National Impact and Market Study of Microfinance in Jordan

Carried out with Al-Ahli Microfinance Company, the Development and Employment Fund, Middle East Micro Credit Company, Microfund for Women, the National Microfinance Bank, Tamweelcom, and the United Nations Relief Work Agency

Presented to the Ministry of Planning and International Cooperation and the Agence Française de Développement by PlaNet Finance

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ABBREVIATIONS AND ACRONYMS

ACC Agricultural Credit Corporation
AFD Agence Française de Développement (French Development Agency)
AMC Al-Ahli Microfinance Company
AMIR Achievement of Market-Friendly Initiatives and Results
CGAP Consultative Group to Assist the Poor
DEF Development and Employment Fund
GoJ Government of Jordan
GUVS General Union of Voluntary Societies
IKM Impact Market Knowledge
JLGCA Jordan Loan Guarantee Corporation
JMCC Jordan Micro Credit Company
JWDS Jordanian Women’s Development Society
MAJ Microfinance Association of Jordan
MEMCC Middle East Micro Credit Company
MFI Microfinance Institution
MFW Microfund for Women
MoPIC Ministry of Planning and International Cooperation
NBFI Non-Banking Financial Institution
NMB National Microfinance Bank
NMN National Microfinance Network
UNRWA United Nations Relief Work Agency
1 Executive Summary

At the request of the Jordanian Ministry of Planning and International Cooperation, and financed by the Agence Française de Développement, PlaNet Finance has carried out from November 2006 – September 2007 a national impact and market study of the microfinance sector in Jordan. The study’s objectives were to provide:

- Details concerning the socio-economic characteristics of microentrepreneur households and activities
- Statistics related to the demand for financial services, including new products and current practices related to the use of financial products
- Information related to the investment practices of microentrepreneurs in their business, including types of investment, frequency of investment, and the accumulation of assets
- A quantifiable poverty index of microentrepreneurs
- A measure of the perception of the impact of microfinance on the household, on women’s empowerment, and on the accumulation of wealth
- Reasons and explanations for client drop-out as well as statistics on client satisfaction

The study is in no way an evaluation of the performance of the microfinance institutions of Jordan.

1.1 Methodology

This study has been accomplished using the Impact-Knowledge-Market (IKM) methodology, a training and action-research program which uses qualitative and quantitative methods as part of a participative and multidisciplinary approach used to identify client characteristics, research market demand, and assess impact. PlaNet Finance carried out 1,314 interviews as well three Focus Group discussions with clients from seven Jordanian microfinance institutions / programs. Participants were selected on a random basis.

The sample is composed of four types of clients: New Clients (less than 6 months participation in a microfinance program), Medium Clients (6-36 months participation), Old Clients (more than 36 months participation), and Drop-Outs (clients who have left a microfinance program). The sample has been proportionally distributed to reflect the geographic distribution of microfinance as well as the market-share of each MFI.

<table>
<thead>
<tr>
<th>MFI</th>
<th>Count</th>
</tr>
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<tbody>
<tr>
<td>MFW</td>
<td>315</td>
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<tr>
<td>TAMWEELCOM</td>
<td>328</td>
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<tr>
<td>MEMCC</td>
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<tr>
<td>NMB</td>
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<td>DEF</td>
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<td>AMC</td>
<td>60</td>
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<td>UNRWA</td>
<td>61</td>
</tr>
<tr>
<td>TOTAL</td>
<td>1,314</td>
</tr>
</tbody>
</table>

1.2 Summary of Results

Profile of the Average Microentrepreneur in Jordan

The sample collected for this study has been designed to produce a profile of the average microentrepreneur household in Jordan. Results indicate that the average age of a microfinance client is a 37 year old, married woman. Her household is composed of three adults 18 years of age or older.
and 2.3 dependants under the age of 18. She has received less than a high school education but is able to read and write. She works as a trader, running a home-based and non-registered activity. Her decision to take a loan in order to build a microenterprise is supported by her family.

Impact of Microfinance on Microenterprise Activities

Microfinance in Jordan has a positive impact on business development. The results indicate that microfinance provides the only external source of finance for the economically active poor in Jordan. 55% of those sampled state that their MFI is their primary source of finance. The only other main source of finance for microentrepreneurs is self-financing through savings.

- The results indicate that clients who have been in a microfinance program for three years or more gain on average 15.4% more in monthly profits than clients who have just recently joined a program.

- Clients who have been in a microfinance program for three years or more have been able to invest more than twice as much in their business as clients who have just joined a microfinance program.

- Microenterprises have more employees the longer the microentrepreneur has been in a microfinance program, meaning that the duration of participation in a microfinance program increases the level of employment.

- Contribution to the household budget increases by 20% between clients who have just entered a microfinance program to those who have participated for at least three years.
Contribution of Microfinance to Business Start-Up

Microfinance in Jordan has led to the creation of businesses. 28% of those surveyed used their microloan to start a new activity, and another 28% would be interested in taking a loan to start a new business. These results indicate that microfinance in Jordan does not exclusively serve for business consolidation but can also contribute to the creation of new economic activities.

Perception of Impact and Household Poverty Levels

Microentrepreneurs in Jordan declare a positive impact of microfinance on their overall well-being and their quality of life.

- 86.7% of respondents declare a positive impact on their sense of autonomy as a result of participation in a microfinance program.
- More than 70% of the respondents have noticed a positive change in their quality or quantity of food since the start of their participation in the microfinance program.
- 57.6% of clients who have children perceive a positive change in their level of education thanks to their participation in microfinance programs.
- 47.6% of respondents state that their health has improved since the start of participation in a microfinance program.
- Finally, nearly all microentrepreneurs – 98% - state that their microenterprises contribute to their overall positive self-esteem.

Nonetheless and contrary to the perception of respondents, microfinance in Jordan does not seem to have contributed to the detention of assets, the improvement of housing conditions, healthcare, or the increased education of children. These results, however, are in-line with impact studies carried out in other leading microfinance sectors world-wide, and namely in Morocco and Afghanistan.

Financial Services Use and Demand

82% of all microentrepreneurs used their MFI loan primarily for business purposes. In terms of new microloans, virtually all those surveyed wish to renew their loan in order to consolidate their businesses or start new activities.

- 38.5% of respondents stated that their first use of the loan would be to expand their existing microenterprise
- 16.5% state that the loan would be firstly used for working capital.
- The median loan amount asked for is 2,000 JDs. Half of all microentrepreneurs surveyed would like a loan ranging from 1,000-3,000 JDs.

The culture of savings is low among Jordanian microentrepreneurs. Only 46% of those surveyed save every month and only 23% use a formal savings account.

In terms of other products and services in demand, 50% of clients desire credit insurance, 51% business training, 60% desire a pension fund, and 66% health insurance.
Client Satisfaction and Client Drop-Out

Microfinance clients in Jordan are largely satisfied with their MFIs and with the services provided.

- 54% of those surveyed listed the relationship with their MFI, in particular the relationship between client and loan officer / branch manager as the most positive aspect of their MFI.
- 37% of respondents listed the ease of procedures and the offer of loan amounts adapted to their needs as the most positive aspect of their MFI.

In terms of dislikes, the two largest problems cited by the sample are the lack of product diversity and the interest rates charged.

- 51.6% cite the lack of product diversity as their primary dislike or complaint with their MFI.
- 26% of those surveyed rate the interest rates charged as either bad or very bad.
- Moreover, 34% of drop-out clients cite the MFI products and services as their primary reason for drop out, specifying that the interest rates were too high and that the loan amounts were not adapted to their needs.

These results indicate that microentrepreneurs in Jordan have a high level of awareness of their financial needs and understand the concept of interest rates.

1.3 Conclusions

Microfinance in Jordan succeeds in the role it is designed to play: MFIs represent nearly the only external source of finance available for the economically active poor, microfinance has lead to increased revenues and business investments for clients, and microfinance has contributed to an overall feeling of well-being and positive self-esteem for microentrepreneurs. Moreover, in comparing the results of this impact study with similar studies, the Jordanian microfinance sector displays similar and in some cases even better results than other countries in the region.

Finally, the study shows that by helping clients build stronger microenterprises and by graduating them from income-generating activities to small enterprises, the overall impact of microfinance will be more important and clients will be able to climb out of poverty and contribute to the economic development of Jordan.
2 Introduction

2.1 Microfinance in Jordan: State of the Sector

2.1.1 The Development of Microfinance in Jordan

The microfinance sector in Jordan can trace its roots back to 1959, when the Agricultural Credit Corporation (ACC) began distributing government-directed subsidized credits for poor agricultural sector workers. This trend of government subsidized loans for the poor was reinforced with the introduction of the first true microlending program in 1965 through the establishment of the Industrial Development Bank, later joined by the creation of the General Union of Voluntary Societies (GUVS) in 1986 and the Development and Employment Fund (DEF) in 1992. These programs provided an early response to the demonstrated need for access to financial services as expressed by poor Jordanian microentrepreneurs.

The evolution of microlending in Jordan into a best practice microfinance sector began in the 1990s as a response to the growing economic instability that high unemployment rates and the diminishing purchasing power engendered. The country’s first microfinance institution established with the objective of sustainability was the Jordanian Women’s Development Society (JWDS), a spin-off of the Save the Children GGLS program which had already been successfully implemented in two refugee camps. JWDS – which eventually became Microfund for Women - was followed by an initiative of USAID and its AMIR program to build a best practice microfinance sector. In addition to providing funding for growth and institutional capacity building to JWDS, USAID established three other sustainable MFIs: the Al-Ahl Microfinance Company (AMC), the Jordan Micro Credit Company (JMCC – later becoming Tamweelcom which is owned by the Noor Al Hussein Foundation and works under the umbrella of the King Hussein Foundation), and the Middle East Micro Credit Company (MEMCC).

These four MFIs, a mixture of not-for-profit and for-profit limited liability companies, advanced rapidly along the path to becoming fully operationally and financially sustainable, thanks to their practice of cost-recovery pricing and reduction of overheads, in addition to their use of commercial sources of refinancing. These institutions were joined in 2005 by another sustainability-oriented MFI, the National Microfinance Bank (NMB or Alwatani). A private share-holding non-profit company established through a partnership between King Abdullah II Fund for Development, AGFUND, and two private sector investors, the NMB has rapidly assumed an important place in the microfinance sector in terms of market share, despite its relatively late entrance in the market.

In addition to the development activities of USAID, the microfinance sector in Jordan also received a significant boost with the entrance of the Ministry of Planning and International Cooperation (MoPIC) as a key policy player and advocate of the sector. Recognizing the importance of microfinance for economic development in the country, the MoPIC has worked to provide an enabling environment in coordination with the national strategy and market players. Among the measures taken by the MoPIC to contribute to the development of the sector were the elimination of taxes and fees for non-profit MFIs, the granting of permission to practice both traditional and Shari’a compliant lending, previously reserved for commercial banks only, and the provision of 5 million JD in soft loans for the finance of MFIs.

The microfinance institutions of Jordan have achieved a high level of international recognition for their excellence. In 2006, the Jordanian microfinance sector received two international distinctions. 34 Jordanian microentrepreneurs won the 2006 Citigroup Global Microentrepreneurship Award for outstanding microenterprise management and community impact, stemming from all MFIs in Jordan. In addition, Tamweelcom was among the 2006 CGAP Financial Transparency Award Winners, the only MFI from the entire Middle East North Africa region bestowed this honor.
In addition, the microfinance sector of Jordan has demonstrated its excellence through impressive ratings of the MFIs. The three MFIs in Jordan that have undergone an institutional rating have received outstanding marks, ranging from B+ to –A with stable or positive trends. Moreover, at least two other MFIs are planning to carry out external ratings, and all seven institutions represented in this study report to the MIX Market with three to five diamonds.

2.1.2 The National Microfinance Strategy

Increasing its participation in the sector and its role in guiding the development of microfinance, the MoPIC, alongside the Consultative Group to Assist the Poor (CGAP), began working on the National Microfinance Strategy in January 2005 with the goals of defining the policy and institutional frameworks for microfinance operations in Jordan. A Microfinance Committee was created, preparing a series of strategies for the development of the microfinance sector, including a definition of the roles and responsibilities of all sector stakeholders, including MFIs, the MoPIC, an on-lending unit, commercial banks, NGOs, and donors.

Policy Framework for Microfinance in Jordan

According to the National Strategy, the Government of Jordan would adopt market-oriented financial and credit policies in order to encourage more private sector participation in the microfinance sector, with a distinction being made between the provision of financial services to the microentrepreneurial poor and welfare assistance to the non-working poor. The following principles would guide the Government’s microfinance policies:

1. The private sector will be the main provider of financial services.
2. The creation of an enabling policy environment that will facilitate the increased participation of the private sector in microfinance.
3. The adoption of market-oriented financial and credit policies, e.g. market-oriented interest rates to be charged on microfinance loans.
4. The non-participation of government line agencies in the implementation of credit and/or guarantee programs.
5. All government agencies that provide welfare support (e.g. The National Aid Fund, The Ministry of Social Development) will withdraw from microfinance lending activities.
6. Support at all levels of government will be provided to create and strengthen the micro and small business sector of the economy. This will be implemented through business and vocational training, the identification of business opportunities, creating the necessary infrastructure, and simplifying business registration procedures.

Institutional Framework for Microfinance in Jordan

The Microfinance National Strategy, developed in consultation with all Jordanian microfinance stakeholders, also defined the various responsibilities that each microfinance actor should play within the sector. This included:

- The Microfinance Institutions (MFIs): to engage in sound, sustainable and viable microfinance activities, following internationally recognized best practices.
- The **Government of Jordan**, through the **MoPIC**: to provide a market-oriented financial and credit policy environment.

- An **On-Lending Unit**: to provide wholesale funds on commercial terms and conditions (including those sourced from foreign borrowings) to MFIs. As listed in the National Strategy, the institution responsible for this activity is the DEF, which also acts as a direct lender to microentrepreneurs.

- **Commercial Banks**: to provide wholesale funds and financial services to MFIs and to selectively take equity positions in for profit MFIs, NBFIs and Microfinance Banks.

- The **National Microfinance Network/Association (NMN)**: to be established, the Network will focus on general microfinance industry issues, such as transparency, capacity building, training, and networking; in addition to holding the National Annual Microfinance Forum.

- **NGOs**: to provide technical assistance in facilitating the linkage between poor households / microenterprises and MFIs to provide capacity building directly to the economically active poor.

- **Donors**: to provide assistance to the microfinance sector that will lead to the broadening and deepening of microfinance services.

2.1.3 Current Trends in Microfinance in Jordan

The microfinance sector in Jordan today can be characterized by the presence of the following organizations:

- Five sustainability-oriented MFIs, with a strong commercial orientation and management committed to the industry norms.

- The DEF, which acts as both a direct lender of retail products (65% to start-ups and 20% to rural clients) and an indirect lender through credit schemes and the financing of MFIs.

- Approximately a dozen other MFIs that provide microfinance as one among many development activities. Among these is the United Nations Relief Work Agency (UNRWA) microfinance program.

- Approximately 200 local microcredit schemes, which are village-type, self-help oriented operations with savings and credit components.

- Government institutions providing direct poverty-focused lending to rural and underserved areas.

- The Microfinance Association of Jordan, a coordinating body which networks microfinance institutions and programs. Despite its defined mission to improve communication and exchange between the institutions, the MAJ has not been able to fulfil its role as a result of insufficient funds and differing opinions among its members.

- Commercial banks, whose role is limited to debt refinancing of successful MFIs with external credit support.
These institutions reach approximately 74,000 active clients today and are experiencing important growth.

Microfinance products in Jordan are still largely limited to credit for business development, although lending methodologies include both group and individual lending. At least three institutions, DEF, MFW, and Tamweelcom, offer an alternative type of microfinance product, a credit life insurance underwritten by Jordanian insurance companies. In addition, MFW is in the preliminary stages of offering a micro-leasing product and several institutions (DEF, Tamweelcom) offer non financial services such as business training. Despite these efforts to diversify the offer of products, any form of deposit taking is strictly forbidden by MFIs, although some do offer savings options through strategic alliances with commercial banks or the Postal Savings Fund Network.

Most microfinance actors in Jordan concentrate their activities in urban and semi-urban areas, with approximately 60% of all microfinance activity taking place in the Amman area; moreover, many of microfinance actors target the same clientele, namely poorer women microentrepreneurs. Competition is quite fierce among MFIs. Because of the concentration of the sector in the same geographical region and the small degree of variation between products and strategies, it is presumed that a level of client overlapping does in fact exist; however, until an information-sharing system or credit bureau is in place, it is difficult to assess the rate of over indebtedness.

Microfinance institutions in Jordan have been able to move away from donor funding in recent years by accessing both foreign and local sources of commercial finance, namely debt financing through banking loans and specialized microfinance investment funds. MFIs in Jordan have been rigorous with microfinance ratings and have been transparent with their financial and operational reportings to organizations such as the MIX Market, all of which has created a high level of visibility of the microfinance sector of Jordan, which is considered an industry leader in the Middle East.

2.2 Context of the National Impact and Market Study

Among efforts to further develop the microfinance sector in Jordan, various Research and Development activities have already been undertaken, including studies related to the commercialization of the sector and new practices for expanding the access to sustainable microfinance. However, no sector-wide participative impact and market study has been done directly with the clients of Jordanian microfinance institutions in order to adapt the products to serve the uncovered needs of microentrepreneurs and in order to maximize the social and economic impact of microfinance on poverty alleviation.\(^1\)

To ensure a sustainable and effective expansion of the microfinance sector in Jordan, and to ensure that microfinance is fulfilling its social mission in terms of poverty alleviation and economic development and empowerment, it is worthwhile to conduct a national impact and market study using a standard methodology in microfinance. This type of study goes beyond a simple client-satisfaction inquiry by seeking to quantifiably assess to what extent participation in a microfinance program has had a positive impact on microbusiness development and poverty alleviation. The activity serves as a basis for new product and service development as well as market stratification, providing MFIs with valuable information on how to better serve their current clients and develop a competitive strategy for expansion. Moreover, a national impact and market study can provide policy makers and regulatory bodies with useful information related to the state of a microfinance sector and its needs in terms of legal framework and industry-building.

\(^{1}\) While no sector-wide impact has been carried out prior to this study, two MFIs, the DEF and Tamweelcom, have carried out similar studies with their own client pool. The DEF has carried out, in collaboration with the Royal Scientific Society, two socio-economic impact studies on DEF beneficiaries. The executive summary of the most recent study can be found on the DEF website: www.def.gov.jo. It is worth noting that results from this study are in some cases different from the results found here. In addition, Tamweelcom carried out two internal client satisfaction and drop-out surveys in 2007.
Recognizing the potential benefit of a national impact and market study in Jordan, PlaNet Finance, an international organization whose mission is to support the development of microfinance worldwide, signed a general Memorandum of Understanding with the MAJ in March 2006 which outlined four sector-wide activities to be carried out together. This general agreement included a national impact and market study, to be carried out with seven MFIs: Ahli Microfinance Company, the Development and Employment Fund, Microfund for Women, the Middle East Micro Credit Company, the National Microfinance Bank, Tamweelcom, and the United Nations Relief Work Agency microfinance program.

In November 2006, the Ministry of Planning and International Cooperation, through financing by the Agence Française de Développement, requested that PlaNet Finance carry out the national impact and market study in order to support Jordanian microfinance actors in improving their microfinance products, better targeting the needs of their potential or existing clients and avoiding unproductive competition. In addition, the project was requested in order to provide international, regional and national visibility to the Jordanian microfinance sector and to encourage deeper cooperation within the sector.

2.3 Organization of the Study

The study was carried out over a ten-month period, from November 2006 – September 2007 and involved a number of different actors and participants, each with a specific role and set of responsibilities:

PlaNet Finance
As project leader, the National Impact and Market Study benefited from PlaNet Finance’s Impact-Knowledge-Market methodology for assessing impact and market demands in microfinance. PlaNet Finance was also responsible for the planning and coordination of every aspect of population sampling and data collection. This included training the seven participating microfinance institutions on the methodology and goals of the impact study, training the data collection agency on interviewing skills and the questionnaire to be used, ensuring an accurate and randomly-selected sample in terms of proportional distribution, and guaranteeing the quality of results.

Microfinance Institutions
The Jordanian Microfinance Institutions were fully involved in the research design, including the preparation of the questionnaire, the sample size and distribution, and the method of data collection. This participation was essential in facilitating the process of data collection (namely the provision of databases and client contact information) and ensured the appropriation of the study and its results by the MFIs.

Microfinance Association of Jordan
As decided in the Memorandum of Understanding, the MAJ played a coordinating role between the seven participating MFIs and PlaNet Finance.

MMIS, local data collection agency
A Jordanian consulting firm, MMIS, was selected by PlaNet Finance according to strict criteria in order to carry out the data collection process. This included:

- The collection of quantitative data through the fulfillment of 1,000 - 1,500 questionnaires in Jordan
- The coding, cleaning and entering of the data from the questionnaires in the SPSS database format, which was then delivered to PlaNet Finance for analysis
3 Objectives of the Study

The National Impact and Market Study has a number of objectives, related to research and development activities and sector strategic planning.

Research and Development Objectives
In terms of research and development, the project aims to provide concrete information on the current market, the quantifiable impact of microfinance on business development and quality of life, and provide information on the demand and client satisfaction. More precisely, the study’s research aspect was designed to provide the following information:

- Details concerning the socioeconomic characteristics of microentrepreneur households and activities
- Statistics related to the demand for financial services, including new products and current practices related to the use of financial products
- Information related to the investment practices of microentrepreneurs in their business, including types of investment, frequency of investment, and the accumulation of assets
- A quantifiable poverty index of microentrepreneurs
- A measure of the perception of the impact of microfinance on the household, on women’s empowerment, and on the accumulation of wealth
- Reasons and explanations for client drop-out as well as statistics on client satisfaction

The study seeks to provide microfinance institutions with information related to new products and services that can be developed in order to better respond to the needs of their clients, especially the needs not currently being met by the current offer of financial products. In addition, the study aims to provide sector actors with information related to market stratification and the positioning that each MFI could take within the market as a means of avoiding unproductive competition.

Sector Strategic Planning
Among the project’s other goals is to provide policy makers, international donor agencies, and coordinating bodies such as the MAJ with a series of recommendations designed to help guide the development of the microfinance sector, along the guidelines established by the National Strategy for Microfinance. More specifically, these recommendations should provide information related to:

- The definition of a creative range of products and alternative forms of guarantees that can be encouraged and developed by MFIs with the assistance of international donors and technical service providers
- Different means of facilitating funding for MFIs, specifically with respect to the upscaling of the sector and role agencies such as the Agence Française de Développement could adopt in this domain
- An overall strategy for upgrading the microfinance sector with specific information related to the roles that the Government of Jordan and MAJ should play
4 Methodology

4.1 Measurements of Impact in Microfinance

Before explaining the methodology employed for this impact study, it is worth reviewing the different methodologies for assessing impact within the world of microfinance today.

As a general definition, an Impact Study measures the impact of services offered by a microfinance institution on the life of its clients within specific domains such as of employment, revenue, nutrition, education, health, or women’s empowerment. It is the principal means by which the efficiency of microfinance as a tool to fight poverty is determined.

The various methodological tools used to measure the impact of microfinance can be grouped into two categories: the quantitative approaches and the qualitative approaches (which can in turn be subdivided into the participatory and non-participatory methodologies).

4.1.1 Quantitative Approaches

As the name implies, the quantitative approaches used to measure impact in microfinance are concerned with numerical values and countable units (such as revenue, consumption, salaries, etc...). Quantitative tools are useful in that they pose the same question to an entire sample and then measure the frequency of each response. As such, they can indicate tendencies and trends among the sample population. In addition, quantitative tools can provide general information related to an entire population, so long as the sample used is representative of the larger population under consideration.

Quantitative studies are generally based on well-structured questionnaires which allow for results to be counted and easily compared. This approach does not allow for interaction between the interviewer and interviewee. While the disadvantage of this approach is the lack of “verification” that the answers provided correspond to reality (for instance, the interviewer will not verify the monthly profits that the interviewee may claim to receive), the advantages of a quantitative approach include the ability to interview a large number of people, the standardisation of responses, and the synthesis of information.

By far the most ideal way to measure the impact of microfinance would be an experimental, longitudinal comparison between groups who have had access and groups who have not had access to microfinance products and services, with participants chosen through random selection. However, the reality of most microfinance sectors prevents the use of this method: most microfinance sectors do not have sufficient penetration rates among the population at large to be statistically relevant.

Given this constraint, the most frequent methodology used among the quantitative approaches is the quasi-experimental method. This methodology compares the results achieved - in this case, the results of microfinance on selected indicators - with a simulation of what results could have been without microfinance. The quasi-experimental method can be carried out either through an econometric technique of multiple regression or through a comparison between statistically relevant groups, with the latter being by far more common among microfinance impact studies.

One of the more common methods of carrying out the quasi-experimental approach has been to create a sample comparing clients of microfinance institutions with eligible clients and non-eligible
clients (with respect to the selection criteria of the participating MFIs) in regions where the MFIs are and are not present. This methodological framework has been used in studies in both Bangladesh (Pitt and Khandker 1997, Morduch 1998, Zaman 2000) and in Thailand (Coleman 2002, Kobasky and Townsend 2003). This method can provide more detailed and significant results in terms of impact assessment; however, it is a lengthier and more costly approach that is not always feasible.

A second method of the quasi-experimental approach compares active clients with new clients who have not yet received a loan. This method is simpler in terms of data collection as it draws exclusively upon the MFIs’ database of clients, thereby diminishing costs and potential bias in the selection of non-clients. This last point is particularly important, as the characteristics between clients and non-clients are often significant and have a greater influence on poverty levels and business development than participation in a microfinance program. Nonetheless, this approach can be faulty if the MFIs’ recruitment policies or strategies have changed over time, causing a change in the socioeconomic characteristics of old and new clients.

4.1.2 Qualitative Approaches

Qualitative approaches to measuring the impact of microfinance on a set population use the same techniques as those used in the social sciences. Such approaches require extensive knowledge of the local context as a means of placing observed results in their proper setting. There are three main tools for carrying out qualitative studies:

1) Qualitative Interviews. This includes posing open-ended questions, leading a semi-guided discussion, and Focus Group discussions (in which one person leads a guided discussion on a key set of topics and notes the frequency of responses).

2) Direct Observation. This method involves observation of the target population in their environment. Direct observation techniques are largely concerned not with what information is stated but with the subtleties that can be observed by the interviewer. For example, in the case of microfinance, an interview may observe the relationship between the interviewee and her husband or the types of assets that are present in the interviewee’s home. This information would then be compared against the norms of the local context in order to provide an assessment of impact.

3) Case Studies. Case studies can be used in order to explore in detail complex issues or questions that cannot be treated through simple question – response techniques. While case studies cannot stand alone in an impact study, they can be useful compliments to other methodological tools or to provide individual examples.

While the qualitative approaches can be used to draw out information that cannot be obtained from questionnaires alone, there are two main disadvantages to these techniques. Firstly, they are largely dependant on the skill of the lead interviewer and his/ her ability to interpret results in a non-biased and scientific manner; without such skills, observations can be non-demonstrative and anecdotal in nature. Secondly, qualitative approaches in microfinance impact studies cannot determine whether or not results observed are directly related to microfinance or not. As such, these techniques assess causal links more than direct impact.
4.2 Methodology Selected

The primary methodology selected for this impact study has been a quantitative approach based on a standardized questionnaire in which each response is assigned a numeric value that can then be counted and compared. This approach has been selected in order to cover the largest and most nationally-represented sample possible. In addition, the quantitative approach has been employed in order to conduct simultaneously an impact study and a market study, thereby providing quantifiable information to microfinance institutions concerning new products and product characteristics. Nonetheless, as a means of complimenting the quantitative study and verifying results, three qualitative Focus Group discussions were also carried out.

While a quantitative approach has been chosen, it has not been feasible to employ an experimental approach involving the comparison of clients and non-clients randomly chosen from the 13 regions considered here. The rate of penetration of microfinance in Jordan is as of present not strong enough to compare clients to non-clients and thus would not provide accurate results.

As such, this study has been conducted using a quasi-experimental, non-longitudinal approach which compares clients of microfinance programs with respect to their duration of participation in a program. The sample has been divided into three groups of active clients: New clients (those who have been with a microfinance program for six months or less), Medium clients (those who have been with a program for a duration of 6–36 months), and Old clients (those with more than three years participation in a program). In addition, the study has included a fourth group, Drop-Out clients, who have left a microfinance program at least six months before.

Including Drop-Out clients in the sample has the positive effect of limiting bias relative to comparing clients only with respect to the duration of their participation in the program. It is presumed that clients who remain in a microfinance program will demonstrate different characteristics than those who drop out: they could be either the best clients who no longer need a loan, or conversely those who benefited the least from a microfinance program. By including them in the study, potential biases related to the types of clients who remain in a microfinance program will be diminished.

4.2.1 Sampling

The sample size for this study was set at 1,500 clients with an expected margin or error of 20%. In constructing the sample for this study, three initial requirements were taken under consideration and used to create the sample distribution:

1) The study would involve seven Jordanian microfinance institutions/programs. A decision was made by the MFIs that the sample should be proportional to the market-share percentage of each MFI in the microfinance market, thereby requiring a precise distribution of the sample between each MFI.

2) The study would be carried out nationally. Following the same principal of proportional distribution, the number of interviews carried out per region was proportional to market-share percentage of microfinance activity per region.

3) The sample would consist of four groups: New, Medium, Old, and Drop-Out clients. While ideally the sample would be divided equally between the four groups, the reality of the microfinance sector in Jordan is much more pyramidal: there are more New clients than there are Old clients, especially as certain institutions (the NMB, Tamweelcom) are too new to have active clients fulfilling the criteria for Old clients.

Given these requirement, the following distributions were established for the study:
Following two months of data collection and cleaning, the initial sample of 1,500 was shown to have an accuracy rate of 87.5%, meaning that 12.5% of interviews displayed inaccuracies and thus were struck from the database. The following figures represent the final distribution of the sample:

Sample distribution by MFI

<table>
<thead>
<tr>
<th>MFI</th>
<th>Sample Distribution</th>
</tr>
</thead>
<tbody>
<tr>
<td>MFW</td>
<td>32%</td>
</tr>
<tr>
<td>TAMWEELCOM</td>
<td>22%</td>
</tr>
<tr>
<td>MEMCC</td>
<td>9%</td>
</tr>
<tr>
<td>NMB</td>
<td>11%</td>
</tr>
<tr>
<td>DEF</td>
<td>18%</td>
</tr>
<tr>
<td>AMC</td>
<td>4%</td>
</tr>
<tr>
<td>UNRWA</td>
<td>4%</td>
</tr>
<tr>
<td>TOTAL</td>
<td>100%</td>
</tr>
</tbody>
</table>

Sample distribution by type of client

<table>
<thead>
<tr>
<th>Type of Client</th>
<th>Sample Distribution</th>
</tr>
</thead>
<tbody>
<tr>
<td>New</td>
<td>29.2%</td>
</tr>
<tr>
<td>Medium</td>
<td>32%</td>
</tr>
<tr>
<td>Old</td>
<td>16.4%</td>
</tr>
<tr>
<td>Drop-Out</td>
<td>22.4%</td>
</tr>
<tr>
<td>TOTAL</td>
<td>100%</td>
</tr>
</tbody>
</table>

Sample distribution by region

<table>
<thead>
<tr>
<th>Region</th>
<th>Sample Distribution</th>
</tr>
</thead>
<tbody>
<tr>
<td>Amman</td>
<td>40.9%</td>
</tr>
<tr>
<td>Zarqa</td>
<td>14.5%</td>
</tr>
<tr>
<td>Irbid</td>
<td>8.6%</td>
</tr>
<tr>
<td>Rusayfa</td>
<td>7.3%</td>
</tr>
<tr>
<td>Aqaba</td>
<td>2.4%</td>
</tr>
<tr>
<td>Madaba</td>
<td>3.5%</td>
</tr>
<tr>
<td>Mafraq</td>
<td>2%</td>
</tr>
<tr>
<td>Tafeyla</td>
<td>2%</td>
</tr>
<tr>
<td>Ma’an</td>
<td>2%</td>
</tr>
<tr>
<td>Jerash</td>
<td>2%</td>
</tr>
<tr>
<td>Al Baq’a</td>
<td>7%</td>
</tr>
<tr>
<td>Aljoun</td>
<td>2%</td>
</tr>
<tr>
<td>Kerak</td>
<td>5.8%</td>
</tr>
<tr>
<td>TOTAL</td>
<td>100%</td>
</tr>
</tbody>
</table>
4.2.2 Data Collection Methodology

The study used both quantitative and qualitative methods for collecting, cleaning and classing data. The quantitative studied was based on a questionnaire broken down into eight sections. This questionnaire was reviewed with Jordanian market study experts and microfinance stakeholders in order to adapt questions to the local context and obtain results that were both pertinent and useful in terms of research and development for the microfinance institutions. A team of 17 interviewers were trained by PlaNet Finance and deployed in the field over a two-month period, supervised by a local data collection consulting firm.

The choice of clients to be interviewed was achieved through a random selection of MFI databases and according to the criteria for the four groups of clients to be considered in the study. Interviewers were then provided with the list of interviewees to be contacted. However, numerous problems were encountered with this methodology which hampered the speed of data collection. Addresses were often obscure and difficult to find and telephone numbers were usually incorrect (as Jordanian microentrepreneurs change phone numbers very regularly in order to avoid tax or bill collection). To facilitate the data collection, a decision was made to enlist the help of branch managers and loan officers in the process of locating and identifying clients. When a client either could not be contacted or did not want to participate in the study, the branch managers provided alternative clients with the same profile for the interviewers.

The qualitative study was achieved through three Focus Group discussions held in Amman, each lasting approximately one hour and involving 6-8 microentrepreneurs. The discussion guide used the same basic framework as the questionnaire, although spent more time focusing on questions related to loan use and satisfaction, the demand for microfinance services (including new products), and the perception of impact on the business, household, and individual levels. The discussions were carried out by an external consultant, trained by PlaNet Finance.

The data collected included a large and diverse quantity of information, divided into eight general categories: demographic and household information, economic activity, evolution of the demand for financial services, investments, perception of impact on the household, perception of impact on women’s empowerment, perception of wealth, and reasons for drop-out.

4.3 General Framework for the Impact Evaluation

4.3.1 Hypotheses

This study has been based on a series of hypotheses which have served to determine the methodological framework and approach used. The hypotheses are:

- Participation in a microfinance program has a positive effect on a series of variables related to the economic activity and household poverty level. These positive effects increase with the duration of participation in a microfinance program (which generally implies a larger number of loans obtained of increasingly larger amounts).
- The degree of impact can vary based on external factors, such as the environment of the client, household size, and the capacity of the microentrepreneur to build and maintain an income-generating activity.
- The intensity of impact varies with the target clientele of the microfinance institution (meaning that different MFIs may target different types of clients, which will influence the results).
• The impact of participation in a microfinance program could be negative in cases of over-indebtedness of the client or poor use of a microcredit.

4.3.2 Indicators for Measuring Impact

The assessment of impact of microfinance is measured against a series of indicators related to the economic activity, the household, and the individual.

• At the level of the economic activity, the study considers indicators related to the microenterprise (sales, profits, investments, number of employees), access to markets (access to inputs and commercialization), and diversification of the activity.

• At the household level, the study examines the impact on household income and consumption, the accumulation of assets, and the education of children.

• At the individual level, impact is measured on the contribution to household budget, perception of empowerment, overall feeling of financial security, and living conditions (home, nutrition, health).

4.3.3 Participation and Control Variables

The evaluation of impact with respect to participation in a microfinance program is assessed with respect to a series of quantifiable variables: the number of credits obtained, the credit amounts, the accumulated loan amount, duration of participation in a microfinance program, etc…

It is worth noting, however, that the degree of impact will be affected by control variables related to the household, the activity, and the environment. These include variables such as gender, degree of education, household size, type of activity, location, the MFI, etc….

4.4 Specific Framework for the Impact Evaluation

As previously stated, the principal objective of the impact study is to assess the effect of participation in a microfinance program on a series of economic, social, and poverty indicators (monthly profit, food consumption, etc…). The study uses the following equation as the basis for evaluation:

\[ Y_i = \alpha X_i + \beta R_i + \delta C_i + \epsilon_i \]  

With \( Y_i \), standing for the indicator being studied; \( X_i \) a demographic characteristic vector; \( R_i \) a vector indicating the characteristics of the region or the sector; and \( C_i \) indicating the level of participation.

Treating this specification alone is likely to produce biased results. In reality, the level of participation is potentially correlated to the characteristics of the population and the indicators. It is possible to control the observable characteristics (those of the household for example, represented here by "\( X_i \)") but the unobservable characteristics (such as "entrepreneurial" aptitudes or qualities) are likely to
determine jointly C and Y. In the majority of cases, the degree of participation is not exogenous; therefore, to estimate correctly the impact, it is necessary to estimate the impact of C on Y by separating the correlation between X and C and by resolving the causality problem between Y and C.

4.4.1 The Impact of Duration of Participation in the Program

A first evaluation method is to compare the impact indicators in relation to the duration of participation in the program, from the date of the first credit until the moment of the investigation.

\[ Y_i = \alpha X_i + \beta R_i + \Pi D_i + \varepsilon_i \quad (2) \]

\( Y_i \) is the impact indicator to be studied; \( X_i \) and \( R_i \) are the demographic and regional characteristics of the vectors; \( D_i \) represents the degree of participation in the program.

The analysis is more specified when we take into account the level of wealth of the clients at this moment and three years ago.

\[ Y_i = \alpha X_i + \beta R_i + \delta_1 T_1 + \delta_2 T_2 + \delta_3 T_3 + \gamma_1 D_1 + \gamma_2 D_2 + \gamma_3 D_3 + \varepsilon_i \quad (3) \]

With \( T_1 \), \( T_2 \), and \( T_3 \) corresponding to the tiers of client wealth - poor, medium, rich – before participation in a microfinance program and \( D_1 \), \( D_2 \), and \( D_3 \) corresponding to their respective duration of participation in the program.

4.4.2 The Impact of Participation

An alternative approach consists of comparing the group of clients having received at least one credit (active clients) with new clients who have not yet received a credit (non-active clients), including drop outs.

\[ E\{Y | C = 1, X\} - Y | C = 0, X\} \quad (4) \]

With \( C = 1 \) if the participation in a microfinance program is active and \( C = 0 \) if not. The impact equation is thus:

\[ Y_i = \alpha X_i + \beta V_i + \delta C_i + \varepsilon_i \quad (5) \]

This approach is more detailed when data can be treated in a chronological series:

\[ E\{Y_{t} | C = 1, X\} - Y_{t} | C = 1, X\} - \{Y_{t1} | C = 0, X\} - Y_{t1} | C = 0, X\} \quad (6) \]

With \( t \) representing the current period and \( t1 \) representing the period passed.

The impact equation thus is:

\[ dY_i = \alpha X_i + \beta V_i + \delta C_i + \varepsilon_i \quad \text{with } C_i (0,1) \quad (7) \]

The effect of participation is evaluated by the interactions of two variables or the Difference in Differences (DID).

\[ Y_i = \alpha_0 + \beta_0 dT + \alpha_1 dC + \beta_1 dTdC + u \quad (8) \]
With \( dT \) acting as a dummy variable representing the current period; \( dC \) a dummy variable representing the group of active clients; and with the coefficient \( \beta \) being linked to the interaction between the two variables.

### 4.4.3 Complementary Analysis of the Duration of Participation: The Instrumental Variable Regression Method

While the equations mentioned above allow for an evaluation of significant difference between clients with respect to the duration of their participation in a microfinance program, they do not solve the problems related to endogenous factors influencing impact. The moment in which a person decides to participate in a microfinance program may be dependant on certain variables that are not observable but that have an effect on the selected indicators. Such endogenous factors may include entrepreneurial capacity, for example, which could explain why certain microentrepreneurs join a microfinance program as soon as a new branch opens while others may wait years before applying.

This point leads to the major problem in this type of impact evaluation: the central variable for analysis is not completely exogenous. For this reason, it is essential to add a second method of analysis to the measurement of impact. For the purposes of this study, two variables—that are exogenous to impact—will be utilized to evaluate the duration of participation in a microfinance program.

The objective of the instrumental variable regression method is to eliminate the biases linked to the endogenous aspect of the variable of duration of participation in a microfinance program. This method is divided into two steps. The first step consists of evaluating the duration of participation in a program using the following specification:

\[
D_i = \alpha X_i + \beta R_i + \Pi Z_i + \varepsilon_i \quad (9)
\]

Where \( D_i \) represents the duration of participation in a program; \( X_i \) represents a demographic and economic variable; \( R_i \) is a dummy variable vector which represents the region; \( Z_i \) is a characteristic vector that affects \( D_i \) without affecting other characteristics and where \( Z_i \) is an instrumental variable; and \( \varepsilon_i \) is an error term.

The two instrumental variables that have been chosen to evaluate duration of participation in a program are: the number of years of existence of the program (per branch) and the number of years of spent in the microbusiness. These two instrumental variables are correlated to the variable of participation but not to the impact indicators or demographic characteristics. As such, they fit the criteria for instrumental variable regression.

The second step consists of integrating into the impact equation the “instrumental” duration of participation:

\[
Y_i = \alpha X_i + \beta R_i + \Pi D_i + \varepsilon_i \quad (10)
\]

Where \( Y_i \) is the impact indicator to be measured; \( X_i \) is the demographic characteristic vector; \( R_i \) is the regional characteristic vector; and \( D_i \) represents the instrumental duration of participation.

### 4.4.4 Perception of Impact of Participation

This perception of the impact of microfinance on clients is measured through a series of indicators, divided into two categories: material household indicators (nutrition, education, health, pleasure) and
immaterial indicators (autonomy and empowerment, consideration of children, consideration of partner, conflicts, serenity).

The perception of change is treated in the analysis as a discrete variable (1,0) in which clients either perceive a positive change or not. The objective is to evaluate the reasons for perception of change for each indicator. The probability is evaluated through logical regression:

$$Y_i = \alpha X_i + \beta R_i + \Pi D_i + \epsilon_i$$  \hspace{1cm} (11)

Where $Y_i$ is the perception indicator to be evaluated with $Y_i = 1$ if the change is positive and $Y_i = 0$ if otherwise; $X_i$ is the demographic characteristic vector; $E_i$ is an economic activity characteristic vector; and $D_i$ represents the time period since obtaining the first loan.

This specification can be further detailed by taking into account the degree of wealth of clients before participation in the program:

$$Y_i = \alpha X_i + \beta R_i + \delta_1 T_1 + \delta_2 T_2 + \delta_3 T_3 + Y_1 D_1 + Y_2 D_2 + Y_3 D_3 + \epsilon_i$$  \hspace{1cm} (12)

Where $T_1$, $T_2$, and $T_3$ correspond to the tiers of wealth of clients – poor, medium, rich – before participation in the microfinance program and where $D_1$, $D_2$, and $D_3$ correspond to their respective duration of participation.

### 4.4.5 Interpretation of Results

The different results are presented with their level of significance at 1%, 5% and 10%. Above these levels of significance, the results are not considered for the study if the variables are quantitative and not qualitative.

The results should be, however, interpreted with precaution because of the limited number of observations in this study and because of the non-quantifiable aspects (the political and economic situation, the managerial skills of the clients) that might affect results.
5 Socio-Economic Characteristics

5.1 General Information

5.1.1 Demographics

The total sample size is 1,314 people, of which 910 (69.3%) are women and 404 (30.7%) are men.

This is due to the fact that many MFIs in Jordan place an emphasis on providing financial services to women in particular, especially Tamweelcom and Microfund for Women, who represent a significant proportion of the sample.

The average age of clients is 37 years and most of them are married (75%).

As the graph at right depicts, 20.9% of respondents have completed higher education (a university degree or professional diploma); 32.6% have completed high school; 41.8% have received less than high school education; and 4.8% received no formal schooling.

The level of education varies between men and women, and is generally higher for men: only 5% of the women hold a university diploma versus 17% of men. Likewise, while 47% of women have less than high school education, only 31% of men have not completed at least high school.

Nonetheless, 93.8% of respondents state that they are able to read.

In the average microentrepreneur household there are 3 adults 18 years of age or older and 2.3 dependants under the age of 18. A full quarter of the sample does not have children.

In terms of the education of children, 5% state that their children have received no formal education and 57% state that their children have not attained a high school diploma. 15% of those sampled state that their children have advanced degrees.
51.3% of the respondents do not pay rent on their homes, indicating that they are either home owners or have other living arrangements.

5.1.2 Evaluation of Wealth: Index of Asset Ownership

In order to evaluate wealth, an asset ownership index is used to subdivide a sample into several groups with respect to their degree of wealth. Each individual or household included in the sample is assigned a score, based on the number or nature of assets owned by the household. This index has been used to divide the sample into five “quintiles” or groups of equal size (see methodology explanation in annex).

The following graphs depict this wealth index in which each group is assigned a value ranging from 1 - 5 where the Group 1 is the poorest quintile and Group 5 is the wealthiest quintile. These groups do not represent a poverty index for Jordan as a whole, but rather a poverty index for the sample used for this survey.

In general, Groups 1 and 2 microentrepreneurs have the most basic income-generating activities while Groups 4 and 5 have the most formal micro or small enterprises. These groups will be kept in mind during the analysis of the data. The objective is to determine the differences between the microenterprises of poorer clients and wealthier clients and to determine the relationship between level of wealth and impact on business development and improvement of quality of life.
As the graph above shows, MFIs in Jordan, on the whole, are active in the same market. The majority of clients for all MFIs except AMC, and to a lesser extent UNRWA, fall in the poorest wealth group. AMC is the only MFI that targets primarily richer clients, with the majority of its clients falling into the richest wealth group.

The index indicates that the microfinance sector in Jordan is stable in terms of income generation among the poorest. However, the poor representation of MFIs in the upper quintiles (Groups 4 and 5) indicates that small enterprises are less well served. As these enterprises are primarily responsible for the creation of jobs, increasing access to finance for clients with the characteristics of Groups 4 and 5 would likewise stimulate job creation. This would entail developing products that are specifically designed for these quintiles and fit their needs, especially in terms of loan size and client graduation. The analyses in this study will confirm this information.
Wealth of microentrepreneurs varies per location in Jordan. The proportion of relatively wealthier respondents is higher in the North region of the country, while there is a higher concentration of respondents in the poorer quintiles in the South region of Jordan. Moreover, the proportion of relatively wealthier respondents is higher in rural areas (44% of respondents), while there is a higher concentration of respondents in the poorer quintiles in semi-urban areas.

The proportion of relatively wealthier respondents is higher in Saqf al Sail, while there is a higher concentration of respondents in the poorer quintiles in Tafeela. The distribution is more even in Ashrafia, Irbid, Aqaba, Ma’an, Ajloun, and Jerash.
5.1.3 Household Expenses

In terms of average monthly household expenditures, the survey indicates that spending on Food is the most important household expense, at an average of 132 JDs per month.

For households that pay rent on their home, Rent comes in as the second most important monthly expense, at 73 JDs per month, with a range varying from 20-300 JDs.

Transportation is the third most important monthly expense, with an average of 48 JDs per month.

Out of 565 respondents who answered the question, the average monthly expenditure on Education is 48 JDs.

Average monthly expenditure on Utilities is 37 JDs, while the average monthly expenditure on Health Services is 27 JDs.

Out of 508 respondents who answered the question, the average monthly expenditure on Special Events is 21 JDs.

178 of respondents state that they give monthly to charity, for an average of 18 JDs.

5.1.4 Mean Priority of the Household

Most respondents listed non-essential matters as the primary concern or priority of their household. 67% of those interviewed listed Social Events, Family-Related Expenses, and Personal Consumption as the primary concern of the household. 21% of respondents stated that Health and Education was the primary priority, while only 10% listed Availability of Work as the top concern of their household.

In terms of second concern of the family, it is worth noting that Social Events, Family-Related Expenses, and Personal Consumption still rank above other concerns, meaning that among those that did not list this as the first priority, 62% listed it as a second priority.

Availability of Work systematically has the lowest percentage, indicating that it is not a primary concern among microentrepreneurs interviewed. This can either be explained by the fact that 1,185 of those interviewed (out of 1,314) currently have an economic activity, or by perceived stability of work availability and income-generation.
5.2 Information about Economic Activities

5.2.1 General Information

Trade is the most important activity of the respondents in Jordan (59%), followed by Handicrafts and Small Producing Industry (15%) and Services (14%). When asked directly, 86 of those interviewed stated that they did not have an economic activity. However, results from the rest of the survey put this figure at 129 respondents.

The second graph (below) shows the distribution of respondents by type of activity. Almost all activities show the highest concentration in the central region. The major exception is Agriculture and Breeding, which is equally distributed in the north and central regions.

In terms of gender, the proportion of women is much higher in certain activities, and most especially among Agriculture and Breeding activities, where 94% of those responding are women. Among Handicraft and Small Producing Industry microentrepreneurs, 90% are women. Likewise, among the respondents who do not currently have an activity, 87% are women.
Only 9% of those interviewed — 124 people — have a second activity. Moreover, among those interviewed, only 23.1% would be interested starting a new activity.

Among the poorest quintile of the survey, only 15% of microentrepreneurs in Group 1 would be interested in starting a new activity. This figure increases as wealth increases: Groups 4 and 5 are more interested in starting a new activity, with 27.7% and 30.2% interested respectively. This indicates that the poorest microentrepreneurs are not as interested in creating new businesses as less poor microentrepreneurs. The reasons for this may be that wealthier microentrepreneurs have are more skilled and thus have an easier time launching businesses, or that they have more economic stability to take the risk in starting a new activity. Regardless, the fact that Groups 4 and 5 are more interested in starting a new activity indicates that they could be the target clients of “Business Start-Up Loans.”

In terms of gender, there is no difference between men and women regarding the desire to start a new activity. Furthermore, the desire to start a new activity is not linked to what type of activity the microentrepreneur is currently exercising. Thus, the target clients for “Business Start-Up Loans” should as a general rule by richer microentrepreneurs with less regard to their activity or gender.

The average number of years that respondents have been working in their primary activity is 5 years.
In terms of first source of financing, the majority of microentrepreneurs surveyed (55%) use their MFI as their primary source of financing.

35% declare that they are self-financed, followed by Family and Friends (5.6%). Other sources of finance are statistically inconsequential.

Among those surveyed, 38.3% rely on more than one source of financing for their activities.

Thus, the survey quite clearly demonstrates that microfinance is the only meaningful source of external finance for the entrepreneurial poor in Jordan.

*Please see section on sources of financing in this survey for further detail.*
As the following two charts show, the majority of microentrepreneurs surveyed sell their products and services from their homes (39.7%) or in markets (36.9%). This is followed by shops (21%). The sale of goods through an intermediary is very uncommon (only 2.4%).

The money cycle of products show that 53% of those interviewed follow a daily money cycle.

In Jordan, 51.8% of respondents run home-based businesses.

These businesses are mainly run by female respondents, as an overwhelming 96% of home-based enterprises are run by women. In terms of non home-based businesses, women only run 38.5%. The implication is that women microentrepreneurs in Jordan – though economically active – are still largely confined to the home environment.

Moreover, the frequency of home-run businesses is also dependent on the level of wealth of the microentrepreneur. The results show that the proportion of respondents working at home increases significantly as their level of wealth decreases. 67% of Group 1 microentrepreneurs work at home while only 29% of Group 5 entrepreneurs run a home-based business.

46.2% of microenterprises are formally registered, while 53.8% are either not registered or are informal. All respondents who declare having a business (1,185 people)
Gender of the business owner affects registration status. Of the 46.2% who declare that their business is formal, 61% are men. Likewise, of the 53.8% of business that are not registered, 68% are run by women.

The above figures indicate, thus, that women microentrepreneurs are more present and dominant in the informal sector, while men microentrepreneurs tend to be more active in the formal economic system.

Finally, the survey indicates that the level of wealth of the microentrepreneur also has an impact on the registration status of the business. The proportion of respondents which have a registered businesses increases significantly as their level of wealth increases. For instance, only one third of the poorest quintile works has a registered business compared to about two thirds of the wealthiest quintile.

This data confirms that Group 1 microentrepreneurs run the most basic income-generating activities and that Group 5 microfinance clients have the most formal businesses.

5.2.2 Seasonality

In terms of seasonality of activities, the graphs below show the activity level throughout the year. Respondents were asked to rank each month’s level of activity according to the following criteria: 0: No activity; 1: Low activity; 2: Average activity; 3: Strong activity.

The seasonal variability of economic activities is moderate for the majority of respondents in all sectors. The following chart tracks activity level for all activities in general and three activities in particular: Trade, Services, and Handicraft and Small Producing Industry.

Sales are slightly higher during the summer season, from June to September, and lower in the winter months.
Concerning seasonality of credit needs, respondents were asked to rank each month’s level of activity according to the following criteria: 0: No need; 1: Need.

Credit needs are higher when the activity level is high, in particular during the summer months, with a high spike in need in June. This is a direct result of the need to purchase stock and equipment in order to meet the higher level of activity in the summer. There is also a significant drop in the need for credit during April. Finally, microentrepreneurs working in services experience a spike in need at the end of the year, which indicated that they may use loans for income-smoothing.
5.3 Mapping

5.3.1 Demographic Mapping

Mapping exercises consist of segmenting the sample and identifying several homogeneous groups according to a set of variables, here gender, age, education and household composition. This exercise provides furthering profiling of Jordanian microentrepreneurs.

Three homogeneous groups of individuals can be identified within the global sample:
- A group of women without any formal education or with formal education less than high school. This group is composed of Group 1, Group 2, and Group 3 wealth groups aged from 32 and 40, whose household is composed of 0 - 4 persons.

- A group of men holding university degrees. This group is composed of Group 4 and Group 5 wealth groups of maximum 32 years old whose household counts 4 -6 members.

- A group of men with at least a high school education or a diploma. This group is composed of Group 4 and Group 5 men aged from 32 – 40 years, whose household has more than 6 members.
5.3.2 Activity Mapping

The mapping of the economic activities includes following variables: types of activities (trade, services, handicraft and agriculture), monthly profit, and age of activities.

Four homogeneous groups of economic activities can be clearly identified within the sample:

- Clients whose main activity is trade. They gain monthly between 50 and 130 JDs as profit. Their activity is 1-3 years old.
• Clients in services. Their monthly profit exceeds 250 JDs per month and their activity is more than 6 years old.

• Clients whose activity is handicrafts. They make less than 50 JD monthly profit. Their activity is 3 - 6 years old.

• Finally, clients in agriculture whose monthly profit ranges from 130 – 250 JDs. Their activity is less than 1 year old.
6 Impact Evaluation

Before analyzing the impact of microfinance on different indicators, it is worth noting that the inflation rate in Jordan has been on the rise since the onset of the war in Iraq and has contributed to rising food prices, fuel prices, and real estate prices. From 2003 to 2006, the inflation rate rose from 1.6% to 6.25%, as measured by the consumer price index and as cited by the Central Bank of Jordan Monthly Statistical Bulletin. Food prices in particular have risen by 21% since 2002. The results of this study have not taken into account inflation; however, this fact should be kept in mind when analyzing results.

6.1 Impact on Economic Activity

6.1.1 Impact on Profit

By comparing the median monthly profit of respondents with their duration of participation in a microfinance program, it is possible to establish a correlation between the two. The sample shows that Old clients have median profits of 150 JDs per month. This median decreases to 125 JDs per month for Medium clients and 130 JDs per month for New clients.

In other words, Old clients have 15.4% higher monthly profits.

The data can be interpreted in several ways. The slight decrease in median monthly profits by Medium clients may be attributed to the fact that average first loan sizes are higher today for New clients than they were for Medium clients, meaning that there is an effect of “upscale” of microloans which could lead to higher monthly profits. In addition, the fact that Old clients have higher monthly profits indicates that their microenterprises are better performing than those of New and Medium clients.
6.1.2 Impact on Investment

Amount of Investment
The investments made by clients in their economic activities are significantly correlated to the duration of their participation in a microfinance program. The global sample shows that Old clients have invested during the last three years a median amount of about 700 JDs. This median amount decreases to 500 JDs for Medium clients and to 300 JDs for New clients.

In other words, Old clients have a median amount of investment that is equivalent to more than twice that of New clients.

There exists thus a positive and significant relationship between the level of participation in a microfinance program and investment in microenterprise. This information is confirmed by the qualitative analysis, which indicates that 82% of the respondents are satisfied with their investments.

Moreover, investments were shown to have a relative impact on clients’ activities. For 46% of respondents, investments have allowed clients to buy more input/stocks. Investments have also allowed 25% of respondents to increase their sales and 13% to increase their profits.

For 13% of the respondents, their investments have no impact on their activities.

The second table compares the level of monthly profits by the wealth index group. The graph shows that the clients in Group 1 have the smallest monthly profits (at 90 JDs) and that the wealthiest microentrepreneurs in Group 5 have the highest monthly profits (at 250 JDs).

As Group 4 and Group 5 clients generally run the most formal microenterprises, this indicates that microfinance has a greater impact on the monthly profits of microentrepreneurs running more formal businesses than those running informal income-generating activities.
Nature of Investments

The graph at left shows that microenterprises invest mainly to buy stock (75%). Investments in equipment and in shop premises are in the minority (25%). However, there is no significant correlation between the nature of investments and duration of participation in a microfinance program. In other words, no significant differences were observed in the types of investments made by Old, Medium, and New clients.

6.1.3 Employment

37% of microenterprises employ other laborers, of which 64% employ full-time paid labor versus 13% part-time paid labor. Microenterprises that employ full-time and part-time unpaid labor represent respectively 10% and 12% of the sample.

The graph below demonstrates that the average number of full-time employees fluctuates significantly depending on the duration of participation in a microfinance program.

The average number of full-time employees is significantly higher for Old clients (0.44 employees on average per microenterprise) than Medium clients (0.39) and New clients (0.24).

By using the technique of multiple regression, it is possible to observe that the duration of participation in a microfinance program increases the level of employment. On average, there is an increase of about 0.12 employees between New clients and Medium clients. The increase is 0.29 employees between New clients and Old clients.

In terms of type of business and employment level, the survey shows that microenterprises working in the domain of services have the highest employment level at 0.7 employees per microenterprise. This drops to 0.4 employees per microenterprise for handicrafts and trade.

In terms of wealth group, Group 1 microentrepreneurs have the least number of employees (0.18 per microenterprise) and Group 5 microentrepreneurs have the most (0.89 per microenterprise). These figures indicate that Group 4 and Group 5 microenterprises create more jobs.

Results are statistically significant at 1% and 5%. (See annex)

6.1.4 Access to Market

The mapping of access to market includes the following variables: place of activities (market, shops, home, intermediaries), satisfaction with inputs, employment, and type of clients (Old, Medium and New).
The three types of clients (New, Medium, and Old) belong to groups with different market access:

- New clients who sell their products in shops and in their homes. They do not employ laborers.

- Medium clients who sell their products in markets, through intermediaries, and in their homes. They are satisfied with their investment in inputs and they do not employ laborers.

- Old clients who sell their products in markets and shops. They employ labors but are not satisfied with their investment in inputs.
6.2 Impact on Household

6.2.1 Contribution to Monthly Expenses

Old and Medium clients contribute more significantly to the budget of their household than New clients. New clients contribute on average 187 JDs per month, Medium clients 202 JDs per month, and Old clients 225 JDs per month.

As median amount of contribution, 50% of New clients spend 100 JDs for their household versus 150 JDs for 50% of Old and Medium clients.

6.2.2 Consumption Expenses

There are no significant differences between the three types of clients concerning their total household expenses and their expenses per capita.

However, within each type of client group, there is a slight difference in expenses regarding food expenditure. New clients spend on average 138 JDs per month while Medium clients spend 135 JDs. Old clients spend on average less than the other two other groups (with an average of 128 JDs per month).
month).
From the data, it is possible to surmise that there is no clear relationship between the level of participation in microfinance programme and the level of household expenditure.

6.2.3 Education of Children

With regards to the education of children and differences between the education of boys and girls, the results to not indicate a correlation between duration of participation in a microfinance program and increased schooling of children.

On average, Old clients send 2.5 children (boys and girls) to school while New and Medium clients send respectively 2.3 and 2.2 children to school. These differences are not, however, statistically significant.

Regarding children's education by gender, Old clients have more boys (1.5) than girls (1.2) in schools. The number of girls sent to school by new clients is the same as the number of boys (1.3).

6.2.4 Detention of Assets

In comparing asset detention between Groups 1 – 5 as per the wealth index presented above, the survey shows that assets held by 7% of Group 1 respondents have increased since the last three years while 3% of Group 5 respondents have seen their assets decrease. The number of people in Group 3 has thus increased by 10% over the last three years.

9% of Old clients have increased their assets during the last three years and have thus changed
wealth class (moving up from Group 1 or 2 to Group 3). Likewise, 5% of Medium clients and 7% of New clients have moved into Group 3 and 1% into Group 5.

Nonetheless, the number of Old clients considered as Group 5 three years ago has reduced by 3%, thereby moving them into Group 3. 5% of Medium clients who were considered Group 5 three years ago have also moved into Group 3.

The reasons for these different movements are difficult to explain as the declarations of each client could not all be verified by the interviewer.
7 Perception of Impact

7.1 Impact Perception

This section consists of analyzing client perception and estimation of the impact of microfinance on a set of specific social indicators that provide insight into level of poverty and quality of life. The indicators can be divided into two categories: tangible indicators related to household and lifestyle (food, children’s education, health, leisure) and intangible indicators (autonomy, respect from partner, respect from children, stress, conflicts and tension in family).

7.1.1 Tangible Indicators by Gender

Comparing the impact perceived by microentrepreneurs on tangible indicators reveals interesting gender differences. The one domain in which women microentrepreneurs perceive a greater impact than men is in the education of their children. This may be related to the tendency of women microentrepreneurs to invest more in their children’s education than men. Likewise, where women perceive the least impact is in leisure time.

The graph of tangible indicators shows that 66% of women respondents versus 77% of men respondents have noticed a positive change in their food since the start of participation in a microfinance program.

In terms of children’s education, 41% of women and 38% of men notice a positive change. Concerning health, 46% of women observe a positive change, versus 50% of men. Finally, in terms of leisure, only 24% of women perceive an impact versus 40% of men.
7.1.2 Intangible Indicators by Gender

In terms of intangible indicators, the graph at left shows once again that women and men perceive different levels of impact. Concerning autonomy, both men and women microentrepreneurs perceive high levels of impact.

However, the perception of impact of microfinance on the level of respect from the spouse is higher for men than women, at 67% for men and 53% for women.

Concerning the perception of impact on respect from children, the statistics are almost identical.

Finally, concerning the perception of impact of microfinance on stress, men perceive a much greater impact than women (at 45% for men versus 20% for women).

7.2 Analysis of Factors Determining Change

As presented in the methodology, the analyses provided below use the technique of logistic regression in order to analyse the factors which determine change. This section will analyse four indicators in particular: food, health, autonomy, and education.
7.2.1 Autonomy

An increase and reinforcement of the sense of autonomy is the domain in which Old clients perceive the greatest impact of their participation in a microfinance program. 86.7% of respondents declare a positive impact on their sense of autonomy. This question was only asked to Old clients as it was believed that they were the only ones to have a long enough history of microcredit to perceive an impact in this domain.

However, this positive correlation between participation in a microfinance program and increased sense of autonomy differs by gender. According to the results of data regression, the probability that a woman client will perceive positive change in her sense of autonomy is 21% lower than the probability for a man. (See annex)

The same analysis by wealth groups shows that clients who fell into Groups 4 and 5 three years ago have a higher probability (24%) of perceiving a positive impact in their autonomy in comparison to clients falling in Group 3. The variable related to Group 1 and 2 clients is not statistically significant and cannot thus be interpreted. (See annex).

7.2.2 Food

More than 70% of the respondents have noticed a positive change in their food since the start of their participation in the microfinance program.

The results of the probit regression show that men’s probability of perceiving positive change in food of their family is higher in comparison to women (see annex).

However, there are no significant differences in change perception between wealth groups of clients and education grade completed by clients.

7.2.3 Health

The perception of impact on health shows somewhat less conclusive results. Although 48% of respondents state that their health has improved since the start of participation in a microfinance program, another 36.7% have not noticed any change while the remaining 15.7% have noticed a negative change.

Comparison of results by gender demonstrates that men are more likely to perceive positive change in the health of their family than women.

On the other hand, data regression does not show any significant difference in the change of perception of family health between wealth groups (See annex).
7.2.4 Children’s Education

40% of clients who have children perceive a positive change in their level of education thanks to their participation in microfinance programs. While it is possible to state that the duration of participation in a microfinance program improves the education of children, the probit regression does not show significant variables to confirm these findings.

7.2.5 Differences in Impact Perception by Location

Identifying differences in impact perception between microentrepreneurs regarding their place of activity and dwelling through probit regression shows interesting information which needs, however, to be further researched as the variables in this study are not statistically significant.
8 Empowerment

8.1 Daily Activities and Organization

60% of clients state that their business has positively changed their daily life in terms of responsibilities and tasks. Only 30% of the respondents have not noticed any change in their daily organization.

Regarding the type of clients, 52% of both New and Old clients (versus 61% of Medium clients) have declared that they have noticed a positive change in daily life in terms of responsibilities and tasks since the start of their participation in the microfinance program.

In comparing these results by gender breakdown, 55% of women versus 53% of men noticed a positive change in their daily life.

On average, 55% of clients falling into Groups 4 and 5 wealth groups versus 53% of those falling in the Groups 1 and 2 wealth groups have noticed a positive change in their daily life.

Regarding domestic tasks, only 35.3% of the respondents have noticed a positive change. For 47.2%, the perception of impact of microfinance on domestic tasks has not changed.

The perception of impact of participation in a microfinance program on domestic tasks is more important for women clients as well as clients falling in Groups 1 and 2 wealth groups.

36% of women clients versus 21% of men clients have noticed that their businesses have a positive effect on their domestic tasks, indicating that the sense of empowerment in this domain is stronger for women that men.

On average, 35% of poor clients versus 23% of rich clients has positive effects of their business on their domestic tasks.

The following two graphs show that the microenterprises of about 30% of respondents have positive effects on increasing time for children and leisure. However, 33% of respondents notice a negative effect of their business on leisure. 18% of respondents state that they do not have enough time for children since their participation in a microfinance program.
On average, men work 10 hours per day in their business while women work on average 6 hours a day. Regarding domestic tasks, women spend on average 3.4 hours per day doing housework while men average 1.1 hours per day.

After analyzing working hours for business by wealth groups, the data show that Groups 4 and 5 clients spend on average 8.5 hours per day in their business versus 6.5 hours for Groups 1 and 2 clients. On the other hand, Groups 1 and 2 spend on average more time (3.1 hours per day) doing domestic works than Groups 4 and 5 (2.3 hours per day).

In terms of duration of participation in a microfinance program, Old clients spend on average more time (8.3 hours per day) than New clients (7.3) in their business. There is no difference between the two groups concerning the time spent doing domestic work.

Additionally, thanks to the help of their spouses, 22% of clients are able to adapt their household to their professional life. Less than 20% of those interviewed evoked the help of children as the means by which they adapt their household to their professional investment (See annex).
8.2 Decision Making

For 46% of men (versus 33% of women), their professional activity gives them more strength in decision-making in their couple.

Results show that microentrepreneurs in semi-urban areas have more strength in decision making in their couple (45%) than microentrepreneurs in urban areas (37%) and rural areas (31%).

The trend is the same when considering microentrepreneurs’ decision-making in their family and in the community in which they are living. (See annex for graphs)

8.3 Support and Perception of Others

86% of MFI clients interviewed stated that their families support their decision to borrow a loan from an MFI.

Borrowers in rural areas and in semi-urban areas are the most supported by their families in the decision to borrow a loan (91%) in comparison to those in urban areas (85%).

In addition, 87% of women clients are supported by their families when borrowing from an MFI versus 85% of men clients. This figure is worth noting as there is a common notion that women clients must often hide the fact that they are borrowing loans from their families and husbands. That 87% of women clients state that they are supported by their family during the process of borrowing a loan shows a positive trend in women’s power of decision-making.

Among problems faced by borrowers as a consequence of their activity, 46% of respondents said that they are tired from their activities. Nonetheless, for 38% of them, there are no problems engendered as a result of their economic activity.
For the majority of borrowers who did not receive support from their family when borrowing from an MFI, the main reason cited was the perception that the family did not need additional income. For a small minority of borrowers, the lack of support from family members during the process of obtaining a microcredit resulted from the feeling that the borrower should take care of the homestead and not the economic activity. Religious reasons or marital status were also cited as reasons for lack of family support.

All questions related to the increase in self-esteem and the impression that others hold show positive trends. 58% of men clients and 54% of women clients declare that others have a positive impression of them. 65% of borrowers living in semi-urban areas declare that others perceive them in a positive manner, while 56% of borrowers in urban areas and 47% in rural areas state that others have a positive impression of them.

Regarding the esteem that they feel within their couple, 37% of respondents declare that their professional activity has positively affected the perception that their spouse or partner shows them as a result of participation in a microfinance program or development of the microenterprise. The trend is similar regarding the esteem that the microentrepreneurs perceive within their family and community.

Finally, nearly all respondents in the sample – 98% - state that their microenterprises contribute to their overall positive self-esteem.
8.4 Business Development Services

Concerning microentrepreneurs’ interest in receiving training from their MFIs to improve their skills, 51% of them are interested in training. This interest is more pronounced among women clients, of whom 55% are interested in receiving training versus only 43% of men clients.

When analysing the interest in training by location of the activity, 53% of urban microentrepreneurs are interested in training in comparison to only 37% of rural clients and 39% of semi-urban clients. Moreover, the results show that Handicrafts and Small Producing Industry microentrepreneurs are the most interested in receiving training, at 65%; agricultural workers and breeders are least interested at 41%.

Only 48% of New clients are interested in training whereas 55% of Old clients have declared their interest in Business Development Services.

Finally, more than 50% of clients falling into Groups 3, 4, and 5 wealth groups are interested in training versus 48% of Groups 1 and 2.

Providing microentrepreneurs with training is considered by 34% of those who are interested as an opportunity to get access to knowledge for more independence in the management of their businesses. For 14% of the interested microentrepreneurs, training will provide access to legal information for further empowerment.

60% of respondents stated that they would be willing to pay for business training. Among them, 72% of men versus 57% of women are ready to pay for the training program. More interestingly, a huge majority of rural microentrepreneurs interested in training - 82% - are ready to pay for training versus 60% of urban clients. In terms of activity, over 70% of microentrepreneurs working in services, agricultural activities, or as employed laborers would be willing to pay for training.

Also of interest, the data shows that willingness to pay for training increases as level of education of the microentrepreneur increases: only 36.7% of those with no education would be willing to pay for training versus 76.1% of those with a university degree. This potentially indicates that the value of training is either better appreciated by those with more formal education.

Finally, the data regression shows, unsurprisingly, that clients falling into Groups 4 and 5 wealth groups are more willing to pay for business development services than clients in Groups 1 and 2 wealth groups (76% versus 47% respectively).

8.5 Wealth and Perception of Wealth

On a scale from 0 to 9, microentrepreneurs were asked to rank their perception of personal wealth. One third of them consider themselves as neither rich nor poor. This figure is interesting when...
compared to the real wealth index calculated from the information collected in the survey. 33% of Group 5 clients, 39% of Group 4 clients, 33% of Group 3 clients, 31% of Group 2 clients, and 26% of Group 1 clients consider themselves as neither rich nor poor.
9 Financial Services Use and Access

9.1 Financial Service Use

The graph at left depicts the loan amount received by New clients from MFIs. The survey sample is comprised of 395 New clients.

The colored rectangle in blue represents where the majority of loan amounts are situated, while the bubbles and marks above represent the extremities (in this case, the few high loan amounts).

The median loan amount is 600 JD, meaning that half of those surveyed received more than 600 JD and half received less.

The graph at right depicts the loan amounts for Medium and Old clients on their first loan received from their MFI.

The median loan amount is 600 JDs, meaning that the first loan amounts for microfinance clients have not changed over the last 3 years.
In terms of MFI loan use, the overwhelming majority of respondents state that their loan was used for their economic activity. 18% state that working capital was the primary use of their loan, 28% state that they used their loan primarily for the start of a new activity, and 36% state that their loan was used to expand their activity.

In terms of non-business related uses for an MFI loan, the reimbursement of a previous debt, the finance of an asset, and personal consumption were cited as the primary uses of loans.

Likewise, the graph at left depicts the loan amounts of the last loans received from MFIs by Medium and Old clients.

The median last loan amount for Medium clients is 1,000 JDs and for Old clients is 1,075 JDs.

This indicates that loan amounts increase over time significantly, reaching an almost 80% increase for Old clients over a three or more year period.

The use of a microcredit from an MFI to start a new economic activity is worth noting, as microfinance is often seen as a tool for business consolidation but not business expansion. This fact has been shown in other impact studies of microfinance, such as the IKM study carried out in Morocco in 2004. Taking a closer look at the 28% who used the loan to start a new economic activity reveals that 71.6% are women and 64.8% work in the services industry. Moreover, 68% are Medium clients versus only 32% Old clients. This last figure implies that while microfinance was used mostly by Old clients for business consolidation, it has since been used more frequently for business creation.

9.1.1 Sources of Credit and Size

Jordanian microentrepreneurs need credit to finance their businesses. In most cases, they turn primarily to MFIs in order to finance their economic activity, followed by self-financing and friends and families.

Only 35 of 1,314 respondents have received loan form a bank in the last three years before the survey,
and only 20 out of 1,314 have borrowed from a money lender in the last three years.

When asked how they fund their economic activity, respondents were allowed to respond with more than one answer. The most prevalent answer was finance through an MFI, as 55% state this as their first source of finance. 35% state that Self-Financing is a first source, and 5.6% state that Family-Friends is their first source of finance.

Out of all respondents, 38.8% listed two sources of finance for their activity, and 5.5% listed at least 3 sources of finance for their economic activity.

That nearly 40% of all those surveyed use at least two sources of credit to finance their activity seems to indicate that loan amounts received from MFIs are not enough to cover all financing needs for microenterprises.

Although very few respondents state that they have received a loan from a bank, money lender, or family member over the past three years, it is worth comparing average loan amounts as a means of situating MFI loans in the formal and informal financial landscape of Jordan.

As the following four charts show, the average loan size from banks tends to be the highest, followed by MFIs. Average loan sizes from money lenders and family members are nearly equal (with a slightly higher average for money lenders), although both fall below the average for MFIs.

These graphs demonstrate that formal sources of finance – banks and MFIs – offer larger loan amounts to microentrepreneurs than informal sources.

The average loan sizes for microentrepreneurs who received a loan from a bank is 6,666 JD while the average loan size for microentrepreneurs who received a loan from an MFI is 1,540 JD. The average loan size from a money lender is 510 JD and from family the average loan size is 419 JD.
The table at right depicts how respondents that received loans from banks, money lenders, and family member used their loans. Respondents were asked if they used their loans for their activity (Yes or No) and their personal consumption (Yes or No). They were then asked what percentage of the loan was used for the activity and what percentage for personal use.

As the table show, loans from family members are the least used for the economic activity, while loans from money lender are the most. In terms of personal consumption, loans from banks and family are more used for personal use than loans from money lenders.

Unfortunately, due to a miscomprehension of a question, it is not possible to determine from the quantitative study what percentage of those surveyed have active loans from more than one institution. The data collected indicates that over 99% of those surveyed have outstanding loans from more than one MFI; however, this extremely high percentage indicates a problem with the question and not with reality of the situation.

Nonetheless, the qualitative study is able to present revealing information on the level of indebtedness of clients. A full third of participants stated that they had an outstanding loan from more than one MFI, indicating that the level of over-indebtedness is quite high. It was not clear from the
Focus Groups if clients realized the potential dangers of overlapping loans: as a case in point, one client was quite proud to state that she had an outstanding loan from every MFI in Jordan.

In order to obtain more valuable information, it is advisable to carry out a separate quantitative study that measures not only the level of over-indebtednesses but also the reasons for this, and especially if overlapping loans are a means of complimenting credit amounts or used to reimburse debts.

9.2 Structure of Credit Demand

9.2.1 Type of Credit

When asked questions concerning the type of loan they would like to receive and what the loan would be used for, 38.5% of respondents stated that their first use of the loan would be to expand their existing microenterprise, while 16.5% stated that the loan would be firstly used for working capital. These responses indicate that microloans are still primarily used for microenterprise development.

Only 9% or respondents stated that the loan's first use would be to finance an asset of for personal consumption. Likewise, only 3.2% of respondents stated that the loan would contribute to the reimbursement of a debt. While this figure is presumably higher in reality (as most clients would not admit as such), it still remains low.

27.5% of respondents state that the loan would firstly be used for the creation of a new economic activity. This figure is more or less confirmed, as 23.1% of respondents stated that they would be interested in starting a new activity if presented with the opportunity.
9.2.2 Preference for a Conventional or Islamic Loan Product

45.6% of respondents state that they would be interested in borrowing an Islamic lending product. However, the figure drops to 35.5% of respondents if the loan proved to be more costly than a conventional product.

The primary reason cited for preference of a Shari'a-compliant loan is for religious reasons, followed by psychological reasons. The different lending methodologies between Islamic and conventional products were not cited or acknowledged by the majority of respondents.

The preference for a conventional loan or an Islamic loan differs based on the location of the microentrepreneur. For respondents living in rural zones, preference for an Islamic loan reaches 62.5%. In urban zones, the majority of respondents prefer conventional loans (55.5%). In semi-urban zone, clients prefer conventional loans 63% to 37%.

The preference for conventional products is higher for men respondents than women. While 62.5% of men prefer conventional products, women interviewed are split 50-50 over type of product preferred.
9.2.3 Loan Size

Microentrepreneurs were asked to state the amount of loan that they would ideally like to borrow. The amounts cited ranged from 150 JDs to 150,000 JDs, with only 13 respondents stating that they do not need a loan.

The median loan size is 2,000 JD. 28% of respondents placed their desired loan amount between 1,000 – 1,999 JDs while 21% between 2,000-2,999 JDs.

In other words, loan products that vary from 1,000-3,000 JDs cover the needs of half of the sample.

Comparing desired loan amount by wealth index group shows that Group 1 clients desire smaller loan amounts than Group 5 clients (1,500 versus 3,000 respectively). This corroborates the fact that Group 5 clients are more likely to have formal businesses and more employees, meaning that their microenterprises have greater financing needs.

With regards to the cost of the loan, the quantitative study used a specific methodology in order to estimate how much microentrepreneurs would be willing to reimburse. The average amount microentrepreneurs would be willing to repay is equivalent to a 24.4% effective interest rate.
Looking at the breakdown of desired loan amount by gender reveals that women overwhelmingly desire smaller loan amounts than men. The table above divides loan amounts into divisions per thousand Jordanian dinars. Among those who stated that they would like less than 1,000 JD, 92.7% were women. Women represent the majority of those desiring loans under 4,000 JDs. Likewise, men represent the majority of those desiring loans of 4,000 JDs or more. For loans of 10,000 JDs or more, men represent 72.7% of respondents.

These statistics indicate either that women need smaller loan amounts than men or that they are less interested in taking the financial risk of a big loan than men are.

If in fact their need for finance is smaller in terms of loan amount than men, this seems to imply that their microenterprises are of smaller scale.

**Loan Size and Location**

Looking at the breakdown of desired loan amount by location, a general pattern can be observed. Respondents living in rural areas desire larger loan amounts: none of those surveyed that stated wanting a loan for under 1,000 JDs live in rural areas; on the other hand, among those requesting 3,000 – 3,999 JDs, almost 10% live in rural areas. More telling, 15.3% of respondents requesting 5,000 – 9,999 JDs live in rural areas and 14.1% of those requesting more than 10,000 JDs live in rural areas.

Respondents living in semi-urban areas can be broken down into generally the same way as those...
living in rural areas: they are situated in the higher loan amounts more than in the lower loan amounts.

For urban dwellers, a clear preference is harder to establish, although there is clearly a wider range of loan amounts among urban dwellers.

These differences can likely be attributed to the differences in type of economic activity exercised by microentrepreneurs living in rural areas versus microentrepreneurs living in urban areas. As rural activities such as agriculture and breeding tend to be expensive, and travel and transportation costs for trade and service activities by rural dwellers are more pronounced, it is normal to observe that rural clients desire higher loan amounts than urban ones. However, the Jordanian MFIs have expressed their scepticism regarding the desired loan amounts of rural dwellers. As such, a specific market study examining the finance needs of rural microentrepreneurs is recommended.

Loan size and Legal Status of Microenterprise

Looking at the breakdown of desired loan amount by legal status of the microenterprise demonstrates a clear correlation between the two: lower loan amounts are requested mostly by unregistered businesses, while higher loan amounts are requested by registered businesses almost exclusively.

For respondents desiring loans of less than 1,000 JDs, 82.5% have unregistered businesses. At the other end of the spectrum, for those requesting loans of 5,000 – 9,999 JDs, 75.4% have registered business, and for those desiring loans of 10,000 JDs or more, 90.7% have registered businesses.

Unregistered businesses are dominant in the loan range of 1 – 2,999 JDs, and registered businesses are dominant for loans above 3,000 JDs.

These figures indicate that registered businesses have higher loans needs than unregistered businesses and thus are likely larger or more developed. This is consistent with trends in informal enterprise throughout the region.

9.2.4 Loan Disbursement

The overwhelming majority of those interviewed – 69% - would mind if their loan was not disbursed in cash. This figure is very high although not surprising as only 28.2% of respondents have a checking bank account.
9.2.5 Loan Repayment Modalities

Repayment Terms

In terms of repayment, 37% of respondents would like a repayment period of 1-2 years, 19% would like a repayment period of one year, and 16.7% would prefer a repayment period of 2-3 years months.

Only 5% of respondents prefer a very short repayment period (under one year). Likewise, only 7% prefer a very long repayment period (more than 4 years).

Installment

Nearly all those surveyed – 96% of respondents – stated that they prefer a once-monthly instalment.
9.2.6 Collateral

Regarding forms of collateral, microentrepreneurs in Jordan are very limited as to what types of collateral they can provide against a loan. 67.9% state that they can provide several guarantors, and 15.8% state that they can provide one solid guarantor.

Only 9.3% state that they can provide one of the following: personal goods, gold, land, or signed check.

6% of those interviewed cannot provide any form of collateral.

9.3 Savings

46.2% of those surveyed state that they save money every month.

Approximately half of these savings are kept at home (49.1%) and slightly less than half are kept in a bank savings account (44.5%).
Looking at the breakdown between place of savings and level of education, it is possible to observe a correlation between level of education and use of informal versus formal savings systems. Of all savers in the sample, only 3.8% have no formal education, indicating that savings is not practiced by those lacking schooling.

For all groups, informal savings are more highly practiced than formal savings through banks. While those with less than high school education prefer saving through cash at home, informal savings groups are preferred by those with high school educations and university degrees.

Looking at the breakdown between place of savings and gender, the sample indicates that women are the overwhelming users of informal savings systems, whether cash at home, informal group saving, or other non-formal mechanisms for saving. Men represent the majority of respondents only for those saving through bank accounts.

59% of those who save use their savings to invest in the business and 22% of respondents keep savings in order to be prepared in cases of emergency. Only 14% of savers dedicate their savings towards family expenses or home improvement.

Only 2% of respondents stated that their savings were used for special events. This statistic is somewhat surprising, as the finance of special events such as weddings or funerals tends to be quite expensive and represents a large portion of a family’s annual budget. The question as to how microentrepreneurs and low-income families finance special events, though not addressed here, would be worth investigating further.

48.1% of savers would be interested in MFI-offered savings accounts.
9.4 Other Financial Services

9.4.1 Insurance Products, Specialized Loans, and Other

In terms of other types of financial services desired, the survey shows that the most requested product is Health Insurance, with 67.5% of respondents stating that they would be interested in such a product. This is followed by a Pension Fund, with 59.8% of respondents expressing their interest in the product. Insurance on loans was also cited by 49.7% of respondents.

In terms of specialized loans, 46.5% of respondents stated that they would be interested in consumption loans while 43.5% expressed their interest in education finance loans.

Property insurance is shown to be less in demand, with only 40.1% of respondents expressing their interest in this option. Money transfers were the least popular product in the survey, with only 21.3% of those surveyed interested in this product.
10 Client Satisfaction

10.1 General Remarks

When asked open-ended questions about the qualities or aspects of their microfinance institution that they found positive and negative, microentrepreneurs provided the following responses:

Respondents are most satisfied with their relationship with their MFI, in particular the relationship between client and loan officer / branch manager. 54% of those surveyed listed this as the most positive aspect of their MFI. 37% of respondents listed the ease of procedures and the offer of loan amounts adapted to their needs as the most positive aspect of their MFI. At a distant third, 4.4% stated that the MFI’s mission to help poor families is the most appreciated dimension of their MFI.

In terms of dislikes, 51.6% of respondents are dissatisfied with the lack of diversity in products and inadequate services. 43.7% claim to be fully satisfied with their MFI or cannot cite a reason for dissatisfaction.

Following this exercise, participants were asked to rate their MFI on specific aspects related to the MFI-Client relationship and to the financial conditions and services proposed. These responses provide more insight to client satisfaction, and especially dissatisfaction.

10.2 Relationship between MFIs and their Clients

Respondents were asked to rank their relationship with their MFI using the following scale:
1: Excellent; 2: Good; 3: Average; 4: Bad; 5 Very Bad. An average score has been calculated accordingly.

Three quarters of respondents rate the willingness of MFI staff to assist clients and the professionalism of the institution as excellent, with another fifth of respondents rating these two elements as good. 68% of respondents rate staff availability as excellent and another 25% state that it is good. Similar figures apply to the relationship between loan officer and client. In other words, 95% of respondents state that the attitude and comportment of their institution is above average.

Similarly, the speed of loan disbursement is ranked as excellent by 70% of respondents, with another 23% stating that it is good.

The one domain in which MFIs did not receive as high of ratings was the distance between the client’s home to the MFI office. 15% of respondents stated rated this element as average while 4% rated this distance as bad.
10.3 Appreciation of MFI Products and Services

As above, respondents were asked to rank their relationship with their MFI using the following scale: 1: Excellent; 2: Good; 3: Average; 4: Bad; 5 Very Bad. The average score was once again calculated accordingly.

As can be seen above, financial conditions and services proposed are less highly rated in general than the MFI-Client relationship. The most positively rated aspect is the access conditions, of which 84% of respondents rated as above average. Repayment mechanisms, loan amounts, and guarantees all fall with in the same range of appreciation: around 75% of respondents rate them as above average, with repayment mechanisms being the best rated.

Grace periods were less well rated, with a full 10% of the sample stating that the grace periods offered
by their MFIs were bad.

The aspect of financial conditions and services most poorly rated by participants is the interest rates on loans. 17% of participants considered the interest rates bad and another 9% stated that they are very bad. The fact that 26% of respondents – a full quarter of the survey – state that interest rates are problematic is significant as it shows that clients in Jordan have a very good sense that their loans have a cost. Other impact studies carried out in different countries rarely show such high levels of dissatisfaction with interest rate, indicating that clients in Jordan are more aware of the characteristics and mechanisms of financial services.

**Applying for a Loan**

When asked the three most important factors that influenced their decision to apply for a loan, 40% of microentrepreneurs stated that the procedures and mechanisms for applying were the most important influence. 36% stated that they were most influenced by the desire to ensure the success of their business, while 14% stated that their decision to apply stemmed from a personal reason or special event. 7% were not able to state what influences them to apply for a loan.

Only 2 out of 1,314 respondents stated that the lack of conflict with religious beliefs was the main influence in their decision to apply for a loan.

These answers are revealing, as they indicate that the facility of applying is a bigger factor than the need. Moreover, the fact that 14% of respondents state that their decision to apply for a loan was related to the onset of a special occasion or personal reason indicates that a larger number of loans are used for personal consumption than indicated when asked the question directly.

**Facility of Borrowing**

The majority of clients – 78% - state that it is easy or very easy to become a client of their MFI.

Only a very small percentage estimates that it's difficult to become a member (under 6%).

22% of the borrowers think that nothing would have changed in their business if they had not received a loan from their MFI and 7% state that their economic situation would be better had they not taken a loan.

However, 34% think that they would not have invested and 14% estimate that their businesses would have stopped without the MFI's services.

12% said they would have applied for a loan from another MFI had their current MFI rejected their loan application.
11 Drop-out clients

Former clients provided several reasons for their departure from their microfinance program. The next sections will describe in details these reasons, which can be classified in several broad categories: MFI product and services, personal reasons, business reasons, socioeconomic environment reasons, group reasons.

11.1 General Observations

Through the interview of clients who have dropped out of a microfinance program, the following three reasons were most often cited for drop-out:

For 34% of respondents, MFI products and services are not adapted to their expectations (more details on this point will be given in sections below).

For 34% of former clients, personal reasons explained their motivation to leave the MFI.

Business reasons are evoked by 21% of drop-outs.

Very few former MFI clients have evoked problems with their solidarity groups as a reason for drop-out.
11.2 Drop-Out Reasons

11.2.1 MFI Products and Services

Concerning the 34% of drop-outs who stated that they left their MFI because of the products and services offered, 42% found loan interest rates to high. For about 23% of respondents, the amounts of their loans were not adapted to their needs. 11% of former clients said they had inadequate repayment rates.

Other reasons given include the fact that the borrower did not repay his or her loan or was blocked from obtaining a loan renewal. In addition, the problems with supplying guarantors and the fines and high premiums of loans as well as the easy availability of money and lack of need for a loan were also cited as reasons for drop-out.

11.2.2 Personal Reasons

For the 34% who left a microfinance program for personal reasons, about 40% simply did not want a new loan and 23% spent their loans for unexpected events or personal use.

The other reasons given for drop-out include health problems and religious reasons.

The last considerable reason for leaving a microfinance program was related to personal conflict with other persons in the program.
11.2.3 Business and Socio-Economic Reasons

Concerning business and socio-economic reasons for drop-out, 46% indicated that situation of the national economy is the main socio-economic reason for leaving the microfinance program.

For 15% of former clients, either their business has been destroyed by natural disaster, or they have a low capacity to compete with large businesses, both of which engender a certain degree of business failure.

11.2.4 Solidarity Group Reasons

Of the 8% who listed their solidarity group as the reason for their drop-out, 46% cited a conflict between one or several members of the solidarity group. Another 43% indicated that they left the institution after their group broke up and did not seek to establish a new group.

The last reason evoked is that some clients (11%) have decided to leave the microfinance program because of restrictive rules associated with group lending.
11.2.5 Appreciation of the MFI Program

Most of the former clients of microfinance programs surveyed here found their participation in the program as positive (49.5%) or very positive (18.4%).

For 27.6% of the respondents, their participation in the program was evaluated as neither positive nor negative.

An overwhelming 91.5% of respondents have not found that one MFI provides better products and services than another. This remarkably high number indicates that clients either do not distinguish between MFIs or simply no longer seek loans from microfinance programs.

Only 8.5% of Drop-Outs state that they are currently being served by another, better institution. Out of these, 38% are benefiting from lower interest rates, 33% appreciate better and easier procedures, and for 13% are pleased that the MFI offers higher loan amounts.
12 Conclusions

12.1 Comparison with Other Impact Studies

As this study shows, microfinance has clearly had an impact on the lives of clients, specifically in the development of their microenterprises and their own personal sense of security and improved living conditions. Unfortunately, there are no internationally accepted benchmarks with which to compare results; however, it is possible to compare the results of the Jordanian National Impact and Market Study with similar impact studies as a means by which to evaluate where Jordanian microfinance stands comparatively in terms of measured impact.

In order to carry out this comparison, it is necessary to draw upon studies which have used a similar methodology and framework for analysis. The study most closely resembling this one in terms of research design and evaluation of results is the IKM study carried out in Morocco in 2004\(^1\). This study was conducted with all microfinance institutions of Morocco and covered seven regions of the country. The total sample size of the Moroccan impact study was 1,287 microentrepreneurs divided into the same four categories as those used in Jordan: Old clients, Medium clients, New clients, and Drop-Out clients.

A comparison of results indicates that the Jordanian microfinance sector is generally on-par with the Moroccan microfinance sector in terms of impact.

Socio-Economic Characteristics

<table>
<thead>
<tr>
<th>Country</th>
<th>Women Clients</th>
<th>Illiteracy</th>
<th>Principal Activities</th>
</tr>
</thead>
<tbody>
<tr>
<td>Jordan</td>
<td>69.3%</td>
<td>6.2%</td>
<td>Trade (59%), Handicrafts (15%), Services (14%), Agricultural (1.3%), Other (10.7%)</td>
</tr>
<tr>
<td>Morocco</td>
<td>68%</td>
<td>45%</td>
<td>Trade (44%), Handicrafts (39%), Services (10%), Agricultural (6%), Other (1%)</td>
</tr>
</tbody>
</table>

- In comparing the socio-economic characteristics of the samples, the microentrepreneurs in Morocco display similar characteristics to those in Jordan, with the exception that they are generally less educated in Morocco and are less concentrated in the sector of Trade activities.
- These results indicate that the level of basic education is superior among Jordanian microentrepreneurs than Moroccan microentrepreneurs.
- The comparison also shows that Jordanian microentrepreneurs are more limited in their types of activities than those in Morocco, especially in the domain of handicrafts/small producing industries.

Impact on Economic Activity

<table>
<thead>
<tr>
<th>Country</th>
<th>Increase in Monthly Revenue</th>
<th>Increase in Investments</th>
<th>Level of Employmen t</th>
<th>Start of a New Activity</th>
<th>Contribution to Household Budget</th>
</tr>
</thead>
<tbody>
<tr>
<td>Jordan</td>
<td>15.4%</td>
<td>133%</td>
<td>28%</td>
<td>20% more</td>
<td></td>
</tr>
<tr>
<td>Morocco</td>
<td>38%</td>
<td>36%</td>
<td>66%</td>
<td>5%</td>
<td>11% more</td>
</tr>
</tbody>
</table>

\(^1\) A copy of the study can be provided upon request by PlaNet Finance or can be accessed on the National Microfinance Gateway of Morocco: www.microfinanceauamaroc.com
In terms of impact on economic activity, the two studies show that microfinance has had an impact on the same set of indicators: monthly revenue, business investments, level of employment, and contribution to household budget.

In terms of increase in monthly revenue, microfinance has had a larger impact in Morocco than in Jordan; however, in terms of business investments, microfinance in Jordan has led to a much larger increase than in Morocco.

Considering the impact of microfinance on the level of employment, the results in Morocco seem to be more significant at 66%; however, these results are not necessarily conclusive as the percentage of clients with employees was too small to be statistically significant.

Microfinance in Jordan has been much more important in starting new activities than in Morocco (28% versus 5%), demonstrating that microfinance in Jordan has been an important source of microenterprise creation in addition to microenterprise consolidation.

Finally, in terms of contribution to household budget, microfinance in Jordan has had a larger impact than in Morocco.

### Impact on Household Poverty Level

<table>
<thead>
<tr>
<th>Country</th>
<th>Monthly Spending</th>
<th>Education of Children</th>
<th>Detention of Assets</th>
<th>Improvement of Housing Conditions</th>
</tr>
</thead>
<tbody>
<tr>
<td>Jordan</td>
<td>Insignificant</td>
<td>Inconclusive</td>
<td>Less than 10%</td>
<td>Insignificant</td>
</tr>
<tr>
<td>Morocco</td>
<td>33% more</td>
<td>Inconclusive</td>
<td>Less than 10%</td>
<td>Insignificant</td>
</tr>
</tbody>
</table>

In terms of the impact of microfinance on household poverty levels, a comparison between the two studies shows that in both cases the impact is quite low.

The one domain in which an impact is observed concerns the level of household monthly spending, where Moroccan Old clients experience a 33% increase in consumption.

The lack of significant observed impact on these indicators should not be attributed to a poor performance of microfinance but rather the higher costs related to such indicators. The increase in monthly salary through participation in a microfinance program can contribute to improved daily life in terms of quality of food, access to leisure activities, and access to over-the-counter medication. However, increasing the level of education of one’s children or improving housing conditions is much more costly and requires a much greater investment over a longer period. The impact of microfinance is thus not insignificant but not yet significant enough to have an effect on these specific indicators.

### Perception of Impact

<table>
<thead>
<tr>
<th>Country</th>
<th>Food Consumption</th>
<th>Education of Children</th>
<th>Health</th>
<th>Sense of Autonomy</th>
</tr>
</thead>
<tbody>
<tr>
<td>Jordan</td>
<td>70%</td>
<td>57.6%</td>
<td>47.6%</td>
<td>86.7%</td>
</tr>
<tr>
<td>Morocco</td>
<td>62%</td>
<td>36%</td>
<td>37%</td>
<td>68%</td>
</tr>
</tbody>
</table>

In terms of perception of impact, the results surveyed in Jordan are higher across the board than those observed in Morocco.
In other words, Jordanian microentrepreneurs perceive a higher impact of microfinance on their food, the education of their children, their health, and their sense of autonomy than Moroccan microentrepreneurs.

12.2 Future Trends in Impact

Finally, the comparisons made in the study between the different wealth groups of clients (where Group 1 represents the poorest in the sample and Group 5 represents the least poor) show that as clients move into even slightly higher wealth groups, their overall economic well-being improves and they are able to contribute more concretely to the Jordanian economy. Clients in higher wealth groups have stronger, more formal business that are generally not home-based and are registered. They have more employees and turn greater monthly profits.

For MFI’s to have a greater impact on poverty alleviation and microenterprise development, developing products and services that fit the needs of every type of client would be an important step. By better helping clients on the upper end of the wealth spectrum, MFI’s will have a positive impact on job creation and the stimulation of the small enterprise sector. Likewise, by concentrating efforts on graduating clients into higher wealth groups and better businesses, the impact of microfinance on key poverty indicators will be improved.
13 Annex

Regression of Employment by Category of Clients

Dependent Variable: EMPLOYMENT
Method: Least Squares
Date: 09/04/07   Time: 16:30
Sample(adjusted): 2 1314
Included observations: 962
Excluded observations: 351 after adjusting endpoints

<table>
<thead>
<tr>
<th>Variable</th>
<th>Coefficient</th>
<th>Std. Error</th>
<th>t-Statistic</th>
<th>Prob.</th>
</tr>
</thead>
<tbody>
<tr>
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<td>0.039970</td>
<td>6.977053</td>
<td>0.0000</td>
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<tr>
<td>MEDIUM</td>
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<td>0.054506</td>
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<td>0.0303</td>
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<td>OLD</td>
<td>0.288137</td>
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</tbody>
</table>

R-squared 0.018901  Mean dependent var 0.387734
Adjusted R-squared 0.016855  S.D. dependent var 0.759522
S.E. of regression 0.753094  Akaike info criterion 2.273859
Log likelihood -1090.726  F-statistic 9.237706
Durbin-Watson stat 1.888179  Prob(F-statistic) 0.000106

Autonomy

Dependent Variable: AUTONOMYD
Method: ML - Binary Probit
Date: 09/05/07   Time: 14:16
Sample: 1 1314
Included observations: 1314
Convergence achieved after 4 iterations
Covariance matrix computed using second derivatives

<table>
<thead>
<tr>
<th>Variable</th>
<th>Coefficient</th>
<th>Std. Error</th>
<th>z-Statistic</th>
<th>Prob.</th>
</tr>
</thead>
<tbody>
<tr>
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<td>0.053481</td>
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<tr>
<td>MEN</td>
<td>0.218410</td>
<td>0.090908</td>
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<td>0.0163</td>
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</table>

Mean dependent var 0.138508  S.D. dependent var 0.345564
S.E. of regression 0.344918  Akaike info criterion 0.803190
Sum squared resid 543.8969  Schwarz criterion 2.289043
Log likelihood -1090.726  F-statistic 9.237706
Durbin-Watson stat 1.888179  Prob(F-statistic) 0.000106

Obs with Dep=0 1132  Total obs 1314
Obs with Dep=1 182
### Autonomy

**Dependent Variable:** AUTONOMYD  
**Method:** ML - Binary Probit  
**Date:** 09/05/07  
**Sample:** 1314  
**Included observations:** 1314  
**Convergence achieved after 4 iterations**  
**Covariance matrix computed using second derivatives**

<table>
<thead>
<tr>
<th>Variable</th>
<th>Coefficient</th>
<th>Std. Error</th>
<th>z-Statistic</th>
<th>Prob.</th>
</tr>
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<tbody>
<tr>
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<td>0.124155</td>
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<tr>
<td>POORAGO</td>
<td>0.199409</td>
<td>0.139359</td>
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<td>0.1525</td>
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<td>RICHAGO</td>
<td>0.243348</td>
<td>0.141170</td>
<td>1.723797</td>
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</table>

**Mean dependent var:** 0.138508  
**S.D. dependent var:** 0.345564  
**S.E. of regression:** 0.345445  
**Akaike info criterion:** 0.806704  
**Sum squared resid:** 156.4450  
**Schwarz criterion:** 0.818532  
**Log likelihood:** -527.0043  
**Hannan-Quinn criter.:** 0.811139  
**Restr. log likelihood:** -528.5519  
**Avg. log likelihood:** -0.401069  
**LR statistic (2 df):** 3.095166  
**Probability(LR stat):** 0.212762

<table>
<thead>
<tr>
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</thead>
<tbody>
<tr>
<td>Obs with Dep=1</td>
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</tr>
</tbody>
</table>

### Food

**Dependent Variable:** FOODD  
**Method:** ML - Binary Probit  
**Date:** 09/05/07  
**Sample:** 1314  
**Included observations:** 1314  
**Convergence achieved after 4 iterations**  
**Covariance matrix computed using second derivatives**

<table>
<thead>
<tr>
<th>Variable</th>
<th>Coefficient</th>
<th>Std. Error</th>
<th>z-Statistic</th>
<th>Prob.</th>
</tr>
</thead>
<tbody>
<tr>
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<td>0.057990</td>
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<td>0.0000</td>
</tr>
<tr>
<td>MEN</td>
<td>0.315395</td>
<td>0.095158</td>
<td>3.314436</td>
<td>0.0009</td>
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</tbody>
</table>

**Mean dependent var:** 0.111872  
**S.D. dependent var:** 0.315329  
**S.E. of regression:** 0.314078  
**Akaike info criterion:** 0.695618  
**Sum squared resid:** 129.4219  
**Schwarz criterion:** 0.703503  
**Log likelihood:** -455.0209  
**Hannan-Quinn criter.:** 0.698575  
**Restr. log likelihood:** -460.4410  
**Avg. log likelihood:** -0.346287  
**LR statistic (1 df):** 10.84016  
**Probability(LR stat):** 0.002928

<table>
<thead>
<tr>
<th>Obs with Dep=0</th>
<th>Total obs</th>
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</tr>
</thead>
<tbody>
<tr>
<td>Obs with Dep=1</td>
<td>147</td>
<td></td>
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</tbody>
</table>
### Health

**Dependent Variable:** HEALTHD  
**Method:** ML - Binary Probit  
**Date:** 09/05/07  **Time:** 15:14  
**Sample:** 1 1314  
**Included observations:** 1314  
Convergence achieved after 5 iterations  
Covariance matrix computed using second derivatives  

<table>
<thead>
<tr>
<th>Variable</th>
<th>Coefficient</th>
<th>Std. Error</th>
<th>z-Statistic</th>
<th>Prob.</th>
</tr>
</thead>
<tbody>
<tr>
<td>C</td>
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<td>0.080071</td>
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<tr>
<td>MEN</td>
<td>0.244482</td>
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<td>2.214961</td>
<td>0.0268</td>
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<tr>
<td>MIDDLEAGO</td>
<td>-0.218585</td>
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<td>0.2013</td>
</tr>
<tr>
<td>RICHAGO</td>
<td>0.021619</td>
<td>0.113025</td>
<td>0.191275</td>
<td>0.8483</td>
</tr>
</tbody>
</table>

**Mean dependent var** 0.076104  
**S.D. dependent var** 0.265265  
**S.E. of regression** 0.264804  
**Akaike info criterion** 0.538849  
**Sum squared resid** 91.85855  
**Schwarz criterion** 0.554621  
**Log likelihood** -350.0241  
**Hannan-Quinn criter.** 0.544764

**Obs with Dep=0** 1214  
**Total obs** 1314

### Adaptation of Household to Professional Investment

<table>
<thead>
<tr>
<th>Raisons of adaptation</th>
<th>Frequency</th>
<th>Percent</th>
</tr>
</thead>
<tbody>
<tr>
<td>No change</td>
<td>857</td>
<td>59%</td>
</tr>
<tr>
<td>Help of the spouse</td>
<td>326</td>
<td>22%</td>
</tr>
<tr>
<td>Help of children (boy)</td>
<td>134</td>
<td>9%</td>
</tr>
<tr>
<td>Help of children (girl)</td>
<td>113</td>
<td>8%</td>
</tr>
<tr>
<td>External help (hire housekeeper)</td>
<td>5</td>
<td>0%</td>
</tr>
<tr>
<td>Help family and friends</td>
<td>27</td>
<td>2%</td>
</tr>
<tr>
<td><strong>Total answers</strong></td>
<td>1462</td>
<td>100%</td>
</tr>
</tbody>
</table>

### Typology of Impact Perception

**Dependent Variable:** AUTONOMYD  
**Method:** ML - Binary Probit  
**Date:** 09/06/07  **Time:** 13:23  
**Sample:** 1 1314  
**Included observations:** 1314  
Convergence achieved after 4 iterations  
QML (Huber/White) standard errors & covariance  

<table>
<thead>
<tr>
<th>Variable</th>
<th>Coefficient</th>
<th>Std. Error</th>
<th>z-Statistic</th>
<th>Prob.</th>
</tr>
</thead>
<tbody>
<tr>
<td>C</td>
<td>-1.128144</td>
<td>0.216502</td>
<td>-5.210780</td>
<td>0.0000</td>
</tr>
<tr>
<td>RURAL</td>
<td>0.045097</td>
<td>0.221319</td>
<td>0.203766</td>
<td>0.8385</td>
</tr>
<tr>
<td>URBAN</td>
<td>0.017372</td>
<td>0.265745</td>
<td>0.065371</td>
<td>0.9479</td>
</tr>
</tbody>
</table>

**Mean dependent var** 0.138508  
**S.D. dependent var** 0.345564  
**S.E. of regression** 0.345819  
**Akaike info criterion** 0.538849  
**Sum squared resid** 156.7835  
**Schwarz criterion** 0.820836  
**Log likelihood** -528.5180  
**Hannan-Quinn criter.** 0.813443
### Probit Estimations

- The probability of urban clients to have positive change in their food is higher than the probability of rural microentrepreneurs.
- The probability of urban clients to notice positive change in their health is less than the probability of rural clients.
- The probability of urban clients to have a positive change in their autonomy is less than in rural areas.
- The probability of urban clients to have a positive change in their children’s education is higher than in rural areas.

<table>
<thead>
<tr>
<th></th>
<th>Food</th>
<th>Health</th>
<th>Autonomy</th>
<th>Children’s Education</th>
</tr>
</thead>
<tbody>
<tr>
<td>Urban</td>
<td>0.11</td>
<td>-0.22</td>
<td>0.02</td>
<td>0.09</td>
</tr>
<tr>
<td>Semi-Urban</td>
<td>-1.22***</td>
<td>-1.45***</td>
<td>-1.13***</td>
<td>-1.59***</td>
</tr>
<tr>
<td>Rural</td>
<td>-0.01</td>
<td>0.03</td>
<td>0.05</td>
<td>0.06</td>
</tr>
</tbody>
</table>

*** (1% of significance)

### Probability of Positive Change in Food Per Area

<table>
<thead>
<tr>
<th>Variable</th>
<th>Coefficient</th>
<th>Std. Error</th>
<th>z-Statistic</th>
<th>Prob.</th>
</tr>
</thead>
<tbody>
<tr>
<td>C</td>
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<td>0.225806</td>
<td>-5.405702</td>
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</tr>
<tr>
<td>RURAL</td>
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<td>0.231055</td>
<td>-0.026479</td>
<td>0.9789</td>
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<tr>
<td>URBAN</td>
<td>0.109869</td>
<td>0.273379</td>
<td>0.401892</td>
<td>0.6878</td>
</tr>
</tbody>
</table>

Mean dependent var 0.111872 S.D. dependent var 0.315329
S.E. of regression 0.315506 Akaike info criterion 0.705005
Sum squared resid 130.5022 Schwarz criterion 0.716834
Log likelihood -460.1884 Hannan-Quinn criter. 0.709441
Restr. log likelihood -460.4410 Avg. log likelihood -0.350219
LR statistic (2 df) 0.505104 McFadden R-squared 6.41E-05
Probability(LR stat) 0.966701
Obs with Dep=0 1132 Total obs 1314
Obs with Dep=1 182

### Probability of Positive Change in Children’s Education Per Area
Dependent Variable: CHILDEDD
Method: ML - Binary Probit
Date: 09/06/07  Time: 13:25
Sample: 1 1314
Included observations: 1314
Convergence achieved after 5 iterations

QML (Huber/White) standard errors & covariance

<table>
<thead>
<tr>
<th>Variable</th>
<th>Coefficient</th>
<th>Std. Error</th>
<th>z-Statistic</th>
<th>Prob.</th>
</tr>
</thead>
<tbody>
<tr>
<td>C</td>
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<td>0.277997</td>
<td>-5.731069</td>
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<tr>
<td>RURAL</td>
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<td>0.283924</td>
<td>0.228206</td>
<td>0.8195</td>
</tr>
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<td>URBAN</td>
<td>0.092133</td>
<td>0.335744</td>
<td>0.274414</td>
<td>0.7838</td>
</tr>
</tbody>
</table>

Mean dependent var 0.063166  S.D. dependent var 0.243354  
S.E. of regression 0.243532  Akaike info criterion 0.475690  
Sum squared resid 77.75281  Schwarz criterion 0.487519  
Log likelihood -309.5286  Hannan-Quinn criter. 0.480126  
Restr. log likelihood -309.5668  Avg. log likelihood -0.235662  
LR statistic (2 df) 0.076369  McFadden R-squared 0.000123  
Probability(LR stat) 0.962535  
Obs with Dep=0 1231  Total obs 1314  
Obs with Dep=1 83

Probabilty of Positive Change in Health Per Area
Dependent Variable: HEALTHD
Method: ML - Binary Probit
Date: 09/06/07  Time: 13:26
Sample: 1 1314
Included observations: 1314
Convergence achieved after 5 iterations

QML (Huber/White) standard errors & covariance

<table>
<thead>
<tr>
<th>Variable</th>
<th>Coefficient</th>
<th>Std. Error</th>
<th>z-Statistic</th>
<th>Prob.</th>
</tr>
</thead>
<tbody>
<tr>
<td>C</td>
<td>-1.446104</td>
<td>0.254165</td>
<td>-5.689622</td>
<td>0.0000</td>
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<tr>
<td>RURAL</td>
<td>0.032832</td>
<td>0.259826</td>
<td>0.126360</td>
<td>0.8994</td>
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<tr>
<td>URBAN</td>
<td>-0.222288</td>
<td>0.329392</td>
<td>-0.674843</td>
<td>0.4998</td>
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</table>

Mean dependent var 0.076104  S.D. dependent var 0.265265  
S.E. of regression 0.265332  Akaike info criterion 0.541717  
Sum squared resid 92.29591  Schwarz criterion 0.553546  
Log likelihood -352.9082  Hannan-Quinn criter. 0.546153  
Restr. log likelihood -353.6605  Avg. log likelihood -0.266575  
LR statistic (2 df) 1.504703  McFadden R-squared 0.002127  
Probability(LR stat) 0.471257  
Obs with Dep=0 1214  Total obs 1314  
Obs with Dep=1 100
### Variation of Asset Detention Since Last Three Years

<table>
<thead>
<tr>
<th></th>
<th>Wealth index</th>
<th>Poor clients</th>
<th>Middle class</th>
<th>Rich clients</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Old clients</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Three years ago</td>
<td>48%</td>
<td>11%</td>
<td>41%</td>
<td></td>
</tr>
<tr>
<td>Now</td>
<td>39%</td>
<td>33%</td>
<td>38%</td>
<td></td>
</tr>
<tr>
<td><strong>Medium clients</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Three years ago</td>
<td>45%</td>
<td>17%</td>
<td>38%</td>
<td></td>
</tr>
<tr>
<td>Now</td>
<td>40%</td>
<td>27%</td>
<td>33%</td>
<td></td>
</tr>
<tr>
<td><strong>New clients</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Three years ago</td>
<td>46%</td>
<td>12%</td>
<td>42%</td>
<td></td>
</tr>
<tr>
<td>Now</td>
<td>38%</td>
<td>19%</td>
<td>43%</td>
<td></td>
</tr>
</tbody>
</table>