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MICROFINANCE AND WOMEN:
FINANCIAL PERFORMANCE, OUTREACH
AND EMPOWERMENT.

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INTRODUCTION

Microfinance and women have always been intrinsically linked (Mody 2000; Yunus 2002). The Microcredit Summit Campaign (2012) reports 3,652 institutions serving 205,314,502 clients, 137,547,441 of whom were among the poorest when they took their first loan. Of these poorest clients, about 82 percent (113,138,652) are women and the growth in the number of very poor women reached has increased from 10.3 million at the end of 1999 to 113.1 million at the end of 2010. These numbers reflect the relevance of the presence of women in microfinance. One of the main reasons for the success of microfinance in the public eye is the targeting of women (Morduch 1999). In fact, there are three main arguments which support the idea of targeting women (Mayoux 2001): the principle of gender equality, the microfinance aim of poverty reduction, and the MFIs’ efficiency.

The thesis, developed in three papers, aims at highlighting the importance of the female gender in the microfinance industry, according to three different points of view: the first research aims at studying the influence of women in the workforce of microfinance institutions (MFIs) on the financial performance in times of crisis, the second study takes its cue from the debate around the relationship between mission drift, financial performance and outreach of MFIs, and considers women as privileged target, and the third paper wants to provide a review of the literature on women empowerment, underlining the importance of context, the downsides and suggestions for future research. The first two papers are quantitative, while the third one is theoretical.
More in details the first paper is entitled “The Effect of Gender Diversity on MFI’s financial performance in Crisis Period”. This study sought to explain the role played by women in microfinance institutions (MFIs) during crisis and their influence on the financial performance. We addressed the relevance of gender diversity and its influence on the financial performance during the downturn periods. We analyzed data from 555 ratings of 185 MFIs from MicroFinanza Rating, a leading microfinance rating agency. The analysis shows that the number of women in staff of MFIs is significantly and positively associated both with the ROE and OSS of MFIs; which means a positive impact of gender diversity on the financial performance.

The title of the second research is “Doing well by returning to the origin. Mission drift, outreach and financial performance of microfinance institutions”. This paper uses a dataset of 194 microfinance institutions (MFIs), 788 annual ratings from 2001 to 2010, collected by MicroFinanza Rating, an international MFIs' rating agency, to study and test three hypotheses on the relationship between mission drift, financial performance and outreach of MFIs. Data analyzed with mixed effect regressions show that MFIs should be encouraged to pursue their original mission: that is to serve the poor and maximize the outreach, without fearing the repercussion on the financial sustainability side. Actually the more they keep on achieving a better outreach, the more they will become financially sustainable over time.

The third and last study is entitled “The process of women empowerment in microfinance: definitions, implications and downsides”. In this paper we provide a review of the literature on women empowerment, in particular, it is explained what is considered women empowerment, and how it is defined by different authors over time, then it is aimed at showing studies conducted on empowerment within microfinance,
and finally we report research on the relevance of context and negative sides of women empowerment. Furthermore, our work points out some gaps in the literature and advices suggestions for future research. We have advanced two hypotheses that could be verified in the future, assuming that there are two levers, “additional resources/services availability” and “national patriarchal society”, which act as mediating factors between the outreach of microfinance, or women, and the actual impact on the empowerment.
The effect of gender diversity on MFI’s financial performance in crisis period

Abstract
This study sought to explain the role played by women in microfinance institutions (MFIs) during crisis and their influence on the financial performance. We addressed the relevance of gender diversity and its influence on the financial performance during the downturn periods. We analyzed data from 555 ratings of 185 MFIs from MicroFinanza Rating, a leading microfinance rating agency. The analysis shows that the number of women in staff of MFIs is significantly and positively associated both with the ROE and OSS of MFIs; which means a positive impact of gender diversity on the financial performance.
1. Introduction

The microcredit industry has grown remarkably in the last few years in terms of reached customers, achieved popularity and number of active Microfinance Institutions (MFIs) all over the world. The Microcredit Summit Campaign (2012) reports 3,652 institutions serving 205,314,502 clients, 137,547,441 of whom were among the poorest when they took their first loan. Of these poorest clients, about 82 percent (113,138,652) are women and the growth in the number of very poor women reached has increased from 10.3 million at the end of 1999 to 113.1 million at the end of 2010. The primary aim of microcredit is to guarantee access to credit to the individuals that are excluded from the traditional circuit of credit (the so called “unbankable”) and it is considered an effective instrument to defeat poverty through the fight against social and financial exclusion (UN 1998). Thanks to microcredit, the poor can start their own business activities, increase their incomes and improve their economic and social conditions. During the years debates about microfinance and poverty reduction have been made, depending on the conceptualisation of who the poor were and the nature of poverty, who has to be considered the main target of the MFIs, the poorest among the poor or simply people in needs, not necessarily the poorest. From the nineties onwards, the poor have been conceptualised as a heterogeneous group of vulnerable households and people with complex livelihoods and varied needs (Carney 1998; Scoones 1998; Ellis 2000, Hulme and Rutherford 2002). It is this broader or extended interpretation of poverty, which is a multifaceted phenomenon that today distinguishes the world of microfinance and the MFIs.

Even if the economic global crisis has had a huge impact on the financial sector, the microfinance industry has continued to grow contrary to the mainstream financial
sector (Overview of the Microcredit Sector in the European Union 2010). The microfinance business is resilient to the economic cycles (Gonzales 2007). It seems that the poor, especially from rural areas, being less dependent on the global economic dynamics, are more faithful. Micro-entrepreneurs generally have a robust capacity to generate cash flow through their business, due to the nature of their activities, and they have a strong incentive to repay the microloans since these are their only source of capital to start up or develop their businesses. In this scenario, we try to give one of the possible explanations of the different trend of MFIs, investigating the role played by gender diversity and its effect on the financial performance in downturn periods.

Over the years indeed, the issue of gender diversity in business organizations has received increasing attention in both the academic literature and the popular press (Francoeur, Labelle and Sinclair-Desgagnè 2008), even though empirical findings on the link between gender diversity and performance have been inconsistent (Ali, Kulik and Metz 2011). Basing on different perspectives used to consider gender diversity, the studies on gender and firms’ financial performance has led to mixed results. Some researchers have found a positive association between gender diversity and firms’ financial performance, giving evidence that gender diversity may enhance the cognitive resources and the problem solving capacity of the team (among others: Bantel and Jackson 1989; Smith et al. 1994, Hambrick et al. 1996; Krishnan and Park 2005; Welbourne et al. 2007). Others instead report a negative relationship between the gender diversity and firm performance underlining the greater difficulty to coordinate individuals that have different ideas on how to solve the same problems, and to take decisions in case of high gender diversity (among others: Earley and Mosakowsky 2000; Rose 2004; Böhren and Ström 2005).
The impact of gender diversity in workforces on MFIs’ financial performance has not yet been investigated. Dealing with microfinance industry, earlier studies referred to gender diversity more as a measure of outreach of the MFIs and discussed the women empowerment process as a result of microcredit or microfinance’s projects (Pitt and Khandker 1998; Amin et al. 1998; Littlefield, Murdoch and Hashemi 2003; Armendariz and Roome 2008), rather than as a driver to increase the financial performance of the institutions. This paper thus intends to primarily approach the gender diversity in total workforce in the microfinance sector, considering the presence of women at any level of MFIs and not just at top management. In addition, it aims at contributing to the understanding of the impact of gender diversity and its influence on the financial performance during the downturn periods. Investigate the role of women in affecting MFIs performance during financial crisis may be interesting mainly for two reasons. Firstly, it may give results that reflect the dynamics that are present in other industries, or show a particular specificity related to the business model that characterizes the MFIs. Second, it may be relevant whether the presence of women influences positively the financial performance of the MFIs. Moreover, as already said, the studies on gender diversity and performance are in the majority of the cases focused on the top management level excluding the others, so that it may be interesting to extend the analysis also at different hierarchical levels.

To analyze the impact of gender diversity in total workforce in MFIs, we analyzed data from 555 ratings of MFIs from MicroFinanza Rating, a leading microfinance rating agency, which operates both in developing and developed countries. The sample studied is relevant and the trustworthiness of the source makes the work valuable since the data collected and the evaluation were made by a third party and are
not self-declared by the MFIs. This turns out to be an added value, since in some studies the analysis is conducted on data from online sources or obtained directly from the MFIs, with the possibility of encountering errors and overestimated or untrue data.

2. Theoretical background

Earlier researches on general business pointed out that arguments which are favourable and that moves towards a greater female participation in business can be traced to two streams: ethical arguments and instrumental purposes. The former stream asserts that gender diversity is a sign of corporate ethics, because in the reason of principle of equality, women should have the same opportunity to reach and be represented in boards (Brammer et al. 2007). Further research in this stream pointed out that women in boards may also impact on overall social orientation of the corporation since women are more favourably oriented towards ethical matters than men (Luthar et al. 1997; Singh et al. 2002; Limerick and Field 2003; Stedham et al. 2007) and are more sensitive to social performance of the firms (Burgess and Tharenou 2002). The second stream is aimed at demonstrating that the increasing presence of women in board and in total workforce is positive related to firms’ financial performance (Adler 2001 and Catalyst 2004) and market value (Carter 2003). The literature on gender diversity and performance in business organizations is mainly concentrated on the relation between female representation in top management and financial performance (Kesner 1988; Bilimoria and Piderit 1994; Daily et al. 1999; Farrell and Hersch 2001; Adler 2001; Carter et al. 2003; Adams and Ferreira 2004; Catalyst 2004). Some other studies have shown that the representation of women also in middle management has positive effects on economic performance (Burgelman 1994; Floyd and Wooldridge 1992; Kanter 1982). The present study draws on the literature of the second stream of research and intends to contribute to its enrichment by verifying the relation between gender diversity and firms’ performance in microfinance industry.
2.1 Gender diversity and microfinance

The majority of gender studies on microfinance have concentrated on women empowerment on the one hand, and on women as favourite target of MFIs on the other hand. Microfinance and women have always been intrinsically linked (Mody 2000; Yunus 2002), so that more than 70% of MFIs’ clients were women in 2007 (Daley-Harris 2009). One of the main reasons for the success of microfinance in the public eye is the targeting of women (Morduch 1999). In fact, there are three main arguments which support the idea of targeting women (Mayoux 2001): the principle of gender equality, the microfinance aim of poverty reduction, and the MFIs’ efficiency. As far as gender equality is concerned, microfinance is considered an effective tool to promote women empowerment because by having access to credit, women may improve their general wellbeing, and also the welfare of the family members. Littlefield, Murdutch and Hashemi (2003) stated that access to MFIs can empower women to become more confident, more assertive, more involved in the decision making process of the family and community, and also better able to face gender inequities. With respect to poverty reduction, it has been argued that women invest their income not just for their personal needs, but for the whole family, whereas men are not used to do the same: a dollar loaned to a woman seems to have a greater development impact than a dollar loaned to a man (World Bank 2007). Concerning MFIs’ efficiency at the end, the high female repayment rate is the main argument (Armendariz and Morduch 2005). Many authors assert that even if empirical evidence usually confirms that women do indeed repay better than men (Khandker et al. 1995; Sharma and Zeller 1997, Kevane and Wydick 2001; D’Espallier et al. 2011) MFIs’ financial performance is more than just repayment. In effect also the financial efficiency and operating costs have to be considered as important variables that may influence the performance. Targeting women is more costly for different reasons: first, their loans are generally smaller than the men (Armendariz and Morduch 2010), so the operating costs associated with loans are expected to be higher, second, women are less mobile, and for this the cost of monitoring might grow, and
third, women are usually less educated, and consequently the time spent by the staff and the administrative personnel in following their practices may be more consuming.

Apart from these considerations, so far nothing has been said about the relation between gender diversity in MFIs’ workforce and overall financial performance of the MFIs. The aim of our study is to fill this gap and investigate the role played by women not as measure of outreach, but on the other side, working as staff in the MFIs. Consequently, as we will explain later, the study might give suggestions to the practitioners of the microfinance industry from one hand, and insights to be deeply investigated by academic research on the other hand.

2.2 Gender diversity and performance

Literature discussed the impact of gender diversity on financial performance based on four main features that differentiate woman from man: the managerial style, the aptitude to innovation, the customer orientation and the skill in increasing internal motivation.

Since different genders respond to different norms, habits, attitudes, beliefs and perspectives, a first stream of research discussed impact of women’s managerial style on economic performance based on different agentic traits between women and men. Agentic traits associated with men are identified in dominance, forcefulness, ambitiousness, self-confidence and competitiveness, whereas the communal or a-attributes are related to women and include interpersonal sensitivity, affection and kindness (Pelled 1999; Eagly 2000). In line with these theories previous research tested a positive impact of gender diversity on performance discussing the differences in managerial style between male and female (Wilson 1993) and socialisation processes (Xia and Whyte 1997). Empirical studies confirmed that women are more collaborative and cooperative than men (Nowell and Tinkler 1994), driving women to use a participative managerial style, opposite to the competitive style of man (Mills 1998; Billing and Alvesson 2000; Zarafullah 2000). In this direction, for instance, Rosener (1995) found out that women are well disposed towards interaction between workers and inclusion by requesting
the intervention of the colleagues and sharing information and communication with their subordinates. Women’s leadership style it is recognizable from the fact that they tend to accentuate constructive human relations rather than relations of dominator, they usually establish emphatic rather than authoritative relationships with subordinates and manifests personal involvement.

Furthermore, it is argued that gender diversity can foster innovation as the variety of perspectives and propositions that emerge from a more heterogeneous team means that more alternatives have been evaluated (Robinson and Dechant 1997). More diverse groups have the potential to consider a greater range of perspectives and to generate more high-quality solutions than do less diverse groups (Hoffman and Maier 1961; Cox, Lobel, and McLeod 1991; Watson, Kumar, and Michaelsen 1993). Østergaard, Timmermans and Kristinsson (2011) suggested that there is a positive relation between gender diversity and the likelihood that firms innovate and that gender diversity can be expected to be positively associated with innovative performance. The result of their analysis shows that gender diversity is one of the variables that has the strongest relation with a firm's likelihood and propensity to innovate. Dezsö and Ross (2012) pointed out that gender diversity in top management improves firm performance only to the extent that a firm is concentrated on innovation as part of its core strategy. This result confirms previous researches that discover a positive relation between gender diversity and high levels of creativity and innovation (Hoffman and Maier 1961; Wiersma and Bantel 1992; Ginsberg 1994; Campbell, Minguez-Vera 2008).

Another stream of research discussed that women have an higher proximity to customer than men. Brammer (2007) pointed out it exists a better understanding of the market scenario in companies with greater female representation, on the basis that a more diverse board can better meet the multiple customer needs. He recognizes the presence of women directors especially in certain commercial sectors, which are associated with retailing, banking, the media and utilities, all sectors that require a close proximity to final customers. A more gender diverse board may
also constitute a firm’s competitive advantage in the case that it improves the image of the firm and consequently has positive effect on the clients’ behaviour towards the firm and on the performance achieved (Smith 2006). Actually, as others have shown, having more women on boards enhances firms’ reputation, in part, supposedly, because of the increased pressure toward diversifying boards (Biliomoria 2000; Brammer 2007).

Adopting the point of view of internal motivations and aspirations, female presence in management committees, internally, inspire female employees to take carrier paths, serving as role models to motivate women to achieve better positions (Milliken and Martins 1996; Biliomoria and Wheeler 2000; Biliomoria 2006). Women in boards indeed encourage other female employees making visible that it is possible to reach influent positions which generally are considered unreachable, too ambitious, or of male prerogative. Therefore, women at senior levels may affect positively the career ambitions of younger women in lower positions, driving in this way a final positive impact on financial performance of the firm (Ely 1990; Burke and MCKeen 1996; Bell 2005).

2.3 Gender diversity and crisis

Before analysing the relation between gender diversity and crisis, it may be useful to give an overview on economic crisis and strategies adopted by the firms to survive in difficult periods. As a matter of fact we have previously highlighted how innovation, proximity to the customers and employee motivation are important issues that characterize women’s attitude and that have positive influence on the financial performance. These issues can be found also in the way in which firms try to come out of economic crisis. In effect the literature on economic crisis, adopting the resource-based view, underlines the need to resort to a management which takes into account the value of innovation in order to survive in hard times (Champion 1999; Goad 1999). Firms during times of crisis need to reorganize their internal resources to manage economic conditions and perform leveraging on intense innovation (Day 1994; Grewal and Tansuhaj 2001; Lawson and Samson 2001; Danneels 2002). Moreover Sommer and Pearson
(2006) sustained that when a crisis occurs the organization’s decision making process is transformed and innovation plays an important role to contribute to the survival of the organization (Shalley, Zhou and Oldham, 2004). Earlier research discovers a positive relation between gender diversity and high levels of creativity and innovation (Hoffman and Maier 1961; Wiersma and Bantel 1992; Ginsberg 1994; Campbell, Minguez-Vera 2008; Østergaard, Timmermans and Kristinsson 2011; Dezsö and Ross 2012).

In addition Brammer (2007) and Smith (2006) highlight the capability of women to understand and meet customers’ needs, especially in some specific market industries, where a higher proximity to the customers it is recommended. This is considered a competitive advantage in crisis period. Finally, in adverse context firms and organizations need to implement effective strategies to survive and these strategies involve all the levels including the employees, as all business and management strategies depend, at least in minimal degree, on the employees.

In this regard employee motivation plays an important role. The motivation is an issue linked with productivity and performance and for this reason is crucial in reaching sustainability and effectiveness (Katzell and Thompson 1990; Lewis, Goodman and Fandt 1995; Sharbrough 2006; Simms 2007; Baron and Armstrong 2007; Friedman 2007). On this issue, Gomes, Asseiro and Ribeiro (2013) find the results that the organization-employee relation is prevalent on job-employee relation, regarding employee’s motivation; which means that the stronger the relation between organization and employee, the higher the motivation, and consequently, the performance will get better. Many authors provide evidence that women presence on boards inspire carrier paths for female employees (Ely 1990; Milliken and Martins 1996; Burke and MCKeen 1996; Bilimoria and Wheeler 2000; Bell 2005; Bilimoria 2006).

Therefore, after having analyzed the role of innovation, proximity to the customer and motivation as important issues to overcome crisis, we proceed underlining the role of gender
diversity in economic performance of the firms during the crisis. In this regard Bartunek (2000), Eagly and Johnson (1990) and Charles (2000) explain that a democratic orientation that enables decision-making processes based on the diversity of ideas, brainstorming and consensus, increases cooperation during organisational crisis. Some studies pointed out that firms operating in complex and risky environments do generate better returns when they have a high proportion of women officers (Francoeur, Labelle and Sinclair-Desgagnè 2008). Other studies demonstrated that female leadership could feed a competitive advantage in turbulent environment (Loden 1985; Helgesen 1990; Rosener 1990). Some feminine features indeed seem to be suitable especially in turbulent and crisis environments, constituting a competitive advantage. According to Bowes-Sperry (1997) men are less likely to cope effectively with employees’ emotions and normally they tend to adopt technical and instrumental solutions to the problems of employees. By contrast, women manifest personal involvement and provide more empathic and non-standardized solutions. The attitude is different also when it comes to reward and sanction the employees; women tend to adopt “equity” principles, whereas men rather prefer to practice “fairness” criteria. Hence women seek to pursue on the harmonious relationships and teamwork, and men concentrate more their effort on the success or failure of the strategies following performance criteria. Furthermore, Archer (1996) highlights the role played by a natural psychological predisposition depending on gender relating the capability to cope with crisis and face stressful situations. Women are more willing to adopt an holistic organizational approach which should encourage the adoption of crisis-preparedness related strategies. Women managers, as we have already reported, share a democratic vision and orientation that increases the participation in the decision-making process, as well as the diversity of ideas and brainstorming. So, therefore, these capacities would be more appropriate and recommended to enhance crisis preparedness (Mano-Negrin and Scheaffer 2004).
Finally, as women have a better ability to cope with the crisis, the presence of women in the total workforce of the MFIs should have a positive impact on the financial performance achieved and for this reason therefore the recruitment of women should be encouraged.

3. Data and statistical methods

The analysis relies on ratings from 185 MFIs in 41 countries that were collected by the MicroFinanza Rating. The firm is a leading microfinance rating agency which produces independent evaluations of MFIs to promote responsible flow of investment towards the microfinance industry. Inclusion of MFIs in the MicroFinanza Rating dataset is based on investors’ interest, and thus the sample is skewed toward institutions that are concerned about financial performance and profitability.

There are 892 observations (rating datasets) in our database because MFIs report information for multiple years. Since we were interested in financial performance in times of crisis, in the data analysis that follows we used only the observations related to the period of global financial crisis (years from 2008 to 2010). The variables included in our analysis were computed as means of value observed for one MFI during the three years. This allows to avoid problems related to repeated measures due to the inclusion of multiple years observations for one MFI, and reduces the data noise related to fluctuations of financial crisis. Thanks to the inclusion of means, the data fits the assumption of independence of observations to conduct an OLS regression based on performance of 185 MFIs during financial crisis.

Table 1 shows statistics at country level for the considered MFIs. In particular in our sample MFIs from Ecuador are the most representative (28 observations), followed by Honduras (13), others MFIs are not so represented. The MFIs included tend to be larger than the standard of MFIs, with a mean of 131 employees and 16,681 active borrowers. Actually, the largest MFI accounts for more than three-quarters of total customers in microfinance industry (Honohan 2004), thus we rely on high level of representativeness for the industry. Referring to
the lending style, Cull, Demirgüç-Kunt and Morduch (2007, 2010) distinguished between three different types: the individual lending, the solidarity group lending and the village bank. In this study the lending methodologies (individual, group or both) as the geographical area of activity (urban, rural or both) do not offer particular insights, they are distributed rather uniformly and equitably in the sample considered.

[Table 1 around here]

The data were provided directly by MicroFinanza Rating, which makes available to us the total database of released rating reports. In addition to standard data from the balance sheet and income statements of MFIs, the dataset contains qualitative information such as: year of inception, average loan for staff, rate of woman in borrowers, rate of female in staff, group versus individual lending, offered services. Many of these variables serve as important control variables in the analysis that follows.

To assess the financial performance of MFIs during crisis we used two indicators: the mean of return on equity (ROE) and the mean operational self-sufficiency (OSS). The ROE measures the mean value generated by the institution for capital invested by owners during the observed three years. The OSS, which is typical of MFIs’ performance, measures the rapport between the mean operating incomes of the MFIs and total costs (operational expenses, loan loss provisions and financial costs) during the three years. Starting from earlier studies on MFIs and financial performance (Hartarska 2005; Cull et al. 2007, Hartarska and Nadolnyak 2007; Mersland and Øystein Strøm 2009), we considered OSS a reliable measure of goodness of financial performance of MFIs. In line with previous studies on gender diversity in workforce, we measure it in MFIs as the percentage of woman included in the total staff of the organizations. This data was necessary to include the MFIs in the rating database produced by MicroFinanza Rating and, because of that, information was registered and available for the large part of considered organization.
To control the effective relevance of gender diversity for financial performance in MFIs we controlled for the effect of other variables. To control for impact of financial crisis in different geographical areas we included in our analysis data on national economic development. Using the World Bank database (2012) we collected data on annual growth of GDP per capita and, because firms analyzed work in the financial industry, we collect both data on spread of interest and inflation rates in each country. We also grouped MFIs based on their legal status. The variable type classified institution into four groups: commercial banks, credit unions, non-governmental organizations (NGOs) and non-bank institutions (NBFIs). We controlled for effect of type because it has various advantages and disadvantages. For instance, NGOs, unlike other MFIs, normally operate without being overly constrained by regulatory government agencies and with lower taxes, which allow them to achieve easily the social goals, while NBFIs generally benefit from more allowances in terms of providing financial services and in terms of attracting funds. However, NBFIs may need capital injection and may require more regulation and reports. These requirements apply even more for commercial banks (Morgan Stanley, 2008). Starting from earlier research which pointed out that organizational efficiency of MFIs and outreach performance could influence overall financial performance of the MFIs (Cull et al. 2007; Cull et al. 2010), we included both in our analysis. We considered measures of MFIs’ organizational efficiency, calculated by average loan for staff and operative expense ratio, and we included average loan for borrower and rate of woman borrowers to assess the level of outreach of MFIs. This indicators are the most common used proxies of outreach to microfinance clients (Olivares-Polanco 2004; Gutierrez-Nieto, Serrano-Cinca and Mar Molinero 2007; Mersland and Strøm 2009; Hermes, Lensink and Meesters 2011). In our analysis we included also data on assets/liability management and portfolio quality. Regarding first dimension, we used three indicators: debt to equity, Yield on gross loan portfolio and cost-of-found ratio. The quality of portfolio is measured by the common PAR30 indicator. PAR30 is the portfolio at risk, that is, the part of the loan portfolio over 30 days overdue. This indicator is largely used in study around MFIs, and it used as an indicator of repayment in the industry.
(D’Espallier, Guérin, Mersland 2011). Cull et al. (2007) analysed the relationship between the financial performance and real yield of MFIs, and found a positive and significant relationship.

We utilized percentages and correlations for the descriptive analysis, and linear regressions analyses to show relationship between gender diversity in staff of MFIs and performance. Table 2 shows the descriptive statistics, which report some significant correlations.

4. Results

In order to address the relationship between gender diversity and financial performance in MFIs we conducted a set of OLS regressions. Multiple regressions have been used to test the increase of explained variance moving from a basic model, which includes only the control variables, to models which consider also gender diversity and covariates. We estimated regression for both the dependent variables using general control variables and different potential variables which could affect the financial performance reached by a MFI. For this analysis SPSS software was utilized. We developed three models for each of the dependent variables. The control model (model 1a and model 1b), which includes the following set of control variables: total staff, growth in GDP pro-capita, spread of interests, inflation rate, type of organization and year of inception. The second model (model 2a and 2b) includes variables considered in model 1 and the gender diversity. The model three (model 3a and 3b) includes control variables, gender diversity and covariates on organizational efficiency (average loan for staff, operating expense ratio), assets/liability management (debt to equity, yield on gross loan portfolio, cost-of-found ratio), outreach (average loan for borrower, rate of woman in borrowers) and portfolio quality (PAR30).

We also tested each regression for multicollinearity; these tests revealed that the variance inflation factors for all variables ranged between 1.0 and 2.0, well below the acceptable
threshold level of 10.0, indicating that multicollinearity was not a serious issue in our analyses (Hair et al., 1998). We conducted also a graphical analysis of regression residuals to test for heteroskedasticity, and it emerges that the distributions of residuals were adequate.

Regression results for the six model used are shown in Table 3. The statistical analysis shows that the number of women in staff of MFIs is significantly and positively associated both with the ROE and OSS of MFIs. Regression models point out that in period of financial crisis the level of gender diversity in the total workforce of MFIs positively affects on financial performance both in the operation activities and on overall return for owners. The inclusion of rate of woman in staff increases the explained variance of MFIs’ OSS of 12% and of 8% regarding the ROE from the basis models (model 1a and model 1b). Model 3a and 3b, which consider also collateral variables, explained additional variance of 10.6% regarding OSS and 8.1% compared to model 2a and 2b, but there are no collateral variables which enter in the model with statistical significance, and the rate of woman in staff remains still statistically positive related to financial performance. The results show that the impact of gender diversity on financial performance is positive and shows robustness in the case of inclusion of collateral variables.

[Table 3 around here]

5. Discussion

This study sought to explain the role played by women in MFIs during crisis and their influence on the financial performance. Considering the two variables ROE and OSS as measures of financial performance, and controlling for different variables in the regression analysis, we found a positive relation between women in staff and ROE, and women in staff and OSS, which means a positive and robust impact of gender diversity on financial performance. Results of this study would show that the topic of gender diversity in MFIs could be a
prominent field of study, and due to some limitation of this study we rely on future research which deepens the relation addressed in this paper.

Even if the research shows a significant and positive relation between gender diversity and financial performance in MFIs, because it is the first study on the relation between gender diversity and financial performance in MFIs, it has not been possible to argue deeply the reasons underlying this result. At the same time earlier literature on gender diversity provides relevant suggestions and insights that have been considered in this work. Particularly, we have observed a positive relation between gender diversity and performance in MFIs during crisis that ends up with the awareness that there are some typical women's managerial features and attitudes influencing the financial performance. These features correspond at least to some extent to the characteristics and the ways of acting that are supposed to be needed by a firm when a crisis occurs, and which explain why it is considered a competitive advantage to have a relevant presence of women. More specifically one of these features refers to the innovation capacity in times of crisis (Lawson and Samson 2001; Danneels 2002). Gender diversity can indeed foster innovation because of the variety of alternatives and proposals that arises from a more heterogeneous working team (Robinson and Dechant 1997; Dallas 2002; Østergaard, Timmermans and Kristinsson 2011). Another relevant contribution to the survival of the organization in crisis periods is played by creativity (Shalley, Zhou and Oldham 2004) which characterizes the passage from the conventional decision-making process, antecedent the crisis, to a new one, which brings out new solutions (Sommer and Pearson 2006). Earlier studies pointed out that gender diversity stimulates the creativity of the firm (Hoffman and Maier 1961; Wiersma and Bantel 1992; Ginsberg 1994; Campbell, Minguez-Vera 2008; Dezsö and Ross 2012). Furthermore, many authors identified the employee motivation as an important factor, correlated with productivity and performance, crucial in reaching sustainability and effectiveness (Katzell and Thompson 1990; Lewis, Goodman and Fandt 1995; Sharbrough 2006; Simms 2007). It has been studied that female presence in management boards increases
the motivation and aspiration of female employees trying to achieve better positions, and this turns into a positive impact on financial performance of the firm (Ely 1990; Burke and MCKeen 1996; Milliken and Martins 1996; Bell 2005). The last potential explanation is that a democratic orientation which favours the decision-making process, based on heterogeneous ideas and brainstorming facilitates the ability to cooperate during crisis (Eagly and Johnson 1990; Bartunek 2000; Charles 2000). In fact, women managers seem to share a more democratic vision and orientation than men, which increases the participation in the decision-making process, and so, women would be more suitable to cope with the crisis (Mano-Negrin and Scheaffer 2004). Considering the robustness and consistency of the positive relationship between gender diversity in the workforce of the MFIs and the financial performance, we can advance several implications. The gender diversity should be introduced by investors and financial analysts as a relevant element in rating of MFIs, because of its capacity to be a valuable predictor of the financial performance of the firms and for this reason, feminine presence should be observed and monitored during time. From the MFIs perspective, our results suggest the goodness of inclusion of gender diversity criteria in MFIs’ workforce selection and recruitment; this result implies a greater attention in the hiring process in maintaining a well-balanced presence of women and men.

There are also managerial implications to be considered: since this study describes and argues the relevance of the presence of women as workforce and their impact on the financial performance of the MFIs, top managers and CEOs, in order to achieve their objectives of generating profits and reaching efficient financial performance, should be sensitive to promote recruitments policies which take it into account. In other words hiring women is not merely an advisable choice to make, because it is fair and ethic, but mostly it appears to be convenient from the financial and economic point of view. For this reason, the issue of gender equality should be faced considering all the employees involved in the firms, and not as it is discussed most of the times, as something that regards just the top management positions and the
opportunity for women to be represented in boards. Hiring women could mean also another practical implication to enhance the social role played by microcredit: being women the preferable target by the MFIs for the disbursement of loans, strengthening the feminine presence in the workforce could let to contribute even more to the global outreach. If it was convenient from this perspective to recruit women, it should also be relevant to adopt and develop a space in order to share, confront and find tools to promote good practices of work-life balance. These practices are more and more useful and necessary to balance the work and the familiar needs, so that firms and companies have to recognize the value of politics that take these considerations into account for a better management, for the achievement of the goals and also to attract even further the women who wish to work but at the same time do not want to give up family responsibilities.

From the academic and researchers point of view, the finding has two main implications. On the one hand the level of gender diversity should be considered as a significant predictor of financial performance and therefore, in studies that try to analyze the enablers of financial performance in MFIs is necessary to consider them as control variables. Secondly the result found opens up new paths of study and future research that, according to different perspectives, can deepen the role of women. Some new perspectives and fields of research could be for example to analyze the relationship between women workforce in the MFIs and the outreach, or to deepen the reasons that allow the presence of women in the workforce to develop financial performance, collecting information on the role played by innovation and by collaborative culture in the microcredit world, or even, to verify if to different levels of concentration of gender diversity - at the top management or in line - correspond different financial or economic performance and the subsequent implications.

To conclude, further researches might be conducted including different variables that confirm that gender diversity in MFIs leads to better financial performance, especially in times of crisis, and it could be relevant to test whether the same effect occurs in periods which are not
affected by the crisis. Additionally, another direction might be to investigate if gender diversity has a significant impact on the social performance of the MFIs besides the financial ones. Finally, it could be interesting to verify the same phenomenon even in other industries to check whether this is limited to the world of microcredit and microfinance or it is generalized and widespread.
References


## Table 1. Observations and data by country

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<tr>
<th>Country</th>
<th>Obs. (n.)</th>
<th>Total assets (USD)</th>
<th>M</th>
<th>SD</th>
<th>MFI's staff (n.)</th>
<th>Active borrowers (n.)</th>
<th>Lending style (%)</th>
<th>Geographical area of activity (%)</th>
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Total: 185 116,756 131.2 81.3 16,681 99,765 39.2 21.8 38.9 33.6 31.5 34.9
Table2. Descriptive statistics and standard deviations

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<th>04</th>
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<tr>
<td>11. Operating expense ratio</td>
<td>0.22</td>
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<tr>
<td>12. Debt to equity</td>
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<td>13. Yield on gross loan</td>
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<tr>
<td>14. Cost of found ratio</td>
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<tr>
<td>15. Average loan for borrowers</td>
<td>6.09</td>
<td>29.74</td>
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<tr>
<td>16. Rate of woman in borrowers</td>
<td>0.56</td>
<td>0.20</td>
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<tr>
<td>17. Par30</td>
<td>0.07</td>
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n. observations: 185; *p<0,05; **p<0,01.
Table 3. Linear regressions on financial performance during crisis

<table>
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<tr>
<th></th>
<th>Operational Self Sufficiency (OSS)</th>
<th>Return On Equity (ROE)</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Model 1a</td>
<td>Model 2a</td>
</tr>
<tr>
<td><strong>Constant</strong></td>
<td>-4.24</td>
<td>10.85</td>
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**Control variables**

<table>
<thead>
<tr>
<th></th>
<th>Model 1a</th>
<th>Model 2a</th>
<th>Model 3a</th>
<th>Model 1b</th>
<th>Model 2b</th>
<th>Model 3b</th>
</tr>
</thead>
<tbody>
<tr>
<td>03. Total staff</td>
<td>-0.11</td>
<td>-0.08</td>
<td>-0.07</td>
<td>0.11</td>
<td>-0.06</td>
<td>-0.04</td>
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<tr>
<td>04. Growth in GDP pro-capita</td>
<td>0.05</td>
<td>0.06</td>
<td>0.08</td>
<td>0.05</td>
<td>0.10</td>
<td>0.11</td>
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<tr>
<td>05. Spread of interests</td>
<td>0.09</td>
<td>0.12</td>
<td>0.19</td>
<td>0.09</td>
<td>-0.02</td>
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<tr>
<td>06. Inflation rate</td>
<td>0.04</td>
<td>0.05</td>
<td>0.01</td>
<td>0.04</td>
<td>0.06</td>
<td>0.07</td>
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<tr>
<td>07. Type of organization</td>
<td>0.02</td>
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<td>0.02</td>
<td>0.02</td>
<td>0.11</td>
<td>0.15</td>
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<tr>
<td>08. Inception</td>
<td>0.02</td>
<td>-0.04</td>
<td>-0.01</td>
<td>0.02</td>
<td>0.07</td>
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**Gender diversity**

<table>
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<tr>
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<th>Model 1a</th>
<th>Model 2a</th>
<th>Model 3a</th>
<th>Model 1b</th>
<th>Model 2b</th>
<th>Model 3b</th>
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</thead>
<tbody>
<tr>
<td>09. Rate of female in staff</td>
<td>0.35 **</td>
<td>0.34 **</td>
<td>0.29 **</td>
<td>0.31 **</td>
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**Organizational efficiency**

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<th>Model 3a</th>
<th>Model 1b</th>
<th>Model 2b</th>
<th>Model 3b</th>
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</thead>
<tbody>
<tr>
<td>10. Average loan for staff</td>
<td>-0.21</td>
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<tr>
<td>11. Operating expense ratio</td>
<td>0.03</td>
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**Assets/liability management**

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<thead>
<tr>
<th></th>
<th>Model 1a</th>
<th>Model 2a</th>
<th>Model 3a</th>
<th>Model 1b</th>
<th>Model 2b</th>
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</thead>
<tbody>
<tr>
<td>12. Debt to equity</td>
<td>-0.14</td>
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<tr>
<td>13. Yield on gross loan</td>
<td>-0.14</td>
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<td>portfolio</td>
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<tr>
<td>14. Cost of found ratio</td>
<td>-0.16</td>
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**Outreach**

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<tr>
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<th>Model 1a</th>
<th>Model 2a</th>
<th>Model 3a</th>
<th>Model 1b</th>
<th>Model 2b</th>
<th>Model 3b</th>
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<tbody>
<tr>
<td>15. Average loan for borrower</td>
<td>0.11</td>
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<tr>
<td>16. Rate of woman in borrowers</td>
<td>-0.02</td>
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**Portfolio quality**

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<tr>
<th></th>
<th>Model 1a</th>
<th>Model 2a</th>
<th>Model 3a</th>
<th>Model 1b</th>
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<th>Model 3b</th>
</tr>
</thead>
<tbody>
<tr>
<td>17. Par30</td>
<td>0.388</td>
<td>2.074</td>
<td>1.725</td>
<td>0.654</td>
<td>1.720</td>
<td>1.322</td>
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n. observations: 185; β Standardized coefficients; * p<0.05; ** p<0.01.
Doing well by returning to the origin. Mission drift, outreach and financial performance of microfinance institutions.

Abstract

This paper uses a huge dataset of 194 microfinance institutions (MFIs), 788 annual ratings from 2001 to 2010, collected by MicroFinanza Rating, an international and well-known MFIs’ rating agency, to study and test three hypotheses on the relationship between mission drift, financial performance and outreach of MFIs. Data analyzed with mixed effect regressions show that MFIs should be encouraged to pursue their original mission: that is to serve the poor and maximize the outreach, without fearing the repercussion on the sustainability side. Actually the more they keep on achieving a better outreach, the more they will become sustainable over time.
1. Introduction

The microfinance industry involves a variety of microfinance institutions (MFIs) such as non-governmental organizations, foundations, government bodies, saving banks, banks, credit unions, cooperatives and nonbank financial institutions. Among all the different types of existing MFIs in the World, the last worldwide available data underlined that only 2% have reached the financial sustainability (Deutsche Bank, 2007; Hermes and Lensink, 2011). It is in this situation that the phenomenon of mission drift arose in the microfinance industry.

When mission drift occurs, MFIs move away from their traditional social mission, that is to provide micro-financial services to allow poor to break the cycle of poverty (the so-called outreach) by reducing their financial exclusion (Argandoña, 1995; De la Cuesta-González, Muñoz-Torres & Fernández-Izquierdo, 2006). The risk of mission drift for MFIs is mainly driven by the search of higher financial performance and, as the 98% of the MFIs has not reached the financial sustainability, this risk is largely relevant for the microfinance industry.

Usually when mission drift occurs, MFIs move away from the traditional business model of microfinance by three different ways. First, they stop to offer microfinance services to poor and they start to increase the average loan; they move to wealthier clients searching for higher profitability (Cull et al., 2007). Second, they shift from group to individual lending methodology, moving away from the use of group lending to reduce the needs of conveyances (Ghatak and Guinnane, 1999; Armendariz de Aghion and Morduch, 2005; Cull et al., 2007). Third, since the concentration of poor people is generally higher in the rural or sub-rural areas, MFIs shift from offering services to poor in rural areas to address the urban ones (Mersland and Strom, 2010).
Some critics to microfinance industry assert that mission drift is the reason of the trend that sees MFIs becoming more and more focused on their financial performance at the expense of their outreach (Olivares-Polanco, 2004). The discussion around relations between financial performance and outreach in MFIs involved different authors who discussed mixed results. Some studies discussed the existence of a trade-off between financial performance and outreach, pointing out that MFIs that look for higher profits lead to lower outreach (Woller, Dunford and Woodwoth, 1999; Paxton, Graham and Thraen, 2000; Woller, 2002; Olivares-Polanco, 2004; Hermes, Lensink and Meesters, 2011). In the mean time a second group of research sustained that a more financially conscious MFIs are better able to provide services to the poorest members of the community (Rhyne, 1998; Christen and Drake, 2002; Hermes and Lensink, 2011).

Although there have been several studies, yet the relationship between mission drift, financial performance and outreach of MFIs is not clear. Using a huge dataset collected by MicroFinanza Rating, an international and well-known MFIs' rating agency, we want to deepen the relation among the three dimensions. The paper provides first a theoretical framework about the relation between financial performance, mission drift and outreach, followed by the empirical studies conducted on this issue, and the discussion of our results, to end with the conclusions.

2. Theoretical framework

a) Mission drift and financial performance

First studies in literature discussing the existence of mission drift risk were run by Woller, Dunford and Woodwoth (1999) and Woller (2002), who sustained that the
mission drift occurs when a MFI decides to take the distance from the poor customers segment moving away from the traditional social mission of MFIs.

Reviewing the literature about the relation between mission drift and financial performance in MFI, Paxton, Graham and Thraen (2000) argue that offering microcredit to poor and being financially sustainable are alternative aims in microfinance industry. This consideration is driven by the negative relation between transactions costs and size of loans. As the transaction costs of lending to poor borrowers can be very high, the pursuing of the traditional social mission of MFIs increases the transaction costs of those institutions and it is conflicting with the financial performance (Hermes et al., 2011). Referring to transaction costs, Prior and Argandona (2009) gave explanations of high costs of microcredit by attributing them to a financial distribution network which is not capillary and cost-effective. Yet, the criticism of microfinance is that the more a MFI is aimed at reaching the traditional social mission of microcredit, providing to poor access to financial services, the higher its transaction cost will be and the financial performance reduced. In the light of this consideration several authors argued that microfinance programs definitively cannot reach the poorest of the poor (Scully, 2004) and that the poorest are deliberately excluded from microfinance programs because the related transaction cost are financially unsustainable (Hulme and Mosley, 1996; Mosley, 2001; Simanowitz, 2002; Kirkpatrick and Maimbo, 2002).

Other authors sustained the opposite hypothesis. Among others Littlefield, Morduch and Hashemi (2003) asserted that microfinance programs that serve very poor perform better than others in terms of efficiency (measured by the cost per borrower). Fernando’s study too (2004), analysed 39 MFIs and found that without shifting from their mission the MFIs improved their financial performance.
The transaction costs which are connected to lending to the poor are the reason that makes us believe that mission drift, (or the removal of providing small loans to the poorest in favour of higher loans to less poor with lower transaction costs), has a positive influence on the financial sustainability of the MFIs.

From these studies we offer the following first hypothesis to be tested.

**Hypothesis 1:** when mission drift occurs MFIs increase their financial performance.

**b) Financial sustainability and outreach**

Being financially sustainable and achieving the outreach are two different objectives that MFIs are expected to reach. Although empirical studies pointed out that they seem to be alternative (Woller, Dunford and Woodworth, 1999; Paxton, Graham and Thraen, 2000; Woller, 2002; Olivares-Polanco, 2004; Hermes, Lensink and Meesters, 2011), in an ideal situation financial performance and outreach should be simultaneously pursued.

During the last twenty years, in the debate on the trade-off between financial performance and outreach in MFIs two different approaches took place: the poverty lending and the financial system approaches (Robinson, 2001). The first one stressed that the main object of MFIs is the outreach, as it was taken for granted that poor cannot afford higher interest rates (Morduch, 1999; Hermes and Lensink, 2007). On the other side, the second approach stressed that the good financial performance is a requirement of microfinance programs, pointing out the ability of the MFIs to cover the costs of lending money and to minimize the operational costs (Dichter and Harper, 2007). The debate between the two approaches has not been concluded yet, although the most
recent microfinance paradigm seems to favour the financial systems approach (Hermes and Lensink, 2007). Among others, Hermes and Lensink (2011) reported that the main argument in support of an increasing attention to financial sustainability in MFI is that outreach, considered in a long-term period, cannot be reached if MFIs are not financially sustainable.

The great emphasis on financial performance and the trend toward commercialization and profitability of microfinance has raised the question about the effects of this shift of the industry on outreach. Earlier research largely addressed the trade-off between financial performance and the number (breadth of outreach) and socioeconomic level (depth of outreach) of the clients that are served by microfinance institutions. The literature provides mixed evidence, especially regarding depth of outreach. Among others, the study by Cull, Demiguc-kunt and Morduch (2007) aimed at examining financial performance and outreach in a large comparative study based on a data set of 124 microfinance institutions in 49 countries. The authors investigate whether financial performances were better if associated with a lower depth of outreach to the poor. The results provided evidence that MFIs that use mainly the individual lending methodology perform better in terms of profitability, but at the same time the proportion of poor borrowers and female borrowers in the loan portfolio is lower than for institutions which mainly use group lending methodology.

An opposite relation was pointed out by Quayes (2012). He showed the interaction between financial performance and outreach, with a sample of 702 MFIs in 83 countries, asserting that the financial performance has a positive impact on the depth of outreach of an MFI, and simultaneously the depth of outreach increases the probability of aiming financial sustainability by an MFI. The studies give evidence of a
positive complementary relationship between financial performance and depth of outreach. In particular the author estimated an endogenous model to capture any evidence of complementary relationship between depth of outreach and financial self-sufficiency and found that a number of variables, including the fraction of women borrowers have a statistically significant positive impact on the depth of outreach. The analysis also showed that a financial self-sufficiency MFI has a better outreach than a MFI which is not self- sufficient. At the same time the impact of outreach on financial performance is positive and significant. More recently Lous, Seret and Beasens (2013), investigated the association between outreach and financial performance using a comprehensive data set of 650 MFIs and found that a positive relation exist between outreach and financial sustainability.

All of these research make us formulate the second hypothesis that follows.

**Hypothesis 2:** financial performance has a negative relationship with outreach in MFIs.

c) **Mission drift and outreach**

At the end, even if the advocates of microfinance argue that access to finance services can help to reduce poverty (Littlefield, Morduch and Hashemi, 2003; Dunford, 2006; Deloach & Lamanna, 2011; Imai, Haiha, Thapa, & Annim, 2012), the increasing attention to financial performance of MFIs raised concerns around efficacy of microfinance in poverty reduction. MFIs have been subject to criticism because it is said that they cannot reach the poorest of the poor, but only the less poor (Scully, 2004) or that the poorest are deliberately excluded from microfinance programs (Simanowitz, 2002). Other critics to microfinance regard the concept of risk associated to the loans,
according to different points of view (Hermes and Lensink, 2011). First, the extreme poor may decide not to participate in microfinance programs because they fear that taking out a loan is too risky for them, and that it is not worth investing for the future (Ciravegna, 2005). Second, there may be a problem of exclusion of the poorest by other group members, because they consider too risky to accept the core poor in their group (Hulme and Mosley, 1996; Marr, 2004). Third, also the staff members of MFIs may prefer excluding the poorest since lending to them is rated as extremely risky (Hulme and Mosley, 1996). Fourth, finally, in some cases microfinance programs are organized in a way that tends to exclude the core poor, for example, microfinance institutions may define as necessary requirement to access the loan, the ability to save (Kirkpatrick and Maimbo, 2002; Mosley, 2001).

When MFIs incur in the mission drift they move away from their original mission with repercussions on the outreach. They change the business model and they lose sight of the fact of offering small amounts of credit to the poor, increasing the average loan and addressing needs of less poor people. As a consequence, when the average loan is higher the criticism on the effectiveness of microcredit become more significant. In addition if the average loan offered by the MFIs increases, the ability of the poor to return the loan decreases, and therefore poor people wave all claims for the loans.

Another consideration about the high level of the average loan is that usually a larger loan is oriented to more structured and developed activities that are far away from the real possibilities of the poor and from their kind of self-entrepreneurship activities. The most common self-entrepreneurial activities, generated by microcredit, are indeed related to the rural world and agriculture, followed by small commercial retail activities.
So, it is understandable and common sense, that for these types of businesses, typical of the developing countries, it is not required a large amount of money (Deininger & Liu, 2013). So, the average size of the loan required by the poor is generally low.

At the end, MFIs have scarce resources, depending most of the times on subsidies (Hudon and Traca, 2011), if they increase the average loan, they will reduce the absolute number of beneficiaries.

These considerations bring us to advance the third and last hypothesis of our work.

**Hypothesis 3:** when mission drift occurs MFIs decrease their financial performance.

3. **Data and methodology**

   a) **Sample**

   A total of 194 MFIs were considered in this study to test the three hypotheses. The MFIs were included in the institutions analyzed by MicroFinanza Rating between 2001 and 2010 to publish a financial and social rating of the institution. MicroFinanza Rating is a leading rating agency specialized in MFIs that produces independent ratings to promote responsible flow of investment towards the MFIs. Inclusion of MFIs in the MicroFinanza Rating dataset is based on investors’ interest, and thus the sample is skewed toward institutions that are concerned about financial performance and profitability.

   [Table 1 around here]
Our full sample consisted of 788 observations (annual ratings). Table 1 describes the dataset in terms of number of observations per year, areas of activities of MFIs, loan types and the legal status of considered MFIs. As can be seen from the table, we have only 13 observations for 2001 and 29 for 2002. In other years, the number of observations increases from 29 to 130 in 2006. In the sample there is an equal distribution between inclusion of MFIs which operate in rural area (25.6%) and those operating in urban ones (25.6%). Referring to the lending style, Cull, Demirgüç-Kunt and Morduch (2007, 2010) distinguished between the individual lending, which applies to MFIs that use standard bilateral contracts between a lender and a single borrower, and the solidarity group lending, in which loans are made individually although the responsibility is shared for repaying the loan. In this study the lending methodologies as the geographical area of activity do not offer particular insights, they are distributed uniformly and equitably in the sample considered. With reference to the lending methodology, the sample shows that the main type of loan realized is the individual (31.2) and loans that are aimed at groups of individuals (18.7%). Data show also that individual loans growth in the last years reaching a presence of 91.2% in the 2010. The main type of organizations is NGOs (39.1%). The second types of organizations included in the sample are the non-bank financial organizations (28.8%) and then the cooperative ones (26.0). The commercial MFIs are the less represented in our sample (6.1%).

[Table 2 around here]
Table 2 shows the number of observations considered in the sample per country. In our sample MFIs from Ecuador are the most representative (111 observations), followed by Honduras (62). Since MicroFinanza rating is one of the larger dataset on MFIs in the world, the country distribution of the sample could be considered as a concrete representation of effective distribution of existing MFIs in the world. The MFIs included tend to be larger than the standard of MFIs, with a mean of 116 employees and 11,520 active borrowers. Actually, the largest MFIs account for more than three-quarters of total customers in microfinance industry (Honohan 2004), thus we rely on high level of representativeness for the industry.

All variables we used in the analysis are collected and verified by independent analysts of MicroFinanza Rating who conducted and realized the periodical ratings of MFIs. Because of the independence of analysts data could be considered as highly reliable. Each rating involves variables on basic financial performance, on amount and quality of managed assets and basic information on customers.

As mentioned before, the central aim of the paper is to test the relationship between mission drift, financial performance and outreach of the MFIs, which emerged as a trade-off between financial versus outreach performance in MFIs. In line with earlier studies (Olivares-Polanco, 2004; Cull, Demirgüç-Kunt and Morduch, 2007; Hermes et al., 2007; Gutierrez-Nieto et al., 2009) we used as indicator of the overall MFIs’ outreach the percentage of women customers. Also the SPTF (2009) report that women’s outreach is considered an important indicator in the social performance measurement and assessment tools used.
b) **Linear mixed models analysis**

In longitudinal data, correlations are typically observed between dependent measurements. To handle this type of data, regular statistical analysis (such as the OLS regression) do not apply because they assume the independence of measurements and specific techniques must be adopted to analyze repeated measures (Omar, Wright, Turner, and Thompson, 1999). Moreover, regular repeated measures analysis of variance typically cannot cope with missing data, and only take into account cases with complete data, that might not be representative of the full data set. In addition, these techniques estimate group effects and provide no insight into how single cases develop over time. For these reasons, the mixed effects regressions have become increasingly popular to analyze longitudinal data. The mixed models include random regression effects that account for the influence of cases on repeated measurements, and thereby enable analysis of single cases development over time. In addition, in this type of regression analysis, cases with incomplete data can be included.

Conducting our mixed-effects regressions, we tested several models to examine which variables should be included to explain the data best (Laird & Ware, 1982). To assess whether a predictor that was added to the model increased the explained variance, we used the Akaike Information Criterion (AIC) (Akaike, 1973). The AIC determines the maximum likelihood of a possible model, adjusted by the number of parameters that are estimated. As an additional criterion, we also considered the Bayesian information criterion (BIC) (Burnham & Anderson, 2002), as this fit measure is insensitive to sampling size, unlike the AIC. The model with the lowest AIC and BIC represents the best model. Moreover, for tested models, we performed the log likelihood ratio test, and we compared the difference in log likelihood between the model with and the model
without the added predictor. Finally, we report the significance of the p-values of the coefficients in the model.

(i) Model A: control variables and outreach over time

First, we tested a model that included the control variables that emerged in earlier studies as predictors of overall outreach performance. In the analysis we included the year, area of activities, loan types, type of MFIs and the natural logarithm of number of employees in workforce as predictors of level of outreach.

\[
OUTREACH_{i,t} = \beta_0 + \beta_1 \text{YEAR}_{i,t} + \beta_2 \text{RURAL}_{i,t} + \beta_3 \text{URBAN}_{i,t} + \beta_4 \text{INDIVIDUAL}_{i,t} \\
+ \beta_5 \text{GROUP}_{i,t} + \sum_{j=6}^{8} \beta_j \text{MFI TYPE}_{i,t} + \beta_9 \ln \text{STAFF}_{i,t} + \varepsilon_{i,t}
\]

In this formula, \(\beta_0\) denotes the sample intercept. The parameter \(\text{OUTREACH}_{i,t}\) refers to the outcome on measurement OUTREACH (percentage of women in customers) for MFI \(i\) on year \(t\). Variable \(\text{YEAR}\) refers to the year of the observations. \(\text{RURAL}\) and \(\text{URBAN}\) are two dummy variables that refer to case of activities of the MFI in rural or urban areas. We included two variables because in the sample there were MFIs that were active in both the contexts. The same situation led us to introduce two dummy variables related to type of landing, including \(\text{INDIVIDUAL}\) and \(\text{GROUP}\) as two independent dummy variables. In order to control the fact that different type of MFIs may have different revenues functions, we add a vector of dummies for the type. \(\text{MFI TYPE}\) is a set vector that includes four dummy variables related to types of organizations. We have dummy variables for commercial, NGO, non-bank financial institutions and cooperative type of MFIs. The last included variable is the \(\ln \text{STAFF}\), which allows considering the size of the MFI. Since some MFIs were rated by
MicroFinanza Rating more times in a year, whereas for one MFI were available two, three, or four ratings in a year, we considered the rating which refers to the overall performance of the MFI in the year. Therefore, all the tested models were run on the 194 MFIs using all the 788 observations.

(ii) Model B: control variables, mission drift, financial performance and outreach over time

To examine whether financial performance affected outreach, we included the financial variables in the analysis. These variables indicate to what extent differences in outreach are due to differences in financial performance of MFIs. The model B was based on the following formula:

\[
\text{OUTREACH}_{i,t} = \beta_0 + \beta_1 \text{YEAR}_{i,t} + \beta_2 \text{RURAL}_{i,t} + \beta_3 \text{URBAN}_{i,t} + \beta_4 \text{INDIVIDUAL}_{i,t} \\
+ \beta_5 \text{GROUP}_{i,t} + \sum_{j=6}^{8} \beta_j \text{MFITYPE}_{i,j} + \beta_9 \text{InSTAFF}_{i,t} + \beta_{10} \text{InOSS}_{i,t} \\
+ \beta_{11} \text{InLLR}_{i,t} + \beta_{12} \text{InROA}_{i,t} + \beta_{13} \text{InALB}_{i,t} + \beta_{14} \text{RTE}_{i,t} + \epsilon_{i,t}
\]

In this model, lnOSS indicates the natural logarithm of operational self-sufficiency, which is typical of MFIs’ performance, measures the report between the operating incomes of the MFI and the total costs (operational expenses, loan provision, and financial costs). The lnLLR indicates the loan loss reserves and it is included to control for differences in the risk taking strategies among MFIs (Fries and Taci, 2005). The lnROA is the measure of Return on Assets, which is a reliable proxy of MFIs capability to reach good operative revenues in the respect of the amount of managed resources. It is a reliable indicator of financial performance of one MFI. The lnALB is the Average Loan Balance per Borrower (in.000 of US dollar) and it is seen as an
indicator for mission drift. In this sense the higher ALB the less the MFI is close to the
traditional business model of MFIs. For this reason an increase in the ALB could be
considered a proxy of mission drift on MFI. The RATE is the interest expense holding
money and is measured as the report between financial expense ratio and the total
amounts of deposits.

(iii) Model C: control variables, mission drift, financial performance, outreach
and interactions

In the third model, we entered the interactions between ROA and ALB, ROA and
RATE and ALB and RATE. The former interaction was entered to account for
profitability and orientation of the MFIs to serve the poor. The second account for
relations between rate of interest and the profitability of the firms, and the last
interaction account for the relation between the interest of the MFI to serve the poor and
the rate that the firm apply to the customers. The final formula of the third model we
tested is the following:

\[
\text{OUTREACH}_{i,t} = \beta_0 + \beta_1 \text{YEAR}_{i,t} + \beta_2 \text{RURAL}_{i,t} + \beta_3 \text{URBAN}_{i,t} + \beta_4 \text{INDIVIDUAL}_{i,t} \\
+ \beta_5 \text{GROUP}_{i,t} + \sum_{j=6}^{8} \beta_{ij} \text{TYPE}_{i,j} + \beta_9 \ln \text{STAFF}_{i,t} + \beta_{10} \ln \text{LOSS}_{i,t} \\
+ \beta_{11} \ln \text{LLR}_{i,t} + \beta_{12} \ln \text{ROA}_{i,t} + \beta_{13} \ln \text{ALB}_{i,t} + \beta_{14} \text{RATE}_{i,t} + \beta_{15} \text{ROA}_{i,t} \text{ALB}_{i,t} \\
+ \beta_{16} \text{ROA}_{i,t} \text{RATE}_{i,t} + \beta_{17} \text{ALB}_{i,t} \text{RATE}_{i,t} + \varepsilon_{i,t}
\]

c) Mixed-effect regression models

Since we entered several variables into the analysis that showed relatively high
inter-correlations, collinearity among variables could have threatened our results. Table
3 shows that there are inter-correlations whit p values under 0.05 percent. Therefore,
since Schie and Fouladi (2003) demonstrated that collinearity did not affect estimation coefficients of linear mixed model, it is unlikely that inter-correlations among variables biased our analysis and estimates.

Table 4 shows the estimated coefficients of our mix-effects regression models.

[Table 3 around here]
[Table 4 around here]

Model A pointed out to what extent control variables contribute to the outreach performance of an MFI. The results for regression weights ($\beta_0$-$\beta_9$) are provided with the variance of the intercept. The table shows that two regression weights were significant: the commercial nature (MFI$\text{TYPE} =$ COMMERCIAL) and the size (lnSTAFF) of MFI. The Model A shows that commercial MFIs reach lower level of outreach, on the other side that large MFI are more likely to reach higher level of outreach.

Model B tested whether the control variables ($\beta_0$-$\beta_9$) and the financial performance ($\beta_{10}$-$\beta_{14}$) of the MFIs affect outreach over time. Therefore, the OSS, the LLR, the ROA, the ALB and the RATE were entered into the formula. The results showed that the OSS, LLR and RATE are not significant contributors to the equation, but that the ROA and the ALB were. The model also showed that the nature of commercial MFI and the size of the MFIs still remained relevant for outreach. The positive regression weight of the ROA indicates that the more an MFI increases profitability from managed assets, the more the MFI will be able to increase the outreach. On the contrary, the more the MFI has low average loan balance, the more it
will reach higher level of outreach. The AIC and the BIC of this model are considerably lower than model A (7.43 and 9.81). This indicates an improvement of the model B over the model A. This consideration is also supported by the significant reduction of log likelihood. In this sense our results show that a trade-off between financial performance and outreach does not really exists.

To study whether the ROA and ALB differently affect outreach, we entered the interactions ROA, ALB and RATE ($\beta_{15}-\beta_{17}$) in the Model C. For the model the interaction between ROA and ALB was significant, so as the two variables stand-alone. Again, the AIC and the BIC and the likelihood proved that adding the interaction between the financial performance led to an improvement of the model (respectively AIC: 6.30; BIC: 6.92; log likelihood: 6.05) compared to the model B. The interaction was significant and the weight shows that there is a negative interaction between ALB and ROA. It confirms that a trade-off between ROA and outreach does not exist, so as it exists a negative relation between ALB and outreach.

Finally, all tested models showed that in the last ten years MFIs that were able to increase their profitability were also able to increase the level of their contribution to the outreach of poor, falsifying the second hypothesis. On the other side, it shows that the more the MFI is oriented to offer small sized loan (reduction of ALB), the more the MFI will increase the overall outreach. From our analysis, it also emerges that the size of the MFI is a significant predictor of the MFIs’ outreach performance, showing that larger MFIs are able to reach higher level of outreach. In addition, it emerges that MFIs that are in nature commercial seems to be less interested in outreach, so that they have level of outreach significantly lower than MFIs from other type.
4. Discussion

Our results, using a large and longitudinal dataset, show that it is possible for the MFIs to pursue financial performance without necessarily having a negative impact on the outreach, as part of the literature seems to suggest (Woller, Dunford and Woodworth, 1999; Paxton, Graham and Thraen, 2000; Woller, 2002; Olivares-Polanco, 2004; Hermes, Lensink and Meesters, 2011). As a matter of fact the findings support the thesis and agree with those who argue that microfinance programs that serve the poor perform better than others and that without shifting from their mission the MFIs improved their financial performance (Littlefield, Morduch and Hashemi, 2003; Fernando, 2004). Mission drift would imply that the institutions, moving away from their original mission, they focus on the wealthier clients, or the less poor clients, offering higher average loans with the goal of increasing the financial performance. Our findings revealed that it does not occur.

The first result arising out of our analysis shows that commercial MFIs have a lower outreach vis-à-vis those of other typologies of MFIs. The explanation is to be found in the objective of commercial MFIs: they have interest in making profits. For this reason it is understandable that the poorest result to be excluded from the main target of MFIs. Another reason concerns the fact that poor clients are also too risky (Hulme and Mosley, 1996; Marr, 2004; Ciravegna, 2005; Hermes and Lensink, 2011). Commercial MFIs are more concentrated on the financial performance and on profitability and so they usually tend to reduce the level of outreach (Hermes, Lensink and Meesters, 2011). The second one asserts that the bigger the MFIs the higher the level of outreach achieved. This finding responds to the statement made by Cull et.al. (2007) which says that 'the question remains open as to whether larger institutions serve
an absolutely greater number of the very poor'. We used natural logarithm of number of employees (staff) as indicator of the size of the institutions, as it is generally done when talking about the size or dimension of an organization or institution. It might be that growing in size, MFIs at the same time expand their contacts and increase their network, having a greater access to information and having a better possibility to reach a greater number of clients. The third and more significant result of our research, and also the most innovative one, takes into consideration two different variables, ROA and ALB, and the relation between them. First, evidence shows that with the increase of ROA, institutions increase also their level of outreach.

Contrary to what was hypothesized, our analysis shows that the phenomenon of mission drift actually does not lead to an improvement in the financial performance of microfinance institutions, but on the contrary, it leads to a deterioration of the financial performance. This finding brings us to affirm that the first hypothesis is denied. An explanation of this result stems from the fact that microfinance institutions are moving from target the poorest (considered riskier) and are moving towards the less poor, in order to ask for a risk premium that is lower and to minimize transactions costs. But, evidence shows that transaction costs decreased only in part and not enough to result in a improvement in the financial performance (Roberts, 2013). Concretely, it is as if moving to the less poor, bring the institutions to reduce the interest rate more than the reduction of the transaction costs. In this regard, it may be suggested to analyze the dynamics of transaction costs and their progress in relation to changes in the poverty level of the clients. It could therefore be suggested that the relationship between interest rate and transaction costs in MFI is not linear. This could also explain the reason why earlier studies identified mixed results, suggesting that specific further studies must be
conducted to understand the nature of the relationship that exists between the two dimensions.

Concerning the second hypothesis, we can say that in cases where MFIs become more attentive to the financial performance, this does not necessarily comes at the expense of the level of outreach achieved. In the table (number of the table), the interaction (B15) shows that the positive effect of a search of financial performance compared to outreach is amplified by the average level of loans. This means that the search for financial performance is not compromised by the level of outreach, when microfinance institutions do not stray from their original social mission. The financial performance and outreach are correlated positively and not negatively as the second hypothesis sustained and which now turns out to be false. So, where MFIs do not fall into the mission drift pursuing good financial performance, they will also have a higher level of outreach achieved. When, on the contrary, microfinance institutions incur in mission drift, there is a negative effect on their level of outreach. Therefore, MFIs moving away from the social mission lead to failure in the attempt to promote the overcoming of the weak economic situation of the poor.

The reduction of ALB corresponds to a growth of the level of outreach. This result confirms the third and last hypothesis. It is true that moving from their original mission MFIs reduce their level of outreach, that is to say that when MFIs offer higher average loans, the level of outreach decreases, while if the ALB is low the outreach will be higher. Therefore, the relationship between mission drift and outreach is verified.

In addition the interaction between these variables demonstrates that if the level of ROA grows and, simultaneously, the level of ALB decreases, the level of outreach will be higher. The analysis of the trade-off between financial sustainability and
outreach in many different cases has highlighted a negative relationship (Woller, Dunford and Woodwoth, 1999; Paxton, Graham and Thraen, 2000; Woller, 2002; Olivares-Polanco, 2004; Hermes, Lensink and Meesters, 2011). Indeed, our research points out that it could be a positive one, in the case that MFIs decide to lower the size of the average loans. In this way it can be said that the trade-off is mitigated by the size of the loans. Reducing the average loan, the profitability of MFIs turns out to be higher as well as the level of outreach. According to this, we are able to assert that the phenomenon of mission drift does not occur and that it is not true that focusing on the financial performance will reduce the level of outreach. Mission drift instead occurs when MFIs provide high loans. To prevent the risk of mission drift MFIs should give small loans and go back to their origin. By doing this, they would avoid mission drift and would allow analyzing the positive relation between financial performance and outreach.

There are several practical implications deriving from our findings, at least at three different levels: for the management of the MFIs, for those who rate the MFIs and consequently also for the potential investors and donors, and finally for the academic research.

The first implies that MFIs should grow their dimension, in terms of number of employees and clients served, but not in terms of bigger loans, rather they pursue growth objective by keeping the size of the loans low. It is in this way that poor will be reached, and so the level of outreach increases. Secondly, rating agencies should take in consideration the ALB indicator and its value, which is fundamental to address whether the mission drift occurs or not. The importance of this indicator is already recognized by the academics and researchers on the subject of mission drift, but not yet, or not so
intensively by rating agencies. Therefore, the evaluation of the MFIs should consider low ALB as a good indicator to reach both profitability and outreach. Finally, findings show that the trade-off is influenced by the way in which MFIs provide loans, meaning that it is advisable to include in the way of distributing loans the size of ALB as a relevant predictor. The relevant result, which brings a new contribution to the literature on this subject, is that the more the MFIs focus their attention on the outreach, the more their profitability grows. This implies that it is advisable for MFIs to go back to the origins of their existence: maximize the outreach in order to reduce poverty, and through this, increase the profitability.

5. Conclusion

The focus of our study is to investigate the relationship between mission drift, financial performance and outreach, having a huge database consisting in 788 observations of MFIs belonging to Microfinanza Rating, a rating agency which operates all over the world in the field of microfinance. The relevance of the research is at least threefold: first, the sample used is consistent both in terms of numbers of MFIs included, that in terms of trustworthiness of the data, since the source is reliable and data are collected and given by an internationally recognized rating agency in the microfinance industry, whereas generally analysis were conducted on data taken from Mix-Market, where the information are often self-declared and for this reason not verifiable. Second, the data collected are representative of the entire world, while some studies concentrate their attention on a particular geographical area, and moreover the observations collected are available for different years, which allowed us to use the mixed-effect regression models. Third, we have considered different control variables to
explain the phenomenon, starting from the nature and type of the organizations, passing through their size in terms of people reached by each of them, and on, to the geographical area in which the institutions operates and the lending methodology used to address people. In addition, the methodology used to run the research is innovative in studies regarding MFIs and the trade-off between sustainability and outreach.

From the findings point of view, the study brings a new insight on the literature regarding mission drift. Data analyzed and test hypotheses show that mission drift does not occur, with the relevant implication that a better profitability is achieved if the MFIs focus their attention and strengths on their mission and on the outreach. So, practitioners of MFIs should take into account that by putting into practice their mission they will reach even better results in terms of ROA and profitability. In conclusion, according to our research, MFIs should be encouraged to pursue their original mission: that is to serve the poor and maximize the outreach, without fearing the repercussion on the sustainability side. Actually the more they keep on achieving a better outreach, the more they will become sustainable over time.
References


Ciravegna, D. (2005), The role of microcredit in modern economy: The case of Italy. www.flacso.or.cr/fileadmin/documentos/FLACSO/auCiravegna2.DOC.


Table 1. Description of the panel per area, loan type, and type of MFIs

<table>
<thead>
<tr>
<th>Years</th>
<th>Obs. (n.)</th>
<th>Area (%)</th>
<th>Loan type (%)</th>
<th>Type of MFIs (%)</th>
</tr>
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<tr>
<td></td>
<td></td>
<td>Rural</td>
<td>Urban</td>
<td>Individual</td>
</tr>
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<td>2001</td>
<td>13</td>
<td>7.7</td>
<td>7.7</td>
<td>7.7</td>
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<tr>
<td>2002</td>
<td>29</td>
<td>0.0</td>
<td>0.0</td>
<td>0.0</td>
</tr>
<tr>
<td>2003</td>
<td>44</td>
<td>4.5</td>
<td>18.2</td>
<td>18.2</td>
</tr>
<tr>
<td>2004</td>
<td>77</td>
<td>11.7</td>
<td>13.0</td>
<td>16.9</td>
</tr>
<tr>
<td>2005</td>
<td>107</td>
<td>10.3</td>
<td>12.1</td>
<td>14.0</td>
</tr>
<tr>
<td>2006</td>
<td>130</td>
<td>19.2</td>
<td>18.5</td>
<td>25.4</td>
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<tr>
<td>2007</td>
<td>127</td>
<td>31.5</td>
<td>26.0</td>
<td>33.1</td>
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<tr>
<td>2008</td>
<td>115</td>
<td>28.7</td>
<td>35.7</td>
<td>35.7</td>
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<tr>
<td>2009</td>
<td>86</td>
<td>44.2</td>
<td>38.4</td>
<td>47.7</td>
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<td>2010</td>
<td>57</td>
<td>75.4</td>
<td>82.5</td>
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<td>Total</td>
<td>788</td>
<td>25.6</td>
<td>25.6</td>
<td>31.2</td>
</tr>
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</table>
Table 2. Description of panel country, total assets, staff e borrowers

<table>
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<tr>
<th>Country</th>
<th>Obs. (n.)</th>
<th>Total assets (.000 USD)</th>
<th>MFI’s staff (n.)</th>
<th>Active borrowers (n.)</th>
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**Total**                      | 788       | 359,576.30               | 115.81          | 20,139.95            |
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N. of observations 788; * p-value<0.05; ** p-value<0.01.
Table 4. Estimated coefficients of Model A, B, C (and standard errors), which test the influence of fixed parameters on outreach

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<th>Coefficient</th>
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<td>SE</td>
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| $\beta_{15}$ [ln(ROA) x ln(ALB)] | -0.11 ** | 0.03         |
| $\beta_{16}$ [ln(ROA) x RATE]   | 1.05     | 0.70         |
| $\beta_{17}$ [ln(ALB) x RATE]   | -0.34    | 0.49         |

Random parameters

$\sigma^2$  158.10  156.74  156.31

Number of parameters 10 15 18
Akaike’s Information Criterion (AIC) 88.71 81.28 74.98
Schwarz’s Bayesian Criterion (BIC) 110.15 100.34 93.42
Log likelihood 70.71 64.83 58.78

N. of observations 788; * p-value < 0.05; ** p-value < 0.01.
YEAR is the number of years from study entry at which the measurements were taken.
The log likelihood estimates are based on maximum likelihood estimations, which only included the fixed parameters. Therefore, these differ to a small extent from what would be expected based on the AIC and BIC values. BIC was based on the total number of measurements over all participants.
The process of women empowerment in microfinance: definitions, implications and downsides.

Abstract

The present paper provides a review of the literature on women empowerment. In particular, it explains women empowerment, and how it is defined by different authors over time: it also aims at showing studies conducted on empowerment within microfinance, and finally, it reports research on the relevance of context and negative sides of women empowerment. Furthermore, our work points out some gaps in the literature and advices suggestions for future research. The authors advanced two hypotheses that could be verified in the future, assuming that there are two levers, “additional resources/services availability” and “national patriarchal society”, which act as mediating factors between the outreach of microfinance, or women, and the actual impact on the empowerment.
1. Introduction

Microcredit turns out to be an important tool not just for the social inclusion and access to credit for poor, but also a significant vehicle to empower women. Many different authors during the past 40 years have given a definition of the concept of empowerment, and specifically of women empowerment, starting from the claims of the feminist movement, through the world of cooperation, development and international institutions, and up to the use in the field of microcredit and microfinance (Among others: Moser, 1993; Batliwala, 1994; Stromquist, 1995; Rowlands, 1997; Mayoux, 1998; Kabeer 1999, 2001; Ravallion, 2001; Bennet, 2002; Mosedale, 2005).

For their nature and very often due to their mission, microfinance institutions target women in order to empower them (Hashemi et al.; 1996; Kabeer 2001; Garikipati, 2008). The underlying reasons for the success of targeting women for microfinance institutions are multiple. Women, in the context of developing countries, are disadvantaged compared to men for different reasons: (1) they are unlikely to have access to credit (UN, 2010, Khan, Islam, Talukder and Khan, 2013), and so generally they are considered poorer than men, they are forced at home, concentrated in domestic activities and childcare (Ainon, 2009); (2) they have no bargaining power toward their husband and no voice in the decision making process regarding purchases or children education (Goetz, A. M., & Gupta, R. S. , 1996; Karim, K. R., & Law, C. K. , 2012); (3) they have little mobility and often they need to ask permission to their husbands also to visit friends or parents, they are victim of gender inequality and lack of employment opportunities (Westergaard, 1999), and ultimately women lack of relationships in the community where they live and they are not engaged in the social and political life of the society (Kabeer, 2005).
This paper provides a review of the literature on women empowerment. In particular, it explains women empowerment, and how it is defined by different authors over time. It also aims at showing studies conducted on empowerment within microfinance, and finally it reports research on the relevance of context and negative sides of women empowerment. Furthermore, this work points out some gaps in the literature and advises suggestions for future research. In this direction we have advanced two hypotheses that could be verified in the future. In fact, we assume that there are two levers, precisely “additional resources/services availability” and “national patriarchal society”, which act as mediating factors between the outreach of microfinance, or women, and the actual impact on the empowerment.

2. Women empowerment: definitions and meanings

There are several definitions from different authors about empowerment, depending on the degree of importance given to particular aspects that compose the concept of empowerment, which is a multidimensional ongoing process. In the table (Figure 1) we have identified the different dimensions of empowerment stressed by different existing definitions of empowerment and respectively associated the authors to them, in order to clarify the concept not just in a chronological order, but also according to the specific contribution.
In the 1970s the term ‘women empowerment’ appears for the first time, invoked by the Third World feminist and women’s organizations as something capable of restoring social justice and redressing the gender disparity. Bisnath and Elson (2003) explaining the concept of that period report: ‘[women empowerment] it was explicitly used to frame and facilitate the struggle for social justice and women’s equality through a transformation of economic, social and political structures at national and international levels’. Later, in the 1990s many development agencies used ‘women empowerment’ in association with a wide variety of strategies including those which focused on enlarging the choices and productivity of individual women.

Another definition is given by Moser (1993) who identifies empowerment as ‘the capacity of women to increase their self-reliance and internal strength’. While, women empowerment as described by Batliwala (1994) is the result of the progression that allows women to exercise enhanced control over tangible and intangible resources and defy the male dominance and sex related discrimination against themselves in the society as a whole. Batliwala, in addition, points out that empowerment is not necessarily a result of economic strength, by exemplifying that also rich women may
suffer domestic abuse and rape. Empowerment, at the end, is conceptualized as ‘a spiral, changing consciousness, identifying areas to target for change, planning strategies, acting for change, and analyzing activities and outcomes’ (Batliwala, 1994).

For Nelly Stromquist (1995), empowerment is a socio-political concept that includes cognitive, psychological, economic and political components. The cognitive component refers to women’s understanding about the causes of their subordination, which involves the capability to go against cultural or social expectations and includes also knowledge about legal rights and sexuality. The psychological component regards the women believing that they can act at different levels, personal and social, to improve their condition through the development of self-esteem and confidence. For the economic aspect, she argues that, having access to work outside home increases the possibility of economic independence and autonomy in general from the domestic role. The political component instead focuses on acting collectively as a driver of social change.

Also Jo Rowlands (1995) underlines the importance of moving to action, considering empowerment as a process that enhances women's control over decision-making and increases the alternatives of life choices to improve their condition and role in the society and promote gender equity. She develops a model of women empowerment with three dimensions - personal, close relationships and collective, where at each level corresponds a series of factors that lead to changes and where a great importance is attributed to the local context. More specifically empowerment is considered as a process, analyzed in the context of social work and education where ‘[...] empowerment [...] involves some degree of personal development, but that this is not sufficient; and that it involves moving from insight to action’ (Rowlands, 1997).
Going forward chronologically, Mayoux (1998) refers to empowerment as a set of 'mutually reinforcing virtuous spirals' of increasing economic development and improved general wellbeing for women.

Then, one of the most cited definition of women empowerment is that of Kabeer (1999, 2001). She defines it as the process in which women challenge the existing norms and culture of the society in which they live to improve their well-being effectively. More precisely, Naila Kabeer, like Rowlands, suggests that empowerment gives the opportunity to make choices to women who did not have this ability before. This implies that only those which have been previously denied a right, such as the ability to choose between alternatives are the beneficiaries of empowerment, and also that the choices involved are strategic. Having analyzed a number of studies of women empowerment, Kabeer argues that empowerment is basically an increase in the ability of a person to make important decisions regarding different alternatives of life. Empowerment is seen as a procedure in which women are protagonists in appropriating those resources, such as information, that are normally scarce, and that limit their choices, in order to reach a better state of life (Ravallion, 2001).

From the institutional point of view, also UNIFEM (the United Nations Development Fund for Women) gives a definition of women’s economic empowerment as ‘having access to and control over the means to make a living on a sustainable and long term basis, and receiving the material benefits of this access and control’. Such a definition goes beyond short-term goals of increasing women’s access to income and looks for longer term sustainable benefits, not only in terms of changes in the regulations that constrain women’s participation in the development process, but also in
terms of power relationships in the household, community and market levels (Carr, 2000).

The same conception is adopted by Bennet (2002), who describes empowerment as an increase in resources and capacities of different individuals or group of individuals that influence, in a positive way, life.

Mosedale (2005) defines women empowerment as the process by which women redefine and extend what is possible for them to be and do in situations where they have been restricted, compared to men, from being and doing. Or, in other words, women empowerment is the process by which women redefine gender roles in ways which extend their possibilities for being and doing. Moreover, she showed that, although there are different definitions of empowerment, however, it is possible to reduce them to four aspects, which seem to be generally accepted in the literature. Firstly, to be empowered one must have been disempowered, before or related to someone else. For example, women, as a group, are disempowered relative to men. Secondly, empowerment cannot be bestowed by a third party. Rather it depends by those who would like to be empowered to take actions to be able to reach it. Development agencies and other institutions, are therefore just the facilitators of this process, they can help women to become empowered. They may be able to create suitable conditions to empowerment but they are not the ones that can make it happen. Thirdly, definitions of empowerment usually include a general desire of people to change their life and to have more control over the decision making process. Reflections, analysis and action are involved in this process which may happen on an individual or a collective level. Finally empowerment is an 'ongoing process rather than a product. People are
empowered, or disempowered, relative to others or, importantly, relative to themselves at a previous time’ (Mosedale, 2005).

3. Microcredit and woman empowerment

In developing countries, poverty appears to be the main obstacle on the long way to empowerment (Ainon, 2009). The general causes of poverty in those contexts are identified mainly in the absence of productive assets and the consequent involvement in low productivity or badly paid jobs, the low work force participation rate, and in addition the high rate of underemployment among those who actually participate in labor force. Whereas employment is generally used as one of the relevant indicators of development, women are victim of gender inequality and lack of employment opportunities, moreover, the rate of underemployment among women is very high, and in the lucky event that they have a salaried job, their salaries are significantly lower than the equivalent work done by a man, in the same area (Cain, Rokeya and Shamsunnahar, 1979; Westergaard, 1999; Rahman and Khandaker, 1994). Talking about numbers, of the 1.3 billion people living in poverty over the world, some 70 percent are women, suggesting an underlying system within cultures that favors men over women especially in accessing financial resources (UN, 2010). This trend of higher poverty levels that characterizes women is particularly evident in Africa and Southeast Asia (UN, 2010). For example, in Bangladesh, the resources mainly belong to men which results into an inadequate and inequitable condition of women, both in terms of satisfaction of their rights, and in terms of discrimination in accessing to resources (Khan, Islam, Talukder, Khan, 2013). Women empowerment is therefore one of the key issues hotly debated in the context of development of developing countries round the globe where men are
privileged over women and hence enjoy the benefits of more resource utilization and empowerment than that of women. Females of Pakistan, for example, are deprived of power in financial and social spheres (Khan, Islam, Talukder, Khan, 2013).

Even though empowerment has become a widely used term and a commonly cited goal of development interventions, and simultaneously there is a significant body of literature discussing how women empowerment has been or might be evaluated, however, there is no accepted method for measuring it and for tracking changes in a standardized way. As a matter of fact, neither the World Bank, nor any other major development agency has created a rigorous method to measure and assess changes in levels of empowerment (Malhotra et al, 2002).

However, those involved in the development process identify the empowerment of women as one of the tools to counteract the weak situation of women in the society and in the families. Also public institutions, such as governments, are interested in empowering women as a natural consequence of their concerns for national human resource development.

There are various development projects which have recently targeted rural women in order to take them out of poverty. In this regard, microcredit works as an important tool to empower women, as the rising evidence reports (Among others: Cain, Rokeya and Shamsunnahar, 1979; Kabeer, 1999, 2001, 2005; Swain and Wallentin, 2007; and Shekilango, 2012).

During the recent years, governmental and nongovernmental organizations in developing countries have introduced microcredit programs offering financial services to low income households, specifically targeting women (Swain and Wallentin, 2007). The basic argument behind lending to women is that they are good credit risks, less
likely to misuse the loan, and more likely to share the benefits with others in their family, especially their children (Garikipati, 2008). Microfinance programs and their role supporting the Millennium Development Goals have therefore raised a growing expectation on their impact on women empowerment (Khan, Islam, Talukder, Khan, 2013).

As Al-Amin, Hossain, Mathbor (2013), reported in their latest work, the effects of microfinance on women empowerment have been rather diverse and inconclusive. That is, while many of the studies have found substantial impact on the process of women empowerment, others have registered very marginal or no effect, and sometimes, even cited for adverse effects. For these reasons, they also pointed out that it is important to address whether, to what extent, and under what conditions could microcredit programs could be successful to empower women. Aligned on these positions, also Holvoet (2005) indicated that if some studies and researchers are supportive of microfinance’s ability to generate a process of economic, social and political empowerment, others are more skeptical and even point to a deterioration of women’s overall well-being.

One of the recurring issues and question about women and microcredit regards the reasons why microcredit organizations target women as prospective clients. Some researchers (Hashemi et al., 1996; Kabeer, 2001) answered to this question believing that investing in women ’s capabilities empowers them to make choices, increases women ‘s resource that contributes to the well-being of the family, and also contributes to greater economic growth and development of a country. Others scholars (Rahman, 1999; Mayoux, 2002), showed that a growing number of microcredit institutions prefer
women as credit clients because they are more reliable and trustworthy borrowers compared to men, which can increase their recovery rate.

As previously mentioned, there is an extensive literature debating the effectiveness (or not) of microcredit in terms of empowering women. It seems clear that many women have improved their situations from increased access to and control over cash, but, at the same time, evidence also points out that it is not sufficient to have women as target to say that they will be empowered (Mayoux, 2002). Therefore, the argument about the relationship between microcredit and its ability to induce empowerment is controversial and evaluations of the effects of microfinance programs on women empowerment generate mixed results.

Some studies indicate that microcredit participation improves women’s socioeconomic status, grows their self-esteem, and guarantees their wellbeing within the family (Ahmed et al., 2001; Hadi, 2001; Mahajabeen, 2008; Schurmann and Johnston, 2009; Salt, 2010;). Another study supporting the empowerment effect, is conducted by Mizan (1994), who tried to judge the empowerment of women looking at the capacity of participation in decision making process. He conducted the research in two villages of Bangladesh to examine the role of microcredit in women empowerment in terms of participation in decision making process. Findings showed that loans offered by microcredit institutions are playing a great role in women empowerment. Hashemi, Schuler and Riley (1996) in the same context of rural Bangladesh, created an indicator based on eight criteria, trying to assess women empowerment: mobility, economic security, ability to make small purchases, large purchases, involvement in major households decisions, and relative freedom from the family, political and legal awareness, participation in public protests and political campaigns. The findings of
Kabir, Rokeya, and Ishrat (2008) accord with the mounting evidences (Rahman, 1986; Robinson, 2001; and Davis, 2007). Kabir, Rokeya, and Ishrat (2008) revealed that participation of women in the development programs brings them out of their homes and make them more exposed to the interaction with other women and to the contamination of different ideas. Moreover, the occasional meetings and the comparison with other women of the village have a positive effect also on the adoption of contraceptive methods and on decisions regarding the family size (Khan, Islam, Talukder, Khan, 2013).

Different researches carried in the context of women empowerment and microcredit showed that microcredit offered by institutions such as NGOs, banks, etc. resulted in poverty reduction, increased mobilization and enhanced networking among women who were previously constrained at their homes (Schuler and Hashemi, 1996; Carr, 1996; Pitt and Khandker, 1996).

So, the general empowerment of women could be subdivided into the economic empowerment, deriving from access to credit, familiar/personal empowerment and social/political empowerment, which includes all forms of meeting and interaction with the community and the society as a whole. These three components then lead to a general empowered state of women that improve not just women themselves, but also the living standard of their children and their family as a whole (AMR, 2001). Another repercussion of these changes can be found in the redefined power relation of men and women. Women in fact tend to exhibit more autonomy in the areas of basic need fulfillment such as education, food, health etc. It was observed that more than sixty percent of the women were able to take important decisions at their homes that before
were deemed to be men's responsibility, like decisions according to the marriage of children or purchase and selling decisions (Chelston and Kuhn, 2002).

Even Pitt et al. (2006) in the same vein, indicated that microcredit programs lead to women taking a greater role in household decision making, having better access to financial resources, having greater social networks due to mobility and mutual interaction, more bargaining power with their husbands, and freedom of mobility. Amin et al. (1995) noted that women's participation in microcredit programs have contributed to their behavioral change regarding fertility and choices about the number of children. Also other studies (Mahmud, 2003; Kabeer, 1999) showed that participation of women in microcredit programs widens their horizon of movement beyond family.

4. Hypotheses on mediating variables

In studies regarding women empowerment and microcredit an important issue is the role played by context and background in which microcredit programs took place and where the process of empowerment is supposed to exist, and also about the influence of the passing of time on the gender relations, on society and on its mechanisms.

In developing countries generally women are still primarily associated with their roles as daughters, wives and mothers, although in some places they are getting involved in the society day by day. For example, in Bangladesh, where a large number of microcredit institutions operates, currently, women are representative of approximately the 50 percent of the total population and most of them, who are employed in the workforce, are unskilled and illiterate (BBS, 2008). Women are more deprived than men. The reasons behind this condition are the lack of education, training
and employment opportunities. To counteract this condition of backwardness there is a
growing number of governmental and non governmental institutions, researchers and
policy makers who realized that true development of the developing countries passes
through the mobilization of women and their involvement in the development process
as protagonists (Khan, Islam, Talukder, Khan, 2013).

Moreover, the patriarchal ideology, spread in the developing countries, may
prevent women from active microcredit participation. Patriarchal ideology is reflected
in the gendered division of labour, in gender inequality and in the subordination of
women (Bograd, 1988; Dobash and Dobash, 1977-1978, 1980; Yllo, 1983). Hence, the
husband’s gender ideology may influence, in a negative way, both women’s microcredit
participation and their changing status as household co-bread-winner (Goetz and Gupta,
1996).

Many scholars have stressed on cultural perspectives to explain women
empowerment. In line with what was stated earlier about the importance of context, they
found that social context has significant influence on women's lives and that the same
interventions are not effective everywhere (Sardenberg, 2010). When we talk about
context we consider different dimensions such as social, economic, political, perceptual
and cultural, which have great influence on the empowerment process of a particular
society. For this reason the evaluation of empowerment should not be based only on
material interventions, but also on social network and relationships (Kabeer and Huq,
2010; Sardenberg, 2010). Malhotra, Schuler and Boender (2002), agree with the
multidimensional process of empowerment, which for them includes economic, social
and cultural, familiar/interpersonal, legal, political and psychological aspects.
Therefore, it is evident that empowerment is not merely change in economic well-being rather is an integrated process of social change in different forms and levels. The following figure (Figure 2) illustrates the mediating role played by two factors in achieving respectively the economic empowerment, and both the familiar/personal empowerment and social/political empowerment.

**Effectiveness of women empowerment**

**ECONOMIC EMPOWERMENT**
- Exercising control over tangible and intangible resources (Batliwala, 1994; Bennet, 2002)
- Increased ability in the decision making process (Mizan, 1994; Kabeer, 1999, 2002; Mosedale, 2005)
- Ability to make purchases and right to use income (Hashemi, Schuler and Riley, 1996; Chelston and Kull, 2002)

**FAMILIAR/PERSOAL EMPOWERMENT**
- Capacity of women to increase their self-reliance and internal strength (Moser, 1993)
- Development of self-esteem and confidence (Stromquist, 1995)
- Increased role in the society and personal development (Rowlands, 1995)
- Capacity to guarantee the wellbeing of the family, especially children (Ahmed et al., 2001; Hadi, 2002; Mahajabeen, 2008; Schumann and Johnston, 2009; Salt, 2010)
- Increased mobility (Hashemi, Schuler and Riley, 1996)
- Informal meetings and interactions between women (Carr, 1996; Pitt and Khandker, 1996; Kabir, Rokeya and Ishrat, 2008)

**SOCIAL/POlITICAL EMPOWERMENT**
- Awareness of the ideology that legitimizes male domination (Batliwala, 1994)
- Capability to go against cultural or social expectations and knowledge of legal rights (Stromquist, 1995)
- Promotion of gender equity (Rowlands, 1995)
- Redefinition of gender role (Mosedale, 2005)
- Political and legal awareness and participation in public protests and political campaigns (Hashemi, Schuler and Riley, 1996)

Figure 2. Personal elaboration
4.1 Microcredit, additional resources and women empowerment

Having assumed that women are the strategic choice of providing loans but at the same they are not their end users, because it is the male members who really use and control the loans (Karim, 2008), it emerges another consequent implication. If it is true that women are not the end users, it is also true that in any case, they are responsible of returning the loans, and this helps to increase their level of stress and dependency (Rahman, 1999). Some credit institutions and organizations have put pressure upon women in case they fail to repay the installments in due time, and moreover they verbally offend women in front of other peer groups for not making regular repayments (Rahman, 1999; Koenig et al., 2003).

A further different analysis is conducted by Haque and Yamao (2008), who with their research come to say that microcredit is not the suitable tool for poor women in Bangladesh, since it can empower only wealthier women who have already a certain level of income, land and assets at the moment of the loan request. Thus, credit is, of course, a way of empowerment, but it is not enough if combined efforts are not made in order to change the patriarchal social structure, the mentality and the gender power relations that are typical of the developing countries (Hashemi et al., 1996; Hossain et al., 2005; Drolet, 2010).

Another study by Garikipati (2008) pointed out that although lending to women benefits their families, its beneficial impact on women themselves is somewhat unclear. This turns out into a paradox, called “impact paradox”. Garikipati examined the impact of microcredit in beneficiary households and on women in the regional district of Andra Pradesh, India. As previous researches (Hashemi et al., 1996; Hossain et al., 2005; Drolet, 2010), the result is that credit alone is unlikely to lead to women empowerment.
in terms of affecting her household position and allocation of her work time (Hunt and Kasynathan, 2001). The findings also support the idea that women may become empowered when credit is provided as part of an integrated package that includes, beyond the credit, other services like non-productive loans facilities, insurance, enterprise development, and welfare-related activities (Berger, 1989; Holvoet, 2005; Johnson and Rogaly, 1997; Mayoux, 2005).

Finally, Husain, Mukerjee, Dutta (2012) conducted an interesting study examining whether women become empowered after joining self-help groups (SHGs), or whether it is women who are already empowered that decide to join SHGs 1.

A potential barrier to the dissipation of benefits from SHGs among target households is that of self-selection. Self-selection occurs when members of a group have a kind of pre-disposition to choose certain outcomes. Since women have to decide to join a SHG or not, the movement is more likely to attract women who are already economically active, or are more empowered than others. As Steele et al. (1998) pointed out “High levels of empowerment among group members cannot be attributed to the program alone without controlling for the likelihood of selection bias”.

Concerning the economic empowerment, we hypothesized that there is a factor which may influence its attainment and we called it “additional resources/services availability”. We suppose that the increased access to resources and services, thanks to microcredit, favors women in reaching the economic empowerment, and in particular it

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1 Self-help groups (SHGs) are informal associations consisting of 10/20 members created for the purpose of enabling members to collect economic benefit through mutual help, solidarity and joint responsibility. The group based approach makes poor women able to accumulate capital in the form of small savings and promotes their access to formal credit facilities (Shylendra, 1998).
enhances the ability to exercise control over those resources (Batliwala, 1994, Bennet, 2002), the ability in the decision-making process (Mizan, 1994; Kabeer, 1999, 2002; Mosedale, 2005) and the ability to make purchases (Hashemi, Schuler and Riley; 1996; Chelston and Kull; 2002).

This lead us to provide the first hypothesis:

**Hypothesis 1:** Additional resources/services availability have a positive impact on the economic empowerment of women.

4.2 Microcredit, national society and women empowerment

At first sight, and up to now, it would appear that everything in the process of empowerment generated by microcredit is delightful and enjoyable, without dark sides, but on closer inspection it may be argued that there are also some downsides.

In a recent study undertaken in India, Banerjee et al. (2009) showed that microfinance has no impact on participants' average monthly expenditure, per capita income, health, and education or family decision-making. In addition, Sugg's (2010) in his study, stated that 57% of female clients has suffered a rise in spousal verbal aggression since the start of their loans, and 13% in both verbal and physical violence.

Some studies agree with Sugg's (Goetz and Gupta, 1996; Rahman, 1999; Hossain et al., 2005) noting that providing financial support to rural poor women in the majority of cases, is not sufficient to empower them, rather it increases episodes of tensions within families and intensify domestic violence since many of the female borrowers actually have no control over loan use and consequently face problems in paying off the loans. Indeed, some other studies stated that women’s microcredit participation increases the family conflict since it threatens men’s traditional patriarchal
authority (Hossain, 2002; Meade, 2010; Schuler et al., 1996, 1998). A significant proportion of loans that are borrowed by married women are actually controlled by their husbands (Goetz and Gupta, 1996; Kabeer, 2001). Therefore, women’s loan-borrowing status may not necessarily improve their income and status. This might be related to the patriarchal gender ideology which is dominant in the developing countries, where men are expected to be the household breadwinners (Baden et al., 1994; Cain et al., 1979; Schuler et al., 2008). Therefore the husband’s gender ideology might influence the levels of women’s microcredit participation and the control over loans. In this regard the study by Karim and Law (2012) examines the influence of the husbands’ gender ideology on women’s microcredit participation and their status within the household in rural Bangladesh. Their findings showed that women's microcredit participation allows a redefinition of women’s typical gender roles in rural Bangladesh since it proposes women to be co-breadwinners of the households, thus reversing the traditional patterns and the common mentality. On the same subject, Kroska (2000, 2007) defines gender ideology and its role in the process of empowerment, as people’s attitudes toward gender specific roles, rights, and responsibilities (Kroska, 2000, 2007). She therefore highlighted that, in a conservative gender ideology, men are expected to fulfill their family roles through bread-winning activities and women instead are expected to fulfill their roles through homemaking and care-taking activities; while in a liberal ideology both women and men are expected to share bread-winning and care-taking activities.

As a matter of fact the national patriarchal society seems to hinder women empowerment, in order to maintain the traditional societal structure, in which women do not have the same rights and possibilities as men, but, simultaneously it becomes a
motivational push for women to take action to obtain those rights and opportunities that they deny them.

Trying to fight against a patriarchal society and mentality, women, thanks to microcredit loans, develop a sense of self-esteem and confidence (Stromquist, 1995) and increases their internal strength (Moser, 1993) on the personal side of empowerment. For the familiar empowerment, women are better able to express their opinion regarding the general well-being of the family, and in particular on children’s life, which normally in a patriarchal family does not happen, or just seldom (Ahmed et al., 2001; Hadi, 2002; Mahajabeen, 2008; Schurmann and Johnston, 2009; Salt, 2010). Moreover the increased opportunities to meet other women (Carr, 1996; Pitt and Khandker, 1996; Kabir, Rokeya and Ishrat, 2008) and also the greater mobility (Hashemi, Schuler and Riley; 1996) allow them to take more conscience of their rights as women within the family and society.

At the same time the national patriarchal society may have repercussions on the social/political empowerment of women. As previously mentioned, women gain greater awareness of their position in the society in which they live (Batliwala, 1994) and try to act to undermine the masculine mentality and redefine traditional male and female roles (stromquist, 1995; Mosedale, 2005), promoting gender equity (Rowlands, 1995).

All these considerations let us elaborate the second hypothesis:

**Hypothesis 2:** National patriarchal society has an impact on the familiar/personal empowerment and on the social/political empowerment of women.
5. Conclusion

As the amount of literature shows, women empowerment is an important debated issue.

Many authors over the years have discussed this phenomenon, some of which have shown that microcredit can be a particularly useful tool in achieving women's empowerment (Cain, Rokeya and Shamsunnahar, 1979; Kabeer, 1999, 2001, 2005; Swain and Wallentin, 2007; Shekilango, 2012).

Already in 2005, Mosedale had highlighted how women empowerment had become a buzzword, which was mentioned constantly, often inappropriately, without actually evaluating the improvement of the living conditions of women receiving microcredit.

Starting from this consideration we have identified for further research two gaps in particular in the literature, and also suggested hypotheses that would be worth exploring. One possible and significant field of research could be the attempt to find indicators standardized and universal for the measurement and evaluation of empowerment, which up to now are rather inconsistent. This would avoid inadequate evaluations of women empowerment and would lead to the ability to make comparisons on the basis of reliable indicators recognized by all as valid.

The second interesting line of research, that up to now is not covered by the existing literature, may be to investigate the phenomenon of women empowerment in the context of developed countries. More in details, it could be relevant to verify what is meant by women empowerment in a context that is completely different from the developing countries and with different problems and dynamics involving women. As a matter of fact, even if women in the western world are not generally in situations of
extreme poverty, they are considered more fragile and vulnerable than men, and so in need of protection.

The third and last suggestion for future research derives from our tempt to configure the literature in a new way. In particular we have hypothesized that two dimensions are involved and affect the empowerment of women: “Additional resources/services availability” and “National patriarchal society”. We suppose that the first one favors women in reaching the economic empowerment, by enhancing the ability to exercise control over the resources, making purchases and increasing the involvement in the decision making process. As for the second one, we have advanced the hypothesis that the patriarchal society, in which women live in most of the developing countries, could play an important role in the personal/familiar empowerment and social/political empowerment too. It may have a double push: on the one hand the patriarchal mentality could hinder the empowerment, on the other hand, however, it can also be considered as the spring that generates the desire to change and the drive for the empowerment of women. It would be interesting to test the relevance of these two dimensions in empirical studies and verify how they effectively influence the empowerment of women and in which way.
References


Baden, S., Green, C., Goetz, A. M., & Guhathakurta, M. (1994), Background report on gender issues in Bangladesh (Vol. 26). University of Sussex. IDS.


Rural Areas in Natore District, Bangladesh. Research on Humanities and Social Sciences, 3(3), 110-120.


Westergaard, K. (1999), Pauperization and Rural Women in Bangladesh. Comilla: BARD.