Microcredit and the informal sector on the West Bank

-Do microcredit activities provide enough stimulus to lead businesses away from informal sector characteristics?

Author: Mikael Fridell
Supervisor: Ranjula Bali Swain
Acknowledgements

The dynamics of scientific research involves standing on the shoulders of others, in terms of benefiting from previous studies as well as in terms of gathering new information. There is little doubt that I owe a great deal of gratitude to the various organizations that have provided assistance in my research, devoted time to discuss issues and effort to complete a questionnaire survey. My only hope is that I do not misrepresent any data that I have acquired.

A few of the generous individuals that made this study possible deserve particular mentioning. For the information collection process, a special thanks goes to Jane Giacaman and Voltaire Kharoufeh at UNRWA, Fadi Abdellatif at USAID, Anwar Jayyusi and Ina'am Zaqout at FATEN, and Izz Tawil at CHF Palestine. Despite holidays and a strained environment there were nothing but welcoming attitudes. The distribution of questionnaires was made possible through the help of the respective Microfinance Institutions. For logistical and accommodation support, Paul Widén and Anneli Rådestad have been invaluable. Finally, I wish to express my heartfelt appreciation to the people who inhabit these troubled areas, from those who sacrificed their time to fill out the questionnaire, to Mr. Palestine who gave me a lift in Bethlehem. The conditions they endure are far from desirable. Thank you!
Abstract

Financial services to the poor are seen as a principal way to achieve goals of poverty reduction and job creation. This study explores the dynamic of microcredit clients with informal sector characteristics. These characteristics include number of employees, registration status, having a permanent address, being based at home, being based in an open space, operating from a temporary place, and government support of businesses. In recent years, the informal sector on the West Bank has grown to become a major source of job creation for poor Palestinians. Using data collected by the author, this study finds that a majority of the responding microcredit clients are in the informal sector and some of them use microcredit to create a job for themselves because they had no alternative. There is some interest directed towards formal registration from lenders and borrowers, while general progress, in terms of formalization, is found to be fairly insignificant. Finally, we do not find that microcredit increases the probability of less informal sector characteristics acknowledged by microcredit clients. Therefore, while other factors may explain lack of formalization, microcredit is found not to provide enough stimulus on its own to lead questionnaire respondents away from the informal sector.

Keywords: informal sector, microcredit, Palestine, West Bank
# Table of Contents

1. Introduction ............................................................................................................................. 5
2. Background .............................................................................................................................. 8
   2.1 Characteristics of microcredit provision ............................................................................. 8
   2.2 The informal sector ............................................................................................................. 11
   2.3 The formalization process .................................................................................................. 13
   2.4 Modelling the stimulus for formalization .......................................................................... 14
      2.4.1 Institutional incentives ................................................................................................. 14
      2.4.2 Opportunity costs ......................................................................................................... 15
      2.4.3 Formalization costs ....................................................................................................... 16
      2.4.4 Costs and benefits in an expression ............................................................................. 17
3. The West Bank setting ............................................................................................................... 19
   3.1 Recent developments on the West Bank ............................................................................ 19
   3.2 The Palestinian Economy and Financial Services .............................................................. 20
   3.3 Features of West Bank microcredit provision .................................................................... 22
   3.4 Islamic lending and perception of borrowing ..................................................................... 24
4. Empirical section ...................................................................................................................... 26
   4.1 Empirical section material collection ............................................................................... 26
   4.2 Econometric specification .................................................................................................. 27
   4.3 Discussion on questions and models .................................................................................. 29
   4.4 Detailing variables .............................................................................................................. 30
   4.5 Descriptive analysis .......................................................................................................... 32
      4.5.1 Do microcredit providers engage the informal sector? ............................................. 32
      4.5.2 Is borrowing for informal businesses connected to coping or crisis management? ...... 34
      4.5.3 Is there an interest in formalization, coming from borrowers or lenders? ................ 35
      4.5.4 Is there progress in terms of informal sector characteristics? ..................................... 37
   4.6 Econometric analysis .......................................................................................................... 39
5. Conclusion ................................................................................................................................. 42
References ..................................................................................................................................... 44
Appendix A: Questionnaire for clients ....................................................................................... 46
Endnotes ....................................................................................................................................... 48
1. Introduction

In the financial markets of most developing countries, informal and formal sectors exist alongside each other as part of the transition from traditional to modern economies. The informal sector represents the traditional economy and the economic activity that is unregulated by society's institutions. It resides in a legal and social environment with similar activities that are regulated, and is characteristically not taxed or overseen by government. The transition, or formalization, process towards a less informal economy has very much been an integral part of the general economic development of industrialized countries.

On the individual level, the informal sector typically lacks desirable working conditions. In 1991 the International Labour Organization (ILO) stated that “there can be no question of the ILO helping to promote or develop an informal sector as a convenient, low-cost way of creating employment unless there is at the same time an equal determination to eliminate progressively the worst aspects of exploitation and inhuman working conditions in the sector” (ILO 1991, p 58). Since then this dilemma has increased in scope and scale (ILO 2002, p 1). The informal sector has become more complex along with the process of globalization. It has not represented a temporary state of an economy, but a growing contributor to job creation and incomes for poor people (ibid). The sector has been a principal force for new employment in developing economies in recent years, but decent work\(^1\) in the informal sector is limited compared to the recognized, protected, and more secure formal counterpart (ibid).

On the national level, a simple, but highly significant, statistical correlation shows that there is a negative relationship between per capita income and share of output attributed to the informal sector (USAID 2005, p 7). Thus, the less important the informal sector, the more likely it is that a country is found economically developed (ibid). Whether formalization is a cause or an effect is another question, but in the perspective of long-run economic growth and socio-political improvement, a large informal

---

\(^1\) Decent work includes “poor quality, unproductive, and unremunerative jobs that are not recognized or protected by law”, lack rights at work and social protection, and lacks of representation and voice (ILO 2002, p 4).
sector is detrimental (ibid, p 4). It also seems uncontroversial that reducing the informal sector helps reduce poverty. One may go so far as to say that without a predominantly formal economy it is difficult for the advanced institutions that today's welfare states have required, to function. In view of this, the financial services offered in developing countries have to take positions with regard to this division of the economy and must thus acknowledge that it has a, potential, role in the transformation and formalization of economies. This informal-formal division and financial services provision provides for substantial scope of interaction between them.

The microfinance industry, that tries to bring financial services to the poor, has grown to become an immensely popular strategy for reducing poverty. In 2006 the Nobel Peace Prize acknowledged the poverty reduction efforts of Dr. Muhammad Yunus and Grameen Bank of Bangladesh. Whether microfinance has had an equally large impact on poverty reduction and economic growth is a debatable issue, but it does affect the environment in which it resides and it does provides financial services in developing economies to those that might not have access to them. Therefore it is reasonably part of the above mentioned interaction. Microcredit, a microfinancial service, is one of the principal employment creating policies of today's development industry. It involves small loans with the purpose of allowing poor people to run a business and smooth consumption. Microcredits have a clear element of engaging the informal sector, but the author finds little said about its potential effects on informal employment.

A report by the International Labour Organization (ILO) asserts that the international financial institutions fail to give adequate attention to the employment implications of their policies (ILO 2002, p 30). The structural adjustment policies of the 1980s and 1990s, that often resulted in increased poverty and unemployment, helped grow many informal economies (ibid). A study commissioned by United States Agency for International Development (USAID), that included interviews with a number of donor representatives, found that most of them were not even aware of whether their organizations had an official definition of informality (USAID 2005, p 2). Thus, if microcredit is a job creating policy that likely engages the informal sector and if the potential interaction has evoked limited reflection, it becomes intuitive to ask: **Does microcredit activities provide enough stimulus to lead businesses away from informal sector characteristics?** While this study will have a somewhat broader perspective, this is its core research question. The question is relevant to individual working conditions, as well as national economic development.
As the focus on microfinance in general, and microcredit in particular, has intensified in the past decades, so has the understanding of the effects of new financial institutions on their surroundings. This study will take a closer look at microcredit lending to the informal sector of an economy. The purpose is to explore the role of microcredits in relation to the progress of the transformation of an economy towards a more formal and modernized one. In fact, informal enterprise activities are often assumed as being supported by microcredit organizations (Nelson & De Bruijn 2005, p 581). If microcredit lending supports informal activities it reasonably also promotes characteristics of the informal sector. Thus, for example, as the informal activities can be a last resort for people having a hard time finding employment elsewhere, microcredits may support this function of the informal sector.

Half of the West Bank population live below the poverty line of US$2 per day (CGAP 2006, p 2). At the same time, the Palestinian informal sector is large and has been growing fast in recent times of political, economic, and military crises. Data suggests that it represents more than half of total income for two thirds of the informal enterprise population (Massar 2002, 5ff). The vulnerability of poor Palestinians is undoubtedly a serious concern, that reasonably is pronounced in the informal sector. Studying microcredit activities in relation to the informal sector thus appears relevant to this case. Due to the regulatory environment, the only form of microfinancial service offered on the West Bank today is microcredit, which puts it in focus here. Today these services reach a mere 2.7 percent of those engaged in the smallest business, the microentrepreneurs (IFC 2007, p 24).

Besides reviewing previous studies, the primary material collected for this study is a short questionnaire survey, carried out on location. The author is not aware of any study on this theme on the West Bank. In fact, the author has not encountered any studies of this theme, but even if there are, this contribution may add to those insights as it looks at, in a way, a unique case. An improved understanding of this phenomenon can help form the basis of appropriate interventions.

The text will hereafter follow four clearly defined sections. A background section will firstly present previous research on microcredit, the informal sector, and formalization. Secondly, the West Bank setting will be introduced. Thirdly, an empirical section will answer the research question through a descriptive and econometric analysis of collected survey data. The study ends with a conclusion that discusses the results thereof.
2. Background

The following provides an introduction to research on microcredit activities, the informal sector, and formalization in developing economies. It deals with issues pertaining to credit services and working conditions for the poor, and gives rise to a relevant framework for the case study.

2.1 Characteristics of microcredit provision

The process of economic development involves the accumulation of physical and human capital, and one vehicle for this is the financial market. Thus, if a country wishes to promote economic development and efficient allocation of resources, it will benefit from a smoothly functioning financial market that links savings with lending (Todaro & Smith 2006, p 741). Providing credit services is an institutional incentive that lowers opportunity costs for informal businesses, in terms of formalization, and it should make formalizing costs more manageable.

The definition of microcredit differs. It can focus on the size of the loans, requiring them to be small, or on the purpose of the loans, such as those targeting microentrepreneurs. It can also look at if those targeted by the credit provision actually are the poor, or whether specific microcredit methodologies, like joint liability schemes, are used. The common ground is that it is primarily a policy for poverty reduction and economic development, that tries to bring credit services to those poorer segments not sufficiently served by conventional financial services.

In fact, the only solution for any individual facing an investment without enough cash on hand, and without present or previously saved capital, is credit transactions (Rutherford 2003). Poor people typically lack excess incomes and sufficient savings. It is therefore seen as a key concern to bring
financial services to the poor, many of whom reside in the informal economy. People borrow to sidestep current liquidity constraints and instead enable intertemporal budgets. After productive investments they then pay the loan back with part of their pay-off. As a result they grow economically, or that is the concept at least. The demands of a characteristic low-income borrower with a business ranges from working capital for continuous investments like buying up a stock of goods and private consumption to cover insufficient incomes, to more long-term start-up or expansionary investments (Ray 1998, p 531). They typically lack access to formal bank loans, and may not be sufficiently served by informal sources of credit (National Strategy for Microfinance). Often, they are self-employed and household-based shopkeepers, service providers and street vendors in urban areas. In rural areas they tend to be small farmers, food processors or traders (ibid). This is similar to the general informal sector characteristics.

Unlike informal credit providers like friends, family and suppliers, the more formal lenders and banks have to consider information asymmetries like moral hazard and adverse selection in their lending activities. The crucial issue in financial markets is this issue of asymmetric information. Information about potential borrowers is scarce both with regards to how a loan will be put to use and if it will be repaid (Ray 1998, p 540). Like any other market, the financial market is controlled by supply and demand forces, but inefficiencies seem to manifest themselves as the exclusion of some, particularly the poor. In trying to solve this problem, microcredit providers often need to battle information asymmetries. Factors such as legal frameworks, education, infrastructure, communication and transportation are also important for the functioning of financial markets (Besley 1994, p 33). For instance, the potential of microcredit activities will reasonably increase if capacity is built in the form of improved social and physical infrastructure (National Strategy for Microfinance). It is not too farfetched to think that running businesses benefit from improvements in infrastructure, such as more efficient government bureaucracy and better roads. Lacking these latter factors logically puts restrictions on the potential impact of microcredit activities.

There are more and more microcredit initiatives that try to preserve the institutional characteristics of formal sector lending while attempting to use the advantages of informal activities, such as the inherent informal community information bases. These are the semiformal microcredit providers. Microfinance Institutions (MFIs) make up the bulk of these. Basically, MFIs can be defined as programs set up by
governments or donors to enable microfinance provision, including credit, savings and insurance services. The semiformal sector includes the MFI's, a growing involvement of formal public and commercial banks as well as different national development banks that act as financiers of MFI's or through direct formal microcredit provision, and donor countries that wants to develop and support microfinance projects as part of their international cooperation strategies. Also, it is obvious that NGOs frequently offer microfinance services as part of their activities, often while targeting a certain segment of a population (see for example National Strategy for Microfinance). These NGO activities have often been subsidized without a strong sustainability focus.

Microfinance activities have, according to literature, had difficulties in actually reducing overall poverty rates (Bali Swain 2004, p 3). However, they have had positive effects regarding schooling, health and nutrition, fertility, and women's empowerment (ibid). Generally, microfinance is regarded as almost a revolutionary tool for alleviating poverty, yet there is not that overwhelming evidence that can point to a clear and positive impact on the economic development of a country. So far it seems as if the literature does attribute a positive effect on poverty levels to microfinance, particularly in relation to the factors mentioned above. The very poorest seem not to have benefited as much as those closer to the poverty line, but households have become less vulnerable through consumption- and labour-smoothing made possible by financial services (ibid, p 26). The prevalent function of smoothing may also indicate a weakness in long-term improvement for these households.

Increasing incomes and reducing poverty does require more sustainable and cost-effective microfinance programmes than are currently available (ibid). Literature furthermore suggests that if economic growth in an economy is weak, microfinance programmes may result in redistribution rather than increased employment and incomes (ibid). This seems to point to the fact that microfinance programmes cannot solve the poverty problem alone, but should be used as one strategy along with other policies in order to achieve significant poverty reduction (ibid, p 3). The impact of microcredit provision is naturally also dependent upon its scale and depth of outreach.

Morduch states that significantly reducing poverty rates requires overall economic growth and increased employment rates (Morduch 1999, p 1610). The strength of microfinance lies in helping poor households taking advantage of these growth rates, but it can likely not create them (ibid).
2.2 The informal sector

The economic development process entails a structural transformation of industrialization and a move from traditional to modern forms of organisation (Todaro & Smith 2006, p 108ff). While these forms coexist during transition there is a dual economy, and it often includes a traditional informal and a modern formal sector (Ibid, p 328). The informal sector represents the economic activity that is unregulated by society's institutions, while residing in a legal and social environment with similar activities that are regulated. It is not taxed or overseen by government. The formal sector is in a sense the opposite, as it is taxed, institutionally regulated, and enjoys government recognition. It is important to realize that in real life this is not a dichotomy but rather a continuum on which any given enterprise can be placed (USAID 2005, p 2). An enterprise may be classified as informal, but still maintain formal characteristics, depending on definitions applied. The dual economy of developing countries by no means excludes the financial markets. This means that financial products are being offered from both informal and more formal sources, and these products may be consumed by both informal and more formal clients and their businesses.

Again, the informal sector has grown rapidly and the situation is getting increasingly complex. In the wake of more global competition and information and communication technologies, there has been a push towards more flexible and informal relationships in production and employment (ILO 2002, p 2). The growth of cross-border trade is an example, where the large retailer is in a developed country and the final producer is an informal microentrepreneur in a developing country (ibid). It is undeniable that global competition have led transnational companies to sub-contract or outsource production to first-, second-, and third-tier suppliers. The lower down the chain, the more likely it is that the business is informal (ibid, p 37). Many of these suppliers are microenterprises, small businesses with few and poor employees, in developing countries (ibid, p 34). This promotes flexible specialization with smaller, more flexible and specialized production units, instead of having a large formal workforce in a large factory (ibid, p 35).

The informal sector has to be seen as important. It is large in numbers employed and represent a significant part of the GDP in many countries (USAID 2005, p 2). Further, it can provide a safety net for those who loose or cannot find formal work (ibid, p 3). It also disproportionately engages women,
handicapped, children and other disadvantaged groups, who can greatly benefit from raised standards in this sector (ibid). Therefore, the informal sector should be tackled to create better quality employment; to strengthen the social contract and enforceability of business-to-business agreements; to expand the tax base; to increase knowledge of economic activity in a country; to increase access to financial and business services; and to improve the situation for marginalized groups (ibid, p 4).

A poor person cannot afford being unemployed. This explains the rationale behind the fact that increasing poverty is a powerful reason behind a growing informal sector (ILO 2002, p 31). Even though there are jobs in the informal sector that can give greater incomes than some lower-end formal sector jobs, poverty and unemployment forces people to turn to informal jobs, and incomes are in general lower in the informal sector (ibid). Thus, there is a significantly higher portion of poor people in the informal sector compared to the formal (ibid, p 3). A political or economic crisis that leads to lower incomes and surplus labour across the board then reasonably leads to a larger informal sector, as it did following the Asian crisis in the late 1990s (ibid, p 30). In that way it serves as a safety net. It seems reasonable that lower incomes or higher unemployment, whatever the cause, would push more people towards engaging in informal sector activities to replace income shortfalls.

The conceptual strategies of the informal sector can be one of coping in an environment where earning opportunities are scarce, or one of unofficial earnings, i.e. increasing earnings while escaping government regulations (GDRCb). The coping strategies include casual, temporary, and even unpaid jobs, as well as subsistence agriculture and the holding of multiple jobs (ibid). Strategies to earn unofficially simply include unofficial and criminal underground type of business activities (ibid). To grip the problems and needs of those engaged in the informal sector it is important to acknowledge their diversity. They range from contributing family workers without contract, or legal or social protection, in informal or formal enterprises, to employees with informal jobs at informal or formal enterprises or households, to informal entrepreneurs with their own businesses (ILO 2002, p 123). Even those who produce goods for use by their household should be considered (ibid). Also, most cases of child labourers are to be found in the informal economy (ibid, p 25). The informal establishments are not fully recognized under legal and regulatory frameworks and thus receive little protection from them (ibid, p 3). They have restricted access to public infrastructure and benefits, and often have to rely on inferior informal mechanisms (ibid).
2.3 The formalization process

It is quite uncontroversial to assert that a developed economy is a formalized economy that is regulated, generate taxes, and provides access to formal social safety nets and specific markets, i.e. public goods and services. However, whether or not to strive towards formalization is contentious among researchers. Some do not believe that decent work can be provided through the informal sector (Global Employment Forum 2001, p 83). Others say that the current job growth of the informal sector would be limited if formal costs and regulations were imposed (ibid). Still, there is a third option of not choosing, but instead trying to improve the informal sector of today through better conditions and productivity, while keeping its dynamic and flexible character (ibid). After all, it is a character that seems favoured in today's globalized world.

The role of the informal sector is as important as it is a source of debate. On the one hand it reduces unemployment and underemployment and helps reduce poverty, but on the other hand payment and job security is poor. It absorbs entrepreneurial spirit, but it undermines compliance with state regulations. Again, the size and role of the sector generally increases during economic downturns, adjustments, and transitions. In high-income economies the unofficial informal sector represents an estimated 4-6 percent of the labour force, compared to more than half in developing countries (GDRCb). Some estimates show an average of over 30 percent of GDP and over 70 percent of employment coming from this unofficial economy in developing countries (Palmade & Anayiotos 2005, p 1). While people have commonly thought that the informal sector would eventually formalize, there has been an almost opposite development with encompassing important contributions to employment and GDP (Blunch et al 2001, p 3). Indeed, it is often the most important source of employment in developing countries. The majority of the small businesses are trapped in low-productivity activities since they have little access to financing, key government services, and formal customers (Palmade & Anayiotos 2005, p 1). This is fuelled by their isolation from safety regulations and social protection (ibid). A popular strategy to increase productivity includes improving access to credit, as it is seen as a primary tool for expansion and formalization (ibid, p 4). It is clear that the characteristics of the informal sector currently are not satisfactory and so in any case it should be intuitive to strive towards improving them. In a way, this is the moral of the “third option” above.
On the individual level the informal sector and formalization is a serious concern in terms of providing for decent work, and on the national level it is relevant to economic and social development of a country. Now, let us look at the dynamics behind informal sector characteristics.

2.4 Modelling the stimulus for formalization

The following will provide a basic way to think about the decision of enterprises to move away from the informal sector or not, and where credit services fits into this process. It will firstly detail common factors and then sum it up in a simple model expression.

2.4.1 Institutional incentives

The legitimacy, rights, and benefits of formality can be referred to as institutional incentives. Informality is not only a pressing concern due to the opportunity costs of informality, but also since there are clear benefits of formality. Indeed, these benefits often correlate with the opportunity costs of informality and vice versa (Jansson & Chalmers 2001, p 5). For example, legally enforceable agreements are a benefit of formality, but also an opportunity cost of informality. These benefits of formalization can be divided into those that benefit the enterprises (usually micro- or small sized), the governments, and the consumers, employees and society in general (ibid, p 1). The enterprises avoid government penalties and intervention that keep them from expanding, from engaging in legally enforceable agreements, from better access to trade opportunities, financial services and government support programmes, and from limiting their personal liability (ibid). Governments stand to benefit from an expanded tax base and better knowledge of their country's economic activities (ibid). Consumers, employees, and societies gain improved income distribution, health and safety standards, better social safety net coverage, and economic growth due to investment and efficiency increases (ibid).

De Silva asserts that poorly designed rules that “are burdensome and involve dealing with corrupt and
inefficient bureaucracies increase transaction costs, discourage compliance, impede economic participation and encourage endemic corruption, thus preventing entrepreneurs from participation in the formal economy” (in ILO 2002, p 28). Consequently, as this is often the case in developing countries, there is a structural problem for the institutional incentives that hampers the benefits of formality.

2.4.2 Opportunity costs

Not only are there benefits of formality for a business, there are clear costs of informality. As was mentioned, these costs include having restricted access to public goods and services (Straub 2005, p 300). Public goods and services enable improved production, through for example law enforcement and infrastructure (ibid). They also secure access to certain markets where they make interaction between private agents possible through ensuring the enforcement of property rights and contracts. Depending on excludability, informal agents are more or less shut out from using these goods and services (ibid). Low excludability would give an incentive for free riding by informal agents. At the same time, there are the inferior informal mechanisms already mentioned. Examples include relying on reputation instead of contract enforcement, moneylending, mafia protection, and neighbour associations (ibid).

Like microcredit, informality means different things for different people, but it has to do with tax evasion or regulatory evasion, such as not complying with labour or product standards. This is why registration is a major component of formalization. The most serious opportunity cost may be that informality discourages investment and undermines competitiveness, due to the low-productivity trap that many are caught in (Palmade & Anayiotos 2005, p 1). The very fact that businesses are informal affords them the alternative of being less productive, as the cost of complying with regulations and paying taxes are avoided (Kenyon & Kapaz, 2005, p 2). They are also largely shut out from using financial services and new technologies. Many (like Massar, and Palmade & Anayiotos) argue that informal businesses grow and formalize, but they do not always do that when they find themselves in an informality trap. Lacking access to expansionary possibilities, evading taxes and other regulations becomes necessary to be competitive in a market with more productive formal participants.

Opportunity costs can also be represented by some of the conditions that those who work in the
informal sector and their enterprises generally have to accept such as (GDRCa):
- Absence of official protection, recognition, and union organization
- Isolation from the social security system, including minimum wages and fringe benefit institutions
- Primarily self-employment work with low income and wages, and poor job security
- Low entry barriers to, unregulated and competitive, markets
- Small scale operation with individual or family ownership
- Labour intensive and adapted technology
- Reliance on locally available resources
- Lacking access to institutional credit or other supports and protections
- Unauthorized use of vacant public or private land

More measurable indicators of informal sector characteristics of businesses are detailed in the material discussion below. But if development has to do with sustenance, self-esteem and the ability to choose a future, it is difficult to have a significant portion of the population with these features and call it a developed economy.

### 2.4.3 Formalization costs

The root causes of informality in developing countries are at least fourfold. They pertain to immediate as well as deferred costs of being formal. Labour laws and regulations are often poorly designed or too extensive for the scope of the government's enforcement capability and the financial capability of businesses. The consequence can be called labour informality (Palmade & Anayiotos 2005, p 2), which reasonably improves the potential for the flexible specialization mentioned above. Demanding registration processes, product standards, and insufficiently enforced intellectual property laws can be difficult to comply with. This creates reasons for what can be termed product informality (ibid). Since also land registration processes are often expensive and insecure, there is land informality as well (ibid, p 3). Among all, the land informality disqualifies companies operating from informal land from mortgage-backed financing. Finally, it is important to note that tax payments is a key cost of being formal and the incentive for a vicious cycle (ibid). Informal businesses evade taxes, so the productivity advantages of formal businesses are diminished, which promotes more informal businesses, and the government has to collect ever more taxes from a shrinking tax base. Lower taxes would reasonably
reduce this problem, but this is of course a difficult decision for poor governments. Reports (like Palmade & Anayiotos 2005) point to the reduction of these problems/costs for businesses as a way of promoting formalization.

The formalization costs include entry costs (like registration and licence fees), compliance with regulations, and paying taxes (Straub 2005, p 300). They are closely related to the root causes of informality. It can be useful to think of the costs of formalization as both immediate and deferred as well as monetary (like registration fees) and indirect (like administrative and time related costs) (Jansson & Chalmers 2001, p 3). Important regulatory areas that may increase the cost of formalization include those concerning the initial establishment and ongoing operation of enterprises, property rights, and employment relationships, such as the indirect costs of respecting the rights and protection of workers (ILO 2002, p 27). These areas fit nicely into the immediate-deferred monetary-indirect cost framework in table 1.

<table>
<thead>
<tr>
<th>Table 1: Example of immediate-deferred monetary-indirect cost framework</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Monetary</strong></td>
</tr>
<tr>
<td>Registration fees</td>
</tr>
<tr>
<td><strong>Indirect</strong></td>
</tr>
</tbody>
</table>

2.4.4 Costs and benefits in an expression

It is convenient to have a framework when trying to understand the formalization process, and it also helps us see where microcredit fits into this process. Nelson & De Bruijn state that cases they studied showed three basic considerations in terms of informal businesses' and their voluntary formalizing decisions. Firstly, institutional incentives (II) are the legitimacy, rights, and benefits that legal status entails, which includes access to financial services (Nelson & De Bruijn 2005, p 585f). Secondly, opportunity costs (OC) are the losses a business suffers due to staying informal (ibid). Thirdly, formalization costs, immediate (IFC) and deferred (DFC), include all costs that are incurred as a result of formalization (ibid). They range from fees and taxes to time loss, and also embody what a business would avoid or benefit as a consequence of being informal. These considerations represent the
stimulus (S) to formalize (ibid). This stimulus refers to the effect that II, OC, IFC, and DFC has on the probability for moving away from informal sector characteristics. The model can be stated as: 

\[ S = II + OC - (IFC + DFC) \]

It leads us to a number of relationships (ibid):

- The higher incentives and benefits to formalize (II), and the higher the opportunity cost (OC), the stronger is the stimulus (S) to formalize.

- Lowering the costs of formalization (IFC and DFC), strengthens the stimulus (S).

- Estimating opportunity costs (OC) subjects it to positive or negative perceptions of individuals.

- The part of institutional incentives (II) that are not money related, like potential borrowing, also get subjective evaluations by individuals.

- The higher the deferred costs of formalization (DFC), like many taxes, the more subjective discounting will affect the stimulus (S).

The relationships state how stimulus is affected and that subjectivity enters via each term in the decision model. The more subjectivity (meaning personal characteristics like risk aversion or self-confidence) enters the decision making process, the more predictability leaves this process. In addition to the obvious policies, this introduces the shaping of perception via information as a crucial factor. The very nature of microcredit is an institution that reduces the benefits entailed in formalization, while potentially better equipping its clients to deal with costs of formalization.
3. The West Bank setting

This section will introduce the West Bank economy, its microcredit activities, and its informal sector in general, through previous studies.

3.1 Recent developments on the West Bank

In 1993, representatives from Israel and the Palestinian Liberation Organization (PLO) signed a Declaration of Principles to formalize arrangements for a transitional period of Palestinian interim self-government on the West Bank, and in the Gaza Strip. Gradually, authority has been transferred to the Palestinian Authority (PA) through a number of agreements starting with the Gaza Strip and Jericho in 1994. In late 2000 the second Intifada derailed the direct negotiations that had started the year before and that were to determine the permanent status of the West Bank and Gaza Strip. It took until 2003 before the so called Quartet (the US, EU, UN, and Russia) launched a road-map to peace that was to be completed by 2005. The time table has been postponed due to disagreements on the fulfilment of criteria and outbreaks of violence. The road-map includes a two-state solution between Israel and a democratic Palestine.

In late 2004 Palestinian leader Yassir Arafat died and was succeeded by Mahmud Abbas as president of the PA. This sparked new efforts to move forward with the peace process, and in late 2005 Israel unilaterally withdrew settlers and its military from the Gaza Strip and four settlements on the West Bank. Though, Israel still controls air- and waterways to the Gaza Strip, there is now a border crossing between Gaza Strip and Egypt under joint PA and Egyptian control.

Hamas, the Islamic Resistance Movement, was given control of the Palestinian Legislative Council in an election in early 2006. Since Hamas does not recognize Israel or previous peace agreements and will
not renounce violence, the international community did not recognize the Hamas government. Negotiations between Fatah (the main political group within PLO led by Abbas) and Hamas eventually led to a unity government. However, it was dissolved in June 2007 after Hamas took control of Gaza. Thus, currently the Palestinian Territories are divided, with Fatah maintaining the West Bank.

### 3.2 The Palestinian Economy and Financial Services

Since the beginning of the second Intifada in 2000, average incomes have declined by more than 30 percent and almost half of the Palestinian population live below the poverty line of US$2/day (CGAP 2006, p 2). As of May 2006 in comparison, according to the 2006 adjusted poverty line of US$2.7 per day, 70 percent live in poverty (IFC 2007, p 11). Estimates of the unemployment rate range between 30 and 50 percent, which is disconcerting since about half of all Palestinians are under 15 years old and are not included in the labour force.

As detailed further below, there has been an increased informalization of the economy and most agree that this is primarily due to political, economic, and military instability (CGAP 2006, p 2). Donor aid shifted towards more emergency assistance following the second Intifada (ibid). Even though it is shifting back, the perception is that little can be achieved without a more favourable policy climate and political situation (ibid). In the Medium Term Development Plan for 2005-2007, where the Palestinian Ministry of Planning identifies primary areas for the donor community, it is clear that increasing access and availability of financial services is integral. Consequently, so is then microfinance. The main points of the development plan is to reduce poverty in a sustainable way and to improve the effectiveness of the PA (ibid).

Two thirds of the employed Palestinian labour force is in the service sector, about one fifth in industry, and the rest in agriculture. Citrus and other fruits, olives, and cereals are the main agricultural products, with sheep and goats being the principal livestock. Low investment levels have lead the West Bank to have only a few small industries. These include the processing of food, textiles, and the manufacturing of cement.
On the West Bank, the most common activity in the informal sector is trade followed by animal husbandry (ibid). Very few export their products. Most owners (80 percent) and managers (78 percent) of informal enterprises are males, and most of them are between 26-40 years of age, married and have got children (Massar 2003, p 4). Primarily the enterprises are full-time activities, half of them operate from their homes, a quarter from a market place, and a fifth from the streets (ibid, p 28 and 31). Also, most enterprises buy goods from local formal markets, do not operate a telephone or fax for work purposes, and use manual tools/machinery in production (ibid, p 5).

Of informal entrepreneurs 10.5 percent have no education, slightly less than half have primary or elementary education, and a quarter have secondary education (ibid). On average, two thirds of the enterprises have no employees, with a rural-urban difference showing that rural enterprises are more likely to have employees (ibid). Half of those who have employees have one, and a quarter have two (ibid). An overwhelming majority of employees are relatives, slightly less than one fifth of them are children under 16\(^2\), and about two thirds of them work without monetary rewards (ibid, p 5 and 29).

Return on sales ranges between 34 percent and 64 percent for informal enterprises, and the value added by the informal sector is about 7 percent of Gross Domestic Income (Massar 2003, p 39). In 2003 there were an estimated 110 000 informal enterprises in the West Bank and the Gaza strip, with most of the businesses located to the West Bank and there employing about 98 000 individuals (ibid, p 38). About half of them were established between 2000 and 2002, marking a significant increase. Half of microentrepreneurs on the West Bank are informal and unregistered businesses (IFC 2007, p 8). Overall, the informal sector is found to contribute to more than 50 percent of the income, to two thirds of informal enterprise owners or a quarter of the total Palestinian population (Massar 2003, p 5ff). There is little doubt that the sector is economically important in relation to employment and income for the vulnerable in Palestinian society.

\(^2\) In our survey sample, 11.7 percent acknowledges having someone under the age of 16 working in their business (with a higher percentage for strictly informal businesses). While this is somewhat less than the informal sector average, it still shows that lenders do not have a no child labour policy, or at least not an effective one. Of course this is hard to eliminate while engaging in larger-scale lending, and the point is not that donors in effect support child labour. The point is rather that this is an indicator of whether the poor traits of the informal sector is supported by microcredit. Not only is the topic of this study an economic development issue, but an issue of avoiding the downside of the informal sector.
3.3 Features of West Bank microcredit provision

The formally regulated Palestinian financial system includes the banking sector, mortgage finance companies, insurance companies, specialized lending institutions and other finance companies, money changers, and a privately operated stock exchange (CGAP 2006, p 3). Outside of this system resides the Microfinance Institutions (MFIs), including nongovernmental organizations (NGOs), for-profit and non-profit companies, and savings and credit cooperatives (ibid). They also provide financial services. Currently, the only microfinance product offered on the West Bank is microcredit and some minor business development services (ibid, p 6). It is only savings and credit cooperatives that can offer savings products (for their members only), as taking deposits from the general public requires a banking licence that only conventional banks have. None of the MFIs have partnered with a bank to offer savings services (ibid, p 7). It is also noteworthy that none of the Palestinian MFIs operate on a sustainable basis (ibid). Those that were previously close to sustainability have shifted towards larger loans or seen a worsened portfolio quality since the second Intifada (ibid). Other MFIs have never charged high enough interests to cover their costs (ibid).

There is no credit bureau as of yet to help microcredit lenders. The lending-only MFIs, the main players, offer individual and group loans, housing loans, Islamic loans, consumer loans, and agricultural loans (ibid, p 8). The purpose of the loans are characteristically business and living standard related. The individual loans require collateral and this usually means post-dated checks, personal guarantees, or salary guarantees (ibid). Collateral like salary guarantees, that often come from government employees, have proven to be less secure than expected. When salaries have not been paid it has had severe implications for the portion of portfolios at risk.

The microfinance sector on the West Bank has so far coped despite times of crisis. There is little doubt that the political, economic, and military crisis have prevented them from increasing their portfolios (IFC 2007, p 12). The number of clients dropped after the start of the second Intifada, but has been recovering since 2002 (ibid). Starting in the mid-1990s the microcredit providers have developed with the help of international donors such as USAID and today they number 13, including 11 MFIs and 2 banks (ibid, p 13). Together with USAID, the Islamic Development Bank and the EU are the most active donors in the sector (ibid). Since 2002 there has been a Palestinian Network for Small and Micro
Finance, that functions as a coordinating and supporting body, now carrying out programmes and projects on behalf of its members (ibid, p 14). In their capacity of being the two largest providers, UNRWA and FATEN, will now be briefly mentioned just to get a hint about their activities.

**UNRWA**
UNRWA started a microfinance and microenterprise programme (MMP) on the West Bank in 1991. This was a response to the deteriorating economic situation, with increasing unemployment and poverty, that followed the first intifada in 1987 and the Gulf War. The MMP has revolving loan funds that lend to small-scale and micro-enterprises, and also to workers. The programme covered its operational costs before the second intifada, but the subsequent effects have lowered this coverage. Most microentrepreneurs cannot access formal financial institutions for credit for short-term working capital, because they lack collateral or personal guarantees. This forces them to depend on more informal mechanisms like supplier credit, or possibly moneylenders that charge 8-10 percent monthly interest rates (i.e. six times more than formal institutions). By mid-2007 the MMP had awarded 30,522 loans to a value of US$37,540,359. The loans are made to individuals using a methodology that principally includes small loan amounts (a maximum of US$400 and US$1,000 for a first loan); graduated lending (increasing loan amounts for subsequent loans); loans for working capital (loans for fixed-capital are available); loans to existing enterprises only; short payback periods (four to six months); and few collateral conditions (group guarantee or post-dated cheques and a notarial deed).

**FATEN**
The second major MFI on the West Bank is FATEN. It is a not-for-profit corporation that emerged out of a micro-finance program called the Group Guaranteed Lending and Savings program, launched by Save the Children USA in January 1995. FATEN offers both group guaranteed and individual lending, but requires clients to complete a group product as a first step and can gradually borrow larger amounts. Since 2005 they also offer Murabaha, a form of Islamic lending, where the provider of capital purchases the commodity and re-sells it to the user at a marked-up price, either through instalments or delayed payment. When it comes to collateral, the focus is somewhat on a client’s intent to repay rather than it being means of loan recovery. For the individual loans for instance, FATEN accepts post-dated checks and promissory notes as collateral. The client also has to sign a notary deed in the court, recognizing that she is legally bound to repayment under the terms of the loan contract. It is possible to
replace these three requirements with post dated checks from transferred salary. This usually means that if the client's check does not clear, there is little that the MFI can do.

According to internal statistics, most of those those who are late with instalments at FATEN one day or more, become late more than 30 days as well. In the second quarter of 2007 this was 26 percent and 24 percent of the clients respectively. This is also reflected in the numbers for portfolios at risk comparing more than one and more than 30 days late. In the second quarter of 2007 they made up 61 percent and 56 percent respectively. For the same period, operational sustainability was at 94 percent and financial sustainability was at 77 percent.

3.4 Islamic lending and perception of borrowing

There is a specific feature that is worth mentioning when writing about financial services in Islamic contexts. In response to religion, market demand, and regulatory environments, an Islamic set of financial services have evolved. To understand the perception of the financial market in an area like the West Bank it is necessary to become aware of how the religious context influences financial services. Charging and paying interest is banned under religious law in Islamic societies (Ray 1998, p 563). Two principles of prohibition are particularly relevant here (El-Hawary & Grais 2005). Firstly, \textit{riba} basically means a transaction based on exchanging a commodity of the same nature, like borrowing money and pay it back with money, at different points in time or with unequal quantities (ibid). Exchanging money for more money is one example. Secondly, \textit{gharar} refers to transactions where the outcome is significantly uncertain (ibid). The Islamic prohibition of engaging in financial transactions that have elements of \textit{riba} and \textit{gharar} is behind an underlying sensitivity to credit activities and the development of Islamic Financial services (ibid). In principle this aims for fair conduct of businesses. In practise it become a guide for Islamic financial services that includes:

\begin{itemize}
  
  \item Symmetrical risk-reward-sharing between the parties of a transaction
  
  \item A direct or indirect link between the financial transaction and a real economic material transaction
  
  \item No exploitation of either party
\end{itemize}
– *Haram* or sinful activities, such as producing alcoholic beverages, may not be financed

Contrasting this with commercial interest based loans, where repayment is expected regardless of the payoff from whatever the loans were invested in, where the link to a real economic material transaction is weak, and where exploitation possibly can occur, the Islamic principles may not be accommodated. Islamic lending can be adapted to microcredit services and there are examples, though it is not widespread. A testament to the strength of these principles is that over one third of respondents to a microentrepreneur survey had not applied for formal interest-based credit for religious reasons (IFC 2007, p 34). Next up we turn to the empirical section to analyse the West Bank case.
4. Empirical section

After a methodological discussion, this section will look at the results of the questionnaire survey as it relates microcredit to the informal sector.

4.1 Empirical section material collection

Even in the most politically, economically, and militarily stable areas of the world, collecting survey data always has its challenges of representativeness and unexpected events. Conducting a survey in a developing country adds to these challenges in terms of the capacity of local institutions and in terms of what constitutes realistic goals. The West Bank is indeed a developing economy, but it is also a conflict area. Conflict situations have even more prevalent uncertain and unpredictable conditions. This presents further challenges to the organization of a survey and to the ability of choosing preferred or even practical strategies. Unforeseen events are a possibility in any setting, but a near certainty in a developing country conflict situation. The West Bank furthermore adheres to specific religious and cultural institutions that place various constraints as well as opportunities on field work. Death threats, closure policies, skirmishes between political and military groupings, public confusion, and ad hoc transportation arrangements are examples of factors that can challenge the research setting. At the same time, it also increases the sense of urgency in getting something useful done. This study represents what was possible to achieve at this point in time under the current conditions on the West Bank.

The distribution of a questionnaire represents the primary material collected for this study\(^3\). Out of up to 13 existing semi-formal and formal providers of microcredit, the two largest of the MFIs in the Palestinian territories are UNRWA and FATEN. Together these two represent roughly 54 percent of the clients and 40 percent of the total number of branches. Through lending officers, these two

\(^3\) See Appendix A for the questionnaire in English.
organizations have assisted in the distribution process, which resulted in a sample of microcredit clients. To overcome the language barrier, the questionnaire was translated into Arabic with the help of FATEN.

The respondent of this survey is the client of microcredit lending, in the population of microcredit clients on the West Bank. Due to the strained environment and limited resources, the extent of randomness of the sample was based on distributing the questionnaire to those microcredit clients that were due for repayment at the branches of FATEN and UNRWA in Bethlehem (including Hebron), and Ramallah during the first two weeks of October 2007. To achieve a somewhat meaningful sample, the distribution aimed for 100 respondents and reached 96 in the end. Though, since every combination of 96 clients out of the entire population of microcredit clients on the West Bank did not have the same probability of being selected respondents, the sample is not random in this regard. Out of the clients at UNRWA and FATEN served by their respective Bethlehem (including Hebron) and Ramallah branches the randomness should be fair, while the comparative weight of the West Bank areas these branches represent is close to equal.

Other than survey data, useful perspectives have been gathered from an informal sector study made by Massar Associates⁴ and a microentrepreneur study made by PlaNet Finance on behalf of the World Bank's International Finance Corporation. These studies were picked up during the research visit and are aggregated data that complements the individual survey data. If this study is to say anything, the selection bias forces the survey to assume that microcredit clients are not biased with regards to the questions they were asked. Comparing with the two complementing studies, there has been no indication that they are in relation to clients in general.

4.2 Econometric specification

The core of this study is finding out if microcredit borrowing provides a strong enough stimulus (S) to lead businesses away from informal sector characteristics, i.e. makes it more likely that they do not

---
⁴ Massar's informal business definition includes: small businesses with limited capital; businesses with five employees or less with low wages; long work hours and poor working conditions; individually or family-operated businesses; the same person is owner and business manager; lack of registration; simple organization and bookkeeping. While informality is defined in a different way in this study, Massar still provides relevant information.
acknowledge them. Whether or not an individual acknowledges an informal sector characteristic is clearly a qualitative and binary variable. Linear regression is inappropriate here as it restricts the residuals of the model, and as the fitted value of a binary dependent variable is restricted to zero or one. The most commonly used econometric models for this type of data are the probit and the logit models (Greene 2003, p 667). They allow us to quantify explanatory independent variables and probabilities of response occurrence while dealing with binary dependent variables that are non-linear. Thus, these models enable us to quantify the relationship between individual characteristics and the probability of choosing one of two alternatives. The dependent variable, y, takes the value of 1 when the event in question occurs and 0 when it does not. So the model enables us to find out the probability of observing y=1 or y=0. It can be described as (ibid, p 665):

\[ Pr(y_i=1|x_i) = F(x_i, \beta_i) \]

\[ Pr(y_i=0|x_i) = 1 - F(x_i, \beta_i) \]

where the coefficients \( \beta \) show the impact of changes in independent \( x \)-variables. The probability of \( y=1 \) depends on \( i \) number of independent \( x \)-variables. The probit model assumes a normal distribution of the probability function and the logit model a logistic distribution (ibid, p 667). These models often generate similar results (ibid), and since this was true for this study, the probit model will be used. To estimate the model, a maximum likelihood function is used (ibid, p 671):

\[ Pr(Y_n = y_n | X) = \prod_{j=1}^{y_j=1} F(x_j^\prime \beta) \prod_{j=0}^{y_j=0} [1 - F(x_j^\prime \beta)] \]

where \( x \) denotes \([x_i]_{i=1,...,n}\). The probit model estimates the probability of an event as a dependent variable on a combination of observed independent variables that are given weights through coefficients. The model coefficients measure the change in probability as a response to changes in independent variables. In contrast to ordinary linear regression, their size cannot be directly interpreted. A positive coefficient indicates that an increase in the independent variable will increase the probability of the dependent variable occurring. To interpret the size of the coefficient as a marginal effect, further calculations are required. The marginal effect, which is the partial derivative of the expected value of \( y \) given a certain \( x \)-variable can be written as (ibid, p 667):

\[
\frac{d}{dx_{ij}} E(y_i | x_i, \beta) = f(-x_i^\prime \beta) \beta_j
\]
This shows the effect on $y$ if there is an increase in an $x$-variable. The probit econometric method forms the basis of the empirical analysis, and the survey data is analysed using the Eviews software programme. Also, to measure the goodness of the fit, the McFadden $R^2$ is included for the probit model estimations. This measures a likelihood ratio similar to the ordinary $R^2$ in linear regression models, and has the property of being between 0 and 1. The closer to 1, the more of the variability of the dependent variable is explained by the estimation, i.e. the stronger is the explanatory power of the estimation.

### 4.3 Discussion on questions and models

This sub-section will present questions and a model type that will provide a way to think about the research question. Presenting previous research gave rise to questions that form the framework for the following analysis. The first four questions are part of a descriptive analysis and the fifth relates to the econometric probit analysis. Firstly, it is necessary to answer: Do microcredit providers engage the informal sector? This will mainly be illustrated by a table showing the prevalence of microcredit clients' informal sector characteristics, contrasted with numbers on microcredit lending outreach. Secondly, the microcredit clients may not voluntarily embrace the informal sector characteristics, which poses the question: Is borrowing for informal businesses connected to coping or crisis management? Answering this question will entail a table with those acknowledging informal sector characteristics and response rates pertaining to questions on borrowing in crisis. Thirdly, to find out about the perception of this issue it is relevant to ask: Is there an interest in formalization, coming from borrowers or lenders? The level of interest will be answered using response rates, complemented by simple hypothesis testing. It will also be related to registration status of respondents. Fourthly, the potential dynamism of changing characteristics gives rise to the question: Is there progress in terms of informal sector characteristics? This dynamism will be explored by looking at how characteristics correlate between today and any point in the past.

Finally, there is a question of whether it can be shown that borrowing is strong enough to make it more likely to have less informal sector characteristics: Does microcredit provision lead away from informal sector characteristics? To answer this a simple model will be estimated for those engaged in informal businesses, using the probit model described under 4.2. It can be expressed simply as:
\[ Pr(y_c=1) = \beta_0 + \beta_i x_i, \]

where \( y_c \) represents dependent informal sector characteristics and \( x_i \) the independent variables. Now let us detail these dependents and independents, principally pertaining to this fifth question. Note that this is not an attempt at a complete model to explain formalization. It is a way of exploring if microcredit activities have explanatory power themselves. If not then the estimations should be very weak and probabilities not significant. The author is fully aware that there are other factors that affect the formalization decision, which the \( S = II + OC - (IFC + DFC) \) model illustrates.

### 4.4 Detailing variables

To identify questionnaire respondents engaged in informal businesses, a definition is required. National accounts around the world use different definitions of informal businesses. The primary definition applied here comes from the Global Development Research Center (GDRC) and embraces points made in section 2. To be considered strictly informal\(^5\), businesses have to acknowledge the following informal sector characteristics:

- They have to employ less than 10 people.
- Any of the following has to fit the business:
  - The business is not registered
  - The business has a permanent official address
  - The business is based at home
  - The business is based in an open space, like a market place
  - The business is operated from a temporary place
- The business should get government support/recognition.

Strictly informal is the main dependent variable in the econometric part. However, it is obvious in literature, and also from our survey data, that there is indeed a formality-scale or continuum that most enterprises are positioned on. Few small enterprises in developing countries are completely formal and few are completely informal. Actually, 100 percent of survey respondents acknowledge some of the strictly informal characteristics above. To capture this better, and as registration is a principal

\(^5\) This is what is referred to as strictly informal throughout the text.
component of being informal, registration status of businesses is presented alongside being strictly informal in all tables of the analysis, and is estimated as a dependent variable in the econometric part. To further capture the continuum issue, two tables have a breakdown of all the informal sector characteristics and there are also comments on specific characteristics where relevant.

For the two probit estimations, there are seven independent variables chosen. First and foremost, microcredit providers lend to their clients and have done so over different amounts of time. Therefore an obvious independent variable should be how long a given client has borrowed. Secondly, microcredit providers can have a role as an information source. It is therefore interesting to include a variable that reflects whether or not clients have received information on formalization, and the topic chosen here to indicate this type of information is registration of the business. Thirdly, clients may themselves have searched for information from their microcredit provider on this type of formalization. Fourthly, if informal sector characteristics are connected to a coping strategy aided by MFIs, it should be relevant to look at whether a given client has borrowed and started an informal unregistered business to create a job for him- or herself. These four variables are joined by the variables age, sex, and years of education. These three are common variables used and including them serves the purpose of adding a few personal characteristics that may be relevant, without distorting the answer to the original question.

It is again important to remember here that these independent variables are not claimed to be able to provide an explanation for why respondents acknowledge informal sector characteristics. The question is whether microcredit activities have led respondents away from these characteristics, so the independent variables mainly reflect microcredit activities in the sphere of clients. If they have done so strongly enough, then this should be reflected in significant probabilities in a probit. If they have not, then the reasons why should be subject to further study.
4.5 Descriptive analysis

Here we will examine a set of questions on microcredit clients and the informal sector. They help describe informal sector issues as it relates to microcredit clients.

4.5.1 Do microcredit providers engage the informal sector?

If microcredit providers do not engage the informal sector they can logically not have a link to the stimulus (S) that leads businesses away from informal sector characteristics. The study of informal enterprises on the West Bank report that about 7 out of 10 informal enterprises used their own savings to set up the business, 2 out of 10 used sources from family and friends, and only 2 percent accessed formal credit sources (Massar 2003, p 43). One-third would consider applying for a loan and feel it is a constraint that they lack access, although about three-fifths of informal enterprises claim they faced serious financing problems when they started (ibid, p 16).

The broad survey of microentrepreneurs (IFC 2007) show that financial services are significantly insufficient. It is clear that outreach is low, since 90 percent of microentrepreneurs report having no access to credit services. At the same time 57 percent of them say they need it, primarily for their business, and a further 27 percent would consider credit if the current situation improves (IFC 2007, p 9). Moreover, 88 percent uses merely self-financing, only 2.7 percent of microentrepreneurs have received loans from MFIs and 1.4 percent from banks (ibid, p 24). Considering current outreach to informal enterprises and microentrepreneurs, the scope of whatever effects microcredit provision has on the economy as a whole may not yet be too overwhelming, or perhaps bordering on insignificant.

The microcredit client survey data suggests that 100 percent of respondents acknowledged at least one indicator of informality, out of those listed in the strict definition. In that way, one might say that practically all lending cases engage the area of informality. Further, informal businesses are often
equated with not being officially registered⁶. Table 2 shows that 65 percent of responding microcredit clients are not registered anywhere. This ought to mean that they are not registered at the municipality, a government agency, or anywhere. Further, out of those who are registered, there may be those who are only registered at one or some of the places they should or could be registered at. An enterprise may be registered at the municipality to access public water and electricity, but not with the appropriate PA ministry.

Table 2: Microcredit engagement with informal sector characteristics

<table>
<thead>
<tr>
<th>Characteristic</th>
<th>Percentage</th>
</tr>
</thead>
<tbody>
<tr>
<td>Business employ &lt;10</td>
<td>65</td>
</tr>
<tr>
<td>Unregistered business</td>
<td>65</td>
</tr>
<tr>
<td>No permanent address</td>
<td>4</td>
</tr>
<tr>
<td>Home-based business</td>
<td>20</td>
</tr>
<tr>
<td>Based in an open space</td>
<td>44</td>
</tr>
<tr>
<td>Operate from temporary place</td>
<td>13</td>
</tr>
<tr>
<td>No government support</td>
<td>88</td>
</tr>
<tr>
<td>Strictly informal</td>
<td>49</td>
</tr>
</tbody>
</table>

Using the stricter definition of an informal business⁷, we find that 49 percent of respondents are strictly informal, while keeping in mind that many more have significant informal features as well. It is safe to say that microcredit provision on the West Bank is engaged in financing the informal sector to a great extent, in terms of proportion of MFI activities. In terms of the proportion of informal businesses that borrow in the whole economy, the engagement is less pronounced, but this is a matter of present outreach.

It was found by the Palestinian Central Bureau of Statistics (PCBS) that 20.5 percent of the businesses in the informal sector were not officially registered anywhere (PCBS 2003). 49 percent of microentrepreneurs have been found not to be registered (IFC 2007, p 8). A simple hypothesis test⁵ shows that it is statistically significant that our survey sample includes a higher percentage of unregistered respondents. To the extent that it is representative, this indicates that microcredit clients are informal to a greater extent than the average among microentrepreneurs and the informal sector in

⁵ As was mentioned under 2.4.2.
⁶ As was detailed under 4.4.
general, which adds to the perception of microcredit providers engaging the poorer segments of the informal sector.

4.5.2 Is borrowing for informal businesses connected to coping or crisis management?

If borrowing for informal businesses are a coping strategy, then the stimulus (S) that could explain the informal sector characteristics acknowledged, has an element of survival in it. According to PCBS, the reason behind 70 percent of the informal establishments was job creation (PCBS 2003). UNDP showed in 2002 that job creation is perceived as the number one poverty reduction strategy by Palestinians themselves (IFC 2007, p 11). It is also asserted that the informal sector has been a significant crisis management tool (ibid). In that way the informal sector is in general often a coping strategy, without which Palestinians would be more vulnerable.

In the study of the informal sector, there is a clear correlation between political instability and sharp increases in amount of informal businesses, and a top reason for establishing an informal business in general is found to be substituting for the loss of a job (Massar 2003, p 15f). The number of informal sector enterprises on the West Bank have been growing steadily and particularly after the outbreak of the second Intifada (ibid). Though not conclusive, the correlation gives a stronger indication that many of these mostly small and micro enterprises are perceived to be a way to cope with a restrained infrastructure and mobility, as a result of a crisis environment.

A majority of surveyed microcredit clients who are engaged in unregistered or strictly informal businesses assert a connection to coping or crisis management, as indicated in table 3. About a quarter of them have had the experience of starting an unregistered business after becoming unemployed. Those who do not use borrowing for informal businesses to cope may use it for unofficial earnings, but table 3 shows that businesses with informal sector characteristics are reasonably not merely used for the latter purpose. In total, three quarters of respondents either view microcredit as a sort of crisis management tool, have had the experience of starting an unregistered business after becoming
unemployed, or both.

There is fairly limited deviation across the questions and between the three columns in table 3. About half of respondents know someone who borrowed in connection to the second Intifada, though significantly less know about others who have borrowed or started an informal unregistered business after a job loss. Also, hidden behind those numbers is that a higher percentage of those who operate from a temporary place view and use microcredit as an alternative in a crisis, possibly since temporality implies closer proximity to a crisis situation.

Table 3: Borrowing in crisis

<table>
<thead>
<tr>
<th>Respondents acknowledging each question (%)</th>
<th>Unregistered business</th>
<th>Strictly informal</th>
<th>Total sample</th>
</tr>
</thead>
<tbody>
<tr>
<td>Do you think microcredit is an alternative in a crisis when you need to start or continue with an unregistered business?</td>
<td>75</td>
<td>67</td>
<td>68</td>
</tr>
<tr>
<td>Did you start an informal unregistered business because you lost or could not find any other job?</td>
<td>24</td>
<td>27</td>
<td>21</td>
</tr>
<tr>
<td>Do you know anyone who borrowed money for an unregistered business right after the al-Aqsa Intifada began?</td>
<td>47</td>
<td>47</td>
<td>44</td>
</tr>
<tr>
<td>Do you know anyone who borrowed money for an unregistered business when he or she lost their job?</td>
<td>17</td>
<td>11</td>
<td>20</td>
</tr>
<tr>
<td>Do you know anyone who started an informal unregistered business when they lost or could not find any other job?</td>
<td>25</td>
<td>16</td>
<td>24</td>
</tr>
</tbody>
</table>

It should be uncontroversial to claim that just as the informal sector absorbs unemployment shocks, microcredit is viewed, and in some cases used, as a tool for job creation by the microcredit clients. A quarter of those who view microcredit as an alternative in crisis have in fact used it as such. In this sense, microcredit has reduced vulnerability and increased coping ability.

4.5.3 Is there an interest in formalization, coming from borrowers or lenders?

Finding interest, defined as clients having been informed or asked about formal registration, touches upon whether there is stimulus (S) enough to encourage interest in formal registration. To answer this as a binary question, table 4 shows that interest does exist. An equality test shows that significantly more respondents had received information than had been asking questions themselves.

8 Though, there is little correlation (0.07) between these two.
about formal registration of business. Thus, there exists an interest in registration and then implicitly also in formalization, coming more frequently from someone other than borrowers.

**Table 4: Interest in formalization**

<table>
<thead>
<tr>
<th>Question: Have you asked anyone about how to turn a business into a formally registered business?</th>
</tr>
</thead>
<tbody>
<tr>
<td>Answer (%): No</td>
</tr>
<tr>
<td>Unregistered business</td>
</tr>
<tr>
<td>Strictly informal</td>
</tr>
<tr>
<td>Total sample</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Question: Has anyone informed you about how to register your business?</th>
</tr>
</thead>
<tbody>
<tr>
<td>Answer (%): No</td>
</tr>
<tr>
<td>Unregistered business</td>
</tr>
<tr>
<td>Strictly informal</td>
</tr>
<tr>
<td>Total sample</td>
</tr>
</tbody>
</table>

Among microcredit clients in general, there is some correlation (0.45) in the questionnaire between having asked and having received information about business registration, so there is some overlap. Going beyond table 4, 63 percent of the registered respondents had received information on registration from somewhere and 55 percent of the unregistered. 55 percent of the registered has asked themselves, but only 19 percent of the unregistered. This may make a reasonable point, as testing for equality \(^\text{endnote 3}\) reveals that a significantly higher portion of those registered have searched for information than the unregistered. A similar but much weaker point can be made for receiving information, as a significantly higher portion of those registered have received information compared to the unregistered. The correlation between asking themselves and being registered (0.37) is at least higher than that between receiving information and being registered (0.08). Either way, there is no overwhelming interest from unregistered businesses in registration (only 19 percent), nor from strictly informal ones (only 22 percent).

For respondents with informal sector characteristics, credit providers seem comparatively strong distributors of registration information. A third of the unregistered businesses and almost half of the strictly informal businesses have received information from a credit provider. Previously, the establishment of informal businesses have been found to have spread with the assistance of microcredits, but there is no evidence that shows natural transformation into larger formal businesses.
(Massar 2003, p 15). This is also reflected in table 5, where most respondents say that they do not even know one case where formal registration has followed borrowing.

<table>
<thead>
<tr>
<th>Question:</th>
<th>Do you know any case where an informal unregistered business has borrowed money and later formally registered its business?</th>
</tr>
</thead>
<tbody>
<tr>
<td>Answer (%):</td>
<td>No</td>
</tr>
<tr>
<td>Unregistered business</td>
<td>88</td>
</tr>
<tr>
<td>Strictly informal</td>
<td>84</td>
</tr>
<tr>
<td>Total sample</td>
<td>81</td>
</tr>
</tbody>
</table>

Given that registration is an integral part of formalization, and 19 percent of the total sample actually knows at least one case, one might say that borrowing and subsequent formal registration is not out of the question.

### 4.5.4 Is there progress in terms of informal sector characteristics?

Is progress or dynamism stimulated (S) in the form of formalization? This question look to the movement of respondents acknowledging informal sector characteristics towards formality, but it starts with some data on growth of informal businesses in general. The informal sector entrepreneurs and their enterprises have characteristics that hamper growth and transformational potential. 59 percent of informal enterprises had serious financing problems during the start-up phase (Massar 2003, p 16). Looking at the factors highlighted in sub-section 2.2, it becomes clear that the West Bank informal enterprises also lack such factors. It has deficient government policies; entrepreneurs have limited managerial skills, low level of education and technologies, limited ambitions and an unwillingness to borrow; entrepreneurs have limited quality assurance, and lack proper work place and space; they have spontaneous projects that respond to existing demand; their organisational level is low; and women who work generally become dually responsible for work and home (Massar 2003, p 40).

About 7 out of 10 of informal establishments have more than 10 years of experience in the sector according to PCBS (2003), which indicates slim transformation and formalization of these enterprises.
The rates of employment growth in informal enterprises is insignificant and the capital investments are generally small (Massar 2003, p 4). Even though the number of informal enterprises have grown, the entities themselves have not. This is true regarding employment, sales as well as capital (ibid, p 4ff). Regardless of if you look at the time before 1995, at 1996-1999, or 2000-2002, the results show insignificant employment growth in West Bank informal sector businesses (Massar 2003, p 16), with only a couple more employees for every 100 business. More informal businesses have been started but have just not expanded in terms of employment. Of those who are employed, 97.5 percent get no upgrading of skills (ibid, p 30). In terms of capital investment, this has increased a low 40 percent on average going back all the way to the start of the business (ibid, p 18). Neither are the sales figures encouraging, as the average increase is 16 percent since the establishment of the business (ibid). This is naturally related to the West Bank setting as well. It seems a valid conclusion that informal businesses on the West Bank increases in numbers and benefit from being flexible, but they remain quite unchanged themselves, and thus again have had limited potential for growth and transformation (ibid).

Looking at the factors in the questionnaire under type of business today, all of them are highly correlated with any point in the past. This is a further blow against dynamism and growth, in terms of moving towards more formal forms of business while using microcredit. For instance, looking at table 6, being based in an open space in the past is highly correlated with still being so. There is further only a low percentage increase (about 1 percent) of clients having grown from less than 10 employees in the past to more than 10 today. Looking closer at the data, this 1 percent was entirely represented by formal clients, according to the strictly informal definition. Of informal microcredit clients surveyed, none of their businesses had grown from having less to more than 10 employees.

<table>
<thead>
<tr>
<th>Respondents acknowledging each characteristic (%)</th>
<th>Today</th>
<th>In the past</th>
<th>Correlation</th>
</tr>
</thead>
<tbody>
<tr>
<td>Business employ &lt;10</td>
<td>65</td>
<td>64</td>
<td>0.88</td>
</tr>
<tr>
<td>Unregistered business</td>
<td>65</td>
<td>72</td>
<td>0.82</td>
</tr>
<tr>
<td>No permanent address</td>
<td>4</td>
<td>8</td>
<td>0.54</td>
</tr>
<tr>
<td>Home-based business</td>
<td>20</td>
<td>20</td>
<td>0.85</td>
</tr>
<tr>
<td>Based in an open space</td>
<td>44</td>
<td>44</td>
<td>0.93</td>
</tr>
<tr>
<td>Operate from temporary place</td>
<td>13</td>
<td>10</td>
<td>0.76</td>
</tr>
<tr>
<td>No government support</td>
<td>88</td>
<td>93</td>
<td>0.75</td>
</tr>
<tr>
<td>Strictly informal</td>
<td>49</td>
<td>52</td>
<td>0.90</td>
</tr>
</tbody>
</table>
The progress experience is not very dynamic in table 6. It shows small percentage differences and high correlations. Considering that the sample unit is microcredit clients, this does not spell encouraging progress for these clients. Poor credit provision may not be the reason of course, but acknowledging such a statement only leads us to the reasonable inability of microcredit to really promote progression away from informal sector characteristics without enabling surrounding factors.

4.6 Econometric analysis

Does microcredit provision naturally lead businesses away from informal sector characteristics? Does microcredit increase stimulus (S) enough to alone trigger formalization? The Massar Associates study concludes that the transformation and development of the informal sector requires policy and assistance programmes that promote these enterprises, accessible finance and credit services, and training and technical assistance efforts (Massar 2003, p 7). It also asserts that the establishment of informal businesses have spread with the assistance of microfinance operations starting in the 1980s already, and that there is no evidence that shows natural transformation into larger formal businesses (ibid, p 15).

Table 7: Strictly informal and MFI

<table>
<thead>
<tr>
<th>Independent variable</th>
<th>Coefficient</th>
<th>Std. Error</th>
<th>z-Statistic</th>
<th>Prob.</th>
</tr>
</thead>
<tbody>
<tr>
<td>Months borrowed</td>
<td>0.0103</td>
<td>0.0091</td>
<td>1.1264</td>
<td>0.2600</td>
</tr>
<tr>
<td>Received info MFI</td>
<td>0.3016</td>
<td>0.8139</td>
<td>0.3705</td>
<td>0.7110</td>
</tr>
<tr>
<td>Searched info MFI</td>
<td>7.6736</td>
<td>1673522</td>
<td>0.0000</td>
<td>1.0000</td>
</tr>
<tr>
<td>Business for job creation</td>
<td>0.7793*</td>
<td>0.4322</td>
<td>1.8031</td>
<td>0.0714</td>
</tr>
<tr>
<td>Sex</td>
<td>-0.2083</td>
<td>0.4900</td>
<td>-0.4252</td>
<td>0.6707</td>
</tr>
<tr>
<td>Age</td>
<td>-0.0383</td>
<td>0.0272</td>
<td>-1.4096</td>
<td>0.1587</td>
</tr>
<tr>
<td>Years of education</td>
<td>-0.0942*</td>
<td>0.0484</td>
<td>-1.9445</td>
<td>0.0518</td>
</tr>
<tr>
<td>C</td>
<td>1.4682</td>
<td>1.3045</td>
<td>1.1255</td>
<td>0.2604</td>
</tr>
</tbody>
</table>

* = significant at 10% level
** = significant at 5% level
*** = significant at 1% level

McFadden R-squared: 0.2021
Log likelihood: -29.5616
The probit model can tell us if microcredit has lead away from informal sector characteristics for the sample of microcredit clients. If any of the microcredit related independents detailed in 4.4 increases the probability of occurrence of an informality indicator, we also look at McFadden $R^2$. Table 7 shows that we do not find that borrowing over time makes it more likely for respondents to be found formal. We see that starting an informal unregistered business and at some point borrowing makes it significantly more likely to be found informal, and that more years of education makes it more likely to be found formal, but the low McFadden $R^2$ points to the weak explanatory power of this estimation. Moreover, this is not relevant for showing that microcredit naturally leads away from the informal sector as the coefficient is positive. In table 8 a principal informal sector characteristic, that is often by itself used as a definition of an informal business, serves as dependent variable. However, using registration of the business does not give us any significant results.

**Table 8: Registered business and MFI**

<table>
<thead>
<tr>
<th>Independent variable</th>
<th>Coefficient</th>
<th>Std. Error</th>
<th>z-Statistic</th>
<th>Prob.</th>
</tr>
</thead>
<tbody>
<tr>
<td>Months borrowed</td>
<td>-0.0024</td>
<td>0.0071</td>
<td>-0.3349</td>
<td>0.7377</td>
</tr>
<tr>
<td>Received info MFI</td>
<td>0.7087</td>
<td>0.7308</td>
<td>0.9697</td>
<td>0.3322</td>
</tr>
<tr>
<td>Searched info MFI</td>
<td>-0.5392</td>
<td>1.2297</td>
<td>-0.4384</td>
<td>0.6611</td>
</tr>
<tr>
<td>Business for job creation</td>
<td>-0.2851</td>
<td>0.4247</td>
<td>-0.6713</td>
<td>0.5020</td>
</tr>
<tr>
<td>Sex</td>
<td>0.6302</td>
<td>0.4539</td>
<td>1.3884</td>
<td>0.1650</td>
</tr>
<tr>
<td>Age</td>
<td>0.0264</td>
<td>0.0227</td>
<td>1.1674</td>
<td>0.2431</td>
</tr>
<tr>
<td>Years of education</td>
<td>0.0302</td>
<td>0.0415</td>
<td>0.7278</td>
<td>0.4667</td>
</tr>
<tr>
<td>C</td>
<td>-1.6387</td>
<td>1.1521</td>
<td>-1.4224</td>
<td>0.1549</td>
</tr>
</tbody>
</table>

* = significant at 10% level
** = significant at 5% level
*** = significant at 1% level

McFadden R-square 0.0699
Log likelihood -35.7536

The main point to be made here is that there are no significant probabilities between borrowing over time and acknowledging less informal sector characteristics. Moreover, the low McFadden $R^2$ shows that the estimations are weak, that not much deviation in the dependent variables can be explained.
Reasonably then, since we cannot find significant probabilities or really any strong connections, accessing microcredit does not seem to be a one-way ticket away from informal sector characteristics for clients on the West Bank. Again, the reason behind this is most likely not related to microcredit only, but microcredit has not been a strong enough stimulus (S) on its own in the environment in which it resides.

Moreover, the probit estimations do not show that clients' receiving or searching for information on formal registration makes informal sector characteristics less likely. Thus, the microcredit providers' role of lender and information source is not found to make it less likely that a client acknowledges informal sector characteristics. The only indication is that starting a businesses for job creation and borrowing at some point, makes a client more likely to be found informal. This sounds reasonable, but is not strongly shown.

As a final note, using probit estimations for each of the informal sector characteristics as separate dependent variables will generate the same conclusion. This just serves as an indication that the main point mentioned is not dependent upon just using strictly informal or registered business as dependents\(^9\).

---

\(^9\) In short, the tables would show that it is more likely for the business to employ less than 10 people if the client started an unregistered business for job creation. Female respondents are more likely to be home-based, and male to be based in an open space. More education makes it less likely to be based in an open space. Finally, borrowing over time makes it less likely to now acknowledge getting government support, while having received information on formal registration makes this more likely. However reasonable this sounds these estimations would show very low McFadden R\(^2\).
5. Conclusion

Much has been written about microcredit provision and much has been written about the informal sector. This study has tried to join these two topics in the case of the West Bank. The microcredit providers do engage the informal sector on a significant scale in terms of the proportion of their loans going to clients that acknowledge informal sector characteristics. In terms of outreach to informal or micro-entrepreneurs, the scale is leaning more towards insignificance.

There is a clear correlation between increased amounts of informal businesses and political instability. Microcredit seems to be used as a coping strategy to some extent, since about a fifth of questionnaire respondents have actually used it to create a job for themselves. Thus, informal sector businesses are used as a crisis management tool by microcredit clients, and together with those who view it as such a tool, they form three quarters of the client sample. In terms of job creation, clients should thereby be less vulnerable on average thanks to microcredit access. For many people the informal sector is their way of survival, and for the West Bank in general it is an important source of employment. It can be supported through microcredit provision. At the same time, there is a significant, though perhaps not overwhelming, interest in formal registration, coming from both lenders and borrowers.

Since outreach is quite limited, the overall effects of microcredit on the West Bank economy may be limited. However, informal businesses tend to have an inability to display growth and transformation in general on the West Bank. The survey data on microcredit clients shows little progress towards more formal characteristics as well.

It is clear that whether in the role of lender or information source, the microcredit providers cannot be shown to increase the probabilities of less informal sector characteristics acknowledged by respondents. There is no valid connection here. Microcredit borrowing does not necessarily or naturally mean formalization according to our survey data. Having started an informal unregistered business to create a job, and more years of education, did illustrate some significance, in terms of making it more likely, and less likely, to display informal sector characteristics. However, explanatory power was weak.
and it does not indicate microcredit as pushing for formalization.

Formalization in terms of registration following borrowing does not seem common in the surroundings of the respondents either, but it is not perceived to be non-existent. Even if there is no statistically significant relationship to be found in this regard here, a fifth of respondents claim that it has occurred.

As stated by Nelson & De Bruijn (2005, p 592), a flourishing informal sector is partly due to economic necessity of the poor, partly due to the flexible character of its business forms, and partly due to government institutions and tolerance. We should be sensitive to the fact that while formalization is desirable it may also risk damaging fragile enterprises and livelihoods. Microcredit provision does not necessarily lead away from informality, but the reasons for this may lie in other structures and policies. This should be subject for further study. It is important to remember that microcredit does have proven positive effects in many places.

These results indicate that the formalization of microcredit clients' businesses require something more than today's West Bank situation. However, you need to engage the informal sector to reach the poor and coping should take precedence.
References


44


Appendix A: Questionnaire for clients

Assalamu aleykum! My name is Michael and I am writing about economic development on the West Bank. I am very thankful for your help in trying to find better ways to develop the Palestinian economy.

General information

How old are you? Are you male or female?
- ______ years old. □ male □ female

How many years of education have you had? Is anyone under 16 years working in your business?
- ______ years. □ Yes □ No

How many months or years have you borrowed from an organization for your business?
- ______ months or ______ years.

What was the purpose of your last loan?
□ Private consumption □ Things for the business

Type of business (please put a circle around the correct alternative)

Today In the past

Does your business employ less than 10 people?
□ Yes □ No □ Yes □ No

Does any of the following fit your business:
- My business is registered
- My business has a permanent official address
- My business is based at home
- My business is based in an open space, like a market place
- My business is operated from a temporary place
□ Yes □ No □ Yes □ No

Does any of the following fit your business:
- My business gets government support
□ Yes □ No □ Yes □ No
Formalization

Has anyone informed you about how to register your business?
- □ No
- □ Yes, a friend of family member
- □ Yes, a credit provider
- □ Yes, a government institution
- □ Yes, someone else

Have you asked anyone about how to turn a business into a formally registered business?
- □ No, I am not sure what that would mean
- □ Yes, a friend of family member
- □ Yes, a credit provider
- □ Yes, a government institution
- □ Yes, someone else

Do you know any case where an informal unregistered business has borrowed money and later formally registered its business?
- □ Yes
- □ No

Borrowing in crisis

Did you start an informal unregistered business because you lost or could not find any other job?
- □ Yes
- □ No

Do you know anyone who started an informal unregistered business when they lost or could not find any other job?
- □ Yes
- □ No

Do you know anyone who borrowed money for an unregistered business when he or she lost their job?
- □ Yes
- □ No

Do you know anyone who borrowed money for an unregistered business right after the al-Aqsa Intifada began?
- □ Yes
- □ No

Do you think microcredit is an alternative in a crisis when you need to start or continue with an unregistered business?
- □ Yes
- □ No
Endnotes

endnote 1:

Hypothesis Testing for REGISTERED
Test of Hypothesis: Mean = 0.510000

<table>
<thead>
<tr>
<th>Method</th>
<th>Value</th>
<th>Probability</th>
</tr>
</thead>
<tbody>
<tr>
<td>t-statistic</td>
<td>-3.1105</td>
<td>0.0025</td>
</tr>
</tbody>
</table>

Sample Mean = 0.354839
Sample Std. Dev. = 0.481058

endnote 2:

Test for Equality of Means Between Series
Sample: 1 96

<table>
<thead>
<tr>
<th>Method</th>
<th>df</th>
<th>Value</th>
<th>Probability</th>
</tr>
</thead>
<tbody>
<tr>
<td>t-test</td>
<td>185.0000</td>
<td>3.5506</td>
<td>0.0005</td>
</tr>
<tr>
<td>Anova F-statistic</td>
<td>(1, 185)</td>
<td>12.6070</td>
<td>0.0005</td>
</tr>
</tbody>
</table>

endnote 3:

<table>
<thead>
<tr>
<th>Test for Equality of Means Between Searched_registered and Searched_unregistered</th>
<th>Test for Equality of Means Between Received_registered and Received_unregistered</th>
</tr>
</thead>
<tbody>
<tr>
<td>Method</td>
<td>df</td>
</tr>
<tr>
<td>--------</td>
<td>-------</td>
</tr>
<tr>
<td>t-test</td>
<td>88</td>
</tr>
<tr>
<td>Anova F-statistic</td>
<td>(1, 88)</td>
</tr>
</tbody>
</table>