DETERMINANTS OF SAVINGS IN FEMALE AND MALE-HEADED HOUSEHOLDS IN MEXICO

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Savings analysis is relevant to the economy due to the role savings plays in the process of capital accumulation and its effect on economic growth. In the case of Mexico, the portion of savings emanating from the home is quite significant: according to figures from the National Statistics and Geography Institute (INEGI), household savings represented 36.4 and 35.1% of total economic savings in 2005 and 2009, respectively. Moreover, savings analysis is also important for individuals and for households. According to Keynes (1936), the main reasons that motivate people to save money are the following: precaution, foresight, calculation, improvement, independence, business, solidarity and greed.

Once the importance of savings is recognized, an analysis of the determining factors of saving acquires relevance. Extensive literature has analyzed the main factors that influence household saving. However, a theoretical approach is still missing that analyzes saving from a gender perspective. The objective of this investigation is to review the determining factors of saving for *de facto* women and men heads of households. To this end, a logistic probability model on saving was formulated using information from the National Survey on Household Income and Expenditures (ENIGH, by its acronym in Spanish) from 2008.

This investigation is divided into three sections, in addition to its conclusions and appendices. The first section refers to the most relevant empirical findings from studies on determining factors for saving. The second section reviews the characteristics of women and men-headed households, for which we consider is important to distinguish between *de jure* and *de facto* heads of households; this section also analyzes patterns of household saving. The third section presents the main findings from the logistic model.

BACKGROUND ON DETERMINING FACTORS OF SAVING

Theoretical frameworks used to explain saving arose from the initial ideas of Keynesian economics. Later, investigations by Kuznets (1946), Duesenberry (1949) and Reid (n.d.) criticized approaches from a Keynesian focus arguing that they adopted a simplistic vision. These contributions served as background for the Permanent Income Hypothesis (PIH)

developed by Friedman (1957), as well as the Life Cycle Hypothesis (LCH) originally posed by Modigliani and Brumberg (1954) and developed over time by Modigliani and Ando (1957) according to Modigliani (1986).

Later investigations broadened these models by suppressing simple assumptions and by incorporating the effect of demographic, social and economic variables to the analysis of determining factors of saving. Butelmann and Gallego (2001) identified three categories of explanatory variables: income-related, demographics and variables that influence decision-making.

In regards to income-related variables, the effect of income has been studied under the propositions of Keynsian theory and the PIH. On the one hand, a group of studies found a positive relationship between household savings and current income, both for developed countries (Poterba, 1994; Browning and Lusardi, 1996) and for developing countries (Attanasio and Székely, 1998; Denizer *et al.*, 1998). On the other hand, evidence exists of a positive relationship between savings and permanent income (Dynan *et al.*, 2000). Furthermore, Butelmann and Gallego (2001) found that household saving in Chile is mainly related to transitory income. Education has been included in some investigations as a proxy variable for income. Most studies find a positive relationship between levels of education and the household savings rate (Attanasio, 1998; Butelmann and Gallego, 2000; Dynan *et al.*, 2000).

In terms of demographics, age is the most analyzed variable to date. This is derived from the LCH formulation, according to which saving is explained as a decision that is made based on systematic variations in income and needs that arise over the course of the life cycle. Modigliani (1986) and Attanasio (1998) found evidence that supports the LCH in the case of United States. However, later investigations found that older people save or at least do not spend as much of their savings as predicted by the LCH (Deaton, 1992). Other household characteristics have also been analyzed as part of this demographic analysis: for example, Elfindri (1990) found that the size of the household negatively affects savings. In contrast with previous results, Browning and Lusardi (1996) identified that household size can have a positive effect according to economies of scale. However, the composition of the family, rather than the size of the family *per se*, has a greater impact on savings. A young family member does not have the same effect on household savings as an elderly family member or an adult.

In regards to civil status, marriage as an institution reduces future uncertainty to the extent that spouses can provide mutual protection in the face of contingencies throughout the life cycle (Lupton and Smith, 1999). Other demographic variables addressed in academic literature include the type and class of the household. In Bosworth *et al.* (1991), the authors found that single-parent families, particularly those led by single mothers, register low levels of savings. While it is true that single mothers spend less money, compared to two-parent families, they also allocate a greater percentage of their income to food (Nord *et al.*, 2006).

Butelmann and Gallego (2000 and 2001) incorporated some other variables to this analysis of determining factors of saving, such as the uncertainty of employment. Theory predicts that a greater level of uncertainty leads people to save in order to face unforeseen circumstances (motive of precaution). These authors found that the rate of savings is higher among women heads of households since they face greater uncertainty regarding future employment. Another variable that can affect the decision to save is effective access to financial markets, given that credit restrictions are related to the intertemporal distribution of consumption and, thus, to savings. The variable of access to formal and informal money transfer systems does not have a clear effect upon savings.

SAVINGS IN MEXICAN HOUSEHOLDS: A GENDER PERSPECTIVE

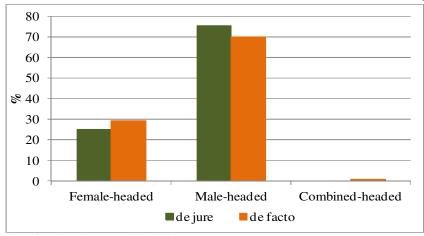
Traditionally, Mexican censuses and other household surveys have assumed that the woman or man who is the head of the household is the person recognized as such by the members of the household. However, this definition responds to socio-cultural constructions of gender roles and stereotypes in terms of who is considered to be the decision-making authority or who owns the family assets (Arriagada, 2002). In this way, the association of the head of the household is reduced to a patriarchal scheme of the family, which identifies men as the breadwinners and heads of the household and women as the ones responsible for childcare. This excludes women who take part in income generation and who, in many cases, are the main breadwinner.

In order to avoid a patriarchal conception for determining the head of a household, Gammage (1998) proposes using *de jure* and *de facto* female/male head of household definitions. The *de jure* concept refers to the head of household generally declared in censuses and surveys. The *de facto* concept utilizes the gender of the main breadwinner to determine if a household is led by a woman or a man. Based on these concepts, this investigation defines a woman-headed

household when a woman generates more than 50% of a household's monetary income, a manheaded household when a man contributes more than 50% of the monetary income and a shared or combined head of household when the income is generated proportionately.

The definition of a *de facto* head of household is relevant to our analysis since internal asymmetries of power; resources and bargaining capacity exist within the home. According to Arriagada (2002:146), "The most power is associated with the person (habitually the head of the household) who –according to cultural norms– generates or who should generate the family's monetary income." In this sense, the *de facto* concept is very close to identifying the woman or the man with the most decision-making power within the home and, consequently, for decisions regarding spending and saving. The data base used for this purpose was the ENIGH 2008.

For our analysis using the *de jure* and *de facto* criteria for analyzing households, we begin by identifying that there were 26.7 million households in Mexico in 2008. If the traditional definition is used to determine the head of the household, 25.0% were led by a woman head of household and 75.9% by a man. According to the *de facto* head of household definition, 29.3% were run by women, 69.8% by men and 0.8% had a shared or combined head of household (graph 1). Under the *de jure* definition, the results reflect greater invisibility of women heads of household and coincide with Arriagada's findings (2002).



GRAPH 1. Distribution of the de Jure and de Facto Households in Mexico, 2008

Source: Authors' elaboration based on ENIGH 2008.

The "declared head of household" definition leads to the identification of older women as the heads of household, although they do not necessary fulfill an economic role in providing for the home, nor play a central role in decision-making. Graph 2 illustrates how an important portion of *de jure* women heads of households are concentrated among an older demographic: 33.1% are 60 years or older. Nevertheless, among *de facto* heads of households, the majority of the women heads of households are middle-aged: 46.2% are between 30 and 49 years old. The sexist bias for "declared heads of households" also tends to identify unmarried women or women without a partner in the home as heads of households.

40 14 35 12 30 10 25 8 % 6 **%** 20 15 4 10 5 0 Married Separated Divorced Widowed Never Marital married union ■ de jure ■ de facto ■de jure ■de facto

GRAPH 2. The *de Jure* and *de Facto* Households by Age Groups and Marital Status in Mexico, 2008

Source: Authors' elaboration based on ENIGH 2008.

The previous results underscore the need for differentiating between the *de jure* and *de facto* criteria given that the proportions and characteristics of women heads of households vary significantly. Given this limitation, and seeking to hone the meaning of "head of household", we decided to work only with *de facto* households, since these identify the women who play an economic role as breadwinners and decision-makers within the home.

Household savings

Savings is defined as the difference between household income and expenditures on nondurable goods. The figures in table 1 show that the level of savings in homes with women heads of households is always lower than households led by men. In both cases, the average is lower due to the presence of households with very negative savings figures. Hence, the median is a more adequate measure; in women-led households, the median is 13.9%, whereas in homes led by a man, it is 18.7%. The rate of savings is higher than the median, suggesting that household savings is highly concentrated in wealthier homes.

TABLE 1. Savings by Gender of the de Facto Household Head in Mexico, 2008

	Rate	Mean	Median
Female-headed Households	24.7	7.8	13.9
Male-headed Households	29.7	12.1	18.7

Source: Authors' elaboration based on ENIGH 2008.

Savings also varies according to household characteristics. Table 2 shows, in general, that the savings rates of women heads of households are lower compared to men's rates, with some exceptions such as households with married women or women living in marital union as the heads of households. These results suggest a position of disadvantage for female heads of households for addressing adverse situations in the future.

Households led by younger women save less, but saving rates increase as women age, with the maximum rate of savings occurring in the 50-59 year old age group; after this point, the level of savings diminishes. These results can be best understood in the context of the previously mentioned LCH, which explains savings precisely as a decision based on a person's age. Among men-headed households, with the exception of the first age group, a similar tendency arises: the rate of savings shows an inverted-U shape profile.

In terms of schooling, households led by women with higher levels of education have higher levels of savings. The same is true of male led households. The following variable is civil status, in which we find that households led by married women save more -28.9%. For male led households, the rate of savings is higher among single men -34.3%.

In an analysis by type of household, the extended household stands out, since it reveals the highest rates of savings among women-headed households. This can be explained by the presence of more family members contributing to household income and, thus, greater contributions to the proportion of savings. The greatest level of savings by men-headed households occurs in single-person households – 38.6%. However, only 6.4% of male heads of households fall into this category. Important differences also arise in regards to locality of residence, since the rates of savings in female-led homes is greater in urban areas; a similar result occurs in male-led households.

TABLE 3. Saving Rates by Characteristic and Gender of the *de Facto* Household Head in Mexico, 2008 (Percent of Total Current Income)

Characteristic	Female-headed Households	Male-headed Households	Savings Gap	
Age Groups				
< 30	23.6	28.9	-5.3	
30 a 39	24.5	25.5	-1.0	
40 a 49	25.1	28.7	-3.6	
50 a 59	27.1	37.4	-10.3	
60+	23.3	29.5	-6.2	
Education				
No formal education	14.6	23.5	-8.9	
Elementary school	18.8	24.7	-5.9	
Junior high school	20.6	24.7	-4.1	
High school	26.7	28.6	-1.9	
College/university	29.1	36.5	-7.3	
Marital Status				
Never married	26.8	34.3	-7.5	
Marital union	26.1	24.9	1.3	
Married	28.9	28.6	0.3	
Separated	12.7	25.8	-13.1	
Widowed	20.7	23.2	-2.5	
Type of households				
Nuclear	24.1	27.7	-3.7	
Extended	27.8	32.9	-5.1	
Composite	23.2	34.8	-11.6	
Single-person	17.4	38.6	-21.2	
Corresident	17.6	29.3	-11.7	
Locality of Residence				
Rural	16.7	24.1	-7.4	
Urbana	25.5	30.4	-4.9	

Source: Authors' elaboration based on ENIGH 2008.

Under income decile analysis, from the fourth to the tenth decile, women-headed households have lower rates of savings compared to men-headed households. This difference is clear for the tenth income decile in which the rate of savings for women-headed households is approximately 40.0%, whereas in men-headed households it almost reaches 50.0% (table 3).

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(referred of Total Current income)

(referred of Total Current income)

(referred of Total Current income)

Deciles

Male-headed Households

Male-headed Households

GRAPH 3. Saving Rates by Deciles and Gender of the *de Facto* Household Head in Mexico, 2008 (Percent of Total Current Income)

Source: Authors' elaboration based on ENIGH 2008.

In sum, savings differs between women and men-headed households but also between subgroups of the population according to a series of socio-economic characteristics. One question that is left to be studied has to do with determining factors for savings. To answer this question, we formulated a logit econometric model seeking to examine the characteristics of factors that influence the probability that women and men-headed households save.

DETERMINING FACTORS OF SAVING AND GENDER

According to the review of academic literature presented in the first section of this article, a gender perspective is lacking from investigations that analyze savings to date. Most models are based on a simplified assumption that an individual exists –the *homo economicus*– who rationally optimizes a level of profit over existing restrictions. This arquetype consists of an extrapolation of gender roles and stereotypes that assign the role of breadwinner to men and that exclude women from being economic actors; women are treated as wives and mothers –they assume responsibilities for domestic labors and family care– in nuclear families, which are considered to be harmonious institutions (Carrasco, 2001). However, women are increasingly joining the workforce.

Resource allocation within the home is generally based on assumptions. The "unitary household model" has prevailed, in which a single function of utility represents the preferences in the household. Nevertheless, this overlooks the possibility that in households where income is not combined the motives for saving among household members present gender differences.

Furthermore, in households where the savings are combined, the differences in the motivations that underlay savings between women and men lead to bargaining and the savings rate will depend upon relative bargaining power (Seguino and Floro, 2003).

A gender-based analysis of savings implies reviewing economic, social and cultural factors that create differences in income, consumption and savings patters both for men and women. For example, according to the LCH, one of the motives why people save is to have a stable consumption path (smooth consumption). However, there may be gender differences in regards to this motive. Due to men's position in the job market, they are more likely to have some type of social security for facing old age; thus, they may have a lesser need to save while they are economically active. In contrast, women are less likely to have a pension or more likely to have a smaller pension than men; given this reality, the lack of resources for old age may serve as an incentive for women to save more than men do while they are economically active (Seguino and Floro, 2003). Likewise, the interaction of factors that influence the life cycle may differ by gender in regards to savings behavior. For example, women's longer life expectancy compared to men may create an incentive for them to save at a higher rate.

In summary, there are gender differences in savings patterns; a review of descriptive statistics indicates that women-headed households tend to be at a disadvantage. Hence, the aim of this investigation is to review which factors are determinants of savings in women and menheaded households.

To explain the probability of household savings, a logit model was estimated for *de facto* women-headed and men-headed households, separately:

$$log\frac{p_i}{1-p_i} = \alpha + \beta Income_i + \beta_i \text{Demographics} + \beta Housework_i + \beta Others_i$$

The dependent variable is a dummy or fictitious variable for households who save. Savings was obtained from the difference between the total amount of income and the consumption of nondurable goods: $S = Y - C_{nd}$. In this notation, Y is household income after taxes, including monetary and non monetary income, and C_{nd} is comprised of monetary and non monetary expenditures on nondurable goods.

The independent variables that explain the probability of why households save are classified into four categories. All of the categories coincide with those identified by Butelmann

¹ The authors will provide a detailed list of expenditures upon durable vs. nondurable goods upon request.

and Gallego (2001) with the exception of domestic labor. The description of variables is provided in Appendix Table A.1. We present the following hypotheses which were developed based upon a review of existing literature:

1) Income-related variables:

H1: The woman or man head of household's level of education and the number of employed and income-generating household members increase the probability of household savings. The former has an influence due to the positive relation between education and income and, in turn, upon income and savings rates (Bernheim and Scholz, 1993; Attanasio, 1998; Attanasio and Székely, 1999; Butellman and Gallego, 2001); the latter also has an influence because it directly affects income.

2) Demographic variables:

H2: A non-linear effect of age of the woman or man head of household upon the probability of household savings is expected. In accordance with the LCH, savings should take an inverted-U shape form (Modigliani, 1986).

H3: Single marital status, for women and men alike, increases the probability of household savings because future uncertainty is greater in the absence of a spouse who can provide protection in the face of contingencies, such as the loss of a job (Lupton and Smith, 1999). Moreover, it is likely that people in this situation are creating a capital reserve for when they decide to marry or live with someone.

H4: The type of extended household increases the probability of household savings because it presupposes the existence of economies of scale.

H5: The number of dependents –children and the elderly– diminishes the probability of household savings because they consume more than they produce.

3) Housework:

H6: The number of hours that a woman or man head of household dedicates to domestic labors decreases the probability of household savings because it represents an absence in the economic-commerce based public arena (Carrasco, 2001).

4) Other variables:

H7: The participation of women and men heads of households in social security systems diminishes the probability of household savings because it reduces future uncertainty in the face of unforeseen circumstances, such as illness.

H8: Effective access to financial markets diminishes the probability of household savings because cash-flow restrictions are reduced (Butelmann and Gallego, 2001).

H9: The presence of formal and informal money transfer systems, for donations, remittances, government program benefits and social networks, diminishes the probability of household savings because it reduces the uncertainty of the household during "hard times."

H10: The direction of the relationship of explanatory variables upon the probability of savings is expected to be similar in women and men-headed households.

H11: On the contrary, differences are expected in the effects of independent variables on the probability of savings in women vs. men-headed households. In this sense, the probability of savings is greater in women-headed households because they face greater uncertainty regarding the future.

Results of the Model

The results coincide with the hypothesis in the sense that the direction is similar in women and men-headed households (see table 2 in the appendix). The marginal effects are presented in chart 4; as we suggested in the hypothesis, the results show that there are differences in the effects of explanatory variables upon the probability of saving in women and men-headed households.

In regard to the income variable, the most important result is the positive association of education at all levels, with the probability of saving by women heads of households, with greater effects at higher levels of education; whereas in the case of men heads of households, only a high school or college education is positively related to the probability of saving. This suggests that education is an important prerequisite to increase the probability of saving in women headed households. In chart 4, we can appreciate that a college-level education has the greatest marginal effect (14.2% in women-headed households and 10.6% in men-headed households). In fact, the marginal effects of the education variable are always higher in the case of women heads of households. These results coincide with the proposed hypothesis and are consistent with existing literature in the sense that there is a significant relation between the highest levels of education and the highest savings rates. It is probable that the savings-education relation is influenced by the savings-income relation.

In regard to the number of employed and income-generating household members, we found a positive association with a 5.7% marginal effect in women-headed households and 8.9%

in men-headed households. This implies that the greater the number of household members who work, the greater the probability of savings.

In the group of demographic variables, differences in behavior were observed between the sexes according to civil status. Being single, in the case of men heads of household, increased the likelihood of household savings, whereas in women, this was not a significant factor. A separation or divorce has an inhibiting effect upon the probability of savings for women heads of households but was not significant for men heads. Some authors explain greater savings rates among single people given increased precautionary reasons, due to the uncertainty of the future (Lupton and Smith, 1999).

We did not find large differences between nuclear households and extended, or composite, households in which there is an inhibiting effect upon the probability of savings, with a greater negative marginal effect among women, in contrast with the reference that these are coresidential or single-person households.

The results in terms of household composition regarding the number of younger and older household members (7-15 years of age and 65+) were significant for both women and menheaded households. In the first case, the number of younger members aged 7-15 discourages the probability of savings, to a lesser degree in the case of female heads of household with a smaller negative marginal effect than in the case of male heads. Our results coincide with the findings of other investigations that showed that the presence of girls and boys in the household causes a drop in savings due to changes in the patterns of household consumption and income. It bears mentioning that these authors comment that this effect is greater at earlier ages. However, the variable related to the number of members aged 0-6 was, unexpectedly, only significant in menheaded households and with a minor negative effect. This could be due to the fact that the presence of children under the age of six implies that mothers possibly withdraw from employment to take care of young children, which leads to a reduction in both income and savings (Smith and Ward, 1980).

On the other hand, a greater number of elderly adults (65+) in the household has a positive effect upon the probability of saving. This was not expected and one explanation is that precautionary reasons surface with greater frequency due to uncertainty regarding future health (Butelmann and Gallego, 2001), but it is also possible that these members cooperate and support

household tasks and childcare. In this case, the marginal effects are fewer for women-headed households.

The number of hours dedicated to domestic labors diminishes the probability of savings in women-headed households; however, the marginal effects are very small. In terms of the "other variables" category, the contribution to social security resulted significant to a negative degree both for men and women-headed households, which could reflect greater uncertainty in the face of future contingencies. Solis and Villagómez (1999) found something similar when they analyzed the existence of a public pension system as part of social security.

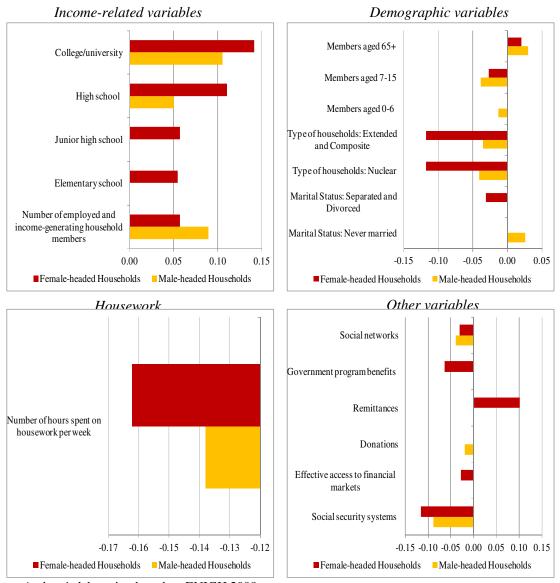
Financial costs also reduce the probability of saving in women-headed households, whereas in men-headed households, this was not a significant factor. This variable reflects effective access to financial markets and the resulting reductions in cash-flow restrictions, offering possibilities to access financial resources.

In regards to the group of variables related to access to formal and informal money transfer systems, the variables of social networks and government support were significant to a negative degree; the first was significant both for women and men-headed households, whereas the second was only significant in women-headed homes. The second variable identifies access to formal money transfer networks, which play an important role in developing countries and which work when people deliver money to homes during hard times (Butelmann and Gallego, 2001). The results suggest that, given the effect of a reduction in uncertainty, these supports allow the household to dedicate income to daily consumption rather than savings. Donations have both a negative and significant effect upon the probability of savings in men-headed households and they were not significant in women-led homes.

Nevertheless, in the case of remittances, contrary to the original hypothesis, receiving remittances increases the probability of saving in women-headed households, with a marginal effect of 10.1%, thus confirming that remittances represent a source of resources that increases income in homes headed by women.

The results presented in table 2 of the appendix indicate that the prediction of probability of saving was 68.0% in the case of women-headed households and 72.0% in the case of menheaded ones. The pseudo-R2 estimates run from 0.07 to 0.11 and the percentage of accuracy of these estimates is 68.0% and 70.0% for women and men-headed households, respectively.

GRAPH 4. Marginal Effects of the de Facto Household Head in Mexico, 2008



Source: Authors' elaboration based on ENIGH 2008.

CONCLUSIONS

The need to mobilize resources by means of household savings requires greater understanding of the determinant factors. This has been the objective of the current investigation which used *de facto* women and men-headed households as units of study. The review of existing literature clearly demonstrates that progress has been made in theoretical and empirical analysis of determinants, that simplified assumptions have been allayed and that the effects of demographic, social and economic variables have been assessed. However, a gender perspective is virtually missing. In this sense, the findings of this investigation are relevant since they show that the

determinants of the probability of saving in women-headed vs. men-headed households are different.

One aspect that merits attention is the concept of a *de facto* head of household, which was utilized in this investigation. As we have mentioned, the definition of a *de facto* head of household avoids the sexist bias from the traditional definition of a head of household. It is noteworthy that the situation of women *de facto* heads of households is not taken into consideration, which clearly shows a split from the traditional model of a nuclear family and the traditional division of labor in which the man is shown as the breadwinner and the woman as the administrator and housewife.

Evidence derived from the analysis of the 2008 ENIGH showed gender inequality in terms of household savings: the overall rate of savings is lower in women-headed households, with some exceptions in the case of women who are married or marital union, which suggests a situation of disadvantage in order to face adverse situations in the future.

The results from the estimation from the models validate the hypothesis in terms of the differences in probability of saving in women and men-headed households. The evidence is clear in terms of the unacceptability of assuming that each home unit has a single preference for decision-making purposes; the need to reach household agreements will depend upon the bargaining power of all parties. This is the reason why it is so important to include gender-based analysis in savings analysis.

We believe that the concepts, such as the *de facto* head of household, and the results of this investigation are a starting point for future work. Once the probability of household savings has been studied, it is important to extend this analysis to the variables that influence the amounts that women and men-headed households save, as well as take a more in-depth look at the savings instruments they employ.

APPENDIX

TABLE A1. Definition of independent variables

Categorías	Variables	Definition			
Income-	Education	Dichotomous variable for the levels:			
related		- No formal education (reference			
variables		category)			
		- Elementary school			
		- Junior high school			
		High schoolCollege/university			
	Number of employed and income-generating household members	Continuous variable			
Demographic	Age	Continuous variable			
variables	Age2	Continuous variable			
rariables	Marital Status	Dichotomous variable for the levels:			
	Waltar Satus	- Never married			
		- Marital union and married (reference category)			
		- Separated, divorced and widowed			
	Type of households	Dichotomous variable for the levels:			
	31	- Nuclear			
		- Extended and composite			
		- Single-person and corresident			
		(reference category)			
	Members aged 0-6	Continuous variable			
	Members aged 7-15	Continuous variable			
	Members aged 65+	Continuous variable			
Housework	Number of hours spent on housework per week	Continuous variable			
Other	Social security systems	1= Contributions			
variables		0= Non-contributions			
	Effective access to financial markets	1= Financial expenditures			
		0= Non-financial expenditures			
	Donations	1= Receive donations			
		0= Non-receive donations			
	Remittances	1= Receive remittances			
		0= Non-receive remittances			
	Government program benefits	1= With government program benefits			
		0= Without government program benefits			
	Social networks	1= Easy access to social networks			
		0= Difficult access to social networks			

TABLE A2. Logistic regression
Dependent variable: Dichotomous variable for households who save

Dependent variable. Dictions	de Facto Household Head				
Independent Variables	Female-headed		Male-headed		
	Households		Househ	Households	
	Coef	Err Est.	Coef	Err Est.	
Education (Elementary school)	0.25**	0.09	0.06	0.07	
Education (Junior high school)	0.27**	0.11	0.11	0.08	
Education (High school)	0.54***	0.11	0.26***	0.09	
Education (College/university)	0.72***	0.12	0.58***	0.09	
Number of employed and income-generating household members	0.26***	0.04	0.45***	0.03	
Age	-0.01	0.01	0.00	0.01	
Age2	0.00**	0.00	0.00	0.00	
Marital Status (never married)	-0.08	0.08	0.13**	0.07	
Marital Status (separated, divorced and widowed)	-0.14**	0.07	0.09	0.08	
Type of households (nuclear)	-0.55***	0.09	-0.21**	0.08	
Type of households (extended and composite)	-0.52***	0.10	-0.18*	0.09	
Members aged 0-6	0.01	0.04	-0.06**	0.03	
Members aged 7-15	-0.12***	0.03	-0.19***	0.02	
Members aged 65+	0.09*	0.05	0.15***	0.04	
Housework	-0.01***	0.00	-0.01**	0.00	
Social security systems	-0.53***	0.06	-0.44***	0.04	
Effective access to financial markets	-0.13**	0.05	-0.06	0.04	
Donations	0.05	0.06	-0.10**	0.05	
Remittances	0.51***	0.09	0.03	0.09	
Government program benefits	-0.29***	0.06	-0.05	0.05	
Social networks	-0.15**	0.06	-0.20***	0.04	
Constant	2.61	0.37	1.63	0.28	
LR chi2	813		1498		
Prob > chi2	0.00		0.00		
McFadden's Adj R2	0.08		0.07		
Cox-Snell R2	0.10		0.08		
Nagelkerke R2	0.11		0.13		
% prob	0.68		0.72		
Correctly classified	0.68		0.70		
Number of obs	8135		18482		

Source: Authors' elaboration based on ENIGH 2008.

The coefficients are significantly different at 1% level (***), 5% level (**) and 10% level (*).

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