hulme, 2006). It is the kind of philanthropy we find in for-profit social lending schemes, where people want to do good, but also extract some return from their investments. Usually people involved in these schemes do not feel they want to be involved with borrowers as much as standard philanthropy would suggest. As Florence, a Zopa lender, says when cited in Hulme's paper:

> *"Zopa are the ones who have to get to know them* (the loan applicants)*, we have no say in whether we're lending it to them and I don't see why we should have any say in it really..."*

Because of this lack of direct involvement, social lending is actually closer to some form of strategic charity than it is to real philanthropy. On the other hand, lenders on schemes such as MyC4 and Zidisha have a higher degree of intervention through being able to deny an entrepreneur's venture to be funded. Still, they are also able to extract some - albeit modest – return and would therefore seem to be situated in the group of 'strategic philanthropists'. Their main aim being to positively impact poor people's lives through invasive loans, while trying to extract some form of return as well. In the next chapter we will elaborate further on this position of Zidisha lenders.

4.1.4 Lenders' Motivation: A Duality

From the above statements we notice how the motivation of those providing funding on social lending platforms is clearly not black-and-white. Not only is there a complex relation between assisting peers and financial gain, the many different platforms are also populated by different populations of lenders. Zopa and Prosper lenders for example, although being motivated in part by the idea of being able to help real people and cutting out the banks, to some other important extent are also driven by some form of financial return. They try to diversify their portfolios and still get a return on their savings. This can be summarized in the words of Lagrone, the vice-president of marketing at Prosper, who says social lending is about *"the great feeling from helping somebody else* (while) *at the same time you help yourself – not charity but meaningful, sustainable help"* (Stetenfeld, 2008)

Peer to peer microlenders on the other hand, although mostly driven by charitable causes to help poor entrepreneurs in developing countries, have a philanthropic approach to this. Rather than donating the money, they believe in the free market and the fact that an interventionist approach will yield better results in the long term. Whereas the Kiva approach of giving no return is capable of motivating part of the population, others, while not expecting to get rich from lending to the poor, still want to keep their funds and therefore require some return on their loans. Basically we can say it is this duality, being driven both by the willingness to help others and the return you get from it yourself that defines the motivation of social lenders.

4.2 Borrowers' Motivation

Besides looking at what motivates lenders, we would also like to know what it is that drives borrowers to apply for loans on social lending websites. Whereas lenders at least partially seem to be motivated by some form of altruism or willingness to support the community, borrowers' motivation turns out to be primarily financial. Nevertheless, we find this aspect turns out to be a lot more complex than one might expect in the first place. In this section we explore their motivation as a way of validating their ideas, getting lower interest rates on their loans, having access to finance which they otherwise would not have, or simply taking away the highs and lows of an unpredictable income.

4.2.1 Validation of Ideas

A first reason for an entrepreneur to use a social lending platform could be to get extra publicity for his idea and validate its characteristics. Lambert and Schwienbacher (2010) stated these reasons as far bigger advantages for entrepreneurs using crowdfunding than the possible financial gains from getting cheaper funding. Similarly, social lending used to finance business ventures could serve as an initial check with the reality of the market to see whether enough people actually believe the project is fully viable. However, as it turns out, most of the loans are not made for business purposes. When looking at for-profit social lending platforms, we notice how most people only gather funds for personal uses: buying a car, doing home improvements, consolidating credit card debt, etc. In Figure 6 below we listed the categories as picked by the 495 loan applicants, available on the Prosper platform on July 13, 2011. Although business use is undeniably present, it only accounts for 15% of all loan listings on the website. Given that 85% of loans are therefore not used for business purposes, we posit that it is unlikely that testing the market would be the main motivation for loan applicants in this social lending community.

On the other hand, platforms such as MyC4 and Zidisha almost only feature loan applications based on business ideas. Although indeed this would make it possible to use the platform's members as a test-market, the distance between the applicants' market and the lenders' environment seems to be prohibitive. We do not only imply the geographic distance between both groups but we also speak of the social difference, both are so big that one can hardly

expect the Western provider of funds to be a good market check for the developing country's entrepreneur. We therefore do not see publicity and validation of business ideas as a major motivator for borrowers to apply for a loan on a peer to peer microfinance network either. Nevertheless, the impossibility to get extra feedback is perhaps not as unfortunate as it might seem at first. Having the lenders' preferences guiding the borrowers' ventures in their countries would perhaps lead to undesirable results. As Babyloan co-founders Duthoit and Poissonnier argue in their explanation of the drawbacks of direct funding: *"what is fashionable here […] does not necessarily correspond to the reality on the field..."* (Thomas, 2009). Hence, although idea-validation can be a valuable return for crowdfunding ventures, it does not seem to be a big motivation in for-profit social lending, nor in peer to peer microfinance.

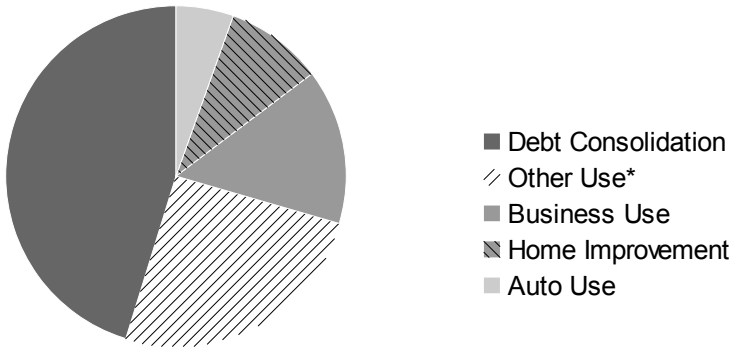


Figure 6: Division of Prosper Loan Listings Categories, July 13, 2011.

** Other Use is a mixture of people choosing to put 'other' rather than one of the four more precise categories, and projects that just do not fit these descriptions.(College loans, urgent medical care, etc.)*

4.2.2 Lower Interest Rates

Probably the most cited reason for borrowers to apply for loans on social lending platforms is the lower interest rates these platforms would offer. This is also how most of them market themselves:

> *"We connect you with individual investors and offer you low fixed rates without any of the hidden fees, red tape and attitude associated with other types of loans"* (Prosper)

> *"Why LendingClub loans are better: Lower rates, we reduce the cost and complexity of bank lending and pass the savings on to you"* (LendingClub)

> *"Entrepreneurs in low-income countries often face a dilemma: their business activities don't earn enough money […], but they lack the investment capital needed […] Zidisha lets you give […] entrepreneurs the chance to overcome this dilemma by lending to them under mutually beneficial terms. This results in lower rates"* (Zidisha)

We believe this is indeed the main motivation for borrowers to apply for such loans, as is also shown in a December 2007 Javelin Strategy & Research study. In this research, of all people surveyed on social lending, the number one reason for using the service (36%) was the better interest rate it offered, followed by (33%) avoiding credit cards (Singletary, 2008). This last reason reminds us of the short survey we did in the previous paragraph, where debt consolidation also turned out to be the primary reason why Prosper members applied for a loan. The logic behind debt consolidation is that it allows you to refinance existing (credit card) debt at a lower interest rate, reconfirming our hypothesis. The third most important reason was the inability to get a loan from a bank or a credit union (27%), a motivation we will come back to in the next paragraph.

So how then can social lending websites offer these lower rates? The rationale behind them can be summarized as follows: banks act as intermediaries between lenders and borrowers and therefore incur transaction costs. On the other hand, social lending platforms, by facilitating direct contact and partnering between those lenders and borrowers and not having the large overhead costs of physical branches and active risk management are able to reduce these transaction costs. Consequently, they do not need to ask as large a margin on their loans to cover their expenses and thus are able to offer lower rates to borrowers. For for-profit social lending platforms such as Prosper and LendingClub this seems like a viable explanation. They are able to offer fairly large loans with little administrative costs and can transfer the transaction risk onto the lender, unlike banks which need to hedge this themselves. For peer to peer microfinance such as offered by Kiva however this calculation does not necessarily hold. Whereas the transaction costs are indeed lower, an additional administrative cost is incurred to update borrower profiles, post photos and track payments (Ashta & Assadi, 2008; 2009). Therefore, even though microfinance institutions partnering with Kiva are getting interest free loans which should allow them to lower the rate they charge their customers, they also have extra costs to update the profiles on-line, eventually offsetting the gains of cheaper financing

(Ashta, 2008). On top of that the costs need to be spread over much lower amounts, thereby making the additional cost proportionally much higher per loan financed. The only way to overcome this problem is by cutting out the expensive middle man (MFI) and have the borrowers themselves take on the administrative cost of uploading their own applications and updates, eventually leading to a similar system as we know in for-profit platforms where the borrower is the sole responsible for his own applications. As mentioned earlier, this is exactly what Zidisha does and which allows them to truly offer low interest rates for borrowers, a fact we will come back to in the next chapter.

4.2.3 Access to Finance

As was found in the Javelin study mentioned earlier in the paragraph on idea validation (4.2.1), besides being motivated by low rates, borrowers also claim to turn to social lending platforms because they simply cannot access loans from banks or credit unions at all. In light of the standards for credit quality on for-profit platforms such as Prosper, Zopa and LendingClub this is somewhat questionable. Prosper for example directly says so on its website when applying for a loan with poor credit quality (FICO credit score below 620[1]): *"Have less than perfect credit? Prosper may not be your best option".* LendingClub is even more stringent, notifying you your loan request will be declined if your credit score is lower than 660. Similarly Zopa warns prospective borrowers they're looking for creditworthy people with *"a good track record of repaying debt"* and no *"maxed-out credit cards"*. Consequently, social lending platforms do not seem to be the ultimate solution for people with too low credit scores. Nonetheless, the situation was somewhat different during the credit crunch that followed the 2007 global financial crisis, when even people with very high credit scores could not get a loan. At that time some applicants with low credit scores unable to get financing from banks did in fact get funded on social lending platforms. Similarly, the websites feature stories of people that could not get the desired amount from their bank and were able to access bigger loans on peer to peer platforms. The fact that even lower credit scores also get funded is also supported by evidence from Ceyhan et al. (2011) who found that for Prosper loans, in the lower credit grades only 5 to 9% of loan applications were actually funded. Although this

1 In the United States, people build up a credit score during their lives by repaying their loans and credit card debt on time. All information concerning your credit history is being grouped by a credit bureau which assigns you a credit score that shoudl reflect how likely you are to repay a loan. The FICO scores are the most well-known and are in the range of 300-850 points, with the higher the score, the higher your credit worthiness. A score above 700 is being considered good, while one eigth of Americans have scores higher than 800, roughly 15% scores below 550. (Money-zine.com, 2011)

amount increases as the credit score goes up, even within the top scores two thirds of loan applications remain unfinanced. So, although under exceptional circumstances social lending websites in developed countries are able to provide credit where banks do not, these platforms do not seem to be the magic solution for the Western poor which cannot access financing from traditional creditors.

In the case of peer to peer microfinance, this is of course very different. Microborrowers usually do not possess assets to put as collateral for a loan and are therefore unable to secure simple bank loans (Williams, 2004). Secondly, the amount they usually need is too small for banks or other traditional providers of credit to make an effort given the high fixed costs of setting up the loan. Nevertheless, saying they do not have any access to finance at all is not really a correct representation of the reality. As Rosenberg (2010) explained, the poor in developing countries have always had access to finance through borrowing from family and friends, ROSCAs of local moneylenders. Recently then, microfinance institutions have been added to this mix to provide loans to the poor[1]. Although these sources usually have a fairly high interest rate, it does not put into question whether or not any access to finance is available. Therefore, although bank financing was, and is, almost impossible to get by, other solutions exist to borrow small amounts of money for a short period. Nevertheless, the often extortionary rates charged to these small borrowers without collateral can put into question whether we can truly speak of 'access' to finance.

Still, for bigger sums, such as the ones entrepreneurs in developing countries require, this is a lot harder. Getting enough money to grow their business is often the hardest task of all. A report on Financial Access in 2010 by the Consultative Group to Assist the Poor, which mentioned the small share of small and medium enterprises in developing countries' economies also found that a "*lack of finance is one of the key obstacles to SME growth"*. This is the real gap MFIs have been trying to fill but for which they require ever increasing amounts of money. Recent estimates (Mixmarket, 2009) say the $65,1 billion currently offered to 92,1 million households by MFIs are only reaching a minority of the world's poor, given the more than 3 billion people living on less than $2 a day (World Bank Development Indicators, 2008). Where the additional funding to fill this gap needs to come from is still subject of some debate. Either it needs to come from donations and charity (as is done by Kiva), or it can be provided on a mutually beneficial, financially sustainable basis (as the

1 Williams (2004) made an interesting remark on how the choice of wording gradually changed from helping the *poorest* to asssisting the *poor*. Even microfinance is not able to provide sustainable funding to the poorest who possess nothing and have no experience with credit.

microfinance funds offered by big Western banks: Triodos Fair Share Fund, Deutsche Bank Microcredit Development Fund, Alterfin Shares, etc.). As it is apparent, the latter is dominating the debate and is even being actively supported by the World Bank, urging private providers *"to make a profit to remain in the market"*. (Ravicz, 1998; Williams, 2004). In this logic social lending platforms offer an interesting addition, allowing the population in the West to guide this path and choose whether they want to offer interest free loans or extract some (minor) return themselves.

4.2.4 Income Smoothing

Unlike the previous three borrower motivations, income smoothing is almost exclusively limited to microfinance borrowers. They do not have access to credit cards, savings mechanisms and other means to take away major fluctuations in their income and manage their cash flows. Having access to microcredit is therefore an extremely valuable means of handling these problems, and consequently an important motivator for a lot of borrowers. As Rosenberg (2010) put it: *"economic poverty is not just a matter of low incomes, but also of irregular and uncertain incomes"*. Although close to blasphemy to most who believe that it is the entrepreneurial spirit and inventiveness of the poor that will lift them out of poverty, this is not necessarily the entrepreneur's view (Williams, 2004). Many of them actually use some of the money and its proceeds towards other ends than business development. Either they use it as an emergency fund, or else the extra proceeds from the loan are not re-invested in the business, but rather are used for family expenses such as tuition fees, house improvements, etc. Even reading the simple comments the entrepreneurs provide themselves makes this obvious:

> *"I almost lost my eye at in an accident at work. I recently lost my mother, a month ago. While she was ill I had to bring her to a hospital in the capital and pay all her hospitals bills. All these costs were covered by the savings that I made through Zidisha."* (Alassane Diop, 14 June 2011)
>
> *"The amount of money you gave unto me assisted me a lot because i build a house of four big rooms."* (John Mopel Napais, 23 March 2011)

As mentioned, even though these entrepreneurs might not necessarily be using the loans exactly for the purposes for which they were intended, the question remains whether this is

such a problem. The reason why these loans are valued so much and for which the borrowers will make every effort to repay them, is exactly this flexibility and reliability with which they can get the loans (Rosenberg, 2010). To many, the value of the loan might not lie in the ability to buy an additional sewing machine, employ some people and become a successful business person. The true value perhaps lies in being able to pay your children's school fees, your mother's medicines, or your wife's hospital bills. All of which would cause additional stress and problems, probably leading to a local moneylender and paying very high interest rates. Luckily microfinance loans can provide the additional financial space needed to overcome these setbacks. Therefore, measuring the impact and value of microfinance also needs to be judged by this factor, which, after all, is not so very different from the consumerist reasons why Western borrowers request loans on for-profit social lending platforms. This reliable and easy-to-get source of emergency funding might not necessarily lift millions out of poverty, but might certainly help in making it easier to cope with this poverty (Collins et al., 2009; Rosenberg, 2010).

4.2.5 Borrowers' Motivation: Issue of Lower Rates and Income Smoothing

When studying what motivates borrowers to apply for loans on peer to peer lending platforms we immediately noticed how we seemingly had to diversify Western borrowers from the poor entrepreneurs in developing countries. We started off finding that borrowers in developed countries primarily needed the loans for consumption reasons and very little business was actually created using these loans. The poor entrepreneurs on the other hand were all about business plans and trading themselves out of poverty. When looking at research on the impact of microfinance however, it turns out that these loans do not necessarily increase the disposable income of these people very much (Rosenberg, 2010). It does however change the unpredictability of the cash flows in such families and thus, rather than decreasing the monetary measures of poverty, the feeling of poverty is being tackled. This turns out to be a major motivation with borrowers in microfinance and will therefore also play its role in peer to peer microfinance.

A second big advantage borrowers on all platforms see are the lower rates social lending offers. Obviously, whatever reason leads you to apply for a loan, the cheaper you can get this, the better in the eyes of any debtor. This ability to get lower interest rates is also one of the most valuable assets and repayment-coercion systems available to a peer to peer lending

platform. Borrowers do not pay back a loan because they like giving back the money, they pay back in order to reapply for another loan and get (even) lower rates a second, and a third time. The danger of not being allowed to ask for another loan seems to be the biggest motivation for dutifully repaying the loans.

After having studied several aspects of social lending and peer to peer microfinance in particular, we will now turn to a case study of Zidisha.org, a peer to peer microfinance platform which currently offers credit to borrowers in Kenya, Senegal and Indonesia, and - to our knowledge – is the only website empowering the computer literate in developing countries to apply for their own loans online.

5 Case Study of a Peer to Peer Microfinance Program

After having gone over some issues and academic research concerning social lending and microfinance we now want to put our learnings into practice and discover whether peer to peer microfinance is actually a viable business model or whether it belongs in the domain of philanthropy. We ask ourselves several questions.

- Can a peer to peer microfinance platform be profitable/cost-effective?
- Did Zidisha find adequate ways of handling the lower and higher tier problems of trust?
- What is it that motivates lenders?
- And why do borrowers apply for loans on Zidisha?
- What determines the interest rate lenders charge borrowers?
- What does the future of this business look like?
- Will it grow and be as well-known and mainstream as eBay is today, will it remain a niche product, or will it soon succumb to problems of borrower default and lender absence?

All these questions eventually lead to increase our understanding of the platform in order to be able to answer the first and primary question of whether peer to peer microfinance is about business or philanthropy. We do so by looking at the Zidisha.org platform, a choice we will defend in the first section of this chapter, after which we will continue to answer the above mentioned questions.

5.1 Choice

Obviously, when deciding to do a case study in order to support your research, it is important to find an appropriate case that will help to explore the issues of interest. As can be expected from a business engineering background, right from the start the interest of this research lay in determining whether peer to peer microfinance should be considered business or charity. We then looked at what websites existed and which of them offered the most interesting perspectives. As explained in section 2.3.2, most of the platforms currently offering peer to peer microfinance still take refuge to intermediaries in their contacts with borrowers. We

found Zidisha to be a refreshing alternative. As, contrary to what most authors take to be true, the platform does not believe that *"poor borrowers do not have computers and are often illiterate,* [...therefore] *an additional intermediary is added"* (Ashta & Assadi, 2009). Rather, Julia Kurnia, Zidisha's founder, discovered the growing untapped potential of computer-literate, small business owners. She combined this fact with the credit history as created in recent decades by numerous microfinance funds and came up with a totally new model for peer to peer microfinance (Kurnia, 2010a). We find this is an inspiring and novel solution that has the potential to bring microfinance much closer to Western investors than any other website has done before. Additionally, by not relying on intermediaries, these do not need to be paid for by extracting a higher rate of interest from the borrowers, thus allowing the entrepreneurs to get financed at affordable rates while still offering a return to investors. And finally, having less intermediaries obviously also reduces the potential for fraud on their part, further decreasing the potential for higher tier trust problems.

These are the reasons why we decided to further research this novel and interesting platform in order to better understand its features and try to determine whether it is the future of peer to peer microfinance or whether it will turn out to be a footnote in the history of this new domain. Given its young age – the first loans were made less than 2 years ago – the amount of loans is rather limited, and the amount of loans that were fully repaid is even smaller. We thus decided to, rather than collect only a sample from the website, to gather data on all the loans that were offered since the platform's inception. We did this collection at the end of April 2011, when 94 loans had been financed for a total value of about $60,000. In addition to getting the data from the website, we were able to interview the non-profit's current CEO and founder, Mrs. Julia Kurnia, to answer questions that remained and to gather insights into her motivation and the platform's model. In the meantime, more loans were added and more of them have been repaid. Recently, a third and fourth country have even been added with new loan applications from Indonesia and Burkina Faso being put online in July 2011. Although we believe our analysis to be valid and valuable to anyone interested in peer to peer microfinance, we want to urge everyone to consider the limits of our data collection. It was done at an early stage of the platform's development, which causes two main disadvantages: first, few loans had been put online and even fewer of them had been repaid at the point of data collection. Second, due to its novelty, demand and supply of loans were not always balanced and this free market mechanism was not always able to play its role of 'efficient allocator of resources'. At some moments in the website's history too few lenders were online

to finance the loans, at which point Julia Kurnia herself financed large portions of the loans. At other moments only a few applications were online, leading all lenders to try to fund these, driving down the interest rate. Since our data collection was limited to a short period of time, we have not been able to sufficiently take all these undoubtedly very important aspects into account in our analysis. Hence, taking into account these remarks, we suggest further research to be conducted over a longer period of time on this particular platform during a later stage of its development in order to confirm the findings we have made, and so as to be able to refine the research we have conducted. For now we advise the reader to take these observations into account and hopefully find our findings of interest to him or her.

5.2 Zidisha.org

As mentioned shortly in chapter 2 Zidisha is different from other peer to peer microfinance platforms by being the only website directly linking borrowers and lenders and empowering both to really make their own decisions. In the first section we will elaborate further on this concept and explain how the loan application process works on Zidisha.org, as well as all other interactions borrowers and lenders have. In a next section we will then offer some statistical data on the platform and adapt the previous chapters' learnings to Zidisha.org.

5.2.1 How Does Zidisha Work: The Life-Cycle of an Online Loan

5.2.1.1 Loan Application

As mentioned previously, Zidisha borrowers differentiate themselves from other microfinance clients by being people with computer access and a credit history. Therefore, when making a loan application these two conditions have to be verified; the first one simply by having applications made on-line, the second one is a little more elaborate. Given the local conditions, a credit history usually implies Zidisha borrowers have successfully repaid a loan from a microfinance institution or a ROSCA before. This is checked by requesting confirmation from the previous institutions through local credit bureaus, local officials and credit associations. For this service a 'new borrower registration fee' applies; depending on the country this is a fixed fee of 1000 KSH ($12) in Kenya, or 10000 CFA ($20) in Senegal. This process is necessary to avoid fraud and ensure the creditworthiness of individuals, and needs to be completed within three days of application.

After receiving confirmation from these verifying institutions, a borrower can apply for loans online. He or she has to choose several parameters: (1) the loan amount, (2) the maximum interest rate, (3) the period in which the loan will be repaid, and (4) the grace period he or she gets before having to make the first repayment on the loan. Some restrictions apply on these values; for example the amount a new borrower can request is maximum 50% of the previously repaid sum as proven by the credit check, this quantity goes up by 50% each time an online loan is successfully repaid. Also, the maximum rate Zidisha borrowers can offer to their lenders is 30%, this is inspired by the social character of the website's mission to provide cheaper loans than moneylenders currently do. When setting the loan and grace period, where the grace period obviously cannot exceed the loan period, prospective borrowers are free to

set it at any length they want. For the moment, the current population has set their loans in the 10 to 21 month period, while it is being encouraged to keep it within a maximum of 12 months.

Besides selecting these technical details, the prospective borrower also tries to make his loan application as attractive as possible by giving details about himself and his business, as well as explaining why he (or rather: his business) needs the requested amount. This ranges from short explanations of 'wanting to buy chicks to resell them at a higher price' to full market evaluations with the price per cow compared between different seasons. Also the personal details the borrower provides are meant to convince the lender of the good he or she will be doing by providing this money to the borrower's family. An interesting addition some borrowers make is providing their education, hoping this will enhance their perceived trustworthiness.

5.2.1.2 Bidding and Loan Disbursement

After the application has been put online, lenders have the opportunity to fund the loan; any amount is allowed, though normally lenders provide only a part (<10%) of the loan. The bids cannot exceed the maximum interest rate the borrower is willing to pay, although anything lower than that is allowed. When more money is bid than was requested by the borrower, the bids with the lowest interest rates are grouped to provide the loan and the final interest rate is determined. Each lender gets refunded the portion of the loan he funded plus the interest he bid.

Once the loan is fully funded the entrepreneur has the choice to either ask for disbursement right away (the majority of cases), or wait for the bidding period to end one month after application, hoping for lower bids to bring down the interest rate. In Kenya loan disbursement is subsequently done through the M-PESA mobile banking network, which does not require any physical transaction between the platform and the borrower. This novel solution is what allows Zidisha to truly operate from anywhere: a Masaï herdsman can download funds on his cell phone and using his unique identification code, he can withdraw them from any M-PESA agent he comes across. In Senegal such a system does not exist and loan disbursements are still handled through banks. This explains why in Senegal most borrowers are concentrated in the capital city of Dakar. Disbursements are done in local currency and it is also in local currency that repayments are made, currency fluctuations therefore only reflect on the lender's

accounts. Rather than lending 30$ of a 400$ loan request, a lender actually lends 7,5% of the total amount and gets repaid this 7,5% of loan repayments. Lenders can hence lose and profit from the currency fluctuations, but the borrower repays in local currency.

5.2.1.3 Making the Loan Work and Repaying it.

After receiving the money and investing it in their businesses, borrowers start repaying their loans on a monthly basis. They are themselves fully responsible for this, both the amount they repay and when they do so. This is where Zidisha is different from the national social lending networks such as Prosper and Zopa who withdraw money directly from the borrowers' accounts. Although many borrowers are frequently (a little) late in their repayments, others repay their loans early. For the moment there are no penalties on both late and early repayments; it is the lenders' evaluation at the end of the loan that might or might not reprimand them. Therefore, during the loan period lenders can do nothing but wait for repayments to come. While doing so they are also encouraged to interact with 'their' borrowers through making posts on an online comment board to inquire how the business is doing or just generally asking questions and giving encouragements to the entrepreneur. Borrowers themselves also try to interact and put some posts online describing their gratitude for the money they received, as well as explaining any difficulties or good fortune they experience.

Although we mentioned how borrowers are fully responsible for their own repayments, they are not totally left aside by the Zidisha organization. In each country where it is active, a volunteer 'Client Relationship Manager' is also present; these are usually international interns from the USA and Europe, but can also be nationals from the country itself. This person pays visits to the borrowers to assist them when making applications online, to answer any questions they might have and more generally to check how the local borrowers are prospering or not under the loan. From time to time they also post comments on the platform with additional information about the borrower and his or her business.

When the final loan amount is due, lenders are invited to give feedback on the borrower by stating whether they are positive, neutral or negative about their experience with this person and giving some extra explanations. The feedback from these lenders then constitutes the basis for the borrower's 'feedback rating' which should aid future lenders in determining whether or not this is a trustworthy party; much like Ebay's or Amazon's user ratings advice

you on whether or not to do business with this user. These ratings however do not seem to be interpreted as being very important by the lenders; almost all of them give positive ratings, while at the same time acknowledging that (intermediate) payments were late. This gives a clear indication of the lenders' motivation, showing their main interest is in helping out others and getting repaid by the end of the loan, rather than paying real attention to the flow of money in the meantime. Another feature that was added in July 2011 further enhances this philosophy: lenders can henceforth opt to forgive any further debt payments to a borrower they feel has been struck by so much bad luck that they not want to increase his suffering by also putting a bad debt burden on him.

5.2.1.4 Loan Renewal

After having repaid a loan in full on the Zidisha platform, some borrowers opt to apply for a new loan of a higher amount to further support their business. Given the young age of the platform, few borrowers have actually reached the end of their loan and thus few of them have had this opportunity. We see however that of the ones who have repaid their loans in full, two thirds[1] re-apply within one month in order to further raise funds. When doing so, the same process of application, funding, disbursement and repayment starts all over again.

5.2.2 Zidisha.org: Charity or Business?

5.2.2.1 Initial Data

Having already mentioned some numbers in the previous section, we will now elaborate a bit further on the data as collected in late April 2011, at a time when the website had been up and running for 18 months. By then 94 loans of $634 on average had been financed at an average interest rate for the borrower of 8,3%. Nevertheless, a big variance could be noticed between the different loans; both in amount, with the smallest loan of $50,6 being contrasted with the biggest of $1324 and in interest rates, going from 5% to 14,71%. Of all the loans published to date none have remained not-financed in the month that followed publication of the loan request. Also, all but one of the loans have been repaid in full within one week of its eventual due-date. More than half of them have even been repaid at least a week ahead of schedule, with the most extreme example being an early-repayment by more than 9 months.

1 10 out of 15 as per July 24, 2011.

As for the difference between borrowers themselves: two out of every five loans were made to men, with the complement loaned to women. One third of the borrowers came from Senegal whereas the rest came from Kenya. The desired loan terms are set by the loan applicant and clearly the most preferred loan runs over 12 months with a one month grace period; in figure 7 below you find the frequencies of both loan periods and grace periods.

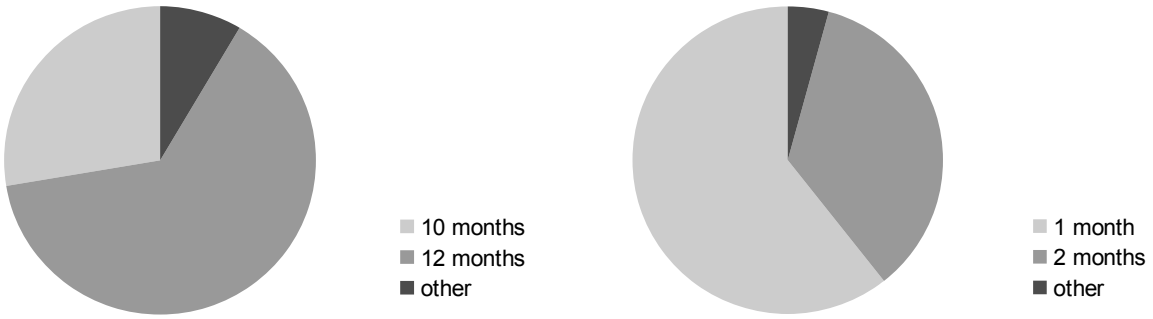


Figure 7: Frequency of Lending and Grace Period as chosen by Zidisha borrowers

We also found that on average a loan is funded by a little less than 10 people (9,45), although some have been funded by more than double that many lenders, and others have been funded by a single person. Although one might expect the more recent loans to be funded by more people and the older ones by fewer, this is not totally confirmed by the data. Other periodic differences have been noted however, the most important being the decline in average interest rate paid on loans which has been steadily declining from an average of 13,8% for the earliest loans, to as little as 6,9% in the first quarter of 2011. More data is grouped in table 1 as displayed below.

Period	Number of borrowers in period	Average loan amount to be repaid	Average interest rate paid	Average number of lenders per loan	Average credit history** (years)
Q4 '09	3	$768	13,8%	5,3	1,5
Q1 '10	3	$443	10,8%	5,0	1,0
Q2 '10	2	$1.136	11,9%	13,5	6,2
Q3 '10	19	$535	8,4%	8,8	2,1
Q4 '10	31	$760	8,4%	11,4	2,9
Q1 '11	29	$506	6,9%	7,8	2,5
Total*	94	$631	8,23%	9,45	2,57

* Total measurements represent data up to the end of April 2011 and therefore might not represent the sum of the data in the column above. Q2 '11 was not added because this period had not ended yet at the point of data collection.

** Defined by the time between the first borrowing experience and the first Zidisha loan .

Table 1: Statistics on Zidisha loans

5.2.2.2 Determinants of Interest Rate

Like we mentioned earlier, there has been a general tendency of dropping interest rates both in Kenya and in Senegal. We are interested in what caused this decline and what loan characteristics determine the eventual interest rate paid by the borrower. Many different possibilities come to mind: (1) country of origin, (2) loan size, (3) gender, (4) loan and grace period, (5) overbidding on a loan, etc. When analyzing the data we discover that indeed, besides a historic decline in interest rate we also see a significant[1] *regional difference* in rates, even given the fact that the earliest – thus more expensive - loans were distributed in Kenya. Kenya's interest rate is 7,52% on average, whereas Senegal's is 9,75%. As for our second determinant, the *loan size*, we see that the average of 826$ in Senegal is about one and a half times higher than the average of 539$ for Kenya. So even though the country in which the loan is requested seems to have a clear impact on the size of the loan, when we research whether this could have an impact on the interest rate we discover loan size and interest rate are only weakly correlated (0,3). As for *gender*, the impact is also very small; whereas male lenders on average receive a loan of $609 with an 8% interest rate, women usually have to repay $647 at a rate of 8,4%. Both of these differences are insignificant to a very large degree with p-values of 0,53 for loan size difference and 0,44 for interest rate variation. When we look at the differences in *grace and loan period* of the loans we discover an interesting, although very unexpected pattern; the shorter loans of 10 months pay a significantly higher interest rate than the longer loans of 12 months for example (9,89% vs. 7,46%). Similarly the

1 P-value of Student's t-test: 0,0002 therefore statistically significant up to 99,98%.

shorter 1 month grace period, meaning the loan will start repaying earlier, has a higher interest rate than the average 2 month grace period (8,81% vs. 7,41%)[1]. We mention this to be very unexpected since normally, a longer time horizon on a loan implies higher uncertainty and thus warrants higher interest rates. A possibility would be that shorter loans tend to be riskier, an assumption that could be checked using default rates. Given the young age of the platform and the subsequent absence of any defaults, this is for the moment not possible. Knowing that interest rates have dropped over time, another option could be that more recent loans have merely tended to be longer and have longer grace periods. This is somewhat confirmed when we plot out the loan and grace period along with the interest rate (appendix 3). Conversely, the correlation between these periods and the date at which the loans were disbursed is very weak (respectively 0,14 and 0,45), hinting at other reasons for this strange learning. We feel this counterintuitive finding indicates that lenders do not pay much attention to these measures when making their funding decisions, whereas borrowers on the other hand have - over time - tried to get longer loan and grace periods for loans at lower interest rates. This hints towards both of their motivations, which we will come back to in paragraph 5.2.2.4.

This interesting result that sheds some doubt about the financial savvy of the Zidisha lenders leads us to research the loans that have been *'overbid'*. These are loans where the Dutch Auction could play a role of decreasing the interest by only awarding funding to the lowest bidders. Again we find surprising results. The 65 loans which only received bids up to the exact amount requested actually have a lower average interest rate (8,1%) than the 29 loans that received some overbidding (8,6%). Although this difference cannot be found to be statistically significant, it is clear that the Dutch Auctioning system did *not* help to lower the interest rates on these loans. All the above findings are summarized in table 2 below, which also contains the P-values for the Student's t-test; with significant difference for values below 0,05 being indicated by the darker fields.

One other point of interest we want to research, although it cannot explain the initial interest rate for a borrower, is how such a borrower performs in a second (or third) round of financing. We wonder what the impact is of having successfully repaid a loan on Zidisha before. As we mentioned, out of the fifteen entrepreneurs who had repaid their loans by July 24,2011[2], ten have reapplied for loans of which seven have been funded by now. Of course this is a very

1 P-value of Student's t-test for the significance of the difference in loan period is 0,0003 therefore statistically significant up to 99,97%; the same test for the grace period offered a P-value of 0,0026.

2 As the attentive reader notices, this is a later date than when the original data was collected, at that moment only 4 loans had been refinanced, therefore we chose to update our data on this particular issue prior to analyzing it.

Significance tests		Interest Rate	Loan Size
Country	Kenya	7,52%	$539,2
	Senegal	9,75%	$825,7
	T-test	0,0002	<0,0001
Gender	Male	7,99%	$608,8
	Female	8,40%	$646,5
	T-test	0,4355	0,5301
Loan Period	10 months	9,89%	$845,8
	12 months	7,46%	$565,6
	T-test	0,0003	<0,0001
Grace Period	1 month	8,81%	$654,4
	2 months	7,41%	$539,2
	T-test	0,0026	0,564
Overbidding	Not Overbid	8,06%	$596,8
	Overbid	8,61%	$708,4
	T-test	0,0956	0,3284

Table 2: Values of Parameters that Influence Interest Rate and Loan Size

small sample for us to do any analysis, but it does give some interesting insights. A first fact we notice is that the interest rate on these new loans is indeed lower than the one of their first loans (an average of 8,1% vs. 12,4% for their first loans). However, when we take a closer look and take into account the fact that these new loans started one year later and then compare them with other loans that were financed in the same period, we find that the average interest rate for the fourth quarter is actually not much higher than the average of borrowers refinanced in that same period (8,4% vs. 8,2%). We do find however that of these seven loans, four have been overbid, which is a significantly higher proportion than the average of all loans (30% overbidding). We thus conclude that prior successful repayment could be interpreted as a lower risk for lenders and apparently is interpreted as such, leading to a higher willingness to finance loans. It does however not impact their willingness to offer lower interest rates to such successful borrowers. We can only contemplate on whether this is because lenders think the rates are too low already, whether they just want to help (the philanthropy argument), or simply because they do not know these entrepreneurs already successfully repaid a loan. Normally, the feedback rating of a borrower should help the lender to establish which borrowers are most trustworthy and deserve lower rates. On the Zidisha platform however, every borrower starts with a rating of 100%, awarded based on the previously repaid loan with an MFI. This of course implies that one can only go fall in this rating when receiving anything but perfect feedback. For the moment it seems that rather than providing an extra motivation for borrowers to make sure their lenders are happy, these

lenders seem to not want to be labeled 'the evil ones' who caused a borrower to lose his perfect rating. Currently all but one of the entrepreneurs have received an all positive feedback after repaying their loan, even if this happened with delays and little communication with the lenders. The only 'neutral' feedback was given at one of the earliest borrowers, and under similar borrower behavior has since not been repeated by the same lender. Therefore we do not expect this important tool, which should have allowed future lenders to easily see how an entrepreneur has performed on his previous loan(s), to be of much use for future financiers. Positive feedback will continue to be given to all but the defaulting entrepreneurs, effectively rendering the feedback rating obsolete. Unfortunately this requires lenders to do a lot of research before finding out how well a borrower did on a previous loan, which some might find too time consuming to bother with.

Nevertheless, although lender behavior does not seem to be impacted a lot by prior repayment, we do see a clear change in borrower behavior: the average amount they request increases by 20%, a surge we expected. On top of that, they also request longer repayment and grace periods. This confirms our expectation that borrowers clearly value the service Zidisha offers them, and they seem to be learning from their earlier loans, subsequently making more informed decisions on the parameters they set for their loans. It also shows that the borrowers seem to have been at the limit of what they could repay, and thus for higher sums would like a longer time to repay.

As we have seen in table 2 above, and as we discussed earlier, the only significant predictors of interest rate turn out to be the borrower's origin and the loan and grace period he or she selects. Since these last two are opposite to what we would intuitively expect, we believe some other parameter must exist that explains the interest rate that is eventually charged. We wonder what determines this interest rate and posit that these are especially the maximum interest rates as set by the potential borrowers themselves that are good predictors of this rate. As can be seen in figure 8 below, the dotted line has a general tendency to decline over time; this is the maximum rate borrowers were willing to pay. We also see, at least most clearly in Senegal, how over time the difference between the maximum rate borrowers were willing to pay and the rate they eventually paid declined to a level where for the most recent loans, the maximum rate practically equals the final rate. This impression is confirmed when calculating the correlation between the maximum interest requested and the final rate borrowers have to pay, which is a strong 0,82. When we, in light of this correlation, look back at our earlier findings on the impact of the borrower's nationality we also discover a significant difference

in maximum interest rates set by borrowers in Kenya and Senegal: 8,2% and 12,7% respectively. This further strengthens our finding on the importance of the maximum rate and of course has implications not only on the cost for the borrowers and lenders but also on their motivations, something we will come back to in paragraph 5.2.2.4.

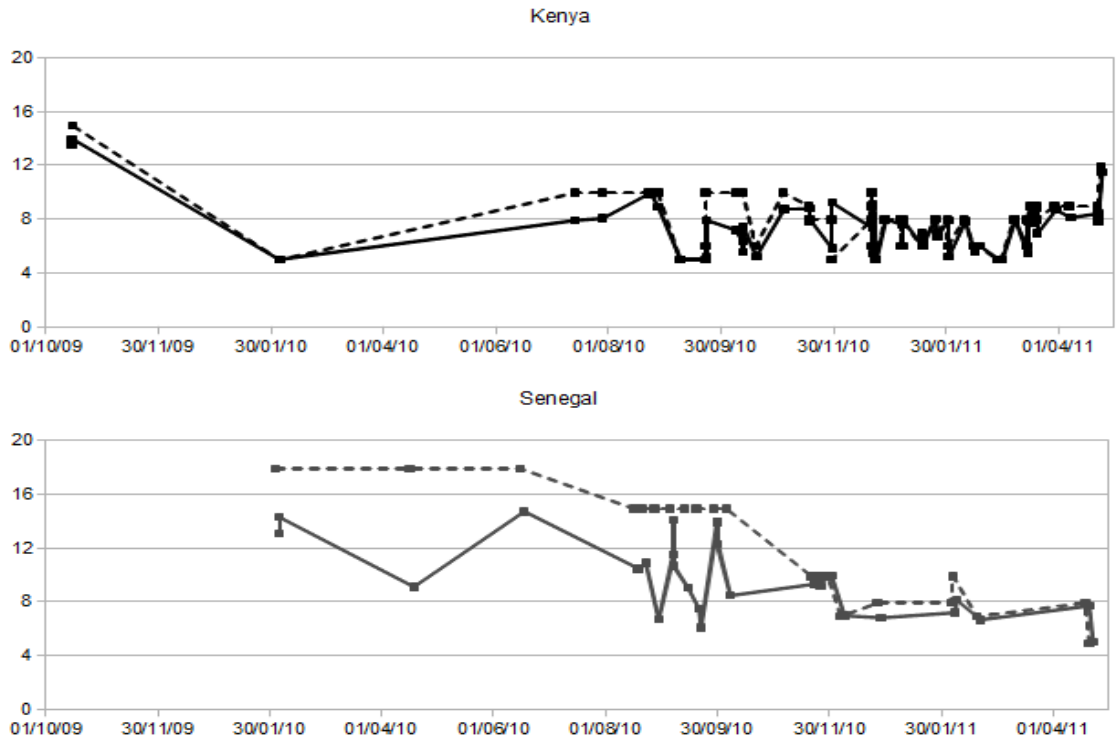


Figure 8: Comparison chosen maximum interest rate and final rate paid

This intuition also holds in a multivariate context as can be seen in Appendix 3. If we do a linear regression with the interest rate as the dependent variable and the maximum rate, grace and lending period, number of lenders, the amount requested and the gender and country of the applicant as independent variables; we find that the maximum rate is by far the most predictive variable. The grace period also shows up strongly in this analysis, but on the other hand also has a very big standard error; this is true for each of these parameters, where we notice very strong uncertainty in all but the maximum rate. This further underlines our previous findings. The F-test confirms our assumption that a linear regression was in order, however a look at the graph already immediately shows us the very big variability that exists.

This is confirmed by the R^2 value which shows that only 60% of the sum of squares is explained by the current model.

Nevertheless, this still begs the question of why borrowers have let this maximum interest rate decline over time. A possible reason could be that the countries' average lending rates on all credit have declined at the same time. Central Bank data from both Kenya and Senegal show however that interest rates have remained fairly stable over the last years. In Kenya, the average lending rate has been hovering between 14 and 15% for the last two years. Similarly, Senegal's average prime lending rate as charged by commercial banks virtually did not leave its 8,30% mark from January 2010 onwards (Central Bank of Kenya, 2011; BCEAO, 2011). According to Zidisha director Julia Kurnia, the origins of the high initial rates are to be found in the entrepreneurs' uncertainty about feasible rates and thus copying what they knew locally as the cheapest loans available. Over time, it has been guided by the principles of supply and demand. When many loan applications are online and too few lenders are available to fund them, interest rates tend to go up. Conversely, when fewer loan applications were made, rates plummeted and even reached the 5% minimum - offering no return to lenders - and were still being funded. The maximum rate proposed by borrowers therefore fluctuates in response to lender supply, an account by the Zidisha founder illustrates this:

> *"... now that we are adding loans more rapidly with more summer interns serving as CRMs, there is more competition among applications and those listed at 8% (3% for lenders) are taking longer to fund - currently around 2 weeks rather than just a few days as was the case a couple months ago. I notice that applications posted in the past few days have begun offering 9% (4% for lenders). If Zidisha were to experience a surge in lender interest in response to media publicity, for example, I would expect applicants to respond by proposing lower maximum rates. [...] In summary, then, I think interest rates are already being set by a rough market mechanism which serves to balance somewhat supply and demand on our platform."* (Kurnia, 2011)

Considering the prior findings and analysis, we suggest further investigation, based on more complete data and at a more mature stage of the platform, is in order. This will help to determine a more predictive model of the interest rate in the future. Yet, as our interest lies in the fact whether the platform is a novel way of charity or an inventive business model, we believe the current analysis of the interest rate suffices and we move on to how Zidisha takes care of lower and higher tier problems.

5.2.2.3 How Zidisha Tackles Lower and Higher Tier Problems

We have already spent a lot of time on lower tier problems in Zidisha; to repeat these are the issues of trust that exist between a lender and a borrower, most commonly known as moral hazard and adverse selection. Zidisha tackles these through having the borrowers' self-declared credit history verified by an independent local agency, and by continuing to have Zidisha volunteers assist borrowers locally. Of course these volunteers do not have the explicit task of supervising the entrepreneurs, but implicitly they can be perceived as such by Zidisha lenders. In case an entrepreneur would take the money and go, this agent would help to know about this earlier, and help to recover the funds if needed and possible. Hence, although officially there is no check and there ought to be true peer to peer trust, we believe these agents constitute an important real-life link between lenders and borrowers on Zidisha and an indispensable tool for fostering the existing long-distance trust. This in turn helps to tackle the problem of moral hazard because after the funds have been dispersed, some supervision is still present, making borrower fraud less likely.

The issue of adverse selection is tackled by requiring previous credit history from entrepreneurs. This helps to select the borrowers that are most likely to be able to repay their loans, and hence helps lenders to overcome the fear that the loan applicants will not be able to repay their loans. On the other hand, requiring this previous experience is exactly what the credit rationing problem is about: credit worthy people are not given loans because of a fear of being stuck with a 'lemon'. Such credit worthy people without credit history are now excluded from the platform even though they might be computer literate and have the ability to repay the loan. Further problems of credit rationing and adverse selection, where borrowers that do get to apply for loans remain unfinanced by the online lenders have not yet occurred. We thus conclude that the current process works quite well at tackling lower tier problems of trust. It remains to be seen how the current loans perform in the future when a larger chunk of them reaches maturity, but the current data suggests to be optimistic about this.

As for higher tier problems, given that no real intermediary exists, we would expect there to be little problems with these. Unfortunately, local intermediaries do exist, which can still cause trouble for borrowers and lenders. In Kenya, after the funds have been transferred to the borrowers' M-PESA account, these can be withdrawn by him at a local M-PESA agent. In December 2010 fraud has been committed at this final stage of the process. Although normally *"M-PESA requires proof of identification to ensure that accounts are opened under*

the owners' real names, and Zidisha checks that account numbers match borrowers' names before disbursing loan funds" (Kurnia, 2011); a person familiar with the process and acting as a trustee of some Zidisha borrowers, changed these borrowers' bank account numbers and withdrew their money. Consequently the borrowers have not received the funds they requested to invest in their business, and the lenders have not received any repayments on these loans. Currently local law enforcement is still investigating this case, but it is unclear how the platform should proceed. Technically the money had been transferred into the borrowers' accounts and thus was theirs, but given the fact that they never possessed this, it is highly unlikely they would be able and/or willing to repay this. Fortunately, a suspect for the fraud has been identified and apprehended. If this was not the case, an even more complicated situation would surface, where a lower tier problem of trust would exist, not knowing whether the duped entrepreneurs are telling the truth or are just trying to get a free loan.

We find that Zidisha has clearly tried to avoid both lower and higher tier problems: by checking the credit history of individuals and providing a local Client Relationship Manager they supply additional certainty for the lenders that borrowers will indeed be repaying their loans. As for now, no real problems of moral hazard have surfaced, given that all loans have been repaid within a reasonable delay at the time when they were due. On top of that, the absence of intermediaries decreases the possibilities for higher tier fraud; by not having any money pass through Zidisha, but rather directly from lenders to borrowers, there is less opportunity for some of that money to 'get stuck' somewhere along the way. Nevertheless, some problems remain: a person was able to abuse the distribution system for the funds, and the website's philosophy is actually based on credit rationing, rather than supplying credit to all that are worth it.

5.2.2.4 Lender and Borrower Motivation

Through researching the other parameters that could impact the interest rate borrowers pay, we already found that lenders do not seem to be researching the bids they make very well and they are making their decisions based on feeling and the rate that is being offered by the entrepreneurs, rather than on credit worthiness, business idea or likeliness of repayment. This seems to confirm the proposition that the lenders' motivation is mostly one of philanthropy and helping others. Given that lenders have repeated this motivation at numerous times themselves and it is in line with the website's founder's philosophy, it seems to be the number

one lender motivation. Nevertheless, when we look deeper into it, their self-declared philanthropic attitude only goes so far as rendering them willing to fund the borrowers at their proposed rate. Most of them hardly undercut this rate to offer even lower rates as we would expect from purely charitable people. This shows us how the mind-set is mostly one of strategic philanthropy. Lending money on Zidisha is still seen as an investment with the purpose of increasing the value of it by as much as possible. This does not necessarily mean people upload the money through Paypal and want to withdraw it one year later with a profit. Even when lenders never intend to recoup the investment, they want it to have as much impact as possible.

On the other hand, lenders such as CWS (Church Wvsorld Service) and CatholicNetworking also exist with pure altruistic philanthropy in mind: these always finance loans at 0%. As their names suggest, their philanthropic or even charitable mindset comes from their religious background and actually leads back to the very origins of charity: a faith-based duty to help and support the less-fortunate. It is once again clear that Zidisha lenders - and social lending lenders in general - cannot be grouped under one clear denominator based on where their motivation lies. What we do find however is that a strategic philanthropic mindset is very much present in Zidisha. Also, lenders do not seem to be differentiating between borrowers a lot and set their interest rates based on what they see as the maximum borrowers want to offer. They do indeed set it at the maximum rather than lower in order to extract the highest possible return on their investment.

As for the borrowers' motivation we already mentioned the importance of getting lower interest rates for them. In our above research this seems to have been confirmed: over time borrowers noticed they could set lower interest rates and still get funded, which drove them to do so, ending up in cheaper loans for all of them. However, it also seems that the aspect of income smoothing remains very important for these borrowers. As was clear from the earlier Zidisha examples, money is clearly fungible and is also used as such by these entrepreneurs. Some choose to invest the money in building a new house, others need it to buy medicine for their siblings, etc. This does not mean the loan is not going to be repaid, but given the fact that there is no real punishment for late payments (this is not even reflected in their final feedback rating), borrowers elect to invest the money in more urgent needs whenever these appear. Very recently again, Zidisha's account manager for Senegal had to convey a message from one of the borrowers: *"Khady just called me to say that she will be late on her payment this month because her mother is sick and she has to buy medicine for her"* (July 14, 2011). In the spirit

of philanthropy on which the website has been built, this is not taken badly by lenders either, and they usually are more concerned about the borrowers' health and well-being than the actual timely repayment of their loan. Their return is not purely monetary but also psychological in knowing their money is helping someone elsewhere in achieving a better life. This culminates in the most recent feature that was added to the Zidisha website: 'I would like to forgive my share on this loan', which enables lenders to forfeit any further repayments on their loans and thus effectively donate their loan to a borrower when he or she feels *"a serious calamity [would] make it undesirable or impossible for a borrower to repay his loan according to the expected schedule"*.

Also the purposes for which the loans are used differ greatly from one borrower to another; nevertheless, two purposes together represent almost 50% of all loan requests: financing for a grocery store or some other business involved in (re)selling food items, and farming (ranging from raising chickens and cows to buying grains and fertilizer in order to improve yields). Other purposes are listed in the graph below (Figure 9). The stated aim of the loans therefore clearly remains productive and entrepreneurial.

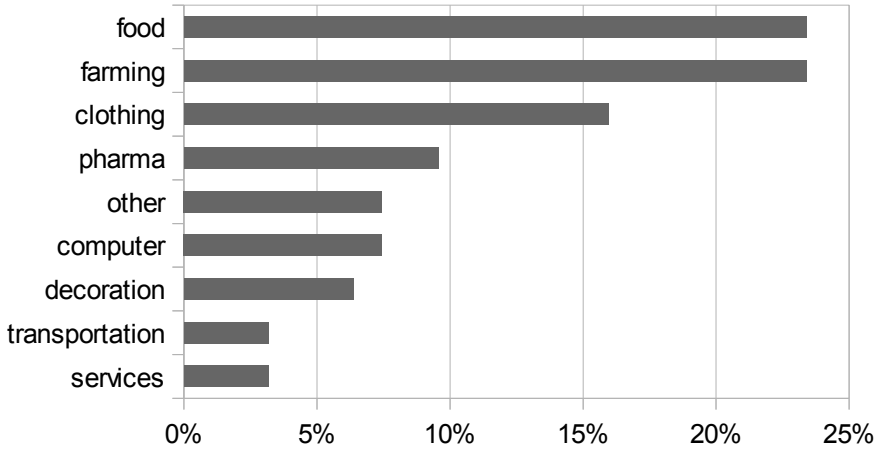


Figure 9: Purpose of loans as stated by Zidisha borrowers

In this paragraph we found the motivation of lenders on Zidisha is as expected mostly strategic philanthropy, trying to profit from the loans they make while allowing the borrower to use the funds as they wish at a comparatively very low interest rate. Nevertheless, some

purely altruistic lenders also operate on Zidisha, lenders who lend out funds at 0% interest rate and who might even forgive their share of a loan in case they feel the borrower has suffered a serious setback which would make repayment of the loan unnecessarily tedious. The borrowers, as could also be expected, seem to be mostly involved in getting a lower interest rate than they could from other local sources of financing. Because of the lenders' 'friendliness', these entrepreneurs are also fully able to profit from the fungibility of money and employ the loans as means of smoothing their income and prioritizing some other payments over repayments to Zidisha lenders who in the end do not punish them with bad feedback on their late repayments.

5.2.2.5 Business Model of Zidisha

Before looking at where we think the future of peer to peer microfinance lies, we still want to investigate the business model of Zidisha in more detail to understand how they pay their bills and where their revenues come from. As shortly explained above, the platform has two main streams of revenues: a fixed fee new borrowers have to pay to check their credit history, and a 5% borrower transaction fee on repayments to cover expenses and transaction fees. This is being supplemented by *"another small but significant source of revenue"* (Kurnia, 2011), namely donations, which are tax-deductible in the USA. As for expenses, the website does not have that many either: the credit checks are being repaid by the fixed fee and all people working on the platform, as well as the local country managers, are volunteers for the moment. In fact it is the lender who bears much of the cost: it is he who pays the Paypal fees when uploading or withdrawing money and it is he who carries all of the exchange risk. When we compare the 5% fee on Zidisha to the African average ratio of operating expenses over loan portfolio of 22,64% (MixMarket, 2009), it is clear that under the current system, and certainly with the current small size of the loan portfolio, the platform would not be able to pay out any salaries. Currently, Zidisha is able to get a small surplus of $100 per month on their fees, which is being used for platform improvements. The non-profit expects to be able to afford one paid full-time staff person by the time it reaches $1 million in loans per year, a goal they feel *"is not a far-fetched target"* (Kurnia, 2011), given where they currently are and the growth they are experiencing. However, in the immediate term, the website will remain to be managed on a volunteer basis by all staff involved.

When indeed payment streams would increase and the platform would grow to many times its current size, Paypal fees would decrease and the 5% borrower transaction fees would possibly be able to cover more of the expenses. Nevertheless, even affording one staff member already seems to be a big success when we think of Kiva's proposal to donate 15% of the loan amount in order for them to pay their operational expenses. The more so since Julia Kurnia, in a recent newsletter promised to channel through all reductions on Paypal costs to the lenders. Because of the evolution the website has gone through, it is highly difficult to now still increase this fee with the purpose of paying for these expenses or even making a profit. First the question of what to do with current borrowers would have to be answered and then a possible problem would surface of coming back to excessive moneylender fees which currently already exist in the countries involved. In case of a minor increase (say 10% instead of 5%) this latter problem would remain fairly limited given the fact that earlier loans were successfully repaid at rates of 13-14% and lenders seem happy to accept returns of 3 to 4%. Nevertheless, we feel that such a move, because of the clear philanthropic motivation present in Zidisha founder Julia Kurnia, remains unlikely.

5.2.2.6 The Future of Peer to Peer Microfinance

It remains hard to tell how peer to peer microfinance will evolve; Zidisha is only a small website which currently only has a very local impact. However, given the current success of altruistic platforms such as Kiva, able to finance $231 million in loans since its launch in 2005, it is clear a big potential for such websites exists. The only constraints to growth that remain are the current small portfolio of prospecting borrowers and the limited geographic focus. The platform is currently working on this second point by offering new applications from Indonesia and Burkina Faso. Furthermore, the growth of mobile banking is an important factor for the operational model of getting the money to the most remote borrowers in rural areas.

As discussed above, Zidisha presents itself as a clear model for real peer to peer microfinance, based on computer-literate entrepreneurs with credit history and philanthropically motivated lenders. We can foresee more such platforms to develop as mobile banking becomes more widespread, and see it as a logical evolution in line with developments which the Irish Loan Funds and the English Friendly Societies also experienced: as microfinance institutions develop a credit history in developing markets, others will be able to profit from this and take

away their most successful clients. Of course the platform is very young and only very few loans have currently been repaid, it remains therefore to be seen how lenders will react when loans default and their money is lost. We foresee this to be a very important test for the platform and urge further research to keep track of this evolution and its possible implications.

70.

6 Conclusion

In this thesis we have researched peer to peer microfinance and whether it is to be understood as a competing technology to present-day microfinance institutions, as an addition to it, or rather as an alternative to charity and philanthropy. We have looked at the historical antecedents to social lending and found similarities between today's peer to peer microfinance and 17th to 20th century friendly societies and Irish loan funds. We found their demise was mostly caused by the higher tier problems of corrupt fund managers and fraud, as well as to increased competition from banks, able to profit from the credit history these institutions created. Although peer to peer microfinance, as illustrated by the Zidisha platform, currently does not yet have such problems in its management, it needs to stay weary of any forms of fraud that might surface and act proactively to prevent them from causing any harm.

We also studied the differences between these higher tier and lower tier problems and found how the actors involved in a credit relationship have to cope with the issues of adverse selection and moral hazard. In our research it turned out Zidisha discovered a non-standard way of overcoming these two lower tier problems: through only allowing those who already have a positive credit history to apply for loans; by having local loan officers supervising the loans; and by offering a unique product in the markets where it is present: low interest rates. As a means of handling the higher tier problems in the future, the platform is having all payments handled transparently online and it has reduced the number of intermediaries needed in its operations to a minimum. Although this is an important first step, the platform still needs to work on ensuring it does not succumb to higher tier problems of fraud and theft in years to come.

Thirdly we considered the motivations for using peer to peer microfinance, both for lenders and for borrowers. The latter's is easiest to define, it lies primarily in the access to finance itself as a means of smoothing income and in the lower interest rates it offers. Lenders' motivation on the other hand is more complicated. It turns out many different variations exist of a combination of philanthropy – wanting to have a positive impact on the lives of the poor – and getting some return from it. Most of the weight currently goes to the aid-aspect, rather than the financial return, although a purely altruistic motivation is rare as well.

In the last chapter we also looked at the business model of the Zidisha platform itself in order to find out what the fundamentals behind this non-profit were. As is apparent from its legal

build-up, making a profit does not seem to be very important. Nevertheless, a business can be very successful and sustainable without really 'making money'. In the end a business is about paying your employees, being able to invest in growth and rendering stakeholders happy. Zidisha could be doing all of this. Through growth and perhaps minor modifications to its model it could be able to afford wages for some of its current volunteers, while keeping some of the funds aside to invest in further website development and reaching more countries. At the same time its stakeholders are pleased: the borrowers get funded at low rates and the lenders are happy to be 'making a difference' with their savings and perhaps getting a little return on the side.

Through researching Zidisha as an example of peer to peer microfinance we gained further understanding of this novel market. Rather than being a tool for the wealthy to get more wealthy, it turns out Zidisha is mostly about philanthropy and helping the poor. It is a tool for Western philanthropists to really have an impact in developing countries and at the same time a means for credit-starved entrepreneurs to get the funds they need to set up their business ideas and be able to better cope with poverty. Nevertheless, this also presents an interesting model for a sustainable business that could help scale up microfinance operations to reach an ever larger amount of the world's poor.

When looking at the trends in social media, the propagation of the internet and the innovations in mobile banking, we believe this website offers us a glimpse of what the future of aid and banking will look like. Although not necessarily a mainstream tool for everyone on this planet, it will surely become part of many a person's portfolio. Rather than donating anonymously to some big NGOs who will use the money for projects we do not know about; people want to see their impact and be able to connect with each other across the globe. Whereas we set out to discover whether peer to peer microfinance was a viable solution in the first place, we came across a business model that in the long run could allow both investors and entrepreneurs to profit from their exchange. Although for a lender it might not be competitive with a savings account or stocks and bonds, the rewards are clearly much larger than that. And for borrowers it could finally prove to be a tool that liberates them from the high interest rates that keep on mortgaging their futures. Microfinance institutions finally do not need to see it as a competitor trying to steal their market but rather as a complement and an inspiration, allowing them to focus on the very poorest, while knowing the people they helped previously are not being abandoned.

Bibliography

Abakaeva, J., Glisovic-Mezieres, J. (2009) “Are Deposits a Stable Source of Funding for Micorfinance Institutions?”, *brief from the Consultative Group to Assist the Poor,* 4 pp.

Agarwal, S., Hauswald, R. (2007) *The Choice between Arm's-Length and Relationship Debt: Evidence from eLoans*, working paper available at SSRN.com, 40 pp.

Arrow, K. (1963) “Uncertainty and the Welfare Economics of Medical Care”, *American Economic Review, 53-5,* 941-973.

Ashta, A, Assadi, D. (2008) “Do Social Cause and Social Technology Meet? Impact of Web 2.0 Technologies on Peer-to-Peer Lending Transactions”, *paper as presented at the Asia Microfinance Institution in Hanoi, Vietnam: 26-29 August 2008*, 34pp.

Ashta, A., Assadi, D. (2009) “An Analysis of European Online Microlending Web-sites”, *Cahiers du CEREN, 29*, 147-160.

Ashta, A., Assadi, D. (2009) *Rang De: How to Make Online Lending Grow in India?* , Case-study at the Burgundy School of Business, 18pp.

Babyloan (2011) “Les petits prêts font les grandes histoires”, *http://www.babyloan.org,* last accessed: June 25, 2011.

Bald, J. (2008) *Stability of Small Balance Deposits, A Technical Note,* Washington, D.C., CGAP, 95pp.

Banque Centrale des Etats de l'Afrique de l'Ouest (2011) *Bulletin Mensuel de Statistiques Monétaires et Financières*, available on: www.bceao.int.

Berger, S., Gleisner, F. (2009) “Emergence of Financial Intermediaries in Electronic Markets: The Case of Online P2P Lending”, *Verband der Hochschullehrer für Betriebswirtschaft e.V., 2-1,* 39-65.

Brammer, S., Millington, A., Pavelin, S. (2006) “Is Philanthropy Strategic? An Analysis of the Management of Charitable Giving in Large UK Companies”, *Business Ethics: A European Review, 15-3,* 234-245.

Cassar, A., Crowley, L., Wydick, B. (2005) “The Effect of Social Capital on Group Loan Repayment: Evidence from Field Experiments”, *paper as presented at the Conference on Microfinance and Economic Journal Symposium on Joint-Liability Lending,* 26pp.

Central Bank of Kenya (2011) *Monthly Economic Review,* February 2011.

Ceyhan, S., Shi, X., Leskovec, J. (2011) “Dynamics of Bidding in a P2P Lending Service: Effects of Herding and Predicting Loan Success”, *ACM WWW Internation Conference on World Wide Web (WWW),* 10pp.

CGAP (2008) “Africa Microfinance Analysis and Benchmarking Report 2008”, *The Consultative Group to Assist the Poor*, 20pp.

CGAP (2010) “Financial Access 2010, the State of Financial Inclusion through the Crisis”, *The Consultative Group to Assist the Poor*, 100pp.

Chassagnon, A., Chiappori, P. (1997) “Insurance under Moral Hazard and Adverse Selection: the Case of Pure Competition”, *paper presented at the International Conference on Insurance Economics*, Bordeaux, June 1995.

Collins, D., Morduch, J., Rutherford, S., Ruthven, O. (2009) *Portfolios of the poor: How the World's Poor Live on $2 a Day,* Princeton University Press, Princeton.

DeFilippis, J. (2001) “The Myth of Social Capital in Community Development”, *Housing Policy Debate*, *12-4*, 781-806.

Dembe, A., Boden, L. (2000) “Moral Hazard: A Question of Morality?”, *New Solutions, 10-3*, 257-279.

Demski, J., Feltham, G. (1978) “Economic incentives in budgetary control systems”, *The Accounting Review, 53*, 336-359.

Ealy, L. (2005) “The Philanthropic Enterprise: Reassessing the Means and Ends of Philanthropy”, *Economic Affairs, June 2005*, 2-4.

Everett, C. (2010) *Group Membership, Relationship Banking and Loan Default Risk: The Case of Online Social Lending,* Working Paper available on SSRN.com, 39pp.

Gambetta, D. (1988) “Can we trust trust?”, *Trust* (D. Gambetta ed.), Basil Blackwell, New York, pp. 213-237.

Garcia, R. (2010) *Microfinance, Crowdfunding and Peer-to-peer Lending Explained*, available on: http://blog.lendingclub.com/2010/10/22/microfinance-crowdfunding-and-peer-to-peer-lendingexplained/, 22 October 2010, 2 pp.

Glaeser, E., Schleifer, A. (2001) “Not-for-Profit Entrepreneurs”, *Journal of Public Economics, 81*, 99-115.

Gorsky, M. (1998) “Mutual Aid and Civil Society: friendly societies in nineteenth-century Bristol”, *Urban History, 25-3,* 302-322.

Handy, F., Ranade, B., Kassam, M. (2007) “To Profit or Not to Profit, Women Entrepreneurs in India”, *Nonprofit, Management and Leadership, 17-4,* 383-401.

Hartley, S. (2010) *Kiva Crowd-Sourced Microfinance and Cooperation in Group Lending*, working paper available at SSRN.com, 82 pp.

Hauswald, R., Marquez, R. (2003) “Information Technology and Financial Services Competition”, *The Review of Financial Studies, 16-3*, 921-948.

Heller, M. (2008) *The Gridlock Economy: How Too Much Ownership Wrecks Markets, Stops Innovation and Costs Lives,* Basic Books, New York. 259pp.

Hewa, S. (1997) “The Protestant Ethic and the Rockerfeller Benevolence: The Religious Impulse in American Philanthropy”, *Journal for the Theory of Social Behaviour, 27-4*, 419-452.

Holahan, C. (2007) “Ebay: The Place for Microfinance”, *BusinessWeek Online, 25 October 2007,* 24.

Hollis, A., Sweetman, A. (1998) “Microcredit in Pre-Famine Ireland”, *Explorations in Economic History, 35-4,* 347-380.

Hollis, A., Sweetman, A. (2001) “The Life-Cycle of a Microfinance Institution: the Irish Loan Funds”, *Journal of Economic Behavior & Organization, 46,* 291-311.

Hulme, K. (2006) “Internet Based Social Lending: Past, Present, Future”, *Social Futures Observatory,* 115pp.

James, B. (2001) *Trade, Craft or Mystery,* available at: http://www.takver.com/history/benefit/ctormys.htm, last viewed: June 1, 2011.

Karlan, D. (2007), “Social Connections and Group Banking”, *The Economic Journal, 117,* 52-84.

Kbyutv (2011) *Microcredit Issues and Debates*, available on: http://www.kbyutv.org/programs/smallfortunes/ issues/, 23 March 2011, 7pp.

Kendric, F. (2004) “Ethical Banking”, *ABA Banking Journal, 96-6,* p. 14.

Kim, J. (2008) “Where Either a Lender or Borrower Can Be”*, The Wall Street Journal, 12 March 2008,* D1.

Kiva (2010) “Loans that change lives”, *http://www.kiva.org*, last accessed: July 5, 2011.

Klafft, M. (2008) *Online Peer-to-Peer Lending: A Lender's Perspective,* Working Paper available on SSRN.com, 5pp.

Kurnia, J. (2010a) “Does P2P Lending Work for Microfinance? Lessons from Zidisha Inc.”, *guest article on: p2p-banking.com, August, 2010.*

Kurnia, J. (2010b) “Interview with Julia Kurnia, Director Zidisha.org”, *guest article on: p2p-banking.com, January, 2010.*

Kurnia, J. (2011) *Personal Interviews with Julia Kurnia, Director of Zidisha.org*, conducted in April-July, 2011.

Lambert, T., Schwienbacher, A. (2010) *An Empirical Analysis of Crowdfunding*, Working Paper available on SSRN.com, 23pp.

LendingClub (2011) “Personal Loans & Investing with Peer Lending”, *http://www.lendingclub.com*, last accessed: July 1, 2011.

Lewis, J. (2008) “Microloan Sharks”, *Stanford Social Innovation Review, Summer 2008,* 54-59.

Lewis, J. (2010) “Obama Calls out Microfinance, Taking the Measure of Microfinance”, *Microcredit Enterprises, April 2010*, 8pp.

MacFarquhar, N. (2010) “Banks Making Big Profits from Tiny Loans”, *The New York Times, 13 April 2010*.

Manjoo, F. (2006) “The Virtual Moneylender”, *Salon.com, 22 May 2006,* 6pp.

Mann, F. (2006) “The History of Microfinance”, *published on Global Envision, 13 April 2006*.

Mayer, R., Davis, J., Schoorman, F. (1995) “An integrative model of organizational trust”, *Academy of Management Review, 20-3*, 709-734.

Mitnick, B. (1992) “The Theory of Agency and Organizational Analysis”, *Ethics and Agency Theory* (Bowie & Freeman eds), 75-96, Oxford University Press, Oxford.

Microplace (2011) “Investments that make you proud”, *http://www.microplace.com*, last accessed: June 1, 2011.

Mixmarket (2009) “Microfinance data and Social Performance indicators for the microfinance institutions that help alleviate global poverty”, *http://www.mixmarket.org,* last accessed: August 4, 2011.

Money Zine (2011) *National Average Credit Score,* available on: http://www.money-zine.com/Financial-Planning/Debt-Consolidation/National-Average-Credit-Score/, accessed on: August 4, 2011.

Morawczynski, O. (2008) “Why has M-PESA become so popular in Kenya?”, *published on: CGAP blog, 17 June 2008*.

MyC4 (2011) “You can lend directly to a small business in Africa”, *http://www.myc4.com,* last accessed: July 20, 2011.

Narayanan, A. (2010) “The Truth about MicroPlace”*, published on: the paypallblog.com*, *15 April 2010*.

North, D. (1991) “Institutions”, *The Journal of Economic Perspectives, 5-1,* 97-112.

Petersen, M., Rajan, R. (2002) “Does Distance Still Matter? The Information Revolution in Small Business Lending”, *The Journal of Finance, 57-6,* 2533-1570.

Premal (2010) “New York Times Article on Microfinance Interest Rates and Profits”, *published on: kiva.org*, *15 April 2010.*

Prosper (2011) “Personal Loans and Online Investing”, *http://www.prosper.com*, last accessed: June 25, 2011.

Putman, R. (2000) *Bowling Alone: America’s Declining Social Capital*, Simon & Schuster, New York.

Rang De (2011) “Knock Out Poverty, Become a Social Investor”, *http://www.rangde.org*, last accessed: June 5, 2011.

RateSetter (2011) “Peer 2 Peer Lending and Social Lending in the UK”, *http://www.ratesetter.com,* last accessed: August 1, 2011.

Ravicz, R. (1998) “Searching for Sustainable Microfinance: A Review of Five Indonesian Initiatives”, *World Bank Policy Working Paper No. 1878*, 103pp.

Rose, R. (2007) *The Prosper Lending Rebellion, and the US Lending/Borrowing Black Hole,* available on: http://blog.p2pfoundation.net/the-prosper-lender-rebellion-and-the-us-creditborrowing-black-hole/2007/08/16.

Rosenberg, R. (2010) “Does Microcredit Really Help Poor People?”, *CGAP Focus Note, 59, January 2010*, 8 pp.

Rozas, D. (2011) “Microfinance without the MFI? Zidisha tests the boundaries of microlending methodology”, *published on: financialaccess.org, July 5, 2011.*

Singletary, M. (2008) “The Pros and Cons of Social Lending”, *published on: Kitsap Sun, The Color of Money, 13 Januaty 2008.*

Sheridan, T. (1787) *The Life of the Rev. dr. Jonathan Swift,* 2nd Edition, Rivington, London.

Spence, M. (1973) “Job Market Signaling”, *Quarterly Journal of Economics, 87-3*, 355-374.

Steelman, A. (2006) “Bypassing Banks”, *Region Focus*, 37-40.

Stern, A. (2006) *Social Lending: The Next Web 2.0 Phenomenon,* available on: http://www.centernetworks.com/ social-lending-web-2-0-3, 25 November 2006, 6pp.

Stetenfeld, B. (2008) “P2P Lending: Threat or Opportunity”, *Credit Union Magazine, January 2008,* 32-36.

Stiglitz, J., Weiss, A. (1981), “Credit Rationing in Markets with Imperfect Information”, *The American Economic Review, 71-3*, 393-410.

Stoba, K. (2011) “Selfish reasons behind altruism and charity”, *published on: Suite101, 3 June 2011.*

Tan, Y., Thoen, W. (2001) “Towards a Generic Model of Trust for Electronic Commerce”, *International Journal of Economic Commerce 5-2,* 61-74.

Thomas, J. (2009) “Kiva Confusion”, *published on: Microfinance.cgap.org, 9 November 2009.*

Von Thadden, L. (2004), “Asymmetric Information, Bank Lending and Implicit Contracts: the Winner's Curse”, *Finance Research Letters, 1*, 11-23.

Weber, M. (1958) *The Protestant Ethic and the Spirit of Capitalism,* translated by Parsons, T., Scribner's Sons, New York.

Wenner, M. (1995) “Group credit: a means to improve information transfer and loan repayment performance”, *Journal of Development Studies*, *32-2*, 263-281.

Westley, G., Palomas, X. (2011) “Is there a Business Case for Small Savers”, *CGAP Brief, January 2011,* 2pp.

Wright, K. (2002) “Generosity versus Altruism: Philanthropy and Charity in the US and UK”, *Civil Society Working Paper 17.*

Williams, T. (2004) “Requiem for Microcredit: The Demise of a Romantic Ideal”, *Banking and Finance Law Review, 19,* 145-198.

Woolcock, M. (2001) “Microenterprise and Social Capital: a Framework of Theory, Research, and Policy”, *Journal of Socio-Economics, 30*, 193-198.

World Bank Group (2008) “World Bank Development Indicators 2008”, *available at: data.worldbank.org/indicator.*

Zidisha (2011) “Link up with remarkable entrepreneurs from around the world”, *http://www.zidisha.org,* last accessed: August 9, 2011.

Zopa (2011) “Loans from People not Banks”, *http://uk.zopa.com*, last accessed: June 15, 2011.

Appendix

80.

Country	Gender	Name	Feedback	Amount requested ($)	Total bids ($)	Amount disbursed ($)	Amount to repay ($)	Maximum rate (%)	Final rate (%)	Repayment period (Months)	Grace period (Months)	Date disbursed	Initial date last payment due	Repymts due end Apr '11	% Repaid end Apr '11	Borrower since	Number of lenders	Category
k	m	John Mopel Napais	100%	779,00	779,00	674,69	767,87	15	13,78	12	1	15/10/09	16/10/2010	repaid	100%	01/07/07	5	food
k	m	nkuyata ole lionyio	100%	779,00	779,00	674,70	766,34	15	13,58	12	1	15/10/09	16/10/2010	repaid	100%	15/07/08	6	farming
k	m	pashar ole mpoe	100%	779,00	779,00	674,82	769,12	15	13,97	12	1	15/10/09	16/10/2010	repaid	100%	15/10/08	5	farming
k	f	faith wanjiru mwangi	100%	69,00	69,00	48,57	50,59	5	5	10	2	04/02/10	6/12/2010	repaid	100%	31/12/09	1	food
s	f	awa seck	67%	223,00	232,00	229,80	257,14	18	14,29	10	1	05/02/10	7/12/2010	repaid	100%	15/01/09	5	food
s	f	ndeye bineta sarr	100%	893,00	893,00	920,24	1020,22	18	13,04	10	1	05/02/10	7/12/2010	repaid	100%	15/02/08	9	clothing
s	f	Fatou Maïna Diallo	100%	854,00	854,00	880,46	947,19	18	9,1	10	1	19/04/10	18/02/2011	112,08	88%	01/06/05	11	clothing
s	f	Combé Thiaw	100%	828,00	948,00	1179,81	1324,44	18	14,71	10	1	18/06/10	19/04/2011	131,64	90%	30/11/02	16	pharma
s	f	Fatoumata Diagne	100%	478,00	478,00	520,81	566,20	15	10,46	10	1	19/08/10	20/06/2011	0	82%	02/05/08	12	clothing
s	f	Khady Faye	100%	877,00	877,00	954,72	1007,75	15	6,67	10	1	30/08/10	1/07/2011	192,56	51%	04/05/07	11	food
s	f	ndeye niang	100%	344,00	344,00	383,79	428,79	15	14,07	10	1	07/09/10	9/07/2011	44,66	60%	03/06/10	12	other
k	m	Paul Ngugi	100%	828,00	828,00	770,21	831,15	10	7,91	12	1	14/07/10	15/07/2011	0	76%	01/01/09	13	food
s	f	aida sow	100%	765,00	775,00	853,49	917,62	15	9,02	10	1	15/09/10	17/07/2011	366,53	30%	12/12/08	18	food
s	f	oureye faye	100%	765,00	795,00	853,49	906,48	15	7,45	10	1	21/09/10	23/07/2011	3,51	60%	12/10/08	12	clothing
s	m	alassane diop	100%	780,00	780,00	870,22	914,20	15	6,06	10	1	22/09/10	24/07/2011	91,56	50%	10/12/08	9	clothing
s	f	maimouna sarr	100%	682,00	687,00	706,74	788,53	15	13,89	10	1	01/10/10	2/08/2011	109,93	46%	03/10/08	17	decoration
s	f	ndeye marie traore	100%	780,00	780,00	808,30	901,99	15	13,91	10	1	01/10/10	2/08/2011	359,16	20%	04/04/08	18	food
s	m	saer ndaw	100%	877,00	877,00	908,82	1001,92	15	12,29	10	1	01/10/10	2/08/2011	99,51	50%	04/05/08	20	pharma
s	f	fama gaye	100%	404,00	404,00	440,23	483,25	15	10,66	11	1	07/09/10	8/08/2011	0	64%	05/02/08	10	food
s	f	aissatou traore	100%	780,00	780,21	808,30	865,22	15	8,45	10	1	08/10/10	9/08/2011	78,9	50%	05/05/09	21	pharma
s	f	Marieme Diagne	100%	574,00	574,00	640,40	701,82	15	11,51	10	1	07/09/10	9/08/2011	69,67	60%	01/05/08	13	clothing
k	f	Miriam Kimani	100%	392,00	392,00	366,50	402,68	10	9,87	12	1	23/08/10	24/08/2011	0	58%	01/01/08	2	food
k	m	David Maina	100%	392,00	392,00	366,50	402,68	10	9,87	12	1	24/08/10	25/08/2011	0	70%	01/10/07	5	farming
k	m	david kamau	100%	260,00	410,00	243,46	255,64	5	5	12	1	09/09/10	10/09/2011	0	59%	31/07/09	2	farming
s	f	berthe diatta diaite	100%	892,00	907,00	904,94	975,18	10	9,31	10	2	23/11/10	24/09/2011	216,71	11%	06/06/06	19	food
k	m	edward waithaka	100%	260,00	314,98	243,46	255,64	5	5	12	1	23/09/10	24/09/2011	0	60%	02/02/07	4	farming
k	f	veronikah kamajah	100%	260,00	275,00	243,46	255,64	5	5	12	1	23/09/10	24/09/2011	0	52%	31/03/08	3	services

k	f	wanjira ngure	100%	330,00	330,00	309,02	324,90	6	5,14	12	1	23/09/10	24/09/2011	0	55%	30/11/07	9	food
s	m	aladji diop	100%	743,00	893,00	753,78	814,33	10	9,64	10	1	24/11/10	25/09/2011	81,41	30%	06/05/05	13	computer
s	f	soda ndiaye	100%	691,00	696,00	701,03	758,46	10	9,83	10	1	24/11/10	25/09/2011	171,32	17%	10/06/08	13	decoration
s	f	astou diop	100%	892,00	915,08	904,94	974,13	10	9,17	10	2	26/11/10	27/09/2011	0	34%	08/10/09	13	clothing
s	f	kadidiatou badje	100%	850,00	958,32	862,33	933,00	10	9,83	10	2	29/11/10	30/09/2011	0	33%	04/02/08	8	pharma
s	f	sanou sarr	100%	892,00	1002,10	969,99	1050,13	10	9,91	10	2	02/12/10	3/10/2011	0	34%	03/04/09	8	transportation
s	f	amy diagne	100%	900,00	900,00	978,69	1035,42	7	6,96	10	2	09/12/10	10/10/2011	0	34%	05/03/06	4	pharma
k	f	florence njrei nquqi	100%	779,00	799,00	729,74	782,11	10	7,18	12	1	09/10/10	10/10/2011	0	56%	31/03/09	18	food
k	f	kiraposho enole sumare	100%	896,00	896,00	839,34	892,50	10	6,33	12	1	13/10/10	14/10/2011	74,17	42%	01/03/07	10	decoration
k	f	naitayuang lenjir	100%	896,00	896,00	839,34	886,05	10	5,57	12	1	13/10/10	14/10/2011	332,87	12%	01/07/08	16	decoration
k	m	salei tira	100%	779,00	779,00	729,74	784,12	10	7,45	12	1	13/10/10	14/10/2011	0	50%	01/06/08	11	farming
k	f	mercy gachie	100%	259,00	259,00	242,62	255,32	6	5,23	12	2	20/10/10	21/10/2011	0	38%	30/06/09	4	food
k	f	Serah Wanjiku Mukuria	100%	279,00	410,32	259,53	285,67	10	8,06	15	1	29/07/10	29/10/2011	0	54%	01/12/07	12	computer
s	f	ndeye bineta sarr	100%	846,00	847,47	919,97	972,13	18	6,8	10	1	29/12/10	30/10/2011	0	31%	15/02/08	12	clothing
k	m	John Mopel Napais	100%	900,00	900,00	864,36	939,79	15	8,73	12	1	04/11/10	5/11/2011	209,45	19%	01/07/07	14	food
k	f	alice wakonyo	100%	648,00	648,00	622,35	677,01	9	8,78	12	1	18/11/10	19/11/2011	0	51%	14/06/09	7	food
k	f	mary kihara	100%	778,00	778,00	747,19	805,70	8	7,83	12	2	18/11/10	19/11/2011	0	37%	30/06/08	9	farming
k	m	sammy kanja	100%	778,00	778,00	747,19	806,68	8	7,96	12	2	18/11/10	19/11/2011	0	38%	14/01/08	4	transportation
s	f	Fatim Sylla	100%	382,00	383,53	416,22	472,85	15	10,89	15	1	23/08/10	23/11/2011	0,2	47%	05/04/08	11	computer
k	m	paul musembi	100%	379,00	379,02	364,00	385,17	8	5,82	12	1	30/11/10	1/12/2011	0	34%	02/02/09	6	computer
k	f	Siyomit Noonkipa	100%	648,00	648,00	622,35	679,75	10	9,22	12	1	30/11/10	1/12/2011	226,58	0%	01/05/09	18	decoration
s	f	khadi diallo	100%	850,00	1299,46	879,92	939,40	10	8,11	10	2	08/02/11	10/12/2011	0	12%	05/10/09	21	farming
k	m	francis ndungu	100%	454,00	454,00	424,82	455,96	8	7,33	12	2	22/12/10	23/12/2011	0	24%	01/07/09	4	farming
k	m	james mangui	100%	389,00	389,00	364,00	393,12	8	8	12	2	22/12/10	23/12/2011	0	22%	01/12/95	2	farming
k	f	lydia wambui	100%	759,00	759,00	710,22	749,05	6	5,47	12	2	22/12/10	23/12/2011	0	19%	01/08/08	8	computer
k	f	nkoije ene kiok	100%	648,00	701,17	606,34	661,23	10	9,05	12	1	22/12/10	23/12/2011	161,31	0%	10/03/09	18	decoration
k	m	nkuyata ole lionyio	100%	900,00	900,50	842,16	911,93	15	8,29	12	1	22/12/10	23/12/2011	227,98	0%	21/10/08	15	farming
k	m	pashar ole mpoe	100%	900,00	900,00	842,16	918,71	15	9,09	12	1	22/12/10	23/12/2011	229,68	0%	15/08/08	16	farming
k	m	shem ondieki	100%	260,00	260,00	243,29	255,46	5	5	12	1	24/12/10	25/12/2011	0	28%	02/01/08	1	other
k	m	francis mungai nginya	100%	260,00	260,00	243,29	262,73	8	7,99	12	2	29/12/10	30/12/2011	0	18%	01/07/08	6	clothing
k	m	benard murage	100%	779,00	779,00	756,81	814,44	8	7,61	12	2	07/01/11	8/01/2012	0	26%	04/01/10	9	computer
k	m	daniel kipsang	100%	649,00	649,00	630,51	668,34	6	6	12	1	07/01/11	8/01/2012	0	25%	01/12/06	1	farming
k	m	james gachucha	100%	779,00	779,00	756,81	817,35	8	8	12	1	07/01/11	8/01/2012	0	25%	04/01/99	2	food
k	f	esther rimui	100%	250,00	250,00	242,88	257,45	6	6	12	1	18/01/11	19/01/2012	7,3	22%	03/11/03	1	clothing
k	m	francis mwangi	100%	779,00	779,00	756,81	802,07	6	5,98	12	2	18/01/11	19/01/2012	0	20%	02/06/08	4	food
k	f	mercy njogu	100%	125,00	125,00	121,43	128,72	6	6	12	0	18/01/11	19/01/2012	9,43	23%	02/02/10	1	food
k	m	samuel ndungu	100%	750,00	750,00	728,64	774,31	7	6,27	12	1	18/01/11	19/01/2012	0	27%	15/01/09	5	other
k	m	wilfred kamau	100%	119,00	119,00	115,61	122,54	6	6	12	1	18/01/11	19/01/2012	0	99%	01/07/10	1	food

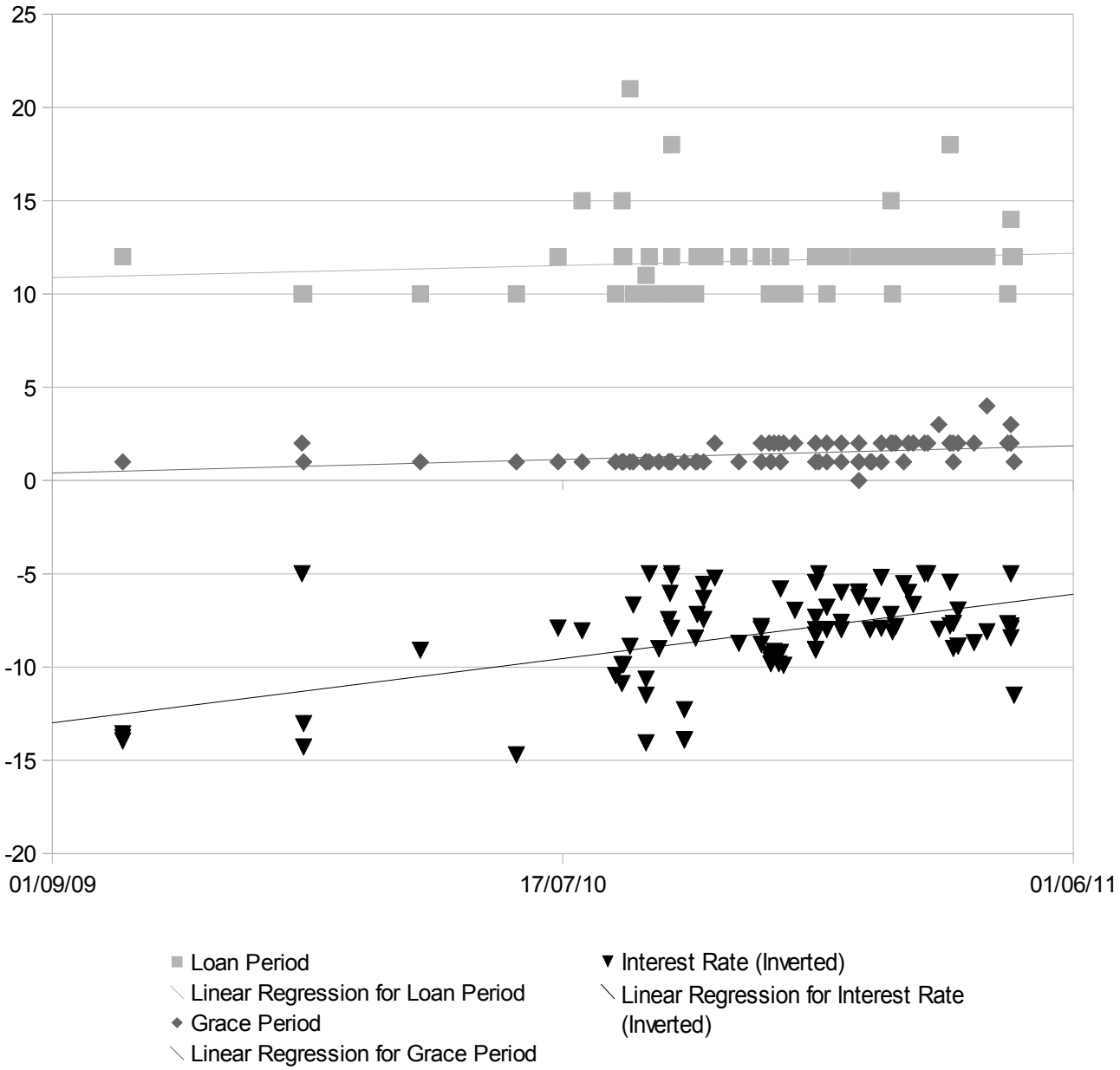
k	m	martin kanja	100%	250,00	250,00	242,88	262,31	8	8	12	1	25/01/11	26/01/2012	0,01	17%	10/01/10	5	pharma
k	f	alice gathoni	100%	437,00	437,00	424,55	453,09	7	6,72	12	1	26/01/11	27/01/2012	0	28%	05/04/10	6	clothing
k	f	elizabeth ruto	100%	850,00	850,00	825,79	881,51	7	6,75	12	1	26/01/11	27/01/2012	0	18%	01/07/09	13	clothing
k	f	ann wangari	100%	850,00	850,00	803,42	867,09	8	7,92	12	2	01/02/11	2/02/2012	0	9%	28/07/10	11	food
k	m	joseph mukui	100%	250,00	250,00	236,30	248,59	6	5,2	12	1	01/02/11	2/02/2012	0	49%	09/10/08	3	farming
k	m	nicholas munyua	100%	850,00	850,00	803,42	866,29	8	7,83	12	2	10/02/11	11/02/2012	0	9%	02/01/08	9	farming
k	f	recheal wairimu	100%	625,00	625,00	590,75	623,48	6	5,54	12	1	15/02/11	16/02/2012	0	17%	04/02/08	20	clothing
k	f	rahab gitonga	100%	308,00	308,00	291,12	308,59	6	6	12	2	18/02/11	19/02/2012	0	12%	01/01/09	7	clothing
s	m	mamadou selou barry	100%	880,00	910,00	880,00	937,61	8	7,68	10	2	21/04/11	20/02/2012	0	0%	02/09/09	13	transportation
s	f	soukey natou ndaw	100%	759,00	793,00	785,72	837,93	7	6,65	12	2	21/02/11	22/02/2012	0	0%	06/12/09	14	food
k	f	ann chege	100%	373,00	373,00	352,56	370,19	5	5	12	2	28/02/11	29/02/2012	0	0%	02/01/08	2	food
k	f	jane mausah	100%	360,00	360,00	355,40	373,17	5	5	12	2	02/03/11	2/03/2012	0	0%	10/02/11	4	farming
k	f	teresia muhtoni	100%	369,00	369,00	364,29	393,33	8	7,97	12	3	09/03/11	9/03/2012	0	0%	30/01/09	8	computer
k	m	james kirubi	100%	123,00	123,00	121,43	128,06	6	5,46	12	2	16/03/11	16/03/2012	0	20%	02/06/10	6	other
k	f	naomi njoki	100%	307,00	307,00	303,55	330,87	9	9	12	1	18/03/11	18/03/2012	0	11%	15/02/10	5	pharma
k	f	rachel gatere	100%	369,00	369,00	364,26	392,22	9	7,67	12	2	18/03/11	18/03/2012	0	0%	02/01/08	10	other
k	f	lucy kamau	100%	467,00	467,00	461,04	501,96	9	8,88	12	2	21/03/11	21/03/2012	0	0%	01/06/05	12	services
k	f	lucy mungai	100%	306,00	306,00	302,10	323,07	8	6,94	12	2	21/03/11	21/03/2012	0	0%	05/01/09	9	clothing
k	m	Anthony Gatembe	100%	392,00	392,00	367,07	410,76	10	7,93	18	1	23/09/10	25/03/2012	0	34%	29/05/09	5	farming
k	m	david kimani	100%	430,00	430,00	424,50	461,41	9	8,69	12	2	31/03/11	31/03/2012	0	0%	01/07/09	13	other
k	m	charles muchemi	100%	615,00	615,00	602,86	651,72	9	8,11	12	4	08/04/11	8/04/2012	0	0%	01/02/08	20	farming
k	f	jane wanbui kabugo	100%	546,00	576,00	new	601,82	8	7,95	12	2	23/04/11	23/04/2012	raising	0%	02/01/07	5	pharma
k	f	ludia ndegwa	100%	615,00	615,00	new	682,49	9	8,43	12	2	23/04/11	23/04/2012	raising	0%	05/01/09	15	farming
s	m	ndiaga sow	100%	440,00	440,00	new	484,01	5	5	12	3	23/04/11	23/04/2012	raising	0%	05/10/07	5	farming
k	m	robert ndungu	100%	861,00	861,00	new	976,46	12	11,51	12	1	25/04/11	25/04/2012	raising	0%	02/02/09	15	farming
s	f	fatou tall	100%	542,00	606,42	561,08	611,43	8	7,18	15	2	07/02/11	9/05/2012	43,67	0%	05/01/07	15	pharma
k	f	Loise Wambui	100%	326,00	326,00	304,79	331,93	10	8,9	21	1	28/08/10	29/05/2012	24	51%	01/12/09	4	farming
k	m	kibiru muchai	100%	615,00	645,00	new	684,85	8	7,8	14	2	23/04/11	23/06/2012	raising	0%	20/01/10	12	other
k	m	anthony ndoge	100%	117,00	127,00	115,51	129,01	8	7,79	18	2	16/03/11	15/09/2012	0	0%	09/04/10	8	services

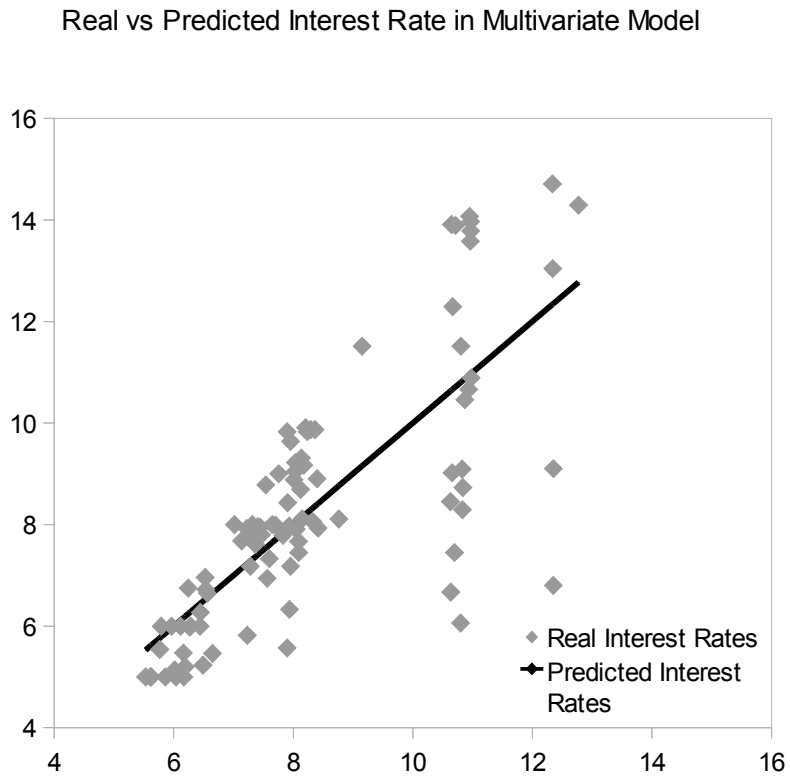
Platform	*Country*	*Focus*	*Legal?*	*Since*	*Total amount Lent*	*Number of Borrowers*	*Number of Lenders*	*Return?*
Zopa	UK	UK, Italy, Japan, US	For-Profit	March 2005	£ 135,000,000	207.492	414.984	Yes
Prosper	USA	USA	For-Profit	February 2006	$ 225,858,878	38.366	1.041.634	Yes
Smava	Germany	Germany	For-Profit	March 2007	€ 50,000,000	6.000	15.000	Yes
Communitae	Spain	Spain	For-Profit	April 2009	€ 89,665,500	12.068	13.080	Yes
LendingClub	USA	USA	For-Profit	May 2007	$ 284,933,075	28.207	171.793	Yes
Rang De	India	India	Non-Profit	January 2008	Rs. 4,50,62,700	8.589	2.676	Yes
MyC4	Denmark	Africa	For-Profit	May 2006	€ 13,260,913	6.663	18.511	Yes
MicroPlace	USA	International	For-Profit	October 2007	$ 22,000,000	400.000	10.000	Yes
Babyloan	France	International	For-Profit	September 2008	€ 1, 835,247	5.788	10.371	No
Kiva	USA	International	Non-Profit	April 2005	$ 217,144,255	288.894	588.266	No
Zidisha	USA	International	Non-Profit	January 2010	$ 63,626	98	275	Yes

Data: June 1st

Notes: Zopa's total amount lent equaled €117,698,344 on June 1st 2011
Prosper's total amount lent equaled €157,346,691 on June 1st 2011
Lending Club's total amount lent equaled €198,531,357 on June 1st 2011
Rang De's total amount lent equaled €696,780 on June 1st 2011
MicroPlace's total amount lent equaled €15,328,827 on June 1st 2011
Kiva's total amount lent equaled €151,369,602 on June 1st 2011
Zidisha's total amount lent equaled €44,353 on June 1st 2011

Periodic Comparison of Loan Period and Grace Period

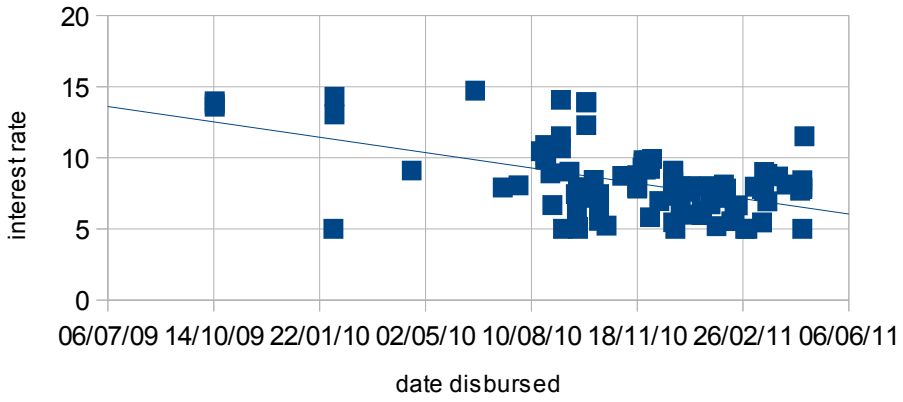




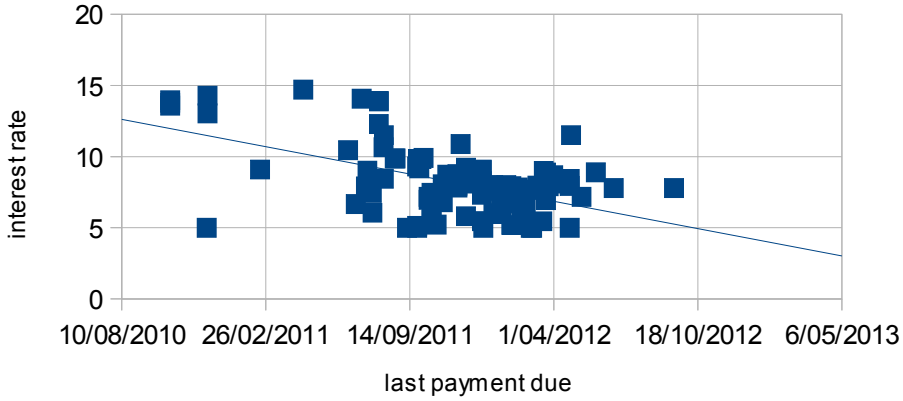
	Maximum rate	Grace Period	Repayment period	Number of lenders	Amount Requested	Gender	Country	Intercept
Line gradients	0,568	0,399	0,009	-0,006	-0,001	0,090	-0,127	2,401
Standard error values	0,068	0,321	0,118	0,041	0,001	0,385	0,525	1,971
Uncertainty gradients and intercept (%)	12,0%	80,4%	1375,4%	-634,9%	-148,9%	425,0%	-412,0%	82,1%

R sq	0,593
F statistic	17,892*
standard error y	1,660

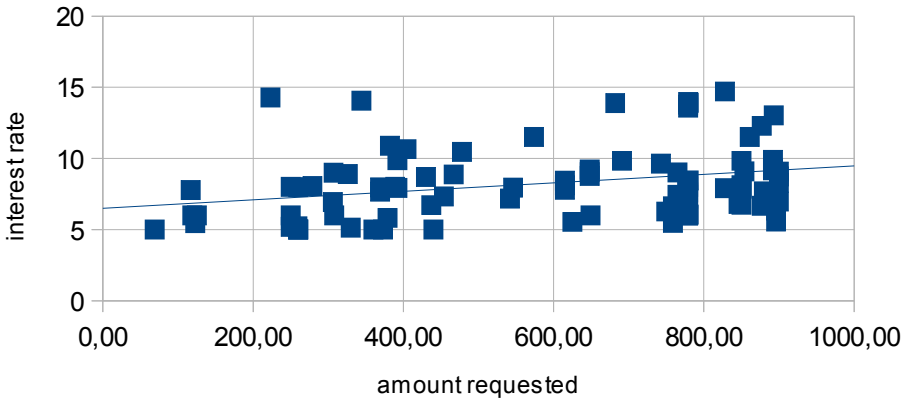
degrees of freedom	86
Regression sum of squares	345
Residual sum of squares	237



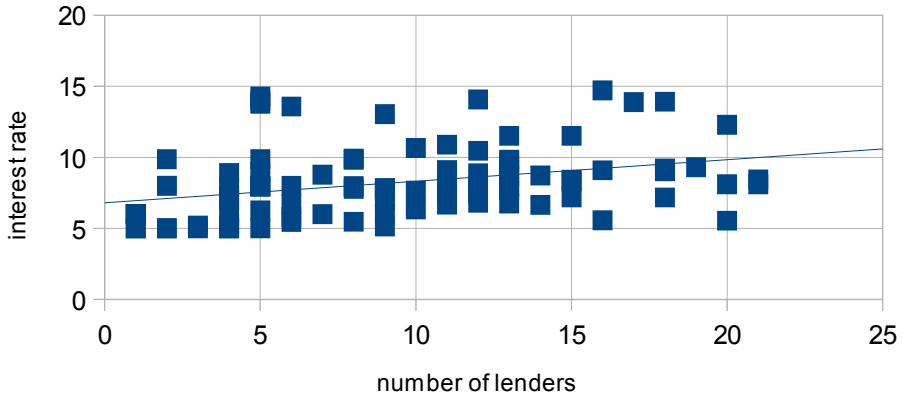
Slope	Intercept	St. dev.	R sq.	Covar.
-0,01	445,27	119,9 days	0,27	-153,53



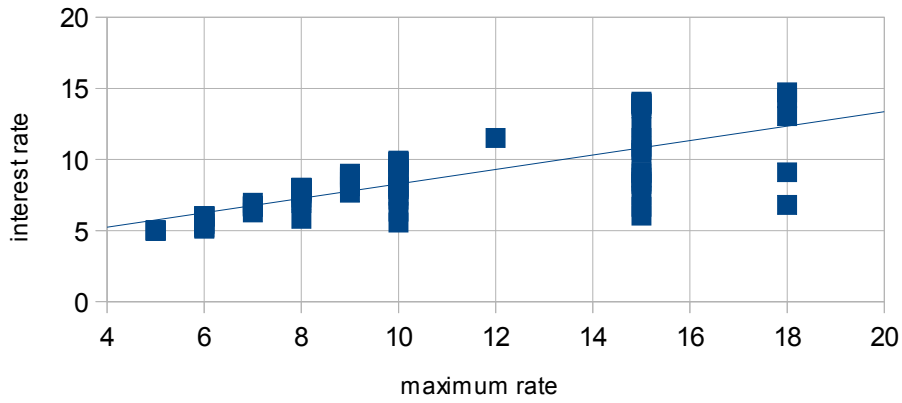
Slope	Intercept	St. dev.	R sq.	Covar.
-0,01	399,89	137,6 days	0,28	-179,60



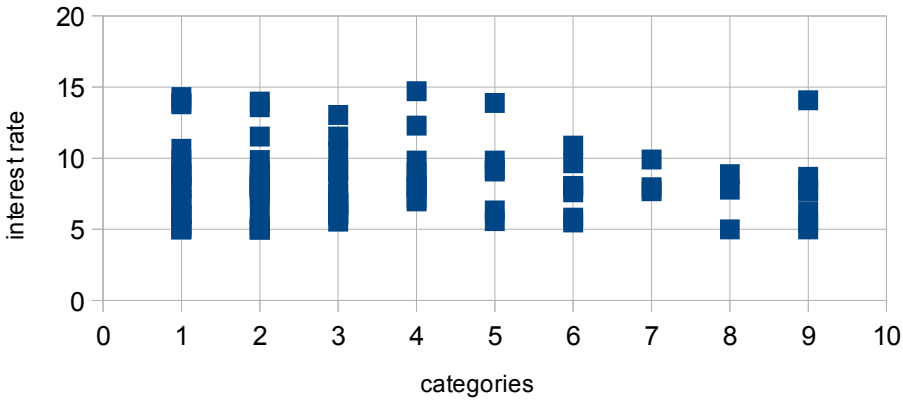
Slope	Intercept	St. dev.	C. of Var.	R sq.	Covar.
0,00	6,49	252,58	0,43	0,09	187,98



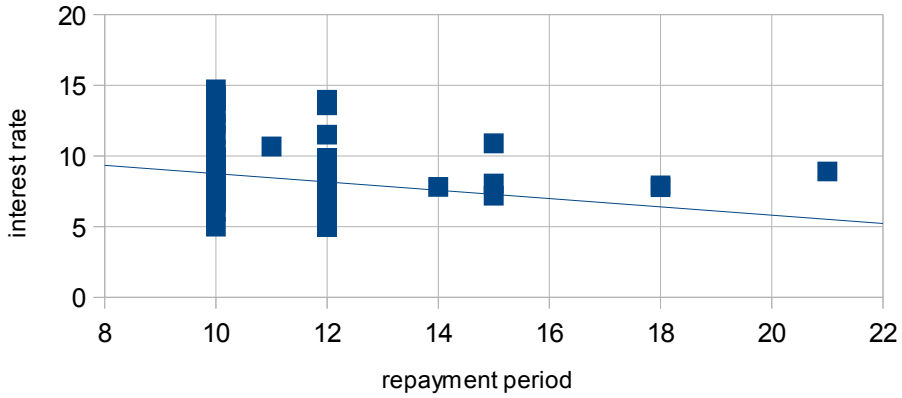
Slope	Intercept	St. dev.	C. of Var.	R sq.	Covar.
0,15	6,80	5,56	0,59	0,11	4,65



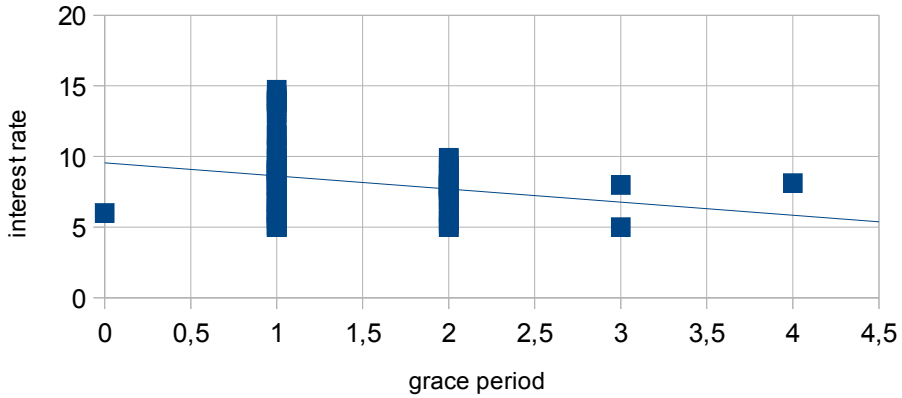
Slope	Intercept	St. dev.	C. of Var.	R sq..	Covar.
0,51	3,20	3,76	0,38	0,58	7,10



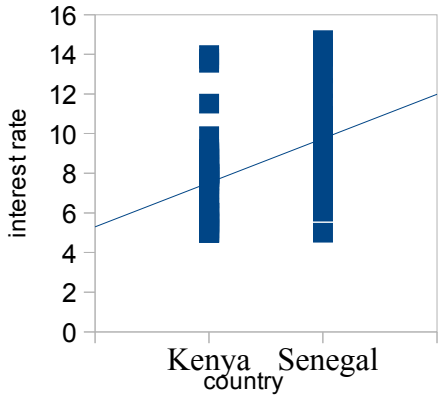
1	2	3	4	5	6	7	8	9
Food	Farming	Clothing	Pharma	Decoration	Computer	Transport	Services	Other

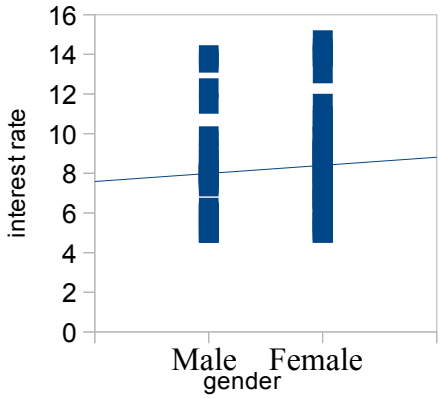


Slope	Intercept	St. dev.	C. of Var.	R sq.	Covar.
-0,29	11,70	1,75	0,15	0,04	-0,89



Slope	Intercept	St. dev.	C. of Var.	R sq.	Covar.
-0,93	9,54	0,61	0,43	0,05	-0,34





Dans le cadre de ce mémoire, nous tenterons de cerner le concept de microfinancement de particulier à particulier, aussi appelé 'microfinance P2P'. Ces dernières années, un nombre toujours croissant de simples citoyens disposant d'argent à investir, choisissent de le prêter à des entrepreneurs issus de pays en voie de développement plutôt que de le risquer en bourse ou de le déposer sur un compte d'épargne. Ces microcrédits n'en sont pas moins de véritables prêts qui se réalisent de particulier à particulier, quasi sans intermédiaire.

Dans le courant de la dernière décennie, on a vu apparaître plusieurs sites web qui se proposent de faciliter ces prêts directs entre investisseurs des pays riches et entrepreneurs du 'Sud' qui, s'ils ont les idées et la volonté de faire évoluer leur entreprise, n'ont bien souvent pas d'accès au financement classique, tel que celui offert par les banques.

Ces sites en ligne présentent certes des différences majeures : certains sites assurent aux prêteurs des intérêts fixes ou variables, alors que d'autres n'en offrent aucun ; certains organisent les prêts en mettant directement en lien prêteur et emprunteur, tandis que d'autres agissent plutôt en tant que courtiers, qui feront en sorte que les investisseurs ne sauront jamais à quel entrepreneur leur argent sera prêté.

Face à cette multitude de concepts, il nous paraissait intéressant de savoir si ce système d'investissement « Nord-Sud » est à considérer comme une nouvelle forme de philanthropie ou s'il s'agit plutôt de 'business', dans le plus pur sens du terme. Ces sites online, facilitateurs de crédits P2P, pourraient-ils constituer une menace pour les banques et les institutions de microfinancement ou n'en seraient-ils qu'un complément? Peut-on considérer ce type de financement comme une alternative aux dons versés par nos citoyens aux ONG, comme Oxfam, Coordination SUD et autres organismes caritatifs ? Mais alors, où se situent certains de ces services en ligne qui en tirent un réel profit en imposant des taux d'intérêts considérables aux emprunteurs ? Toutes ces questions, parfois interpellantes, feront l'objet de ce mémoire.

Nous avons choisi de nous pencher plus longuement sur un site en particulier, celui de l'asbl américaine Zidisha. Cette association se distingue des autres plateformes en ce sens qu'elle n'autorise l'accès à ses services qu'à des emprunteurs qui savent manier l'outil informatique et ont déjà contracté - et remboursé – au moins un micro-crédit auparavant. Ainsi, Mme Julia Kurnia, fondatrice et directrice du site, réfute l'idée largement répandue dans l'opinion publique, que les emprunteurs n'auraient pas les compétences informatiques nécessaires pour communiquer eux-mêmes avec leurs prêteurs et se déclare sûre de « pouvoir faire confiance

aux emprunteurs pour rembourser leur prêt, comme le font les habitants des pays riches, sans leur envoyer constamment leurs agents »[1] (Kurnia, 2010).

Ainsi donc, chez Zidisha, ce sont des emprunteurs informatisés qui lancent un appel direct à des investisseurs conscientisés pour décrocher un emprunt à un taux abordable, qui profitera aux deux parties. Ils mettent en ligne leur appel sur le site zidisha.org, laissant à chaque prêteur le loisir de décider du montant qu'il veut investir, et à quel taux d'intérêt. Quand le montant des offres dépasse la demande, ce seront, en toute logique, les offres aux taux les plus bas qui seront retenues pour financer l'entrepreneur. A ses débuts, en octobre 2009, la plateforme enregistrait des taux variant entre 14 et 16%. Aujourd'hui, ils ont déjà baissé jusqu'à 7 et 8%, dont seulement 2 à 3 % reviennent au prêteur. Sachant que le taux moyen de la microfinance en Afrique est de 22,64% (MixMarket, 2009), ces taux nous semblent largement abordables, voire faibles. Jusqu'à présent, tous les emprunts ont été remboursés plus ou moins à temps, et parfois même avant terme. Ce modèle d'emprunt à taux accessible, où la dette semble toujours honorée et qui se réalise pratiquement sans supervision entre particuliers, pourtant parfaitement inconnus l'un de l'autre, nous intéresse tout spécialement car son succès nous interpelle. Comment Zidisha parvient-elle à faire ce que tant de spécialistes de la microfinance déclarent impossible ? Quelles sont les techniques utilisées ? S'agit-il d'une association philanthropique ou pourrait-on la définir comme un modèle d'entreprise commerciale ?

Pour tenter de répondre à toutes ces questions, nous avons d'abord recherché des antécédents historiques, comme les 'Irish Loan Funds' et les 'Friendly Societies', telles qu'elles ont existé en Angleterre et en Irlande du 17ème siècle jusqu'au début du 20ième siècle. Nous en avons tiré quelques enseignements très importants, comme celui de veiller à la solvabilité de l'emprunteur, mais aussi de se méfier du danger de fraude chez les gestionnaires des institutions financières. Ces institutions se sont aussi révélées bénéfiques pour le débiteur car elles lui offrent une expérience positive en matière de crédit et lui assurent ainsi une fiabilité qui en fera même de potentiels nouveaux clients pour les institutions financières bien établies. Ensuite, nous avons examiné la relation de confiance sur laquelle se construit tout type de crédit, et tout particulièrement celui de la microfinance P2P, ainsi que les différents systèmes qui la favorisent. Nous parlons non seulement de la confiance entre les individus mais aussi de celle qui s'établit entre l'individu et l'institution elle-même. Nous avons donc analysé les problèmes d'aléa moral et de sélection adverse et nous avons pu conclure que, si la

1 « Borrowers not only lack the necessary computer skills to communicate with lenders themselves, but also […] cannot be trusted to repay loans, as residents of wealthy countries do, without constant visits by loan officers »

microfinance P2P est capable d'offrir du crédit sans supervision directe, ni garantie sur gage, c'est parce que, dans ses prises de décisions, elle se révèle *aussi* sensible à des informations qualitatives, plutôt qu'uniquement quantitatives. Enfin, nous avons également analysé les motivations des prêteurs, tout comme celles des emprunteurs, et nous avons constaté que la motivation des premiers est plutôt philanthropique, tandis que les emprunteurs sont motivés en premier lieu par les taux d'intérêt moins élevés, ainsi que par l'effet de 'lissage du revenu' qu'offre le crédit.

Après ces recherches académiques, nous avons mis à profit ces constats pour examiner le site web de Zidisha. Nous avons découvert que l'organisation avait trouvé une manière unique de maîtriser les problèmes d'agence courants. Elle n'admet que les candidats-emprunteurs ayant déjà connu une expérience positive en matière de crédit ; elle utilise des agents sur place qui encadrent les débiteurs locaux ; et enfin, elle offre un produit précieux et très populaire : le crédit à taux non-élevé. En outre, tous les paiements sont gérés en ligne, limitant ainsi au maximum le nombre d'intermédiaires dont la plateforme a besoin, ce qui aide à combattre l'escroquerie. Ensuite, nous avons analysé le modèle d'entreprise de Zidisha pour juger de sa durabilité. Celle-ci est pour l'instant plutôt précaire: tous ses employés sont bénévoles et elle dépend pour une grosse partie de dons privés pour financer ses coûts de développement et de fonctionnement. Néanmoins, sa croissance lui permet aujourd'hui de mettre de côté 100 dollars par mois, pour un volume de 60 à 70 000 $ d'emprunts par an. Selon ses estimations, la plateforme devrait pouvoir se permettre un salarié dès que le seuil des 1 million de dollars sera atteint. Nous estimons que, vu la faiblesse des taux d'intérêts résultant de la motivation philanthropique des prêteurs, une petite augmentation des honoraires pourrait aider la plateforme à atteindre cet objectif plus rapidement. Nous croyons celle-ci tout à fait envisageable, étant donné que les taux d'intérêts actuels de Zidisha sont largement inférieurs aux taux généralement offerts (souvent près du double) par les banques locales des pays en développement, même si, dans un contexte où la motivation de la fondatrice est plus philanthropique que commerciale et où les taux actuels sont déjà rentrés dans les mœurs, elle nous semble sans doute improbable.

En conclusion, pour répondre à la question de savoir si la microfinance P2P est une entreprise caritative ou une vraie entreprise commerciale, nous pouvons affirmer que Zidisha est une organisation clairement philanthropique, qui offre un modèle intéressant pour d'autres organisations actives dans la microfinance et/ou les prêts entre particuliers. De plus, moyennant quelques petites modifications, sans pour autant renoncer à son but caritatif, ce genre de plateforme peut contribuer à une popularisation de l'aide humanitaire. Le citoyen

peut en effet préférer s'engager pour un prêt durable 'à visage humain', au lieu de faire des dons anonymes dont il ne connaîtra jamais vraiment l'utilisation. Et même si cette forme de crédit ne conduit pas directement à une réduction de la pauvreté monétaire des pays en développement, cela peut quand même aider les entrepreneurs locaux à faire face à l'imprévisibilité du marché local et à assurer de la liquidité pour leur jeune entreprise.