The Effect of Microcredit on the Household Welfare (Empirical Evidences from Women Micro-entrepreneurs in Tanzania)

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ABSTRACT
In the recent days, microcredit schemes have been proliferating in all parts of the world. Although the impact of those schemes on the borrowers' businesses and household welfare is widely contested, the number of women borrowers has been on sharp increase. This paper endeavoured to assess the effect of microcredit on the welfare of households of women borrowers in Tanzania. The paper made use of survey data collected from 400 respondents including 217 borrowers and 183 non-borrowers. Using Chi-square method, the findings revealed that borrowers' households were more likely to own living houses than those of non-borrowers. Using Principal Component Analysis, the study revealed that on aggregate borrowers' households had acquired more household assets than those of non-borrowers. Qualitative evidences revealed that borrowers had used part of their loans to finance children’s education and medical treatments. Also, they had used part of the loans to finance the household pressing needs like paying the previous debts. This paper concludes that microcredit had contributed to the improved welfare of women borrowers’ households by enabling them to own long-term assets. In that way, it is noted; women’s participation in microcredit contributed to household poverty alleviation.

Key words: Microcredit, Microenterprise, Women, Microenterprises, Households, Welfare

1. INTRODUCTION
The role of microcredit on household’s poverty reduction and ultimately welfare is one of the areas that have recently created heated debate among scholars. Specifically, two opposing schools of thoughts have emerged and the central question is; does microcredit contribute to the improved welfare of the borrowers? On the one hand there is a large body of empirical literature showing that microcredit can play a very big role in reducing poverty (Yunus, 1999; Sanyang and Huang, 2008) and that has improved both economic and social wellbeing of the beneficiaries (Woller and Parsons, 2002; Mosley, 2001; Wurdnmann, 1998, Selejio, 200; Mduma and Wobst, 2005). Yunus (1999), for instance, is convinced that there is direct and
obvious relationship between participation in microcredit scheme and poverty alleviation. To him, the poor are poor because they lack reliable source of finance.

On the other hand a number of other authors have fiercely criticize what they perceive to be an “over stated” impact of microcredit on poverty reduction indicating that the given evidences are seriously flawed (Dichter and Harper, 2007; Bateman and Chang, 2009; Bateman, 2010a; Bateman, 2011a; Lont and Hospes, 2004). According to Lont and Hospes (2004), for example, all the evidences showing that microcredit schemes have positive impact on borrower’s welfare are ‘a world of make-believe’. Yet, Bateman and Chang (2009:4) in their famous paper on “Microfinance Illusion” strongly argue against social and economic impact of microfinance. They write “we see a growing number of reasons to believe that microfinance may actually be undermining attempts to establish sustainable economic and social development, and so also sustainable poverty reduction. Microfinance may even constitute a new and very powerful form of ‘poverty trap’”. On the same accord, Mahjan (1998) completely reject the idea of providing the poor people with credit arguing that microcredit schemes are based on wrong assumptions that the poorest wish to be self employed and that credit is the main financial service needed by the poor.

This article is written with realization that microcredit, especially because of stringent conditions, can increase burden on the very poor, as posited by the opponents of microcredit schemes, but questions whether that has always been the case. The paper, therefore, endeavours to assess the effect of microcredit on the household welfare. The household welfare approach in the analysis of the effect of microcredit is based on the realization that there is fungibility of resources within households as well as in the use of credit and profits generated by credit across a range of household production and consumption activities (Sebstad and Chen, 1996).

2. LITERATURE REVIEW

A number of empirical studies have found out that participation in microcredit schemes has resulted into poverty reduction among the clients. Khandker (2003) tracked microfinance and poverty indicators for Bangladesh for a period of two years starting from 1991 to 1992 and found out that microfinance reduced both moderate and extreme poverty among clients and non-clients but much more on the former. Among clients moderate poverty was reduced at 1.6% per year while extreme poverty was reduced at 2.2% per year. Among non-clients, moderate poverty was reduced at 1.0% and extreme poverty by 1.3% per year. He concluded that microcredit was responsible for 40% reduction of moderate poverty in rural Bangladesh and that the impact was much stronger among female borrowers than among male borrowers.

A study of ASHI program in Philippines by CASHPOR Technical Services, edited by Hellen Todd, involving 152 ASHI clients and 90 non-clients showed that poverty had decreased among microcredit clients. The percentage of very poor clients had reduced from 76% to 13% indicating that most clients had moved from being extreme poverty to being moderately poor. The percentage of very poor non-clients had moved from 76% to only 49%. Accordingly, the
study found out that 22% of clients had completely moved out of poverty by owning valuable productive assets like machinery, vehicles, livestock and better houses (Todd, 2000).

Similarly, a study conducted in two regions namely Mbeya and Iringa in the southern highlands of Tanzania found out that microcredit credit was enriching the borrowers (Kayunze et al., 2005). Using t-test, the authors noted that incomes of borrowers had increased significantly after participating in borrowing schemes. The study further showed that borrowers had positive attitudes towards credit meaning that had benefited from the same. They also indicated that they were willing to continue borrowing meaning that such income had been useful in maintaining household welfare. The study concluded that “the contention that credit has negative effect among the very poor does not generally hold in the Southern Highlands Tanzania, particularly among the households surveyed”.

Particularly, more convincing evidences have emerged when the approach was on determining the contribution of microcredit on household welfare. A number of empirical studies show that participation in microcredit schemes has positive influence on household ownership of living houses (Barnes et al., 2001a; Barnes et al., 2001b; Lacalle et al., 2008; Nanor, 2008; Brannen, 2010; Adjei and Arun, 2009). A study conducted in Zanzibar (Tanzania) showed that participants in Village Savings and Credit Associations were more likely to own their own home than non-participants (Brannen, 2010). Another study conducted in Rwanda revealed that credit recipients (clients) had made more improvements to their homes than non-recipients (Lacalle et al., 2008). Furthermore, a study conducted in Uganda (Barness et al., 2001a) showed that more client households of microcredit than non-clients had become owners of the places in which they resided. According to this study, the clients were more likely to increase the number of rental units owned than non-clients.

Studies have shown that there is difference between clients and non-clients of microcredit schemes in terms of ownership of household assets. A study conducted in Ghana (Nanor, 2008) found out that clients’ households had more to spend on non-food items than non-client households. Another study of women enterprises in Ghana revealed that there was significant association between participation in microcredit program and ownership of refrigerators and sewing machines (Adjei and Arun, 2009). Findings of a study conducted in Rwanda (Lacalle et al. 2008) revealed that credit clients purchased significantly more clothes than non-clients. Empirical evidences from Uganda and Zanzibar showed that microcredit clients had been able to access more household assets like mattresses, radios, stoves and beds than non-clients (Barnes et al. 2001a; Brannen, 2010). Particularly, the findings from Zanzibar revealed that investing in household assets was significant among female clients. Accordingly, evidences from a study conducted in South Africa revealed that microcredit clients’ households were better off in terms of the value of household assets (Pronky et al., 2008).

Participation in microcredit scheme has also been found to have positive influence on household’s expenditure on children’s education, enrolment and attendance. A study conducted in Ghana showed that participation in microcredit schemes increased client households’ expenditure on children’s education (Adjei and Arun, 2009). However, length of
participation in those programs did have significant impact on that expenditure (ibid). Similarly, the findings of a study conducted in Rwanda revealed that participation in credit program increased household’s expenditure on education (Lacalle et al., 2008). Specifically, this study showed that the percentage of clients’ children in schools was higher than those of the non-clients. It also revealed that microcredit clients were more likely to be able to pay all school fees for their children in schools than the non-clients.

On the contrary, however, there are evidences showing that participation in microcredit schemes had negative impact on school enrolment, attendance and even expenditure. A study in Malawi showed that participation in microcredit scheme significantly decreased primary school attendance among borrowers’ children leading to repetitions of primary grades for young boys and delayed or lack of enrolment for young girls (Shimamura and Lastarria-Cornhiel, 2009). Another study in Uganda showed that clients were significantly more likely to be unable to pay school charges for one or more household members for at least one term during the previous two years than non-clients (Barnes et al., 2001). According to this study, children of clients were more likely to drop out of school than those of non-clients.

Yet, a number of other previous studies have found out that there was no difference between clients and non-clients in terms investment on children’s education. For example, a study conducted in Madagascar showed no significant difference in primary school enrolment between clients and non-clients of microcredit schemes (Gubert and Roubaud, 2005). Another study conducted in Zanzibar (Brannen, 2010) revealed that there was no relationship between participation in credit and savings scheme and household expenditure on education. Furthermore, a study conducted in Ghana showed mixed results indicating that participation in microcredit schemes could have both negative and positive impacts on education expenditure depending on the location (Nanor, 2008). In this study, clients spent more on education in Manya Krobo district while non-clients’ expenditure on education was more in the Yilo Kirobo district.

Expenditure on health services is another aspect which, according to empirical evidences, has been noted to be influenced by participation in microcredit schemes. It has been found that participation in microcredit schemes increases investment in health care in terms of health insurance (Lacalle et al., 2008) and expenditure on health care itself (Adjei and Arun 2009; Brannen 2010). However, Adjei and Arun (2009) found out that duration of participation in the program does not affect health expenditure in Ghana. Other studies have found out that microcredit improved the health of the children of clients. Brannen (2010) for example, found out that children of the clients were more likely to sleep under mosquito nets than those of non-clients in Zanzibar. Doocy and colleagues found out that the nutritional status of clients’ children was better than that of children on non clients in Ethiopia (Doocy et al. 2005). However, these authors found that it was largely the female clients (and not male clients) who invested in their children’s nutrition.

At this point it is worth noting that while a number of studies have been conducted to assess the effect of microcredit on the household well being, none of them has adopted Principal
Component Analysis (PCA) to construct Household Assets Index. Different from the previous studies cited in the literature review, this study endeavoured to construct asset indices for households of borrowers and those of non-borrowers so as to enable the comparison of those two groups.

3. MATERIAL AND METHODS
3.1 Research Design
This study, which was a sample survey by approach, adopted a quasi-experimental research design. Particularly, the study employed what Kothari (2004) calls “after-only with comparison group”. Using this design, the effect of microcredit on household welfare was determined by comparing microcredit clients and non-clients in terms of ownership of assets. In order to increase the validity of the findings, the study adopted a blend of quantitative and qualitative approach.

3.2 Sampling Procedure and Sample Size
Study population for this study were women owners of microenterprises in Tanzania. The study focused on the three major cities in Tanzania namely Dar es Salaam, Arusha and Mwanza. Selection of these cities was on merit that they had large number of microfinance institutions, and of course, of women borrowers. Sample selection involved a combination of purposive and simple random sampling techniques. The wards, which were the entry points, were purposively selected with the help of cities’ Business Directors. At ward level, the researcher randomly selected women owners of various types of microenterprises. This random selection was carefully made so as to make sure that both borrowers and non-borrowers were involved. The researcher made sure that respondents from both groups shared similar characteristics including, but not limited to, type of businesses, locations from where they operated businesses and size of businesses. Similarity in those two groups was treated as a pre-condition for carrying out group comparison. In sum, this paper utilized survey data collected from 400 respondents including 217 borrowers and 183 non-borrowers.

3.3 Data collection
The paper utilized both qualitative and quantitative data. Quantitative data were collected by use of questionnaire. Mainly this data consisted information on ownership of living houses and of household assets. Data on households’ ownership of living houses were collected using two questions. First, the respondents were to indicate whether they owned living houses or not. If a respondent indicated that her household owned a living house, she then had to state whether that house had been constructed through loans or not. Only responses indicating that construction of living houses had used borrowed money were taken. In order to collect data on ownership of household assets, the researcher read a list of assets to all 400 respondents (including borrowers and non-borrowers) and they were to respondent “YES” if their household owned that specific asset or “NO” if their household did not own it. In the data entry, YES responses were coded 1 while No responses were coded 0. This kind of coding was done so as to transform the responses in a dichotomous scale as suggested in the literature (Vyass and Kumaranayake, 2006).
The choice of items to include in the asset index construction was influenced by items included in previous similar studies. Largely, the previous studies that had constructed asset (or wealth) indices used data from the Demographic and Health Surveys for particular countries of interest. In Latin America Public Opinion Project (LAPOP) ten household items namely television, refrigerator, conventional telephones, cellular telephone, vehicle, washing machine, microwave oven, indoor plumbing, indoor bathroom and computer were used to construct an asset index (Cordova, 2009:9). In Tanzania Demographic and Health Survey 2010, nine items including radio, television, mobile telephone, non-mobile telephone, refrigerator, bicycle, motorcycle, car/truck, and ownership of land were used (URT, 2010:26).

This study involved a total of 14 items to construct an asset index for households of women borrowers and non-borrowers. Those items included radio, television, DVD player, computer, bicycle, motorcycle, decoder, refrigerator, sewing machine, juice blender, gas cooker, Hair drier (used in women salon), thermo flask/hot pots/food warmers, kiosk/booth/room from which the business operated. The selection of these items was based on the items included in the previous studies (URT, 2010, Cordova, 2009, Filmer and Pritchett, 2001) and researcher’s own consideration of the real living conditions of women owners of microenterprises in Tanzania.

It should be noted here that the number of variables included the construction of household index matters. According to McKenzie (2005), researchers should consider including more variables in order to be able to capture the inequality among households. Using more (many variables) is likely to make it possible to avoid clumping and truncation, two effects that may deter the component scores (McKenzie, 2005). In the previous studies the number of variables used has ranged from 10 (Schellenberg et al., 2003) to 30 (McKenzie, 2005). Given this margin, the selected 14 items were considered to be enough to construct a reasonable asset index for the households of borrowers and non-borrowers women owners of microenterprises in the study areas.

Qualitative data were collected through focus group discussions with borrowers and non-borrowers. A total of 12 such discussion meetings including 4 from each region were conducted. The interviews focused on how borrowed money had been used in financing other household needs than businesses.

### 3.4 Data analysis

The analysis of quantitative data involved use of chi-square test to find out whether borrowers’ households were more likely to own living houses than those of non-borrowers. Principal component analysis (PCA) was used to construct household asset index for borrowers and non-borrowers. The intention was to find out whether borrowers had more household assets than non-borrowers. The results of the asset index derived from PCA for each household can be written as follows.

\[
A_j = f_1 \frac{aj_1 - a_1}{s_1} + \ldots + f_n \frac{aj_n - a_n}{s_n}
\]
Where

\[ A_j = \sum_{i=1}^{n} f_i(a_{ji} - a_i)/s_i \]

- \( A_j \) is an asset index for each household (\( j = 1, ..., n \))
- \( f_i \) is the scoring factor for each durable asset of household (\( i = 1, ..., n \))
- \( a_{ji} \) is the \( i^{th} \) asset of \( j^{th} \) household (\( i,j =1,...,n \))
- \( a_i \) is the mean of \( i^{th} \) asset of household (\( i = 1, ..., n \))
- \( s_i \) is the standard deviation of \( i^{th} \) asset of household (\( i = 1, ..., n \))

During the analysis an extraction method using varimax method was selected. Accordingly, three important aspects namely determinant matrices (R-matrices), Kaiser-Meyer-Olkin Measure of Sampling Adequacy (KMO) and Bartlett’s Test of Sphericity were checked for. These tests were conducted to validate whether data collected were suitable for Principal Component Analysis. The household consumable and productive assets’ index was constructed using the scores of the first components for both borrowers and non-borrowers. The use of the first component for this purpose is emphasized in Field (2005) and was widely used in the previous similar studies (Filmer and Pritchett, 2001; Mckenzie, 2003; Mckenzie, 2005; Schellenberg et al., 2003; Minujin and Hee Bang, 2002; Vyass and Kumaranayake 2006; Labonne et al., 2007).

4. FINDINGS
4.1 Credit and ownership of living houses
The findings revealed that only 135 (38.8%) respondents indicated that loans accessed within five past years had made it possible for their households to own living houses. Among the 135 respondents whose households owned living houses, 85 (63%) were borrowers while 50 (37%) were non-borrowers. A chi-square test of independence was performed to examine the relation between access to credit and household’s ownership of the living house among women proprietors. The relation between these variables was significant, \( X^2 (1, N=400) = 9.399, p< 0.01 \). The findings, therefore, indicated that households of women proprietors who had accessed credit in the five previous years were more likely to own a living house than those who had not received one.

4.2 Credit and ownership of household assets
Principal component analysis using extraction method was conducted to find out whether there were differences between borrowers and non-borrowers in terms of ownership of consumable and productive assets. The aim was to construct household assets’ indices for both groups so as to be able to tell the difference, if any. During the analysis three important aspects namely determinant matrices (R-matrices), Kaiser-Meyer-Olkin Measure of Sampling Adequacy (KMO) and Bartlett’s Test of Sphericity were checked for. Literature suggests that R-matrix has to be greater than 0.00001 (Field, 2005). Values less than that indicate that variables are highly correlated and therefore there is multicolinearity effect. In this study R-matrix for borrowers was 0.105 while for the non-borrowers was 0.118. Since both of the values were greater than 0.00001, the study confirmed that there was no collinearity effect and, therefore, factor analysis could proceed.
Kaiser-Meyer-Olkin (KMO) measure of Sampling Adequacy and Bartlett's Test of Sphericity were requested for in the analysis. Literature suggests that KMO value must range from 0.5 to 1.0 for factor analysis (and implicitly principal component analysis) to be meaningful (Leech et al., 2005). In this study KMO value for borrowers was 0.611 while for non-borrowers was 0.612. Both values fell within the required range indicating that the sample was enough to guarantee factor analysis. The results of Bartlett's Test of Sphericity were significant for both borrowers ($x^2 = 468.609$, df = 91, $p < 0.0001$) and non-borrowers ($x^2 = 374.493$, df = 91, $p < 0.0001$). Significant Bartlett's Test of Sphericity means that variables were correlated enough to allow for factor analysis (Field, 2005). Table 1 presents the detailed results.

<table>
<thead>
<tr>
<th>Table 1: KMO and Bartlett's tests results</th>
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<tr>
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<tr>
<td>Kaiser-Meyer-Olkin Measure of Sampling Adequacy</td>
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<tr>
<td>Bartlett's Test of Sphericity</td>
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Using the weighted scored of the first component of coefficient matrix the following asset index was constructed.
Table 2: Household assets’ index for borrowers and non-borrowers

<table>
<thead>
<tr>
<th></th>
<th>Borrowers</th>
<th>Non-borrowers</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Consumable assets</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Radio</td>
<td>0.385</td>
<td>0.463</td>
</tr>
<tr>
<td>Television</td>
<td>0.398</td>
<td>0.438</td>
</tr>
<tr>
<td>DVD player</td>
<td>0.301</td>
<td>0.357</td>
</tr>
<tr>
<td>Computer</td>
<td>-0.084</td>
<td>-0.016</td>
</tr>
<tr>
<td>Bicycle</td>
<td>-0.055</td>
<td>-0.060</td>
</tr>
<tr>
<td>Motorcycle</td>
<td>0.057</td>
<td>-0.032</td>
</tr>
<tr>
<td>Decoder</td>
<td>0.209</td>
<td>-0.109</td>
</tr>
<tr>
<td><strong>Mean index score</strong></td>
<td><strong>0.173</strong></td>
<td><strong>0.149</strong></td>
</tr>
<tr>
<td><strong>Productive assets</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Refrigerator</td>
<td>-0.082</td>
<td>0.01</td>
</tr>
<tr>
<td>Sewing machine</td>
<td>-0.065</td>
<td>0.08</td>
</tr>
<tr>
<td>Juice blender</td>
<td>-0.013</td>
<td>-0.124</td>
</tr>
<tr>
<td>Gas cooker</td>
<td>0.017</td>
<td>0.038</td>
</tr>
<tr>
<td>Drier</td>
<td>0.094</td>
<td>0.031</td>
</tr>
<tr>
<td>Thermo flask/hot pots/food warmers</td>
<td>0.078</td>
<td>0.058</td>
</tr>
<tr>
<td>Kiosk/booth/room from which business operates</td>
<td>0.021</td>
<td>-0.002</td>
</tr>
<tr>
<td><strong>Mean index score</strong></td>
<td><strong>0.007</strong></td>
<td><strong>0.013</strong></td>
</tr>
<tr>
<td><strong>Total mean index score</strong></td>
<td><strong>0.180</strong></td>
<td><strong>0.162</strong></td>
</tr>
</tbody>
</table>

Taking into account the total mean index scores for both consumable and productive assets, the findings on Table 2 revealed that on aggregate borrowers’ households had acquired more assets (total mean index score = 0.180) than non-borrowers (total mean index score = 0.162). Specifically, borrowers’ households owned more consumable assets than non-borrowers. This is evidenced in mean index score of 0.173 for borrowers and 0.149 for non-borrowers. Predominantly, the borrowers’ households were more likely to own motorcycles and decoders than those of non-borrowers.

However, the findings revealed that households of non-borrowers (mean index score = 0.013) were more likely to own productive assets than borrowers (mean index score = 0.007). Nevertheless, when the mean scores were approximated to two decimal places, the results showed that there was no difference between borrowers and non-borrowers.

4.3 Credit and investment on children’s education and health

Qualitative evidences collected through focus group discussions revealed that women borrowers, especially those who borrowed from MFIs, did so in order to finance household requirements like education and health service for children. Particularly, the financing of children’s education involved paying school fees for children in secondary schools or in colleges. A number of borrowers were quoted as follows.

www.hrmars.com
“With the loans I have been able to educate four of my children in secondary schools. I have also been able to take my children to hospitals when they were sick. There is nothing else that I have done”.

(Borrower from SEDA: Arusha region)

“Loans have helped me. Using part of loan and the profit I get out of my business I have been able to finance secondary education for two of my children”.

(Borrower from PRIDE; Mwanza region)

“Frankly speaking I borrow for school fees and sometimes to buy animal feeds. I cannot put 450,000 into this business....I have educated three of my children; two have completed secondary school and one a tourism course”

(Borrower from SACCOS: Arusha region)

The above testimonies show that women borrowers had been able to secure better health and education services for their children other than investing on physical assets or business. This is evidenced in the first testimony above where the borrower said that “there is nothing else that I have done”. It was also noted some women’s intention for borrowing was exclusively to finance other household needs like education as opposed to abusiveness. This is contrary to stated (formal) intention in the borrowing contract with MFIs. Another point to note regarding the above testimonies is that borrowers did not indicate that had used borrowed money to finance primary education. This can be associated with the fact that primary education in Tanzania is given for free in the public schools where, supposedly, many of women microenterprises’ owners educate their children.

4.4 Credit and household consumption smoothing

Women borrowers used part of the borrowed money to finance other pressing household financial needs than their businesses. Evidences showed that some of the borrowed money was used to settle the previous debts or spent on the beauty makeup. This is evidenced in the following testimonies.

“You see? When one gets loan she finds that is already indebted. The first thing I did after obtaining loan was to pay rental charges for the house my family was living in. I had delayed for three months and the Land Lord was about to kick me out”

(Six times borrower from PRIDE: Dar es Salaam region)

“Loan helps a lot! Even the person who did not use to go to salon, now she does after being involved in credit schemes...Everyone knows
The above evidences show that using borrowed money some women had assumed the responsibility of paying house rental charges, which otherwise should have been taken by their husbands. This is demonstration of empowerment on the side of women borrowers. Accordingly, women borrowers had been able to make independent decisions about their beauty makeup because of the loans they had taken. Again this is an element of empowerment.

4. DISCUSSION OF FINDINGS

The findings of the study revealed that households of women proprietors who had accessed credit in the five previous years were more likely to own living houses than those who had not. In fact, the findings showed that 63% of all respondents whose households owned living houses were microcredit beneficiaries. Similar findings were also reported in a number of previous studies in Tanzania (Brannen, 2010), Uganda (Barnes et al., 2001b), Rwanda (Lacalle et al., 2008) and Ghana (Nanor, 2008; Adjei and Arun, 2009). An important point to note here is that money used to finance construction of living houses constituted part of borrowed money as opposed to profit resulting from businesses. For instance, findings of a country-wide survey involving a total of 633 respondents from 10 regions where Small Enterprise Development Agency (SEDA) operates in Tanzania Mainland revealed that 20% of borrowers had used loans they had obtained in the construction of houses (SEDA, 2011). An interesting fact to note is that by ownership of living houses, the borrowers had also managed to own the land on which those houses were constructed.

Drawing from the asset index constructed, the borrowers owned more consumable assets than non-borrowers. Similar findings have also emerged from a number of previous studies (Brannen, 2010; Lacale et al., 2008; Pronkey et al., 2008; Barnes et al. 2001a) indicating that participants in microcredit schemes stood better chances to acquire consumable assets. However, it was surprising to find out that there was no difference between borrowers and non-borrowers in terms of ownership of productive assets, at least when the mean index score was adjusted from three to two decimal places. On this aspect the findings contradict those of a study carried out in Ghana by Adjei and Arun (2009) where borrowers owned more productive assets like refrigerators and sewing machines. The implication of the above findings is that stringent repayment conditions including high interest rate have negative effect on borrowers’ ability to invest on productive assets.

Although the above findings have shown that there was no difference between borrowers and non-borrowers in terms of ownership of productive assets, there were enough evidences on qualitative improvement of wellbeing among the former. Particularly, the borrowers had used borrowed money to finance children’s education and health. Accordingly, the borrowers had been able to improve their personal wellbeing including making their hair in salons. These qualitative evidences bring the researcher to the argument that although the impact of microcredit on women’s poverty is contested issue, with some authors showing that there is
positive impact while others contend that credit given to women does not make any positive impact, the whole point is about how that impact is measured and above all interpreted. Indeed quite a number of previous studies have shown that participation in microcredit schemes has lead to better household and individual women’s wellbeing (Hossain and Asfar, 1988; Nanor, 2008; Lacalle et al., 2008; Barnes et al., 2001b; Adjei and Arun, 2009; Doocy et al., 2005; Brannen, 2010).

5. CONCLUSION AND RECOMMENDATIONS
This paper has provided empirical evidences showing that the households of women borrowers were more likely to own living houses than those of non-borrowers. Accordingly, the findings on the household assets indices revealed that borrowers' households owned more assets than those of non-borrowers. Furthermore, the qualitative findings revealed that borrowers had used part of the loan to finance children’s education and health services. Given the evidences from this study and the previous similar studies, it is clear, therefore, that microcredit had been useful to the wellbeing of the borrowers by enabling them own long-term assets like living houses and, of course, land on which those houses were constructed. The paper therefore concludes that, women’s participation in microcredit contributes to household poverty alleviation.

In line with the above findings, discussion and conclusion, this paper recommends the following measures to be taken by various actors. First, the findings have shown that participation in microcredit schemes can contribute to poverty alleviation among women clients. This paper calls for consorted efforts by government agencies, NGOs and MFIs to scale up microfinance services especially to peri-urban and rural regions. This suggestion is given cognizant of the fact that in Tanzania most of microfinance institutions are concentrated in urban areas. Furthermore, this article emphasizes the importance of multifaceted approach to assessing the impact of microcredit schemes. The paper recommends that researchers should be aware that although most of MFIs do not lend so as to enable their clients own houses, finance children’s education or any other social need, those who have interest in assessing the impact of microcredit schemes must think beyond the formal purpose of specific loan products stipulated on the lender-borrower contracts.

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REFERENCES


