KEEPING UP APPEARANCES: MICROCREDITS AND THE CONSUMPTION VS. THE INVESTMENT DECISION

Proposed Track: Consumer Behavior

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ABSTRACT

I analyze the determinants of the use of microloans by poor people, under the basis of economic and social behavior. The economic rationality is the idea that individuals make long run decisions in terms of cost and benefits from an economic point of view, considering profitable rational choices. In contrast, I introduce a social rationality that argues that microcredits can also be used for consumption, since it can provide people with social recognition. An analysis of microloans in Mexico indicates that poor people with higher education (secondary vs primary), are more likely to use microloans for consumption rather than investment.

1. INTRODUCTION

In this paper I study the use of microloans by poor people, the so-called base of the pyramid (BOP) (Prahalad, 2004). In the last years the study and understanding of the BOP has become more important, considering the aggregated level of consumption that this group represents. It is interesting to notice that there is an increasing number of business models focusing on them.

The traditional view of finance for the BOP is illustrated by the Grameen Bank started by Muhammad Yunus in 1976 in Bangladesh, which focus on financing production and therefore income in rural areas to alleviate severe poverty trough providing credit with no collateral (Yunus, 1999). The model shows evidence of positive results in a longer period of time, and at this point of time billions of dollars have been allocated, and the program is continuously evolving to provide those resources in the best and most effective way. This has accomplished the main purpose, which is to promote investment and to create income for poor people, since it has proved that it works effectively by helping millions of people.

In recent years microlending has gained a lot of importance when it comes to argue how to alleviate poverty and above all how to help to finance those that lack a collateral. Whether it works or not is a source of very controversial debates, above all considering a very diverse range of borrowers in terms of education, gender, age and social ties, just to mention some.

When analyzing the way microloans affect individuals and society we can find positive and negative effects of how they create opportunities (Khavul 2010). There are several reasons that may explain why this happens. Cull, Demirguc and Morduch (2009), analyze some of these questions while studying the Mexican microcredit industry in particular the case of Banco Compartamos.

My argument is that there are two different theories. On the one hand side as it has been mentioned there is evidence that microlending resources can be used for productive purposes focused on creating wealth under the basis of an economic rationality where individuals want to maximize their economic welfare. Nevertheless, I argue that microlending can also be used for consumption under other particular circumstances more related with a social nature and rationality. For these reasons, I analyze decision making after receiving a microloan and complement the economic rationale for investment with the social rationale for consumption, relating the analysis in particular to education.

Of course there are different ways of contrasting both rationalities, the most logic maybe could be using gender, age and level of income to explain both of them. But there are some other factors that exert some degree of influence in the use of resources and their destiny. One could expect also that in addition to the variables previously mentioned the number of people living in the same house, how many people do actually contribute to the monthly household income, and how willing are you to receive a loan together with the years of education can help to better explain the way how decisions are

being made. In this study, as previously mentioned, I focus particularly on education and propose two competing arguments based on these economic and social logics.

What is important to understand is that for different types of individuals profiles there are complementary logics. One where long run decisions are made under the basis of the idea to maintain a certain life style over a longer period of time and the other where short run decisions prevail due to social circumstances in the environment.

The remaining of the paper analyses the literature with two different theories to reinforce these ideas, the economic and the social rationality, then a model with two hypothesis is proposed and the paper finishes by making some conclusions.

2. MICROLOANS AND THE ECONOMIC VERSUS SOCIAL RATIONALITY

This paper analyzes differences in attitudes toward investment and consumption by focusing in the analysis of two logics. In particular the analysis will focus on the way how years of education together with some other factors do influence the behavior of individuals. I argue that there are differences amongst consumption groups, based on socioeconomic levels, just to mention some. The levels of utility of individuals or groups do not necessarily are expected to be the same in terms of investment and consumption since the factors that satisfy and motivate them are not necessarily the same. The socio economic level is the ability to access a range of goods and lifestyle, and is divided according to purchasing power and living standard factors (Asociación Mexicana de Agencias de Investigación de Mercado y Opinión Pública, A.C., 2009).

Some of the main financing sources the BOP has are microloans. Which are granted by some financial institutions to individuals who may prefer to purchase consumer durables to improve their lifestyle (Ataur, 2009). There are two dimensions of loans; first, a loan-focused approach that attempts to improve financial literacy by increasing consumer knowledge about loans—how and why loans work and their advantages and disadvantages. Second, lender-focused literacy refers to consumer knowledge about lenders, including how and why particular lenders act as they do (Bolton, Bloom and Cohen, 2011).

Gehlich-Shillabeer (2008), makes a critic to microcredit by asking whether they represent poverty alleviation or poverty traps. Since there is not a good understanding of the sensitivity derived from very precarious conditions that the targeted households lived at. Concluding that one cannot expect favorable results in all cases derived from the existence of microcredit. On the other hand Hoque (2004), states that when it comes to poverty reduction microcredit have a low impact. All this explained by the nature of goods purchased with the credit, where 54% was invested in productive activities in contrast with 46% who was used in unproductive activities.

One of the main concerns is once you get resources through microcredit and budget conditions change, can we expect the same to happen with consumption due to social and personal needs? Matin (2002) argues that due to the

increasing availability of financial products it is necessary to better understand money management. He mentions the case of women and their dependents in the early 1980´s and how from running microenterprises with the generation of income they turn into consumption or assets possession. At the end of the day, the existence of credits represent a good way to secure a certain level of income when plans do not work the way it was planned from the beginning.

Consumers purchase goods and services and perform consumption behaviors for two basic reasons: (I) consummatory affective (hedonic) gratification (from sensory attributes), and (2) instrumental, utilitarian reasons. (Voss, Spangerber and Grohmann, 2003). In addition, we can find that there are some factors that may motivate the ordering of consumption before investment under certain circumstances. At the BOP one of the main reasons for consumption is materialism, which has been defined as the centrality of possession and acquisition in consumer's lives (Richins and Dawson, 1992).

Under the presence of different social natures and stages, individuals with access to credits do not necessarily see investment as a priority over consumption making them deviate from the idea that financing sources could be employed for production purposes only. Some previous studies as the one from Richins (2011), shows that the transformation of expectations is significantly associated with materialism, and also that high materialist costumers are more likely to think about purchases as a mean for changing who they are and other's perceptions about who they are, inducing credit overuse behaviors. Ponchio and Aranha (2008) analyze the relationship between materialism and indebtedness. Their model confirms materialism as a behavioral variable that is useful for forecasting the probability of an individual getting into debt in order to consume. In addition to all these previous studies, it is important to contrast how differences in gender influence the purchasing behaviour (Coley and Burgess, 2003) and (Tifferet and Herstein, 2012).

2.1. Economic rationale. Education and investment

When it comes to relate education and investment, it will be expected that the higher the level of education the higher the income and the knowledge making it more likely for individuals to invest rather than to consume. In terms of economic rationality people are more willing to privilege log run decisions, therefore are expected to be more willing to invest rather than consume. A higher level of education supposedly gives a better understanding of how to generate wealth through investment in a more conscious way. All these under the understanding that there is a bias towards the economic rationality, which allows the following hypothesis.

H1. People with a higher level of education are less likely to select consumption instead of investment.

2.2. Social rationale. Education and consumption

On the other hand as it has been argued, besides an economic rationality there is a social rationality that privileges status and social recognition. Therefore, it can be the case that the higher the level of education of an individual the higher the social pressure for him/her to show an "economic success" since it could be expected that both should be related. A higher level of education can be seen socially as a success. This implies that this should be related with a higher purchasing power, leading to a "social pressure" to consume and show up since this provides with status and is socially easy to see. From here we can state the following alternative hypothesis.

H2. People with a higher level of education are more likely to select consumption instead of investment.

3. RESEARCH DESIGN

3.1 Data collection

In order to analyze these hypotheses of the use of loans an interview was conducted in low income areas of Guadalajara, Mexico, with questions that could help to understand the consumption patterns and interests of respondents together with their willingness to invest, based on particular characteristics of their socioeconomic profile mainly, like years of education, age, number of people living in the same house and information related to income. A total of 380 people were interviewed but 18 of them were not taken into account in the final sample due to a lack of information. All the people that participated in the interview were chosen because they were heads of the family or important contributors to the household income. 195 (52.70%) of the respondents were male and 175 (47.30%) female, in the case of gender we use a binary variable where 0 represents men and 1 women). The ages were between 18 and 61 years old, the years of study were in the range of 0 to 16 where more than 80% of the respondents were in the range of either completed primary or secondary education. Almost 48% were willing to have a loan, more than 70% of the households had only one person contributing to the household income, with a monthly income per household between MX$0 and MX$12,999, where more than 80% are between MX$0-$7,499 approximately (at an Exchange rate of MX$12.70 for US$=1) and where more than 50% of the respondents were living in houses with more than four members.

3.2 Measures

The variables of the loan use to be included in the analysis have the following definitions.

Dependent variable:

Consumption: when the respondents prefer to devote the money for consumption. In our questionnaire rather than using the word consumption we gave them a list of options of possible categories of articles which could be bought such as: electronics, appliances, clothes, cell phones, computers, parties, etc. Where there was an alternative set of options that had to do with investing the money for example in starting a business, investing in a house, etc.

Independent variable of interest:

Years of Education: measured in terms of the years of school attendance.

Controls:

Gender: when the respondent is Female the value is 1 and when Male is 0.

Age: the number of years of the respondent.

Willing to have a loan: when the respondent is willing to accept a loan to start a business, if the answer is yes the value is 1 and 0 when the answer is no.

People with income: How many people do actually contribute to the monthly household income.

Monthly household income: measured by adding the total income of all the household members. Measured in MX$.

People living at the household: the number of individuals that live in the same house.

3.3 Method of analysis

By using a logistic regression as proposed by Ponchio et al., 2008. I analyze the answers of the respondents in order to see after receiving a loan of MX$10,000 what is it that they will privilege amongst consumption (C) or investment, and determine in accordance to the answers how is it that household monthly income, gender, age, willingness to have a loan and years of study do influence them both in a separate way.

I propose initially the following regression equations considering different variables that may affect consumption, and at the end making the analysis of the effect that education plays over consumption.

The general model is the following

$$Logit\ (C_i) = \ \alpha + \ \beta\ willing\ to\ have\ a\ loan + \ \gamma\ people\ with\ income + \ \delta\ monthly\ household\ income$$
$$+ \ \varepsilon\ people\ living\ at\ the\ household + \ \zeta\ gender + \ \eta\ age + \ \phi\ years\ of\ education$$

Where C_i is the probability (1=yes, 0=no) of people using the MX$10,000 for consumption or investment respectively.

3.4 Limitations

The study uses a particular method of analysis. There are some other studies that propose some other analytical tools. In comparison to other studies more control variables have been included in the analysis. This paper pretends to be an initial approximation to understand how individuals make decisions contrasting economic versus social rationality by focusing mainly on education as the explanatory factor. Nevertheless, it is important not to forget that when it comes to analyze these kind of behaviors there are many different factors, contexts, natures, etc. that exert some degree of influence. It could be interesting apart from using some other different analytical techniques to also use additional variables that propose different situations. Also, it is important to analyze the dynamics of microlending, together with a better understanding of income evolution and how both consumption and investment preferences may change.

4   RESULTS

4.1 Descriptive statistics

For further reference, all the data collected is summarized in Table A.1. As can be seen the loan use variables previously mentioned, present the following statistics:

Investment: From the sample 46.22% belong to this category, where the majority corresponds to: male (63.74%), ages ranging between 26-36 (40.94%), years of study 7-9 (49.71%), where 56.14% are willing to have a loan to start a business, more than 50% live in households where there is one single person the one that contributes with the total household income where more than 65% is between MX$5,000-$7,499 and where there are more than 5 members living in the same house.

Consumption: From the sample 53.78% belong to this category, where the majority corresponds to: female (56.78%), ages ranging between 26-36 (38.19%), years of study 7-9 (56.78%), where 59.80% are not willing to have a loan to start a business, more than 85% live in households where there is one single person the one that contributes with the total household income where more than 60% is between MX$0-$4,999 and where the number of people living in the same house is balanced in percentage terms between 1 and 4 people.

In all cases the percentages shown are measured in terms of the number of individuals that belong to a particular category (gender, age, years of education, etc.) against the total of respondents that have chosen either investment or consumption.

4.2 Hypothesis testing

As mentioned before, by using the variables in Table A.1, I run a binary logistic regression model, analyzing what respondents could do after receiving a loan by MX$10,000, whether they will consume it or invest it. Each case will imply a 1 when the respondents are more propense to consume and 0 if they are not. In Table B.1, I summarize all the results. It is important to mention that some of the variables show a low level of significance, nevertheless in order to include more control variables they will be part of the analysis.

Table A.1 Descriptive statistics of the sample

	Total	Investment	% Investment	Consumption	% Consumption
Gender					
F	175	62	35.43%	113	64.57%
M	195	109	55.90%	86	44.10%
%F	47.30%	36.26%		56.78%	
%M	52.70%	63.74%		43.22%	
Age					
18-25	110	39	35.45%	71	64.55%
26-36	146	70	47.95%	76	52.05%
37-61	114	62	54.39%	52	45.61%
%18-25	29.73%	22.81%		35.68%	
%26-36	39.46%	40.94%		38.19%	
%37-	30.81%	36.26%		26.13%	
Years of education					
0-6	53	37	69.81%	16	30.19%
7-9	198	85	42.93%	113	57.07%
10-12	104	40	38.46%	64	61.54%
13-16	15	9	60.00%	6	40.00%
%0 - 6	14.32%	21.64%		8.04%	
%7 - 9	53.51%	49.71%		56.78%	
%10 - 12	28.11%	23.39%		32.16%	
%13 - 16	4.05%	5.26%		3.02%	
Willing to have a loan					
Yes	176	96	54.55%	80	45.45%
No	194	75	38.66%	119	61.34%
%Yes	47.57%	56.14%		40.20%	
%No	52.43%	43.86%		59.80%	

Table A.1 Continue

	Total	Investment	% Investment	Consumption	% Consumption
Number of people who contribute to the household income					
1	266	91	34.21%	175	65.79%
2-3	104	80	76.92%	24	23.08%
%1	71.89%	53.22%		87.94%	
%2-3	28.11%	46.78%		12.06%	
Monthly household income					
0 - 4,999	151	25	16.56%	126	83.44%
5,000 - 7,499	151	113	74.83%	38	25.17%
7,500 - 12,999	68	33	48.53%	35	51.47%
%0 - 4,999	40.81%	14.62%		63.32%	
%5,000 - 7,499	40.81%	66.08%		19.10%	
%7,500 - 12,999	18.38%	19.30%		17.59%	
Number of people living in the house					
1	54	10	18.52%	44	81.48%
2	66	20	30.30%	46	69.70%
3	67	19	28.36%	48	71.64%
4	91	47	51.65%	44	48.35%
5 or more	92	75	81.52%	17	18.48%
%1	14.59%	5.85%		22.11%	
%2	17.84%	11.70%		23.12%	
%3	18.11%	11.11%		24.12%	
%4	24.59%	27.49%		22.11%	
%5 or more	24.86%	43.86%		8.54%	
Total					
Total	370	171	46.22%	199	53.78%

From the results in Table B.1. One can observe that not all the coefficients are significant. As previously mentioned, two models are analyzed one including years of education and the other that does not in order to contrast the effect that the variable exerts over all the analysis. Since we are interested in the effect of education and considering the coefficients with at least a 95% of significance level, the results show that the number of people contributing to the household income affects positively the propensity to consume. While the opposite happens with the level of income, the

number of people living in the same house and females. In the first case it is interesting to look at the fact that the higher the level of income the less likely it is to privilege consumption. When it comes to analyze the number of people living in the house there is a negative relationship with consumption maybe explained because assuring more resources becomes important for maintaining a certain level of living standard. While in the case of gender it is women the less propense to consume.

Table B.1 Binary logistic regression. Determinants of Consumption versus Investment.

Response Information	Value
After receiving MX$10,000 what is it that they will privilege:	
Consumption,	1
Investment	0

Coefficients:	with years of education	z-test	without years of education	z-test
Constant	0.9134	1.088	2.0919	3.234 **
Willing to have a loan[1]	-0.3651	-1.452	-0.4379	-1.767
People with income[2]	0.7794	2.714 **	0.8339	2.934 **
Monthly household income[3]	-0.6810	-3.820 ***	-0.6052	-3.467 ***
People living at the household[4]	-0.5452	-6.209 ***	-0.5566	-6.388 ***
Gender[5]	-0.6559	-2.580 **	-0.6619	-2.618 **
Age[6]	0.0106	0.740	0.0018	0.132
Years of education[7]	0.1106	2.168 *	-	-

Finally, we will focus our attention on the effect of education over consumption. The results support hypothesis 2 and not 1. As can be seen, there is a positive relationship between them. One could have expected that the higher the level of education people will have more knowledge of how to invest and a lower propensity to consume for this reason. Nevertheless it is important not to forget that more than 80% of the respondents have 7 to 12 school years, making them not necessarily

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[1] Willing to have a loan (1 = yes, 0 = no)
[2] People with income (1, 2 or 3 people contributing to the household income).
[3] Montly household income MX$ (4 Intervals: $ 0 - $ 2699, $2700 - $4999, $5000 – $7499, $7500 - $12,999)
[4] People living at the household (Number of people living in the same house: 1, 2, 3, 4, 5 or more).
[5] Gender (2 levels: 1 = female, 0 = male)
[6] Age (3 intervals: 18-25, 26-36, 37-61).
[7] Years of education (4 intervals: 0-6, 7-9, 10-12, 13-16).
* $p < 0.05$
** $p < 0.01$
*** $p < 0.001$

business or investment literate. On the other hand, since as mentioned before education is seen as related to economic success, the second hypothesis proves to be the correct one due to the fact that consumption represents status and provides social recognition.

5   CONCLUSION

By analyzing differences in household monthly income, gender, age, willingness to have a loan, members of a household, household income contributors and years of study it has been shown that financing the BOP can have different outcomes in the way how resources are used, particularly in terms of education. I argue that when individuals have access to financing sources and their years of school attendance are higher, they will worry more about consumption rather than investment since there are more social pressures for showing the expected success that supposedly comes with education, following more a social rationality versus an economic rationality which should be more biased to invest and to create wealth than to consume and to fulfill a social recognition. This may imply that depending on the context also people make short (consumption) vs. long run (investment) decisions. Of course it is important not to forget that there are different motivators by nature. As mentioned before the Grameen Bank´ model does focus on alleviating poverty by providing low income people with resources to generate income and show an economic rationality of wealth creation. This is more investment oriented. Whilst, models as the ones proposed by Ponchio and Aranha (2008) and Richins (2011), are more consumption oriented with a social bias.

In the literature one can find analysis that focuses mainly on explaining why people privileges consumption and what is it that motivates it or that look for an explanation why microlending not necessarily is an answer to productive or efficient uses of the resources as its nature proposes. Even when it is important to analyze all these different angles, it is also important to analyze the decision process, what is it that people prefer when they have more than one option like in this case investment or consumption. This makes people to decide and show what their preferences are and also under what circumstances in terms of their profile and situation. There is no doubt that there are psychological influences but also different logics that bias the way how individuals make decisions. In the case of those logics I proposed the use of two of them since most of the individuals are supposed to decide under the basis of looking to maximize their economic welfare by allocating the resources in the most effective way that leads them to create wealth. Since this is not necessarily the case always, there is also another logic the social one, where individuals invest from a social point of view following a rationality of belonging and status mainly and where it is not wealth creation their motivator but social recognition mainly. This is the main reason why this paper proposes the analysis of these two logics and the possibility to self select linking it with decision making in terms of consumption or investment under different individual and household profiles, focusing mainly on their relationship with the level of education.

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