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Djossou, Gbètoton Nadège Adèle and Monwanou, Djohodo
Ines and Novignon, Jacob

Department of Economics and Management, University of Abomey
Calavi, Abomey Calavi - Benin, Department of Economics and
Management, University of Abomey Calavi, Abomey Calavi - Benin,
Economics Department, Kwame Nkrumah University of Science and
Technology, Kumasi-Ghana

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Improving access to microcredit in Benin: Are the poor and women benefiting?

Gbètoton Nadège Adèle Djossou

Department of Economics and Management,
University of Abomey Calavi, Abomey Calavi - Benin

E-mail: nadeged2001@yahoo.fr

Mobile: +229 97643418

Djohodo Ines Monwanou

Department of Economics and Management,
University of Abomey Calavi, Abomey Calavi - Benin

E-mail: monwanou@yahoo.fr

Mobile: +229 61749088

Jacob Novignon

Economics Department,
Kwame Nkrumah University of Science and Technology, Kumasi-Ghana

Email: jnovignon@gmail.com

Mobile: +233 242 586462

Abstract

In February 2007, the Government of Benin set up a Microcredit Program to support the Poor (MPP). The main objective of this programme was to alleviate household poverty and particularly women through easy access to microcredit to start their own microenterprises. The objective of this paper was to assess the impact of the MPP on poverty and women empowerment in Benin. Our empirical strategy relies on comparing socioeconomic outcomes (poverty and gender inequality index) of individual with access to MPP and those without. Using data from the Beninese Household Survey (EMICoV: Enquête Modulaire Intégrée sur les Conditions de vie des Ménages) conducted by the National Institute of Statistics in 2011, we estimate the average treatment effect of the MPP using Propensity Score Matching (PSM). To measure poverty and gender inequality, we construct a composite indicator using various dimensions of wellbeing (e.g. Education, health, assets etc.). In general, the results showed a positive and significant impact of MPP on poverty. Women empowerment in health care access and assets ownership were positively impacted by MPP access. The results encourage further expansion of the MPP and to ensure effective as well as efficient implementation of the programme.

Keywords: Microcredit, poverty, Women empowerment, Propensity Matching Score, Benin

1. Introduction

Poverty reduction and improved income inequality has become a global policy concern across several countries. This is particularly profound in Benin where poverty levels are relatively high. At the national level, it is estimated that about a third of the population has been income poor since the 1990s. For instance, in 2011, 36 per cent of the population was estimated to be living with annual income below the national poverty line. This marked a marginal reduction from 38 per cent in 2006 but an increase from 35 per cent in 2009 (INSAE, 2013). The population living in multidimensional poverty is estimated at 72 percent in 2006 (UNDP, 2013). Extreme poverty incidence was estimated at 51% in 2011 and varies significantly across regions. In the same year, 64% of the rural population was considered as extreme poor against 32% of the urban population (INSAE, 2013). The country also failed to achieve the MDG target of halving poverty levels by 2015 (UNDP, 2015).

Several efforts have been put in place over the years to help ameliorate the devastating impact of poverty in Benin. Notable among these efforts include the Growth Strategy for Poverty Reduction, with particular emphasis on microfinance. In the country's Development Policy Document, microfinance is defined as the supply of financial services to individuals excluded by banks and with small collaterals to access banking services. In addition to limited Microfinance Institutions (MFIs) that operate in the country, the Government of Benin has set up a Microcredit Programme to the Poorest (MPP). The programme operates on the principle that improving access to credit for the poor will also improve their propensity to undertake income generating activities and access basic social services. Thus, it is expected that the MPP will contribute to reducing the risks and uncertainties faced by the poor.

While its broad focus is on improving access to microcredit among the poor, the MPP focuses mainly on women that have relatively low economic power compared to men. Available data show that 45 percent of households headed by women are affected by economic shocks against 41 percent of households headed by men (UNDP, 2015). Among other things, factors that have been identified to limit female economic power include legal barriers, limited access to financial and physical assets and to information in the market, poor social networks and business relationships, limited access to education and skills improvement, and a weaker bargaining power in the labour markets.

In spite of its potential impact on poverty, very few empirical studies exist on the impact of the MPP. The Ministry of Microfinance study in 2010 and Dahoun *et al.* (2013) are the only studies that have analysed the impact of the MPP on women's empowerment. However, the impact of the MPP on poverty and women empowerment is still in question. It is therefore important to examine whether the MPP has helped to alleviate households' poverty and improve women empowerment.

In this regard, the current study sought to assess the impact of the MPP on poverty and women empowerment in Benin. This study contributes to the existing literature on the relationship between financial inclusion (access to credit), poverty and women empowerment in Benin. The study also generates findings that will inform policy makers on whether the Microcredit Programme to the Poorest (MPP) has really benefited poor and encouraged women empowerment since its inception in 2007.

The rest of the paper proceeds as follows; section two and three presents a description of the microcredit programme in Benin and literature review, respectively. Section four presents the methods used in analysis while the results from the analysis are presented in section five. In section six, the results are discussed with various policy implications. The summary and conclusions are presented in section seven.

2. The Microcredit Programme to the Poorest (MPP) in Benin

The government of Benin launched the Microcredit Programme to the Poorest (MPP) in February 2007. The aim of this programme was to empower the poor and particularly women in order to improve their living conditions. To achieve the MDGs, the microcredit policy has been incorporated into the Growth Strategy for Poverty Reduction to better target the poor. The MPP is mainly focused on women to increase their revenues, improve their empowerment and allow them to start their own enterprise and improve their status within the household. The MPP is expected to contribute to greater involvement of women in community activities and strengthen their bargaining power. The MPP assists poor households in the following areas: (i) monitoring services to develop their management capacity of income generating activities; (ii) access to microcredit for the development of income generating activities.

The resources from the MPP help the poor to have access to microfinance and to promote income generating activities in three steps. The first phase lasts at most two cycles of six

months. The beneficiaries receive a maximum credit of FCFA 30,000¹ at each cycle. The annual interest rate is 5 per cent. The second phase also lasts at most two cycles of six months. The amount of credit received by beneficiaries is increased to a maximum of FCFA 50,000 with an annual interest rate of 8 per cent. In the third phase, the beneficiaries are monitoring to be referred to the Microfinance Institutions (MFIs). To enable MFIs to effectively ensure this phase, the government grants them loan at moderate rates.

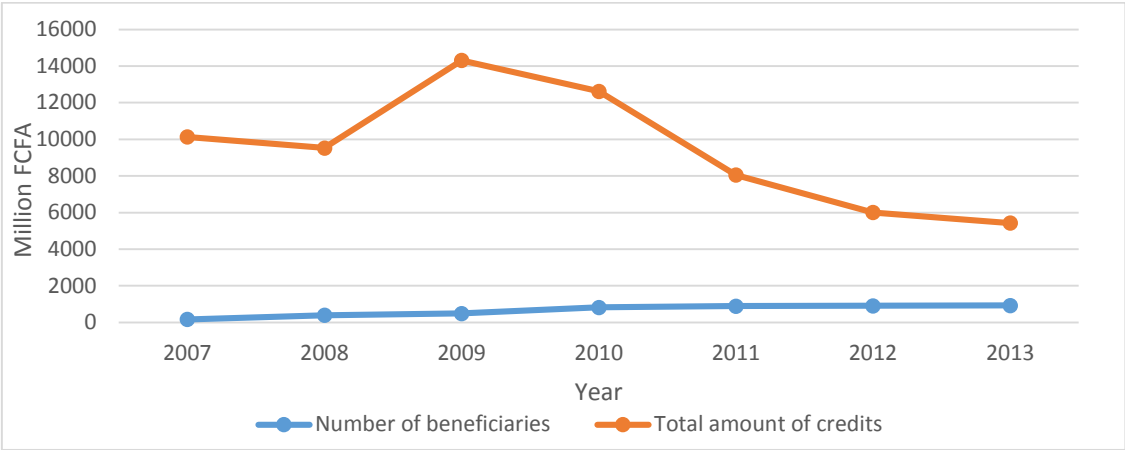
Outside of the microcredit product, the MPP offers two savings products to individuals who join the programme. The first one consists of a portion of the amount of interest paid by the beneficiaries on their loans. This saving is mandatory and is rebated to the beneficiaries according to their repayment efforts. The second savings product is similar to the traditional savings products offered by MFIs to their customers. Moreover, trainings are given to the MPP beneficiaries on topics such as: the management of cooperatives and of solidarity groups, the literacy, the business management, elementary accounting, credit and its main obligations.

The MPP is managed by the National Microfinance Fund (FNM)². Established by the decree No. 2006-301 of 27 June 2006 and placed under the Ministry of Microfinance, the FNM is intended to help vulnerable populations to improve their living conditions through the MFIs. The grants obtained by the FNM from the Government is amounted to FCFA 9,968,499,000 in 2007 at the beginning of the programme. From 2007 to 2013, a total of 4,756,655 individuals (with only about 5 percent of men) have received microcredit under the MPP. Figure 1 presents a trend analysis between 2007 and 2013. Since 2007, MPP beneficiaries have been increasing each year. However, the total amount of credit distributed each year has been decreasing since 2010.

¹ \$1 = FCFA598 (2016)

² FNM: Fonds National de la Microfinance

Figure 1: Evolution of some MPP indicators between 2007 and 2013



Source: National Microfinance Fund

3. Literature review

Access to capital has been recognized as one of the factors that contribute to raising households’ welfare. Enhancing poor households’ access to capital will likely lead to a more efficient allocation of resources, and increasing of production and welfare (Singh *et al.*, 1986). Microcredit programme are basically designed with the intention of providing poor people with small collateral-free loans for reducing poverty through helping them in starting income generating activities, such as investment in small business, investment in crops and animal production, expansion of farm enterprises or for the payment of children school fees among others. Microfinance creates access to productive capital and thereby, enable poor to move out of poverty (Otero, 1999). Using panel data from Bangladesh, Khandker (2005) shows that microfinance reduces poverty and increase consumption for both participants and non-participants albeit the effect is low.

Expansion of microcredit programmes in developing countries is based on the concept that poor households are affected by lack of access to financial services in both formal and informal sectors. With respect to the formal sector, banks exclude poor households through the collateral requirement, credit rationing and preference for high income clients. With respect to the informal sector, money-lenders usually charge excessively high interest rates, tend to undervalue collateral, and often allow sexist attitudes to guide lending decisions.

Constraints on access to credit and entrepreneurial decisions have also gender dimensions (Arenius & Minniti, 2005; J. Chowdhury, 2009). Female and male entrepreneurs differ with respect to the sector they work in, their education and experience, and the size of their

enterprises. Those factors are most likely to impact the amount and composition of their financial capital (Verheul & Thurik, 2001). While poverty alone seriously handicaps creditworthy borrowers' access to capital, women may be even more constrained because of their gender. Female entrepreneurs have a smaller amount of start-up capital than men. They face number of legal, social, cultural, and economics restrictions that may affect their ability to seek and access to credit compared to men. Women own less property that they might place as collateral and need to be supported and authorized by their husbands before applying for loans. Women have different information channels as men and are less aware of funds available to them and of the conditions for obtaining a loan (Almeyda, 1996; Fletschner, 2008, 2009; Lycette & White, 1989). Women are less likely than men to start a business; they are also more likely to leave self-employment. The childcare responsibilities reduce their opportunities to participate in productive activities (Fletschner, 2008; Lin *et al.*, 2000).

Microfinance programmes are designed to support informal sectors that often have low return and low market demand as well as poor women who are left out of the formal financial system. Interventions that improve women's access to credit are necessary because women tend to have poorer access to resources than men and rationing mechanisms that limit women's access to capital may have substantial economic consequences for their households (Fletschner, 2008). According to Almeyda (1996). Access to microcredit is key for improving women's empowerment and for achieving greater equality between genders.

However, Minniti and Arenius (2003) argue that there is no evidence that microfinance programmes alleviate poverty by increasing consumption or by increasing educational enrolment for children. A mere access to microcredit is not enough to ensure starting of a business by a woman. The ability of a woman in starting a microenterprise depends on her bargaining power in the intra-household resource allocation. If a woman does not have the bargaining power in the household, she does not have the capacity to start a microenterprise despite of the fact that she has access to microcredit. The intra-household dynamics and the socio-cultural environment are also important for enabling poor women to have access to loans, to start and manage micro-enterprises (J. Chowdhury, 2009; Fletschner, 2009). Chowdhury (2008) finds that women use their microcredit loans for increasing the capital of existing businesses that are usually managed by male members in the household. The control on microcredit loans goes from the women to their husbands.

4. Methodology

Using data from the Benin Household Survey (EMICoV: Enquête Modulaire Intégrée sur les Conditions de vie des Ménages) and the Demographic Household Survey (DHS) conducted both by the National Institute of Statistics in 2011, we estimated the average treatment effect using Propensity Score Matching (PSM) method. It consists of comparing outcomes (multidimensional poverty and women empowerment) of individual with access to the MPP and those without. To estimate the set of outcomes, we constructed a composite indicators using the Multiple Correspondence Analysis (MCA). The following dimensions have been considered to construct the Multidimensional Poverty Index (MPI): housing, durable goods, education and health facilities. Concerning Women Empowerment Index (WEI) we used education, health, household bargaining power, as well as assets and social access dimensions. The score was then disaggregated into its four components.

Participation in the MPP could be associated with self-selection problems. Households might choose whether or not to participate in the programme and this may depend on some observable and unobservable characteristics. For areas where microfinance is available, individuals with similar characteristics (such as education or age) might have different levels of entrepreneurial spirit or ability, which may lead to different probabilities of their participation in the programme (Becker & Ichino, 2002; Imai & Arun, 2008). Also, those who are implementing the MPP can decide to focus on individuals with some particular characteristics. The Instrumental Variable (IV) estimation and the Heckman Sample Selection model have been widely used in literature to correct the self-selection problem. While useful, the robustness of these methodologies depends on the instruments used. Generally, it is difficult to find valid instruments and the results are not consistent if the instrument is not significant (Arun *et al.*, 2006).

Rosenbaum and Rubin (1983), therefore, proposed the Propensity Score Matching (PSM) as an alternative method to reduce the bias in the estimation of treatment effects with observational data sets. When the comparison of outcomes is performed using treated and control subjects who are similar as possible, the PSM method can yield an unbiased estimate of the treatment impact (Becker & Ichino, 2002; Dehejia & Wahba, 2002). The drawback of this method is that it only reduces the bias but does not eliminate it. The extent to which the bias is reduced depends crucially on the richness and quality of the control variables on which the propensity score is computed and the matching performed. To be precise, the bias is eliminated if the exposure to the treatment can be considered to be purely random among individuals who have the same value of the propensity score (Becker & Ichino, 2002).

Let $D = \{0,1\}$ be the binary variable on whether the individual has access to MPP or not; X the multidimensional vector of pre-treatment characteristics. We assume that,

- (i) If $p(X)$ is the propensity score, then:

$$D \perp X \mid p(X) \quad (1)$$

Individuals with the same propensity score have the same distribution of observable (and unobservable) characteristics independently to their access to the MPP. In other words, for a given propensity score, access to the MPP is random and therefore individuals with and without access to the MPP are on average observationally identical. That is the Balancing Hypothesis.

- (ii) Assignment to the MPP is unconfounded, i.e.

$$Y_1, Y_0 \perp D \mid X \quad (2)$$

Then assignment to the MPP is unconfounded given the propensity score, i.e.

$$Y_1, Y_0 \perp D \mid p(X) \quad (3)$$

Based on (1) and (2), we defined the propensity score as the conditional probability of receiving the MPP given pre-treatment characteristics (Rosenbaum & Rubin, 1983):

$$p(X) = Pr\{D = 1 \mid X\} = E\{D \mid X\} \quad (4)$$

If the exposure to the MPP is random within cells defined by X , it is also random within cells defined by $p(X)$ or the propensity score. Following Becker and Ichino (2002), the Average effect of Treatment on Treated (ATT) for the MPP can be estimated as follows:

$$\begin{aligned} ATT &= E\{Y_{1i} - Y_{0i} \mid D_i = 1\} \\ &= E\left\{E\{Y_{1i} - Y_{0i} \mid D_i = 1, p(X_i)\}\right\} \\ &= E\{E\{Y_{1i} \mid D_i = 1, p(X_i)\} - E\{Y_{0i} \mid D_i = 0, p(X_i)\} \mid D_i = 1\} \end{aligned} \quad (5)$$

where i denotes the i_{th} individual, Y_i is the socioeconomic outcomes (multidimensional poverty index and women empowerment index) in the two counterfactual situations with and without access to MPP. The first line of the equation (2) states that the policy effect of the MPP is defined as the expectation of the difference between socioeconomic outcomes of the i_{th} individual with access to MPP and that of the same individual in the counterfactual situation without access to MPP. The second line is the same as the first except that the expected policy

effect is defined over the distribution of the propensity score. The last line is the policy effect as the expected difference of the socioeconomic outcomes for the i_{th} individual with access to MPP given the distribution of the probability of accessing MPP and that for the same individual without MPP given the same distribution.

The average treatment effect (ATE) estimates the average impact of the MPP across all individuals in the population. It is the difference between the average outcomes among those who have access to the MPP and those in the control group. The ATE is computed as follow:

$$ATT = E\{Y_{1i} - Y_{0i}\} \tag{5}$$

5. Results

5.1 Descriptive statistics

Table 1 presents a descriptive analysis of how access to microcredit differs across sex, place of residence and poverty level. The table shows that, on average, a higher proportion of males had access to microcredit relative to their female counterparts. Significant proportions (about 82%) of rural residents accessed microcredit relative to their urban counterparts. Relative to the rich, a higher proportion of poor households accessed the MPP services.

Table 1: Access to MCP by sex, place of residence and composite poverty index (CPI)

Access to MCP	Sex		place of residence			MPI			Total
	Male	Female	Urban	Rural	Poorest	Middle	Richest		
No	51.51	48.49	19.40	80.60	75.92	21.40	2.68	598	
Yes	50.61	49.39	17.94	82.06	67.94	28.50	3.56	814	
Total	50.99	49.01	18.56	81.44	71.32	25.50	3.19	1412	

Source: Authors' compilation

In Table 2, a descriptive analysis of the estimated composite measure of poverty is presented across place of residence. The evidence show that generally, rural households were found to be poorer compared to urban households. About 74% of households in urban areas were in the highest wealth category compared to 26% in rural areas. Over 75% of rural households were in the lowest wealth category.

Table 2: CPI and place of residence

CPI	Place of residence	
	Urban	Rural
Poorest	24.46	75.54
Middle	38.65	61.35
Richest	73.88	26.12
Total	39.82	60.18

Source: Authors' compilation

Table 3 presents the statistical results for the estimated Women Empowerment Index (WEI). The score was also disaggregated into four components, namely; education, health, household bargaining power, as well as assets and social access. It is evident from Table 3 that only about 13% of women recorded high empowerment index. About 13% of women who did not have access to microcredit scored higher on general empowerment compared to about 11% of women who had access. The disaggregated analysis shows that about 13% of individuals who recorded high score in education had access to MCP compared to 16% of women who had no access to MCP. With regards to health care access, a relatively smaller proportion of women (about 26%) who recorded a high score had access to MCP relative to women who did not have access (30.3%).

Table 3: Women empowerment and access to MPP

Empowerment		Access to MCP (%)		Total (%)
		No	Yes	
WEI	Low	52.53	47.26	49
	Middle	34.34	41.79	39.33
	High	13.13	10.95	11.67
Education	Low	76.77	78.11	77.67
	Middle	7.07	8.96	8.33
	High	16.16	12.94	14
Health access	Low	30.30	37.31	35.00
	Middle	39.39	36.32	37.33
	High	30.31	26.37	27.67
Household Bargaining power	Low	2.02	3.98	3.33
	Middle	12.12	6.97	8.67
	High	85.86	89.05	88
Asset and social access	Low	41.41	33.33	36
	Middle	41.41	40.80	41
	High	17.17	25.87	23

Source: Authors' estimation

Table 4 presents the descriptive statistics on women empowerment according to their place of residence. It shows that, the less empowered women live in rural areas. Around 21% of women with less empowerment score and 78% of women with high empowerment score were, respectively, in rural areas and in urban areas. Almost all women (about 93%) that own high

level of asset were in urban areas. However, about 64% of women with high household bargaining power were in rural areas against about 36% in urban areas.

Table 4: WEI and place of residence

Empowerment and Empowerment dimensions	Index	Place of residence	
		Urban (%)	Rural (%)
Empowerment	Low	21.27	78.73
	Middle	52.46	47.54
	High	78.14	21.86
Education	Low	26.79	73.21
	Middle	82.25	17.75
	High	78.39	21.61
Health access	Low	22.16	77.84
	Middle	40.10	59.90
	High	47.67	52.33
Household Bargaining power	Low	26.52	73.48
	Middle	35.08	64.92
	High	36.37	63.63
Asset and social access	Low	17.13	82.87
	Middle	35.49	64.51
	High	92.78	7.22

Source: Authors' estimation

5.2 Impact of MPP access on poverty and on women empowerment

Table 5 shows results of the impact of MPP access on multidimensional poverty using the propensity score matching (PSM) method. The results suggest that there was a significant positive impact of MCP access on poverty levels of both the treated group (Average Treatment effect on the Treated, ATT) and entire sample (Average Treatment effect, ATE). These results were the same, when we consider the Kernel Matching, the Nearest Neighbour Matching and the Radius Matching. For instance, individuals who accessed microcredit experienced 11% reduction in their poverty level compared to individuals who did not access microcredit. A general impact of MPP access on both the treated and untreated was estimated to be 7%. It was also observed that the positive impact of MCP access on poverty was only experienced by individuals in the lowest poverty category.

Table 5: Impact of MCP access on poverty, PSM estimates

Outcomes	ATT	ATE	T-test	Kernel Matching	NN Matching	Radius Matching
MPI	0.11	0.07	3.05	0.084	0.114	0.086
Poorest	0.11	0.07	2.87	0.089	0.111	0.079
Middle	-0.09	-0.06	-2.53	-0.084	-0.094	-0.070
Richest	-0.02	-0.01	-1.12	-0.005	-0.017	-0.008

Source: Author's estimation

Table 6 presents empirical results for the Average Treatment effect on the Treated (ATT) and the Average Treatment effect (ATE) of MPP access on women’s empowerment. The idea was to find out if the microcredit programme has empowered women who had access, relative to those who did not have access. As discussed earlier the general empowerment score was disaggregated into four components. Each component represents score of a woman’s empowerment in that particular component. A quick observation shows that the MPP had in general, negative impact on total women empowerment who were involved in the programme. However, the access to MCP was consistent for health empowerment and bargaining power. The implication is that for women who had access to the microcredit programme, their access to health services and bargaining power in the household were improved by about 87% and 21% (radius matching), respectively. The average treatment effect (ATE) of MCP access on women access to health services is also positive. Total women access to health services was improved by about 16%. On the contrary, education and asset and social access empowerment among women were not improved by access to the microcredit programme.

Table 6: Impact of MCP access on women empowerment, PSM estimates

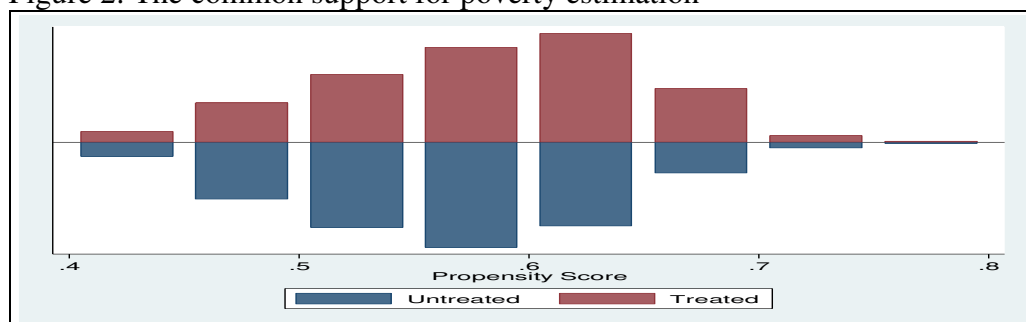
Outcomes	ATT	ATE	T-test	Kernel Matching	NN Matching	Radius Matching
WEI	-0.62	-0.40	-0.26	-0.34	-0.61	-0.38
Education	-1.34	-1.09	-1.95	-1.00	-1.34	-1.12
Health	0.87	0.16	-1.48	-0.40	0.08	-4.48
Bargaining power	-0.79	0.01	-0.79	0.22	-0.07	0.21
Asset and social access	0.09	0.22	0.25	-0.02	0.09	-0.22

Source: Author’s estimation

5.3 Common support and balancing checking

Figure 2 shows that, in general, there is an overlap between individuals with and without access to MPP. This ensures that individuals with the same propensity score have a positive probability to have access to MPP or not. This results are also valid when we consider women except for those with extreme propensity score (Figure 3).

Figure 2: The common support for poverty estimation



Source: Author's construction

Figure 3: Common support for women's empowerment estimation



Source: Author's construction

There was evidence from Table 7 and 8 that the estimations reduced the biases for the region and age variables (since the percentage of bias reduction is positive for this two variables). This result can be confirmed by the visual inspection of bias reduction (Figures 4 and 5). Moreover, the variance ratio $V(t)/v(c)$ presented in Table 7 is around one for all variables and the absolute standardized difference of the means of the linear index of the propensity score in the treated and non-treated group is less than 25 ($B = 21.1$). Therefore, we can conclude that the data used are sufficiently balanced.

Table 7: The balancing test for MCP and Poverty estimate

Variables	%reduction bias	$Ve(T)/Ve(C)$
Hhsize	-12.5%	1.07
Region	91.6	1.00
NbYear_Educ	-55.3	1.04
Sex	-79.3	0.99
Age	78.3	0.93
B		21.1
R		1.37

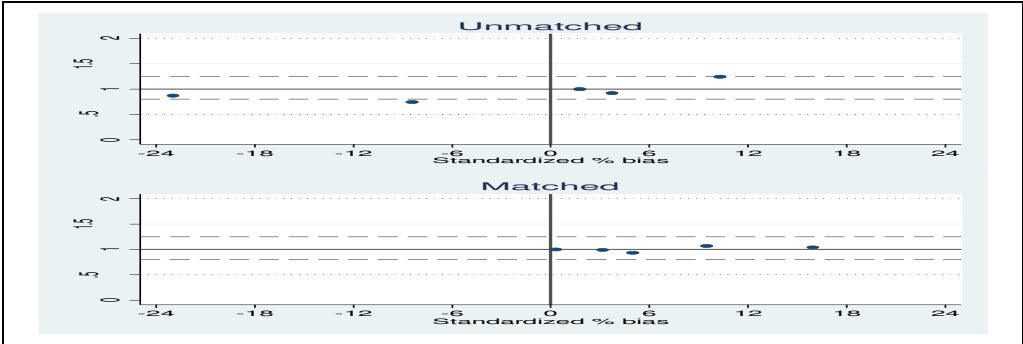
Source: Author's estimation

Table 8: The balancing test for the impact of MCP on Poverty

Variables	%reduction bias	Ve(T)/Ve(C)
Hhsize	23.4	0.69*
Region	12.4	1.10
NbYear_Educ	-260.7	0.97
Age	90.1	1.03
B		41.4*
R		0.68

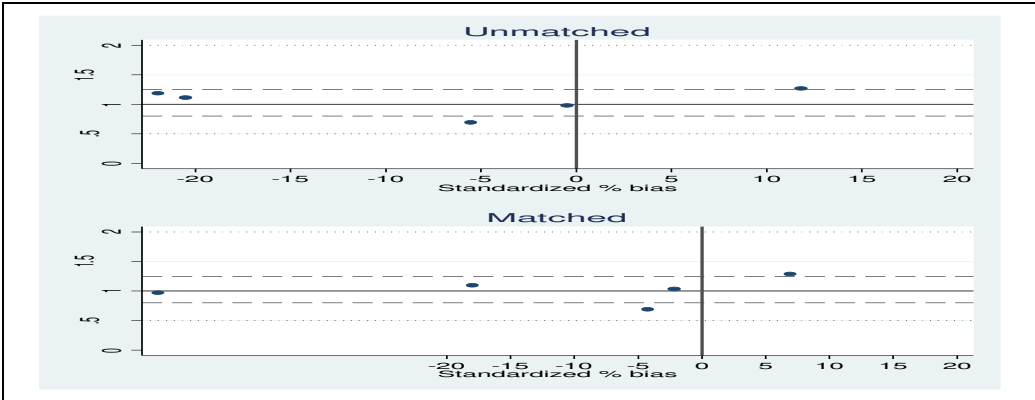
Source: Author’s estimation

Figure 4: Visual inspection of the bias reduction



Source: Author’s construction

Figure 5: Visual inspection of the bias reduction



Source: Author’s estimation

6. Discussion

The findings of the study suggest that the MCP seem to be reaching its ultimate target including the poor and rural dwellers. The descriptive analysis showed that a significant majority of rural respondents accessed the credit from the MCP programme relative to their urban counterparts. The programme was originally designed to assist the poor and women with credit to ameliorate challenges faced by these individuals. Lack of credit was identified to be key in determining livelihood of the poor and rural individuals. It was also observed that, relative to females, a

higher proportion of males had access to MCP. This implies that even though the MPP programme set out to target poor females, there are still fewer females covered.

With regards to the estimated multidimensional poverty index, the findings show that a significant proportion of rural households were poorer, relative to their urban counterparts. Out of the total households estimated to be poor, over 70% of them were from rural areas. This confirms existing estimates that suggest that rural households face higher poverty levels relative to their urban counterparts. National poverty estimates show that rural poverty in Benin was about 32% while urban poverty is about 25% in 2011 (INSAE, 2013). These findings also confirm several calls for poverty reduction strategies to particularly focus more on rural communities. The MPP is one such policy that targets increased access to credit in rural areas of the country.

Results from the propensity scores matching for the impact of MPP on poverty suggests that individuals who benefited from the MCP programme experienced significant improvement in their poverty levels. This result was expected and consistent across the various matching specifications (Kernel, Nearest Neighbour and Radius matching) employed. The findings also confirm existing studies that conclude that access to credit is an important determinant of poverty and livelihood. For instance, Singh et al. (1986) claim that access to credit leads to more efficient allocation of resources and enhances production and welfare. Also in an empirical study on Bangladesh, Khandker (2005) shows that microfinance reduce poverty and increase consumption across all the population.

The transmission mechanism through which access to credit influences livelihood and poverty is traced to the ability of individuals to receive credit to invest appropriately. Easy access to credit enables poor households/individuals to invest in capital that will eventually improve their income levels. The findings also suggest that the government's initiative to roll out a credit access programme that reduces financial barriers, especially among the poor is a step in the right direction. This also implies that there is need for appropriate steps to be taken to improve coverage and ensure efficiency in the management of the scheme.

Further evidence was also provided to show that the MPP also improved some aspects of empowerment among women who had access. While not all aspects of women empowerment were enhanced by the MCP programme, some very sensitive aspects including health and asset ownership were positively affected. This implies that other aspects of women empowerment could be improved if women are better targeted.

7. Conclusion

This paper set out to estimate the impact of Benin's National microcredit programme on poverty and women empowerment. We used data from the 2011 Benin National Household Survey to compute a multi-dimensional poverty index and women empowerment index using the Multiple Correspondence Analysis. The PSM approach was therefore adopted to estimate the impact of the MPP programme. The findings suggest that the programme has impacted positively on individuals who had access relative to those who did not have access. Women who had access to microcredit were also empowered in specific aspects (health and asset ownership). The findings of the study support further expansion of the microcredit programme to cover the poor and women. There is need to also ensure the efficient implementation of the programme to achieve its ultimate objective of reducing poverty in Benin.

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