Is there a Market for Microlending

in Industrialized Countries?

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Abstract

While in less developed and in transition economies microlending has become an efficient instrument for providing small and micro businesses with the necessary financial means, in industrialized countries, with highly developed banking systems, the existence and size of an uncovered demand for microlending services has been controversially discussed. This study explores the inclination towards microlending products, with information drawn from 213 interviews conducted with German small and micro-business owners in 2005. Among the interviewed entrepreneurs, 15% report revolving funding needs and state that they are interested in microloans. Characteristic target group members are retail business owners, foreign small business owners, and persons having previously received private loans. Therefore, lenders entering the market should address this group using a focused market entry strategy. Key product features are a speedy access to short term loans combined with personal contact to the loan officer who should be able to thoroughly understand the client's business concept. Finally, it is also remarkable that 65% of the surveyed persons financed their first three years' operations without having asked for any loan product, at all. Among these, there might be a hidden demand which could be unleashed by designing novel microlending products.

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1. Introduction

Self-employment has become a buzzword in the European labor market policy. In Germany, for instance, the number of entrepreneurs working without any further employees (so-called 'solopreneurs') rose from 1.4 to 2.1 million persons during the last ten years.[5] It is estimated that every year about 500,000 persons are founding their own business, again more than half of them as solopreneurs. At the same time, the 'KfW-Mittelstandsbank' (KfW) - Germany's largest government bank which uses commercial banks as distribution channel for its own products and which states to be the major supplier of start-up finance to small and micro enterprises - reports that in 2005 less than 5,000 loans were granted in this credit segment, indicating that about 1% of start-up businesses finance their founding period with a subsidized loan from KfW. During the last years, German media have not become tired of reporting on young entrepreneurs with excellent business ideas whose loan approvals were rejected by their bank – while several analyses indicate that banks do no good job in this segment.[6]

Putting these pieces of information together, one could assume that these persons are excluded from the credit market in Germany in a similar way as their colleagues from less developed countries. As such, improving access to finance seems to be pivotal in fostering entrepreneurship and promoting growth in small and micro businesses. According to the asymmetric information approach[7], two main reasons are identified on the supply side which explain their exclusion: (1) As small businesses usually cannot provide collateral, they are unable to signal their creditworthiness. Banks which secure loans by collateral are incapable of assessing the risk of these borrowers. Lacking collateral could be substituted by additional screening and monitoring efforts, which, however, would also increase the cost on the lender's side. (2) Given that persons running small- or micro-businesses mostly ask for small loan sizes, the fixed costs of loan extension tend to eat up most of the profits derived from interest payments. Thus, most institutional lenders who use conventional credit technologies consider the disbursement of loans to this target group unprofitable.

However, evidence from developing countries and emerging nations in Asia, Africa and South America has shown that lending in this market segment can sometimes be a highly profitable business if appropriate technologies are applied, known as microlending (Armendáriz de Aghion and Morduch (2005)). It has been only recent years that attempts were made to transfer these technologies to European countries. Since then, successes have been reported in particular by Eastern European Microfinance Institutions (MFIs), for instance in Poland, Russia, or Georgia.[8]

During the last ten years, several local microfinance initiatives were created also in Germany in order to extend loans to specific target groups (some of these projects were financed by the Federal Ministry of Labour). Expectations were that they would attract thousands of young entrepreneurs in particular during their start-up period. However, no initiative got off the ground, not due to low repayment rates but because customers failed to appear in the offices of these MFIs (22 initiatives financed with tax money served less than 1,000 customers per year). The reason for this failure is very simple, though: the narrowly prescribed intended use of public funds made it difficult for these MFIs to develop products focussed on their market.

Such experiences accentuated the notion that MFIs have to focus not only on the supply side (by designing products that mitigate the problems resulting from information asymmetries) but also on the demand side of the market (by designing products which respond to customers' needs). Accordingly, Woller (2002) advocates a radical shift in MFIs' policies by placing customers as priority and moving away from a 'product-driven' microfinance culture. To date, still only a minority of MFIs in the developed world have conducted thorough market studies before launching their loan products.[9] Consequently, little is known about customer preferences.

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[5] In the same period, the number of employed persons went down by a similar amount (from 32.4 to 31.7 million), and the number of entrepreneurs (who employ further persons) remained constant (at around 1.8 million). All these figures can be found in Piorkowsky and Fleißig (2005) who provide annual employment reports based on the so called 'Mikrozensus', and in the reports of the "Institut für Mittelstandsforschung (2006)".

[6] cf. inter alia Evers (2002).

[7] An encompassing survey of the area is provided by Hillier and Ibrahimo (1993).

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[8] For a detailed analysis of respective MFIs, cf. e.g. Armendáriz de Aghion and Morduch (2000), Nagarajan (2000) or Kritikos and Vigenina (2005).

[9] Telephone interviews with five big European MFIs in October 2005 showed that none of them conducted preliminary market research. Instead, they applied a trial-and-error approach and gradually adapted their loan product to their clients' needs.

Our paper contributes to close this research gap by examining the demand side of the microlending market in Germany. It aims to quantify funding needs that small and micro businesses typically exhibit, illustrate the main purposes of funds, and describe financial sources that are used to cover financial needs. Our main analysis is conducted on business owners who financed through borrowing during their first three years' operations. In particular, we identify business owners inclined to microloans and derive those product features that best serve their needs. Finally, we derive central aspects of an MFI's marketing strategy on the basis of our findings. By merging the theoretical fields of entrepreneurship and microfinance, a comprehensive picture of the microlending market in Germany is obtained.

The paper is organized as follows. Section II describes previous theoretical and empirical research results and outlines our research agenda. Section III gives a short overview of the finance programs which exist in Germany to support small businesses. Sections IV and V describe the data and present the empirical analysis. Section VI discusses implications for a microfinance market entry strategy. Section VII concludes.

2. Previous Research

2.1 Small Business Finance Theory

Ang (1992) highlights that the acquisition of capital by small firms is crucial. While traditional finance theory states that all firms have equal access and are able to fully participate in financial markets with similar competitive positions, the situation for small companies differs to a great extent. Informational opaqueness, market imperfections, and agency relationships are factors on the supply side that detract the application of finance theory to small firms (Ang (1992); McMahon et al. (1993); Petty and Bygrave (1993)). Thus, small firms and large companies typically do not share the same set of financing sources. The small firms' lack of access to the loan market poses a violation to the perfect capital market assumptions.

Asymmetric information as the root of credit rationing has been the subject of a considerable body of theoretical analysis (Jaffee and Russel (1976); Stiglitz and Weiss (1981); Besanko and Thakor (1987a, 1987b)). The observed shortage of financial capital faced by small and micro businesses (in particular during their start-

up period) rests on two main assumptions: (1) lenders cannot distinguish between high and low risk borrowers and borrowers cannot easily signal their own risk taking behavior, (2) loan contracts are subjected to limited liability. According to this theory, credit is rationed when the amount lenders are willing to lend to borrowers is limited or when even no lender is willing to make a loan to a borrower. Despite these theoretical efforts, there remains little consensus about wether credit rationing is an economically significant phenomenon (Berger and Udell (1992)).

With regard to the demand side of loan markets, there has been less theoretical research. Based on the asymmetric information approach, the Pecking Order Theory (Myers (1984)) establishes that businesses adhere to a hierarchy of financing sources and prefer internal financing when available; and, if external financing is required, debt is preferred over equity.[10] Apart from that, it is our notion that evidence from other disciplines can greatly contribute to explaining borrower behaviour. As an example, recent research from neurosciences found evidence that people who experienced negative outcomes in the near past (like previous unemployment), might in the near future either avoid any higher risks or might become strong risk seekers. Applied to the small and micro business sector, these findings allow for the conjecture that start-ups (in particular those out of unemployment) might try to avoid financial solutions which entail borrowed capital or in some cases might try to finance a large venture only with loan capital (for a basic article on emerging neuroscience evidence, cf. Bechara and Damasio (2005)[11]).

2.2 Empirical Evidence on Small Business Finance

Small businesses are generally not publicly traded and are not required to release financial information. This lack of data is probably one of the main reasons why small business finance has been 'one of the most underresearched areas in finance' (Berger and Udell (1998)).[12] In the U.S., research has grown tremendously in this field due to the influx of several different data sets - most importantly, the National Survey of Small Business Finances (NSSBF). It provides information on the income

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[10] Though initially designed to explain the financing practices of large corporations, it was soon recognized that this theory could also be applied to small businesses (Scherr, Sugrue and Ward (1993)).

[11] Further discussion on this topic can be found in Kenning and Plassmann (2005).

[12] Before that, several stand-alone studies analyzed financing experiences of small business in different US regions (van Auken and Carter (1989), Lamberson and Johnson (1992), Carter, van

situation of small businesses (less than 500 employees) as well as the availability of different types of external finance. Using the NSSBF data, Bitler, Robb and Wolken (2001) assert that commercial banks are the dominant source of financial services for small businesses. The Office of Advocacy of the Small Business Administration (SBA) (2003) finds little evidence that creditworthy borrowers faced substantial credit supply constraints and Berger and Udell (1998) emphasize the importance of private loans for small business finance.

Harhoff and Körting (1998) were the first to replicate the NSSBF survey design in Germany. Their research concentrated on the nature of firm-bank relationships and their impact on collateral requirements. Funding needs were measured via the volume of credit lines in a static model. They conclude that lending is typically heavily concentrated on one or two financing institutions in the SME segment of the German economy. Hinz and Jungbauer-Gans (1999) compare the distribution of start-up capital between previously unemployed and previously employed business founders. They observe that employed founders raise a higher average sum of outside capital, rely more heavily on bank financing and have easier access to outside capital as compared to unemployed founders.

In a representative survey on the impact of the bridging allowance on survival rates of formerly unemployed entrepreneurs (the target group of our paper), 3.000 persons who found their business in 2003, were asked 2005 how much capital they needed during the first two years. The share of business foundations with no or little funding needs (less than € 5,000) was 53%, while another 14% reported that they needed between € 5,000 and € 10,000. 28% were in need of funds between € 10,000 and € 50,000 and another 5% of more than € 50,000. (Caliendo, Kritikos and Wiessner (2006)).

In a recent survey that analyzed SME finance in the European Union, it was furthermore found that about three quarters of German SMEs reported to have sufficient financing, 80% of them obtained financing through banks, of which, however, only 14% reported easy access to loans (Eurobarometer, 2005). Comparing these figures to other countries like Finland, Great Britain and France which noted

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Auken and Harms (1992)). Pettit and Singer (1985) were the first to provide a foundation for the

95%, 70% and 60% respectively, the SME loan access in Germany depicts a relatively dismal picture in particular when comparing the last figures revealing the easy access to loans. When evaluating bank service quality in terms of consultancy, sector-specific know-how knowledge and suitability of the loan offers, German banks fared below average.

Copisarow (2004), who established 'Street UK', a microfinance institution in the UK, delivers a comprehensive field report on the applicability of microfinance to industrialized countries and analyzes the needs of potential clients. She highlights important factors such as small amounts of capital, minimal waiting time for the approval of loans, high probability in receiving loans, the easy subsequent access to loans and terms and conditions that are clear and pre-explained. She concludes that the target market is defined by a segment of society that lies between the poor and the non-poor, that is a population group that does not have access to loans in mainstream financial institutions, but at the same time, is not eligible for social welfare. Hence, non-financial business support services are needed to create and enhance financial literacy and business knowledge. For the case of Germany, Jacob and Warg (1997) and Kritikos and Wiessner (2000) proposed the application of microlending technologies to the classic credit business.

2.3 Research Agenda

For the purpose of our study, we collected data on the demand side of this loan segment containing information (a) on the financing patterns of small and micro business owners and (b) their attitudes towards typical microlending products. By doing so, we are able to establish a link between the existing literature on small business finance and financial marketing. While the former addresses funding needs and financial sources that are used to cover those needs, the latter analyzes the design of financial products which are apt to meet the exigencies of small and micro businesses.

Accordingly, we first examine the financial determinants of these businesses, allowing us to describe their external sources of capital and to answer the question of whether small and micro businesses in Germany face liquidity constraints. Second,

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development of research in the area of small business finance.

the respondents are grouped according to their inclination towards microloans, taking into account various characteristics such as previous experiences in bank meetings, product preferences or funding patterns. We then identify potential microfinance clients, the characteristics of a loan product apt to their needs and develop a marketing perspective on how an MFI can best reach such clients.

Testimonials from small business owners and MFIs' practical experiences suggest that there is a large latent demand for microfinance services in the industrialized world. However, there has been no attempt so far to structure this demand empirically. The results derived from this study will be highly relevant and useful for existing European MFIs as well as MFIs that are planning to enter this market.

3. Small Business Finance in Germany

The German SME sector comprised of almost 4m businesses in 2004. More than 90% of these businesses realised a yearly turnover of less than € 1m. 55% of the businesses were run by self-employed (Piorkowsky and Fleißig (2005)). The average year-to-year survival rate of all businesses in recent years was 92.5% (Constant and Zimmermann (2005)). As to the number of new business openings the available data sources exhibit a fairly inconsistent picture. Depending on the data source, the number of start-ups for the year 2004 varies between 350,000 and 570,000 (Kritikos and Kahle (2006)). Hence, projections of the market size for microfinance services in Germany also depend on the data.

Inside and outside the formal banking system, there are various funding alternatives for small and micro-business owners. As the main provider inside the system, *Kreditanstalt für Wiederaufbau* (KfW) offers three loan products aimed at small and micro businesses in their start-up phase where for the two of the three products customers are allowed to apply for until three years after they found their business. Maximum maturities vary between 5 and 10 years, and maximum loan amounts range between € 10,000 and € 50,000. As mentioned already in the introduction, slightly more than 4,500 loans have been extended in 2004.

In order to assist business owners who have been displaced by corporate restructuring, many regional governments were prompted to set up their own loan

funds (in addition to the federal fund) – most of them beyond the formal banking system. Despite the setting up of such programs, only about 1,000 loans were approved by 22 different regional or local institutions (Habschick, Evers and Jung (2004)) Therefore, although there are several financing alternatives inside and outside the commercial banks, only a very small minority of start-ups is making use of such offers at the moment.

In this context another support scheme has to be highlighted: previously unemployed business founders are entitled to receive the so called 'bridging allowance' which is granted for a period of 6 months. It largely equals the unemployment benefit the entrepreneur would have received if he or she had remained jobless. As these funds are generally available to all entrepreneurs starting their business out of unemployment and as we had interviewed only business start-ups who used this benefit, this information was excluded in this survey. In the same year of 2004, more than 180.000 persons received the bridging allowance.[13]

4. Sample description

4.1 Overview of descriptive statistics

Our data is derived from a survey that provides information on the sources of finance of different small and micro business owners during their first three years of operations. The survey was conducted between mid-October and December 2005 and it consists of 213 telephone interviews with people who became entrepreneurs during the past five years. The interviews were conducted using a standardised questionnaire which we developed on the basis of 34 non-standardised personal interviews with small and micro business owners as well as a focus group comprising 7 participants. The majority of the questions were close-ended which enabled the respondents to answer unambiguously. When necessary, the interviewer gave additional explanations.

The questionnaire was designed to collect a wealth of information and it was segmented into two main parts. The first part covered questions pertaining to funding

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[13] Between 01/2003 and 06/2006, the federal government introduced a second support measure for previously unemployed business founders which was used by another 170.000 persons in 2004, but our sample does not include these benefit recipients. Both support schemes were replaced by a new scheme (the so called 'Gründungszuschuss') on July 1, 2006.

patterns and sources of capital during the first three years of business operations. The succeeding part included possible funding problems that were encountered and the interest that respondents expressed for microlending schemes. Interviews were conducted with one person per firm and in the case of team foundations, the overall-in-charge was interviewed. The survey participants were selected from two client lists given by German start-up centres that were situated in the provinces of Hesse and Bavaria. The lists comprised of clients who took part in coachings and seminars held in 2000 and 2003 in preparation of their self-employment.[14] Consequently, at the time of the interview, the respondents exhibited consistent retrospective views concerning funding issues as they had been active in the market for three to five years.

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insert Table 1 about here

The sample was split into two main groups: those who required outside finance during their first three years of operations (35% of the sample) and those who had sufficient equity capital to finance their business (65% of the sample).[15] The term 'outside finance' is umbrellaed to refer to all financial means that do not constitute equity capital, for instance, bank loans and private loans through friends or relatives.[16] Table 1 exhibits some descriptive statistics characterizing these groups. Variables are classified according to attributes that describe the chracteristics of the business owners (owner-entrepreneur characteristics); the properties of the business (business characteristics); and the firm's funding needs for each of the first three years (financial characteristics). Accordingly, to understand the potential size of the market, we are able to state in

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[14] In order to receive this kind of support the applicant had to be employed before s/he became unemployed. In our sample, more than two thirds of the respondents had been unemployed for less than 6 months which corresponds to the general figures for all founders out of unemployment (cf. IAB et al. (2005)).

[15] The high share of persons not in need for outside finance might be explained by the fact that they received the so called 'bridging allowance' for the first six months after the foundation of their business which grants them a basic income during this time.

[16] We did not ask for VC or equity finance, as typically small and micro-businesses do not have access to this kind of funding.

Result 1: Within their first three years' operations, 35% of the respondents were in need of outside finance, while the remaining 65% could do without.[17]

37% of the borrowers were in the retail or crafts business compared to a mere 11% in the non-borrower group. Chi-square bivariate correlations reveal that retail (p<=0.003) and crafts enterprises (p<=0.059) exhibit significantly higher financial needs during the first three years as compared to other lines of business. This is very plausible as most of these businesses require more funding in investments such as the purchase of stocks and machines.

4.2. Comparison of borrowers vs. non-borrowers

Table 2 provides an overview of the funding needs of borrowers and non-borrowers during their start-up phase. The mean of the funding needs amounts to approximately € 15,000.[18]

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insert Table 2 about here

Figure 1 reveals the funding needs of borrowers and non-borrowers for the three years considered. A clear separation can be observed (a) between year 1 and the two following years as well as (b) between the borrowers and the non-borrowers. While more than 80% of the non-borrowers needed less than € 10,000 in year 1, this is the case for only 47% of the borrowers. More than a quarter of these businesses required more than € 25,000. The level of funding needs in the subsequent year 2 and year 3 differs extensively from year 1, while both years show similar patterns among one another. Obviously, in both groups there are high shares of businesses that exhibit no funding needs at all after year 1.

There is incidence that two kinds of investment patterns exist: one group of businesses requiring one-time funding needs and a second group exhibiting recurring

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[17] Similar figures were obtained by Caliendo, Kritikos and Wiessner (2006) in a telephone survey of 2,500 start-ups in West Germany which started their business by making use of the bridging allowance in 2003. Comparably, Fraser (2005) finds out for the UK that almost 2 in 3 businesses used personal savings as the principal source of finance to establish the business, and a third received funds through a bank loan or a private loan.

funding needs. We will further examine this observation in the next section, when we segment the market according to funding patterns.

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insert Figure 1 about here

Respondents were asked to specify the most important intended use of funds for the three years. Figure 2 gives a categorized overview of how funds were allocated. Not surprisingly, a high share of businesses had to fund start-up expenses like IT infrastructure, office equipment, material etc. for their first fiscal year. Liquidity finance played an important role for the borrower group in the two following years: More than 50% reported liquidity gaps that had to be serviced, for instance the entrepreneur's cost of living and pre-financing customer orders. Cases of 'emergency finance' like back duties falling due were mentioned. A clear homogeneity among fiscal year 2 and 3 is observed, whereas inter-group comparisons show that non-borrowers had a more pronounced need for growth and replacement finance compared to the borrowers.

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insert Figure 2 about here

Result 2: Liquidity finance plays a crucial role for the borrower group, especially during the years after foundation.

4.3 Experiences when raising capital
A series of earlier studies has found out that raising capital poses a problem to young entrepreneurs (van Auken and Neeley (1996), Blanchflower and Oswald (1998), Hinz and Jungbauer-Gans (1999); Eurobarometer, (2005)). Figure 3 allows to draw a more differentiated picture: 84% of business owners in the borrowers group requested financing from a bank, of which almost two thirds were successful, that is, they could cover their funding needs through a bank loan or an overdraft facility. Among those who received a bank loan, there were only two cases still requiring

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[18] This figure is slightly lower to the mean of about € 20,000 which was reported by Hinz and Jungbauer-Gans (1999) for the group of unemployed business founders, while in the study of Caliendo, Kritikos and Wiessner (2006) the average amount is very similar to the present data.

more funds (which is less than 5% of the subsample). Therefore, we may conclude that banks, if they provide outside finance to young businesses, do it sufficiently with respect to the loan size.[19]

Result 3: Two thirds of the business owners who applied for a loan were successful. Once receiving a loan, almost all respondents did not require any further finance.[20]

What about businesses which reported to have no need for outside finance?[21] Figure 3 relates to this question when the sample was split into two. The first subsample consists of business owners who did not apply for a loan. These business owners either did not need a bank loan to finance their business concept or were afraid to apply for loans. When explicitly asked if fear of indebtedness was an obstacle to taking up a loan, roughly one third of all non-borrowers affirmed this statement.

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insert Figure 3 about here

The second subsample comprises of business owners who had applied for a loan but were eventually rejected. Reasons for rejection were not known as banks do not disclose such information to applicants most of the time.[22] In relation to the whole sample, slightly more than 10% of business owners experienced a rejection from banks. 35% of them reported a funding gap, while the rest got along without bank loans. This shows that liquidity constraints do exist, but on a limited scale.

Result 4: There are three reasons why entrepreneurs start businesses without taking up a bank loan. They either i) do not need outside capital, or ii) do not want to take up a loan, or iii) their loan application was rejected by a bank. Our findings reveal

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[19] This coincides with the findings of Lamberson and Johnson (1992) who interviewed 140 firms on their financing experiences, of which only 6% reported dissatisfaction with the amount of credit available.
[20] One reason for the certainly high rate of loan approvals might be that all interviewed business owners had received professional training and coaching during the start-up phase of their business.
[21] Earlier evidence on capital acquired from sources other than equity and bank loans can be found in the 'bootstrap finance' literature (Bhide (1992), van Auken and Neeley (1996)).
[22] Evidence from other interviews with loan officers reveal that main reasons for rejection are (i) low loan volumes, (ii) poor business concepts, (iii) redlining of certain industries (e.g. retail) and (iv) a low degree of borrower creditworthiness (IAB et al. (2005)).

that limited access to outside finance seems to play a smaller role for young businesses than widely believed.

Over 90% of business owners who requested a loan had a formal meeting with the bank and explained their business concept to a bank employee. Of those who visited a bank, 71.9% asked about a loan, 12.5% asked about an overdraft facility and 15.6% enquired about both products. Interestingly, more than two thirds of the respondents contacted not more than 2 banks. We then analyzed whether there is any correlation between the number of trials that were undertaken by the respondents and the later success of the business (measured by the number of employees, income and owner's satisfaction level at the time of the interview). Presumably, respondents who apply more times for a loan would be regarded as more risky businesses as most likely; banks would not have rejected their application. However, there was no correlation, giving a certain incidence that the banks' scoring processes are not yet optimized in terms of identifying superior business concepts in the small and micro business sector.

Result 5: Business owners who were rejected by banks and who received a loan after several attempts are just as successful as those who received a loan after their first application.

5. Empirical analysis

5.1 Variables used for market segmentation

We segmented the borrowers by the interest they expressed for microfinance products. For that purpose, a microloan with the following properties was presented to the respondents:

- The loan value varies between € 1,000 and € 10,000;
- the term of each loan ranges between 1 and 2 years;
- there is no amortization-free period;
- the repayment scheme is fully flexible (comparable to an overdraft facility);
- the credit decision is communicated within five days;
- interest rates amount to approximately 20% per annum;
- the loan officer acts as a partner to the client and problems are solved cooperatively;
- different kinds of collateral are used.

These product features are largely based on microloans that are offered similarly in other European countries such as the UK, Poland, Russia or Georgia.[23] It was explicitly highlighted in the interview that loans with such properties were not offered by traditional banks in these countries. Respondents were then asked whether they would accept loans with the above properties. If respondents rejected such a loan, a reason was asked. If respondents revealed that calculating interest was named as the main reason, we presented a showcase calculation that included interest payments in absolute terms (a strategy commonly used by MFIs). Respondents were then asked if such presentation would change their minds. A dichotomous variable 'target group' was defined to take the value 1 if respondents took an interest in the product and 0 if they did not, or said they were not sure. In total, 41.3% of respondents said they would have taken such a microloan and thus we will term them as target group members.[24]

5.2 Tests and Results

(1) Is target group membership correlated to preceding experiences in bank meetings?

In this section, the experiences that potential microloan clients had during their bank meetings were explored. Respondents were asked to rate the service quality they experienced during their most recent bank meeting on a Likert-type scale varying from 1 (strongly disagree) to 5 (strongly agree). We hypothesize that people who are inclined to microloans, have had negative experiences during their bank meetings and therefore will source for funding alternatives, such as microloans.

To test this hypothesis, a Wilcoxon-Mann-Whitney test is used. We assume that once a potential micro business owner receives a loan, it would have a positive impact on

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[23] Specific product features are discussed e.g. in Copisarow (2000), and for the transition economies inter alia in Armendáriz de Aghion and Morduch (2000) or Vigenina and Kritikos (2004).

[24] This target group classification ('accepters': potential clients who are interested in micro-loans vs. 'rejecters': business owners who are not) follows the logic of the consideration set theory. Complex decision processes like the acquisition of capital demand a reduction of alternatives, in order to reach cognitive relief. The decision maker, in our case the micro-business owner, only takes those alternatives into account that are mentally stored in his consideration set, i.e. that he is acquainted with (which in our study is assured by describing the microloan product) and that are valued positively (Crowley and Williams (1991)). If micro-loans are not stored in the consideration set of a potential customer because of the negative valence attached to it, he will reject them in the first place. A consideration set is dynamic, however. Certain alternatives can be upgraded from negative to positive appraisal, caused by specifically designed marketing measures, that we used by presenting interest payments in absolute terms.

the evaluation of the bank meetings. This rationale is psychological: a favourable outcome of the meeting may bring about positive evaluation. On the other hand, the bad experience of not receiving a loan may result in a negative evaluation due to the unsatisfactory outcome. To test this assumption, a variable 'received loan' is defined to contain information on the outcome of bankmeetings. It takes the value 1 for those who received a loan and 0 if the loan was not granted.

A negative z-value indicates that the sum of the ranks for those who did not receive a loan must be smaller than the sum of the ranks for those who did. Table 4 illustrates the results. The value -3.14 in row 1 indicates that micro-business owners who did not receive a loan, rate the bank's customer service lower than those who did. The z-value of 0.001 reveals that this result is significant at the 0.1%-level.

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insert Table 4 about here

As all z-values are significantly negative, it is evident that unsuccessful loan applicants tend to rank their banks' service quality articulately lower than their successful counterparts. This confirms the psychological bias assumption. We conclude that if we want to relate microloan affinity to the rating of experienced bank service quality, we must take this correlation into account. Therefore, in the following we will concentrate only on the group of applicants who eventually *received* a loan and thereby adjust the above mentioned psychological bias. Among the group of successful applicants, we differentiate the target group dummy - between persons who were interested in a microloan and those who were not. Again, we employ a Wilcoxon-Mann-Whitney test. Table 5 presents the results.

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insert Table 5 about here

The findings from the rank-sum test confirm our initial hypothesis. Business owners that show interest for microloan products had significantly worse experiences during their bank meetings than the other group, even if both groups eventually received a loan. Their evaluation of the meetings is significantly less positive and they did not

feel as full-fledged clients. Furthermore, there is noticeable disagreement with the statement that bank employees understood the business concept of the applicants. Business applicants did not feel well-informed on the terms and conditions of the possible loan products.

Result 6: Preceding negative experiences with banks have a positive impact on target group membership, i.e. on being interested in a microloan, even if the business received a loan from a bank.

(2) What are the crucial product features?
Microloans are mainly characterized by i) flexible repayment schemes after the loan has been disbursed, ii) fast access to loans and iii) individual support given by loan officers (Copisarow (2000)). This in turn implies higher interest rates than the usual market rate. To find out which product features are important to potential microloan clients, we provided them with a set of statements and asked to rate them on a scale from 1 (strongly disagree) to 5 (strongly agree). Again, we employ a Wilcoxon-Mann-Whitney test to analyze group-specific differences. Table 6 presents the results.

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insert Table 6 about here

The rank-sum test delivers two significant differences between the subsamples. First, business owners who showed interest in microloans state that they operate in businesses that demand fast access to loans. Second, they are willing to pay higher interest rates for faster access to loans. Product features like flexible repayment schemes, amortization-free periods and individual support given by a loan officer are obviously not suitable for separating the two groups.

Finally, we analyzed correlations between bank assessments and product features. Our results show that applicants who gave an overall bad rating of bank meetings would actually pay higher interest rates for loans. The same holds for those who stated that they did not feel as a full-fledged client. Experiences from the interviews with the members of the focus group show that future clients want to be assured of a high probability of receiving a loan. High rejection rates tend to deter potential

clients from applying for loans and information about high rejection rates is spread around among potential clients in a very short time span.

Result 7: Borrowers who are interested in microloans are ready to pay higher interest rates if, in return, the applicant has a high probability of access to the loan and if the loan is fast and easily accessible.

(3) Do target group members exhibit a typical financing pattern?

Figure 4 depicts the financing patterns for target group and non-target group members. There is a clear discrepancy between the funding needs of the two groups in year 1. Looking at the three year trend, target group members exhibit rather constant funding needs; the other group, in turn, reports needs for higher funding volumes in the first year and rather low requirements in year 2 and 3. An ANOVA test was conducted to compare the groups' funding needs in each year. It yields a significant F value only for the first period (p=0.09). We presume that a lower level of start-up finance is a distinguishing feature of the target group.

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insert Figure 4 about here

We draw the conclusion that borrowers interested in microloan products exhibit a specific financing pattern that is characterized by a rather constant need for funding. Unlike non-target group members, target group clients reported funding needs with means ranging between € 6,000 and € 12,000 in the three-year period.[25] This is a possible benchmark of a loan size a microloan should have. Funding needs of non-target group clients, in contrast, average at € 19,000[26] in year 1 and drop far below € 5,000 in the subsequent years. The higher funding volume in the first year is an indicator that these borrowers often receive bank finance, which is generally approved only from a certain amount on. In that case, banks are normally also more willing to finance subsequent loan volumes. Our analysis also showed that these borrowers were allowed overdraft facilities significantly more often in the years after foundation than target group members.

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[25] Figure 4 is adjusted for 7 outliers as they distorted the means quite heavily (including the outliers, means oscillate between € 15,000 and € 20,000). The 75-percentile including outliers is € 25,000.

Equity ratios of the two groups display a palpable discrepancy: target-group members continuously exhibit lower equity ratios than non-target group members. An ANOVA test confirms statistical significanct differences only for the first year (p=0.02). As a certain amount of equity capital is the necessary precondition for receiving a bank loan, it is quite probable that target group members are largely excluded from the formal banking system. Therefore, microloans present a relevant funding alternative to them, and higher interest rates do not deter them.

Result 8: Applicants interested in microloan products have - compared to non-target group members – i) lower funding needs during the start-up phase, ii) higher funding needs in the subsequent years, and iii) are equipped with less equity.

(4) A model for determining target group membership

We developed a model that enables us to determine relevant factors affecting target group membership. For this purpose, a binary logit regression is used with 'target group' as the dependent variable. In Model A, personal explanatory variables have been applied. The firm variables have been added to perform a second Model B. At last, an extended Model C was estimated, in which financial characteristics of the firm were included. With this approach the advantages of multivariate methods are exploited, as measured effects might disappear if they are controlled for alternative effects of other explanatory variables. Nagelkerke R² and Cox & Snell R² provide estimates of good overall model-fit for each of the specifications.

Table 7 reports the estimation results of the three models that were employed. The business owner's age does not have a significant impact on target group membership. The same holds for gender, which is only weakly significant in Model C. Foreigners have a higher propensity to be interested in microloan products, which could be due to the fact that they are more often excluded from the banking system and therefore depend more extensively on alternative funding. Blanchflower et al. (2003) show similar empirical evidence for this observation when they analyze access of small businesses to the credit market in the U.S. Concerning the education variables, master craftsmen have a significantly lower propensity to belong to the target group, which is indicated by the negative sign of the dummy. They usually have higher

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[26] € 32,000 when not adjusting for outliers.

funding needs during the start-up period as they have to buy more expensive equipment than e.g. in the service sector.

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insert Table 7 about here

With respect to the firm variables, we find strong evidence that firms operating in the retail business tend to have a strong inclination towards microloans. This coincides with our findings that potential microloan clients need fast access to funds. Retail business is traditionally characterized by near-term funding needs, often triggered by the need to pre-finance inventory (van Auken and Carter, 1989). The other industry dummies have no significant bearing on target group membership. The variable 'team foundation' shows a weak positive significance in Model B when controlled for financial characteristics. We therefore conclude that retail business is the only relevant firm characteristic that determines target group membership– a result which coincides with what many countries experience when microfinance products are extended (Kritikos and Vigenina (2005)).

Model C contains a set of dummies that provide information on the firm's funding characteristics. Businesses which received a private loan during their first three years' operations tend to show a weak significant interest in microloans. Anecdotal evidence from the interviews confirms that people who receive funding frequently through private loans are reluctant to borrow from friends and relatives as this implies a certain kind of social dependency. Applicants who received a bank loan show a higher propensity not to be a member of the target group as lower interest rates of bank loans are indicated. This confirms the conjecture we made when analyzing funding patterns. The only caveat to this finding was detected in Section 5.2(1): borrowers that experienced poor bank service quality show a significantly higher interest in microloan products. Finally, the dummy 'funding needs in year 2 or 3' does affect target group membership positively, but with a weak significance. This validates our financing pattern analysis which showed rather constant funding needs for the target group and therefore an elevated need for finance after foundation of the business. Receiving an overdraft and a need for liquidity finance do not affect target group membership.

Result 9: Business owners who are interested in microloan products could be found among foreign and retail business owners, as well as those who received a private loan. Those who needed finance in the years after business foundation were also more likely to be a member of the target group.

6. Implications for a market entry strategy for MFIs

Our findings lead us to a market entry strategy that addresses two main issues: first, findings concerning past banking experiences and product features imply that positioning MFIs to be different from the typical commericial banks might be crucial. Business owners interested in microloan products report negative experiences with banks that may drive them away from commercial banks when shopping for loans. Furthermore, these business customers value speed and flexibility in the process of receiving loans. Compared to the rather slow approval processes of banks, this is a unique selling proposition for MFIs.

Apart from this general positioning, we can derive criteria to define a target group for MFIs. When looking at the results from our target group membership model, we can isolate a distinctive pattern: typical members of the microloan target group are retail business owner, foreign business owner, and persons with a loan history rather on the private instead of the bank market. Thus, MFIs could in the beginning target in particular retail businesses offering microloans that respond to their special business needs. Furthermore, potential customers are most likely found to be in the period after foundation of their newly established business. Thus, it makes sense to direct microfinance promotion activities to businesses which are operating for more than one year. It has to be emphasized that such a strategy - of focusing on more experienced businesses owners – corresponds to the needs of the MFI of reducing its lending risks. For well-trained loan officers it is much easier to differentiate between low and high risks among their future clients if these passed the start-up period and made first experiences in their respective markets.

Furthermore, the process of receiving the loan should be as 'non-bank' as possible, that is to give customers the feeling of being a client whose needs are understood, and who is respected as a full-fledged client. Given the importance of ambience in the physical environment (Baker, Berry and Parasuraman (1988); Baker, Grewal and

Parasuraman (1994)), it might even be sensible to design MFI's offices differently as compared to bank branches so as to enable the target group members to feel welcome. Interviews with the members of the focus group support this suggestion, as they share similar sentiments in being treated negatively from the loan officers of several local MFIs (which were publicly financed) in a similar way as from the conventional banks.

This result is decisive for the design of appropriate micro-lending products. On the one side, it is crucial that loan applications have a high probability of being positively decided – there is a commonly used rule of thumb of a 90% acceptance rate. On the other side, it is important as well, to have the well-known supply side problems still in mind which we shortly mentioned in the introduction, such as adverse selection and moral hazard. To meet both challenges, the micro-lending products need to be designed in a way that a high self-selection process will take place where the potential members of the identified target groups and at the same time as many creditworthy persons as possible should be attracted by the product.

We can further conclude that a market entry by a specially designed MFI will be successful only if it houses well-trained loan officers who are familiar with offering good customer service quality and who are able to speed up the process of loan screening and approval. These insights also reveal why many successful MFIs in Eastern Europe are not employing former bankers as loan officers. They rather hire psychologically trained officers that possess no previous professional experience within the traditional banking sector.

7. Conclusion

It has become almost common sense that small and micro businesses have more difficulties in getting access to outside finance than larger firms do – in Germany in the same way as anywhere else. Loan volumes tend to be too small for commercial bank finance while small and micro business owners can less effectively signal their risk taking behaviour than managers of larger companies can. Meanwhile, there is abundant information in the media indicating that the majority of small and micro businesses indeed is in need for financial means but excluded from access to credit, in particular during their start-up period. Therefore, during the last decade, about two

dozen local MFIs were set up in Germany in order to offer loan products, particularly aimed at start-ups. However, their success measured in terms of outreach remained far below expectations.

To better understand the demand side of this market segment in Germany, we conducted a survey with 213 entrepreneurs and interviewed them about their funding needs and their inclination towards a typical microlending product. As to the size of the market, 65% of the business owners reported that they were able to operate their business either without capital or without any form of outside finance. Among the remaining 35% of the business owners needing outside finance, almost every second person (or 15% of the total sample) felt attracted by a microfinance product even if annual interest rates amounted to 20%. These people were termed as target group.

Thus, it might be true that the majority of small and micro business owners are excluded from access to small loans. However, our survey reveals that a good portion of these persons does not rely on outside finance. With regard to the high number of businesses that were financed without outside capital, further research should therefore be directed at the reasons for this behaviour. More specifically, it should be examined more thoroughly to what extent their decision is driven (i) by sufficient personal liquidity reserves of the owner, (ii) by the feeling that as a small or micro business owner it is futile to ask for a loan as banks will reject the application anyway, or (iii) by the fear of incurring debts (for which we found first evidence). Further studies should investigate if a hidden demand can be detected and addressed with targeted offers, as it proved to be the case in many countries where professional MFIs have been established in the meantime.

Our second main result is that among those business owners who were in need of outside finance we observed that there were two different financing patterns. One group needed higher outside finance particularly during the foundation phase of the business, while the other group exhibited funding needs which were rather constantly spread over their first three years of business operations and which showed to be significantly lower in year 1 than those of the other group. Furthermore, the non-target group members were more satisfied with the loan schemes offered by the traditional banks.

Third, our survey revealed that there are certain businesses that are particularly interested in microlending products, amongst them foreign and retail business owners, persons who received loans from their private network and persons who were dissatisfied with the service quality offered by the bank where they felt patronized by the loan officers.

We conclude that the market for microlending in Germany is smaller and the potential clients are different from what was widely believed. It is true that – as often highlighted – there are some start-ups whose loan proposal were finally rejected by one or more banks (in our survey about 10% of the complete sample) and that half those who were rejected from a bank eventually succeeded in getting a loan from their private network. It is also true that only about 20% of the young entrepreneurs in our sample financed their business with a loan during the start-up period. However, our analysis makes clear that these figures do not allow for the conclusion (as it is often done) that 80% of the young entrepreneurs face financial problems during their start-up period because they are excluded from the credit market.

Our approach makes also clear that the existing MFIs had addressed the wrong target group – namely the start-ups - and had developed loan products which were not suitable to meet the demand of potential clients. Business owners who need outside finance during the start-up period are asking for rather higher sums than are usually offered by MFIs, and are often able to get access to the loans they are asking for at the commercial banks.

Two market entry strategies seem to be crucial: First, the target group has to be specifically addressed, namely businesses which were labelled in this paper as micro-businesses (according to their financial needs), which are not anymore in the start-up phase but have already been operating for some time. Second, instead of focusing on young entrepreneurs in general which does not allow for the development of any specific product design, micro businesses should be targeted by product features specifically designed for the subgroup which we identified in this paper. Third, the features which are crucial to create a demand for microlending products even at higher interest rates, are: quick and easy access to loans and an environment which does not remind the customers of their last bank visit.

In order to provide such good service quality to their customers, MFIs will have to employ professionally trained loan officers who are able to put the crucial product features into action and to realize effective screening procedures at the same time in order to keep high credit risks at a low rate. Only then, an MFI will successfully attract customers and be able to promote its uniqueness in a way different from the commericial banks. Since many of the potential customers are not excluded from access to credit, it has also to be emphasized that MFIs might gamble away their credibility in a very short period of time (as some of the existing MFIs did already) if their loan officers behave similar to the commercial banks.

This leads us to the conclusion that, albeit small, there is a market for microlending in Germany. It might have a potential to grow if there is a hidden demand among the astonishingly high share of those business owners who reported to have no need for outside finance, in particular among those who are currently afraid of applying for a loan.

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Appendix

Variable	Borrowers		Non-borrowers		Chi² Sig.*
	N	Mean	N	Mean	
Owner-Entrepreneur Characteristics					
Female	76	0.41	137	0.39	
Foreigner	76	0.09	137	0.02	**
Education					*
Academic	76	0.42	137	0.53	
Master craftsman	76	0.26	137	0.20	
Age	76	42.68	137	44.80	
Preceding period of unemployment (months)	73	9.22	129	8.76	**
Entrepreneurial self-confidence (1-not at all; 5-very self-confident)	76	4.13	137	3.92	*
Experienced severe business crises	74	0.73	136	0.51	***
Business Characteristics					
Retail	76	0.13	137	0.04	***
Crafts	76	0.24	137	0.07	***
Liberal profession	76	0.13	137	0.20	
No. of employees	76	1.13	137	0.31	**
Team foundation	76	0.17	137	0.07	**
Financial Characteristics					
Funding needs year 1 ('000 €)ᵃ	66	20.17	130	7.92	***
Funding needs year 2 ('000 €)ᵃ	66	5.3	130	1.97	**
Funding needs year 3 ('000 €)ᵃ	66	5.3	130	1.33	**

*** significant at a 1% level   ** significant at a 5% level   * significant at a 10% level
ᵃ adjusted for outliers (funding requirements exceeding € 100.000in at least one year)

Table 1: Descriptive Statistics for the two subsamples.

Funding needs	Borrowers	Non-Borrowers	Total
None	2.6%	13.1%	9.4%
Less than € 5,000	19.7%	43.8%	35.2%
> € 5,000 – € 10,000	25.0%	24.1%	24.4%
> € 10,000 - € 25,000	23.7%	14.6%	17.8%
> € 25,000 - € 50,000	19.7%	3.6%	9.4%
More than € 50,000	9.2%	0.7%	3.8%
Mean (Median)	27,138 (12,750)	7,946 (5,000)	14,794 (7,000)

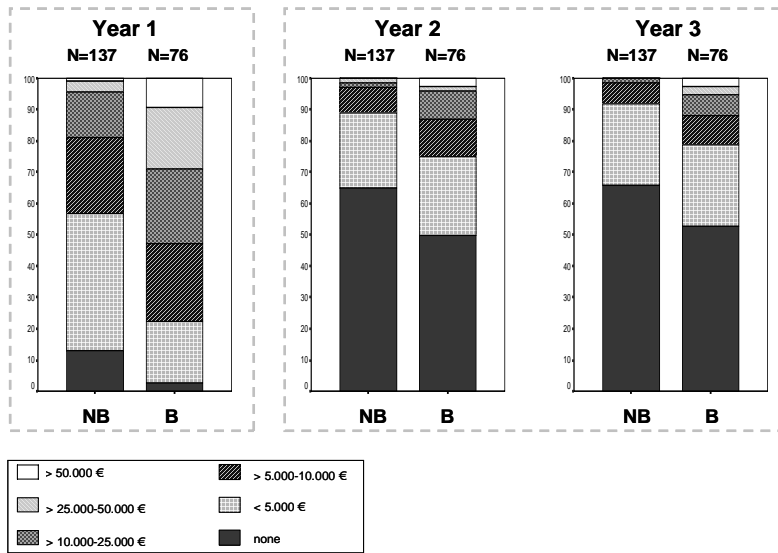*Table 2: Funding needs of borrowers and non-borrowers in Year 1*

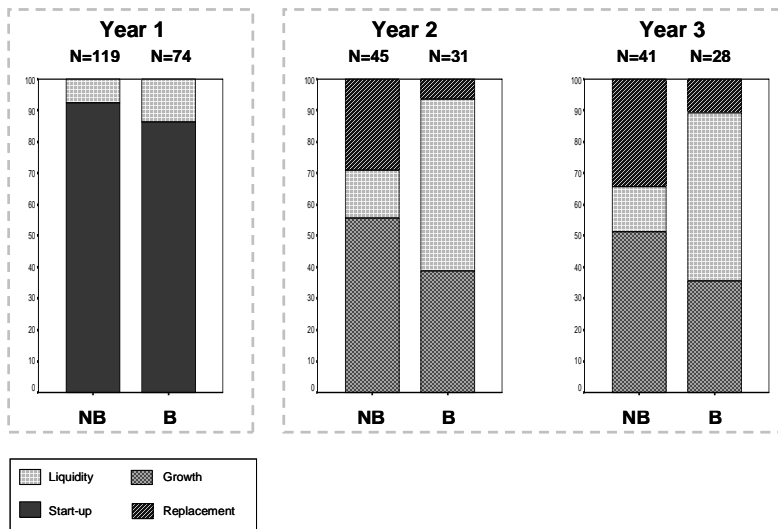*Figure 1: Comparison of funding needs between borrowers (B) and non-borrowers (NB).*

Figure 2: Comparison of investments purposes between borrowers (B) and non-borrowers (NB).
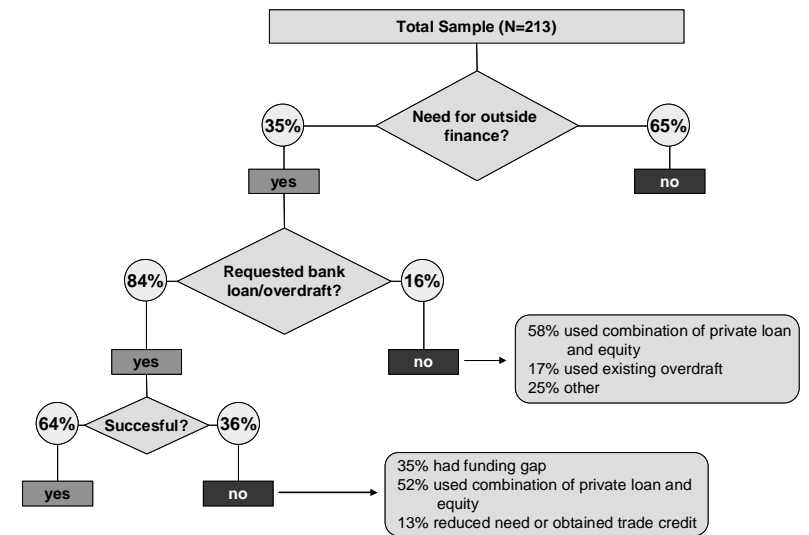

Figure 3: Overview of the subsamples.

Statements	z-value	Prob > |z|
All in all, I have a positive impression of my meeting(s) with the bank(s).	-3.14	0.001
I felt as a full-fledged client.	-3.70	0.000
I had the feeling that my interlocutor understood my business plan.	-2.31	0.021
I received competent advice concerning relevant products.	-2.74	0.006
I received comprehensive information on all terms and conditions.	-1.85	0.065

Table 4: Comparison of successful and unsuccessful loan applicants.

Statements	z-value	Prob > |z|
All in all, I have a positive impression of my meeting(s) with the bank(s).	-2.47	0.014
I felt as a full-fledged client.	-2.27	0.023
I had the feeling that my interlocutor understood my business plan.	-2.03	0.042
I received competent advice concerning relevant products.	-0.99	0.323
I received comprehensive information on all terms and conditions.	-1.71	0.088

Table 5: Comparison of target group and non-target group members who received a loan.

Statements	z-value	Prob > |z|
I am agreeable to accepting higher interest rates when taking a loan if this allows more flexibility in repayment schemes.	-0.28	0.8
In my line of business, it is utterly important to receive a loan whenever appropriate.	-2.4	0.02
It matters to me to pay no amortizations, especially in the first months after borrowing.	-0.92	0.36
I am willing to pay higher interest rates for faster access to loans.	-2.02	0.04
Individual support given by the contact person is as important to me as to the terms of a loan.	-0.25	0.82

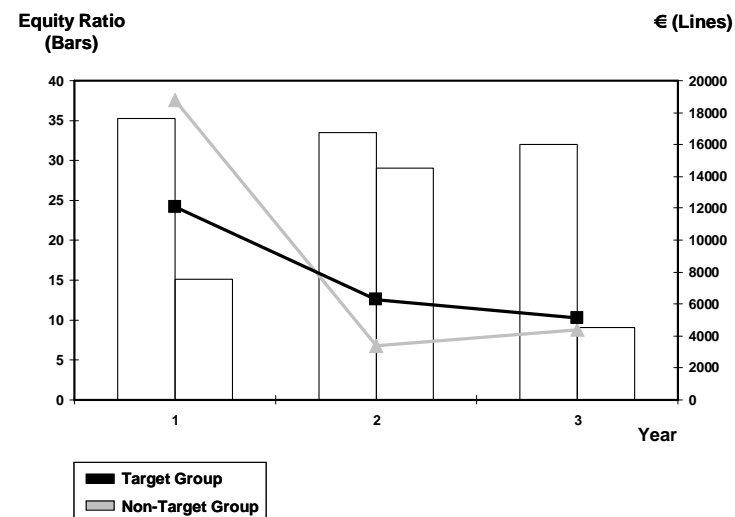*Table 6: Comparison of target group members and non-target group members.*

Figure 4: Financing patterns of target group and non-target group members (adjusted for outliers with funding needs exceeding € 50.000).

Explanatory Variables	Model A	Model B	Model C
Gender (female=1)	-0.63 (0.64)	-0.97 (0.77)	-2.83 (1.63)*
Age	-0.03 (0.04)	0.02 (0.05)	-0.03 (0.08)
Nationality (foreigner=1)	2.47 (1.54)*	2.44 (1.44)*	5.04 (2.46)**
Education			
(academics=1)	-0.24 (0.67)	-0.07 (0.87)	1.91 (1.78)
(master craftsmen=1)	-3.29 (1.24)***	-3.57 (1.46)**	-6.33 (3.07)**
Preceding period of unem-ployment (months)	0.01 (0.03)	-0.01 (0.03)	0.08 (0.07)
Line of business			
(retail=1)		2.67 (1.24)**	6.76 (2.64)***
(crafts=1)		0.87 (1.05)	0.72 (1.85)
(lib. professions=1)		-0.09 (0.99)	0.08 (1.28)
Team foundation		2.03 (1.11)*	3.44 (2.15)
Received private loan			2.46 (1.40)*
Received bank loan			-4.85 (1.96)**
Received overdraft			-1.03 (1.66)
Liquidity finance			-2.71 (1.90)
Funding needs in year 2 or 3			2.64 (1.64)*
Constant	1.38 (1.78)	-1.34 (2.26)	0.43 (3.62)
Nagelkerke R²	0.345	0.485	0.754
Cox & Snell R²	0.254	0.357	0.556
Model Chi²	50.28	27.4	18.21

Standard errors in parentheses
*** significant at a 1% level   ** significant at a 5% level   * significant at a 10% level

Table 7: Binary Logit Estimation of determinants of target group membership.