The Effect of Socio-Demographic Variables on Household Saving in Indonesia
(The Analysis of the 2007 IFLs Data)

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Abstract
The objective of this study is to analyze the effect of socio-demographic variables on household savings in Indonesia. The study was conducted using three models; the ownership status, the value of the savings, and the savings ratio. It employed the OLS and the logistic regression of the 2007 IFLS data. Also, it was discovered that the average level of education of productive-aged family members along with the total household income were constantly significant as the determinant factors in all the three models. The other finding was that patriarch households were less likely to have savings than matriarch households.
Keywords: sosio demographic variables, the ownership status, the value of the savings, and the savings ratio.

1. Introduction

In Indonesia, the potential for the mobilization of household savings is very large. This can be seen from the development of Indonesia's domestic savings that increases significantly each year. According to the 2008 data from the Asian Development Bank, Indonesia's domestic savings in 1990 was Rp 53.8 trillion and in 2007 it increased to up to 20-folds. The largest contribution to total domestic savings came from private savings (91.97%), while government savings contributed only 8.03 percent.

Despite the increase of the domestic savings however, Indonesia was still ranked the lowest compared to other countries in Asia (Figure 1.3). A survey that was conducted by Bank Indonesia (BI) in 2010 showed that 62 percent of households in Indonesia did not yet have savings. This was mainly because the access to financial institutions (especially banks) was still quite limited. The finding was in line with the results of the World Bank study in 2010 that stated only half of Indonesia's population had access to any kind of formal financial system.

The study also found that the trends to save tended to decline from year to year, this illustrated that both the desire and the ability of most Indonesians to save were still very low. The argument explained that when it came to household savings, there was a difference between the reality and the actual savings potential. This study was also conducted in order to identify the determinant factors that usually influence the household propensity to save. Keeping in mind the large number of people that Indonesia has, (plus the case of demographic bonus) combine with the desire to save can become a tremendous capital strength for the nation.

In the macro level, savings is one of the resources that is used by the government to encourage the economic growth. Studies that were conducted about savings in the macro level showed that savings was proven to play a key role in the process of both the economic growth and the national development. The other determinants factors that should not be separated from the fiscal and the monetary policies when it comes to savings are the income per capita, the inflation, the interest rates, the population dependency ratio, the foreign capital flows, and so on.

This study foucused on private/domestic savings and not the government's. Its main intention was to analyze the savings in the micro level, thus the subject of the analysis was the households' savings. The study also tried to analyze the variables that influence the savings' behavior in the household level.

From the above research agenda the following questions were formulated: (1) The characteristics of Indonesian depositors (2) The socio-demographic variables that influence most households to own savings (3) The socio-demographic variables that influence the value of the savings (4) The socio-demographic variables that influence the propensity to save according to the savings ratio.

Figure 1.1: Average level of domestic savings of some Asian countries أ-
(% of GDP) year 1970-2007 ب-
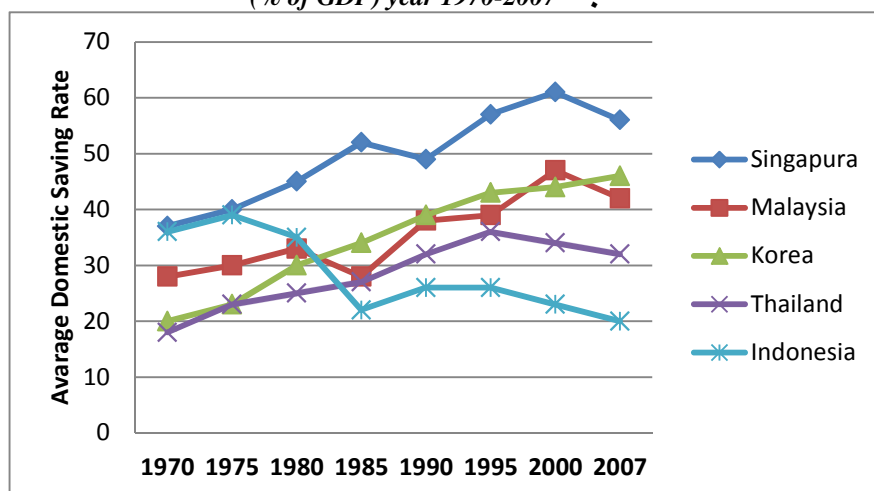
Source: Asian Development Bank, 2008

2.   Theory of Savings
2.1   Savings according to the Classical Theory

The concept of savings in economics is a number of income saved when it is not entirely used for consumption. In the more classical economics theory, savings plays a role that connects interest rate with positive relation. One of the classic notables who developed this theory was Wicksell (Vieneris, 1977,) who stated that the public's interest for savings is affected by the level of interest rates. The higher the interest rate is, the greater the amount of savings will be. This is due to the accumulation of assets. If the interest rate is high, most commonly the public will reduce their current consumption in order to increase the amount of capital they can save. Thus the classical argument stands: savings is affected positively by the interest rate and the income while at the same time negatively influenced by the level of consumption.

2.2   Savings according to the Absolute Income Hypothesis (Keynes)

The Keynesian believe that savings is highly determined by the level of disposable income. The desire to save will usually increase according to the income level. This is known as the Absolute Income Hypothesis of Keynes. Crouch (1972) stated that both the consumption and the savings cannot be seen separated from the household income since the income is used for both the consumption and the savings. Thus the Keynesian argument stands: savings is affected positively by one's income while at the same time influenced negatively by the level of consumption.

2.3   Savings According to the Relative Income Hypothesis

The supporters of the relative income hypothesis believe that in short term, the consumption function tends to move upward like serrated wheels. If the revenues growth arises steadily for a good amount of time, the consumers will balance their shopping behavior to a higher level of consumption. However, when it comes to the short term basis, the consumers are reluctant to change their consumption behavior despite the changing in revenue. This mostly because in short term, the change (whether is for the better or not,) is quite unreliable.

An explanation of this theory cannot be separated from consumption behavior. Since consumption relies on a relative income, if the level of the income increases, the amount of consumption will then also increase proportionally. On the other hand, if one's income falls, the consumption does not automatically go down in respect to the long-run consumption functions, instead it follows the short-term consumption function. Therefore the level of consumption function should ideally be planned to suit the long term agenda since people's consumption is relatively higher in relation to a higher level income in the long term basis (Suparmoko, 1994.) Then it can be said that the basis of the relative income hypothesis is the people's long-term consumption while the short term consumption derived from the change in revenue in short period. Automatically the savings' behavior follow this pattern; it will go up when the income rises and down as the income drops.

Still according to this hypothesis, savings is also affected by one's current income, one's previous income, one's consumption level, the interest rate, the expected revenue, the income distribution, the income growth rate, and the age distribution in the household.

2.4   Savings according to the Permanent Income Hypothesis

The permanent income hypothesis was formulated by Milton Friedman of the University of Chicago in

the 1950s (Sumastuti, 2008.) According to Friedman the term 'income' consists of two components: the permanent income and the recurring revenues (transitory income.) The basic idea of this hypothesis is that as most individuals have the expectations to live as long as they possibly can, they tend to make the consumption decisions base on that assurance. In this case, a period of many years. This hypothesis considered permanent income is a result of one's accumulation of wealth, including the physical assets and the human capital (education, etc.). Friedman believed that most individuals have the ability to estimate the amount of their income stream throughout their lives. Base on that, they then adjust their consumption levels to what they consider the normal consumption pattern with the expectation that the income stays stable throughout the year. In addition, to the most restricted variants of this hypothesis, the consumption level tends to have a major and constant proportion of the permanent income, this can get to nearly 100 percent of the permanent income. That being said, any savings an individual can spare in this hypothesis presumably comes from recurring revenues, unpredictable earnings, rising asset values, changes in relative prices, sweepstakes winnings, unexpected income, and so forth.

All the hypotheses discussed above view income; whether it is the current income, the relative income, or the permanent income as the prime determinants of one's savings behavior. However, income is not the only determining factor of savings behavior. Permanent income hypothesis as explained above also acknowledges the influence of interest rates on savings behavior. Thus economists who believe that independent variables such as the age structure in the household, the residential location (urban versus rural) also influence savings' behavior. According to the permanent income hypothesis, savings are determined by one's consumption levels, growth rate revenue, interest rate, total assets, tastes, foreign savings, foreign currency exchange rate, inflation, and the ratio of security and one's earnings

2.5 Savings according to the Life Cycle Hypothesis (Life-Cycle Saving)

Irving Fisher (1930) in (Arsyad, 1999) was the first to observe the relationship between the population and the levels of savings. According to Fisher, this relationship occurs because of the differences in the productivity of every person at every age throughout his/her life cycle. The rationale was then developed further by Modigliani (1963) who proposed the idea that for every individual or household there are 3 phases of life cycle that are closely related to the formation of savings. Every stage in the life cycle also has a different level of consumption and earnings capacity. The first phase is when an individual has not yet reached his/her productive age while inevitably has the ability to consume (0-14 years,) this early age phase is called 'dissaving period' or negative savings period. The negative savings period occurs when an individual does not or minimally produce earnings while at the same time his/her consumption still exists.

Figure 2: The level of income, consumption, and savings during household life cycle
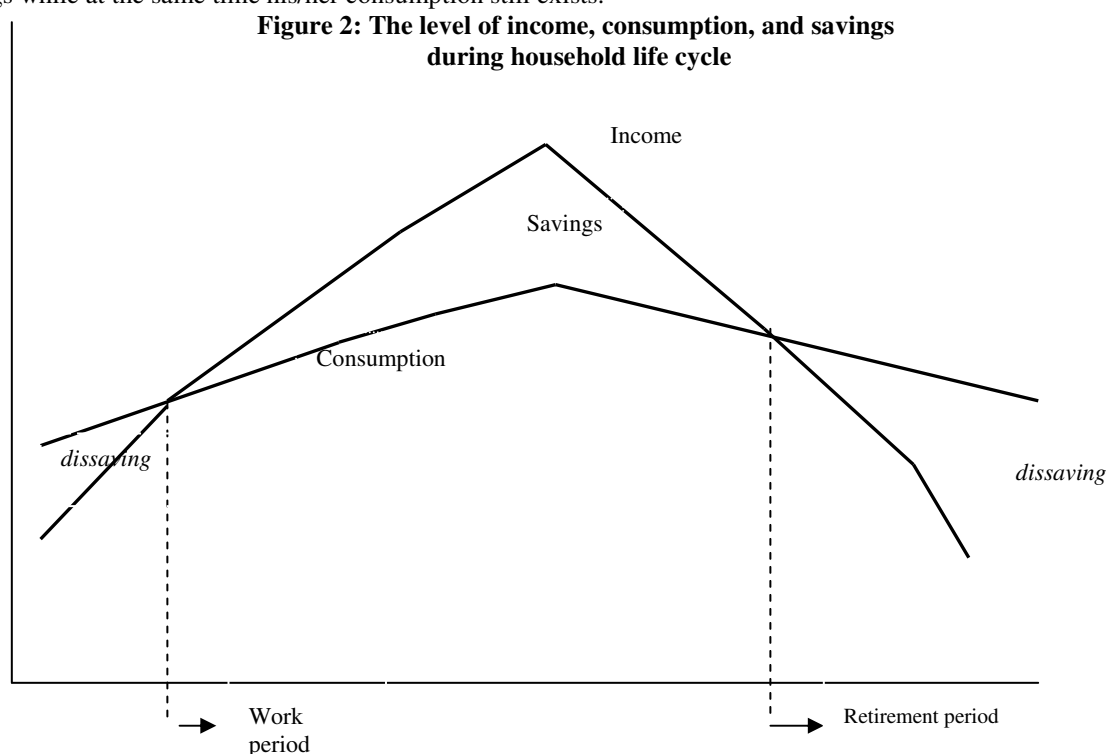
Sources: Mason (1988)

The second phase is when a person begins to enter the working age (15-64 years) also known as working years. In this cycle, an income is derived from employment. The earnings then use to meet the needs of

consumption, pay off previous debts, or to save. If a person saves during his/her productive age, the savings can be used and is usually intended to also meet the consumption needs in retirement age.

Third, when an individual enters the period of retirement. Once a person is no longer in his/her productive age, the revenue declines considerably. This is due to the fact that the person is no longer holds a job which in return reduces his/her income and productivity level. On the other hand, the expenses are relatively fixed because people have tendencies to consume the same things in the same amount in a regular basis; the smoothing consumption. At certain ages, unfortunately, the increase of the level of consumption may be inevitable. This is due to the rising health care costs that is in line with the declining physical health. To meet these needs people usually resort to the savings that was collected during the work period or participate in health insurance policies designed for senior citizens. The senior citizens usually also receive financial aids from their family members (children, grandchildren, relatives) who set aside a portion of their income to help. This act is strongly associated with the social values that prevail in the society. Other forms of aids are derived from the government in the form of hospitals subsidies and other supports. The life cycle hypothesis comes with the assumption that most individuals try to keep a fixed consumption throughout their lives. This hypothesis also believes that accumulated savings can make sufficient quantities that greatly help the ability to consume during retirement.

2.6 Savings according to the Rational Expectations

Savings according to the rational expectations is based on the consumers' decision on consumption that depends not only on their current income but also depends on their expected revenue in the future. While the permanent income hypothesis says that the public's consumption depends on its expectations (Mankiw, 1997,) the rational expectations on the other hand says that savings is determined by the current income, the expected income in the future, the level of consumption, the tax rate, and the interest rate.

2.7 Savings according to The Overlapping Generation Model (OLG)

In summary, the OLG model illustrates that people live in two periods of their lives: the youth and the elderly. In each period interactions between people from different generations occur. Vitello and Mampouw (2000) supported the theory and stated that it is possible to use this model extensively because the model has a unique analytical power. OLG generates aggregate implications of the life cycle of individual savings. According to the OLG, savings is determined by one's income, one's consumption, and the interest rates.

3. The Previous Discoveries

Mason (1981) suggested that countries with high income growth usually have a high savings rate as well, this comes with the condition that those countries have a low record of population growth. Mason pointed out that demographic interventions affect the level of savings. In other words, in addition to be affected by the level of income, the savings rate can also be influenced by demographic factors.

Coale and Hoover (1958) in Williamson (2001) believe that the demographic factors that mostly influence the economic growth is the change in population structure, for example from youth to adulthood. The new proportion makes the increment of people in productive age. If the increasing number of the productive age is also accompanied by the increment in employment opportunities, then the public's ability to save will also escalate.

Another life cycle hypothesis was done by Landsberger (1970) and Kelley and Williamson (1968) by employing the data from developing countries. Landsberger estimated the linear consumption function in Israel in two groups of households: 1. The patriarchs age were less than 34 years old, 2. The patriarchs age were 35-44 years old. The independent variables that were examined were the current household income, the age of the patriarchs, and other income. The survey were conducted in two periods: 1957-1958 and 1963-1964. The results showed that the MPC of the older age group was considerably higher.

As seen from the above illustration about the different variables that may affect the level of savings, the study tried to assess the influence of socio-demographic variables on household savings in Indonesia. The study measured the household savings through 1) The ownership status of the savings, 2) The value of the savings, and 3) The savings ratio. The socio-demographic variables that have the effect on household savings are, the age of the patriarchs, the size of the household, the average level of education, the youth dependency ratio (YDR), the old dependency ratio (ODR), the total income, gender, the work status, the field of business, the loan tenure, and the area of residence.

4. The Methodology
4.1 The sources of the data

This study used the secondary data from the Survey of the aspects of household life in Indonesia (Sakerti 2007) or also known as the Indonesian Family Life Survey (IFLS) conducted by RAND, a research agency from the United States in collaboration with the Center for Population Research and Policy, Gajah Mada

University. The total of the respondents that was surveyed in IFLS was approximately 12. 987 households. However, after going through the process of data cleaning, the number of respondents in this study decreased to only 9159 households. The reduced number from 12,987 to only 9159 households was mostly from the loss of data on the total household income variable.

The total household income data that was used was the total revenue with value that was greater than zero. So if there were respondents with the total household income of ≤ 0 then the information concerning that household would automatically not be used. It was possible to find households with income under ≤ 0 since the study used a total savings combination of labor income, non-labor income, farm yield, non-farm enterprises, sale of assets, and other income.

4.2 The definition of the variables

The household savings in this study was measured by: 1) The ownership status of the savings, 2) The value of the savings, and 3) The savings ratio. The ownership status is a statement whether a household owns savings or not, w hile the value of the savings is the type of wealth in monetary form. Respondents who did not have regular savings were still included in the sample with the value of savings = 0. And finally, the savings ratio is the ratio between the value of household savings and the household income.

The data analysis that was used in this study were the descriptive analysis and the inferential analysis. They were employed with the intention to present a descriptive analysis of data that is brief but clear. The observations is done in order to learn the different dynamics between groups of individuals, areas /regions, inter-mitten, and also to study the relationship/ the association / the correlation between variables (Agung, 1998.)

The inferential analysis used the binary logistic regression analysis (for model 1) and the ordinary least square regression (OLS) (for models 2 and 3). The estimated model is shown in the following equation:

Model 1- Logistic

have_tab = $\alpha_0 + \alpha_1$ agekk + α_2 agekk^2+ α_3 jart + α_4 rata_educ + α_5 YDR+ α_6 ODR+ α_8 laki + α_9 formal + α_{10} tani +α_{11} kredit + α_{12} kota + α_{13} incgroup_2 + α_{14}incgroup_3 + α_{15} incgroup_4 +i α_{16}incgroup_5 +ε

Model 2- OLS

Rp_tab =$\alpha_0 + \alpha_1$ agekk + α_2 agekk^2+ α_3 jart + α_4 rata_educ + α_5 YDR + α_6 ODR+ α_8 laki + α_9 formal + α_{10} tani + α_{11} kredit + α_{12} kota + α_{13} incgroup_2 + α_{14} incgroup_3 + α_{15} incgroup_4 +iα_{16} incgroup_5 +ε

Model 3- OLS

S/Y= $\alpha_0 + \alpha_1$ agekk + α_2 agekk^2+ α_3 jart + α_4 rata_educ + α_5 YDR + α_6 ODR+ α_8 laki + α_9 formal + α_{10} tani + α_{11} kredit + α_{12} kota + α_{13} incgroup_2 + α_{14} incgroup_3 + α_{15} incgroup_4 + α_{16} incgroup_5 +ε +ε

Explanation:

have_tab	= own household savings
Rp_tab	= savings value
S/Y	= savings ratio
Y	= total income
Agekk	= age of the patriarchs
Agekk^2	= age of the patriarchs (squared)
Jart	= Number of the family members
Rata_educ	= Average level of education of productive-aged family members (15-64 years)
YDR	= Youth dependency ratio (0-14 years) towards the productive-aged family members (15-64 years.)
ODR	= Old dependency ratio (65+) towards the productive-aged family members (15-64 years.)
tot_income	= Total household income that is derived from various sources (labor income, non labor income, farm+non farm business profit, sale of assets) shown in the form of dummy variable (incgroup_1=0*, incgroup_2 = 1, incgroup_3 =2, incgroup_4= 3, incgroup_5=4).
male	= Gender of the patriarchs. 1= for male dan 0*= for female
farm	= Patriarchs field of employment (farm=1; non farm=0*).
credits	= Status of credits/loans (without credits/loans= 0*; have credits/loans= 1)
city	= Location/respondents residential location (rural= 0*; urban=1)
ε	= Random disturbance variable

5. The Empirical Discovery
5.1 The characteristic of household that own savings

Based on the IFL data tabulation 2007, the households that had savings were only 26 percent (with the remaining 74% still without savings.) The characteristics of the households with savings were:

a. The majority of the patriarchs were between the age of 25-34. When being compared to the households that did not have savings, the households that had savings had younger patriarchs.

b. The amount of the family members (1-3 people.) There was no substantial differences however, between households with savings and without when it comes to the number of family members.

c. The average education of productive-aged family members group was in the high of 20 percent (quintile group 5.) Meanwhile, concerning the households without savings, the majority came from the household with lower average education, or in the lowest 20 percent (quintile group 1). Thus, it can be said that in general, households that had savings were "more educated" than the ones who did not.

d. The households that had a dependency ratio of young family members ages between .25 to 0.5. Compared with households that did not have savings, the household that had savings had higher YDR.

e. The households that had a dependency ratio of older family members with 0 value (ODR = 0.) This also applied to the condition of the households without savings, meaning that the majority had the ODR = 0. However, the percentage of the households with savings ODR = 0 had a higher rate than the ones without savings (even though both were the majority).

f. The households with male patriarch, this also went for the group that did not have savings. However, the percentage of the male patriarch households that did not have savings were higher than the ones who had.

g. The households whose patriarchs worked in the formal sectors. These households mostly had savings compared to the group whose patriarchs worked in the informal sectors.

h. The households whose patriarchs worked in non-agricultural sectors. This also went for the households without savings. However, the percentage of the households whose patriarchs worked in non-agricultural sectors were higher than the ones without savings. (even though both were the majority).

i. The households that did not have credits / loans. The condition was the same with the households without savings, however, the percentage of the households that did not have credits / loans in the households that did not have savings was higher than the ones that owned savings.

j. The households that lived in urban areas. The majority of the household that did not have savings came from families that lived in rural areas.

k. The households with high earnings capability group (quintile 5). The households in this group had more savings than the households with lower earnings capability (quintile 1.) In other words, better earning capabilities enables people to save.

From the results of the comparison between the households that had savings with the ones that did not, it can be concluded that the characteristics that clearly distinguished the two groups were: the average education level, the work status; formal vs informal sectors, the area of residence, and the total household income. While they had different proportions, other characteristics were relatively similar (Appendix Tables 1a and 1b.)

5.2   The factors affecting the household savings ownership status

From the logistic regression with dependent variables of the ownership savings (Model 1,) it was determined that the socio-demographic variables that significantly affect the ownership of household savings were:

1.   The number of family members

The direction of the negative coefficient means that the more members of the household, the lower the tendency of the household to save. The low birth rate per household may generate a relatively low level of consumption which ultimately increase the ability to save. On the other hand, the odds ratios indicates that if a household increases one family member, the chances of that household to have savings will increase by 0.92 times.

2.   The average level of education of productive-aged family members

The directions positive coefficient means the higher the average level of education of productive age in a family, the higher the tendency of the family to have savings. The odds ratio also shows that if the average level of education is added by 1 year, the odds of the households to have savings will increase by 1.14 times. The result of this regression proves that education is an important factor that contributes to savings tendencies.

3.   The gender of the patriarchs

When it comes to owning savings in respect to the gender of the patriarchs, the regression results prove that the tendency to save in the households with patriarchs is lower than the ones with matriarchs. The odds ratio shows that the matriarchs tend to have savings 0.56 times more that the patriarchs. This is presumably because the gender roles are constructed by a culture that attune women's role as managers of the domestic sphere; such as child care, financial manager, caterer, love and protection provider. The roles continues to manifest in the form of savings' behavior, this is part of the urge to continuously protect the fare of the family members in order to lead a comfortable life.

4.   The patriarchs field of employment

The direction of the positive coefficient on this variable means that households that patriarchs work in the agriculture industry are more likely to have savings than the households whose patriarchs work in the non-agricultural industry. The odds ratio suggests that these households tends to have savings 1.28 times if compare to the households that patriarchs work in the non-agricultural sectors. This is most likely related to the nature of

the agricultural sector that strongly depends on the season (seasonal.) Having a much greater business risks than the non-agricultural ones, (eg crop failure) makes the households in this group tend to save for the rainy day.

5. The residential location

The direction of the positive coefficients means that the tendency to have savings in households that reside in urban areas is higher than households that reside in rural areas. The odds ratio proves that the households that live in urban areas tend to have savings 1.2 times more compare to the households that live in rural areas. This is due to better access to banking services in urban areas that makes going to the bank to save easier.

6. The total family income

The direction of the positive coefficients means that the higher the total household income the greater the tendency of that household to save. A person with a high income and a relatively steady consumption level, will have some relatively large balance that he/she can put towards savings without having to sacrifice his/her comfort.

5.3 The factors affecting the value of the household Savings

The OLS regression with the value of savings as dependent variable (Model 2,) found that the socio-demographic variables that significantly affect the value of household savings were:

1. The age of the patriarchs

The direction of the positive coefficients means that the older the person gets, the greater the amount of savings he/she has (linear relationship.) Interestingly enough, the hypotheses related to the influence of age on the value of the savings is not proven. This can be seen from the model shape that was linear instead of the inverted U-shaped (quadratic.) Presumably, this was because of the limitations of the study that employed the accumulative value. Theoratically of course,when a person saves for a long time, his/her savings should then accumulate accordingly.

2. The average level of eduaction of productive-aged family members

The direction of the positive coefficients means that the higher the average education of productive-aged family members, the greater the value of the savings usually is. Each 1-year increment in the average education increases the value of the savings as much as Rp 278,942.3. The direction relations between the two variables is consistent with the hypothesis that was formed at the beginning of the study, which said that the level of education is directly proportional to the value of the savings. This proves that education has an important influence on household savings.

3. The employment status of the patriarchs

The directions of the positive coefficient means that households whose patriarchs work in the formal sectors usually have a greater amount of savings than households whose patriarchs work in the informal sectors. The reason behind this hypothesis is that most formal sectors' jobs bring higher earnings than the informal sector ones. The Absolute Income Hypothesis stated that the marginal propensity to Save (MPS) relates heavily with the increment of income level. The higher the income, the greater the savings usually is.

4. The total family income

When it comes to total household income variable, there are two groups whose total income significantly affect the value of the household savings, these are: (a) households income quintile group 2; the direction of the negative coefficient means that households income quintile group 2 have savings with the value lower than households income quintile group 1, (b) households income quintile group 5; the direction of the positive coefficient means that households income group 5 have savings with the value lower than households income quintile group 1.

5.4 The factors affecting the household savings ratio

The OLS regression of dependent savings variable to income ratio (Model 3) showed the socio-demographic variables that significantly affect the household savings ratio are:

1. The number of the family members

The direction of the negative coefficient means that the more the family members are, the lower the ratio of the household savings is. The number of the households has a huge impact on the level of consumption. A family with fewer family members consumes less than a family with more family members. The high level of consumption leads to lower tendency to save.

2. The average level of education of productive-aged family members

The directions positive coefficient indicates that the higher the average education productive-aged in a household, the higher the savings ratio that household has.

3. The credit status

The direction of the negative coefficient means that households that have credits have a lower savings ratio compared to households that do not. The hypothesis of this study believes that there is a relationship between credit status with proven savings ratio, ie there is a significant differences between the savings ratio of households with loans with households without loans. In the regression results it can be concluded that credits

act as a burden for households which in turn lower the tendency to save. Individuals who do not have credits have less financial responsibilities than individuals who have. This creates the opportunity for people without charge account to save more.

4. The total family income

The direction of the negative coefficient in each income group has the sense that income quintiles 2, 3, 4, and 5 have a lower savings ratio compared to the first quintile income group, presumably because low income hinders a person to save.

The result of the regression model 1, 2, and 3 prove that the social variables consistently bring significant effect on household savings. These variables are: the average education of productive-aged household members and the total household income. While the demographic factors show the affect of the ownership and the savings ratio on household savings. Overall the authors concluded that savings is still synonymous with the characteristics of urban population. The data shows that better education, higher income, formal work status, and residential location bring positive effect on household savings.

Tabel 1: The conclusion of the regression result of socio-demographic variables that significantly effect household savings (the ownership status, the value of the savings, and the savings ratio)

No.	Ownership status	Savings value	Savings ratio
1.	The number of family members	1. The age of the patriarchs	1. The number of family members
2.	The average level of education productive-aged family members	2. The average level of education productive-aged family members	2. Credit status
3.	The gender of the patriarchs	3. Patriarchs employment status	3. The average level of education productive-aged family members
4.	The patriarchs field of employment	4. Total family income	4. Total family income
5.	Residential location		
6.	Total family income		

APPENDIX

Tabel 1a: The Characteristics of respondents based on the ownership satus of savings in accordance with socio-demographic variable, IFLS 2007

Variable	Own savings (%)	Do not own savings (%)
Age group		
15-24	7,80	6,11
25-34	31,55	25,52
35-44	29,35	26,43
45-54	18,35	21,55
56-64	9,03	11,96
65$^+$	3,92	8,43
Total	100,00	100,00
Number of family members		
1-3	48,63	47,76
4-6	46,35	46,33
7$^+$	5,02	5,92
Total	100,00	100,00
Average level of education productive-aged family members		
Quintile 1	7,42	24,40
Quintile 2	12,19	22,73
Quintile 3	16,32	21,27
Quintile 4	24,84	18,31
Quintile 5	39,22	13,29
Total	100,00	100,00
Youth Dependency Ratio		
0.0-0.2	33,74	34,78
0.25-0.5	34,33	33,19
0.6-4.0	31,93	32,03
Total	100,00	100,00
Old Dependency Ratio		
0	89,54	86,87
> 0	10,46	13,13
Total	100,00	100,00
Gender of patriarchs		
Males	85,45	87,21
Females	14,55	12,79
Total	100,00	100,00

Sources: The result of IFLS 2007

Tabel 1b: The Characteristics of respondents based on the ownership status of savings in accordance with socio-demographic variable, IFLS 2007

Variable	Own savings (%)	Do not own savings (%)
The patriarchs employment status		
Formal	56,98	35,02
Informal	43,02	64,98
Total	100,00	100,00
The patriarchs field of employment		
Farm	11,18	17,32
Non-farm	88,82	82,68
Total	100,00	100,00
Credit status		
Own charge account	21,97	16,84
Do not own charge account	78,03	83,16
Total	100,00	100,00
Residential location		
Urban areas	67,86	46,70
Rusal areas	32,14	53,30
Total	100,00	100,00
Total family income		
Quintile 1	9,03	23,84
Quintile 2	11,22	23,11
Quintile 3	16,15	21,30
Quintile 4	22,99	18,96
Quintile 5	40,62	12,79
	100,00	100,00

Source: The result of IFLS 2007

Tabel 2: The result of the Biner Logistic Regression concerning socio-demographic variable on the ownership status of savings, IFLS 2007

Ownership status(own savings)	Coefficient	*Odds Ratio*	P>z
(1)	(2)	(3)	(4)
Age of the patriarchs	-0,01596	0,9841	0,234
Age of the patriarchs squared	0,00009	1,0000	0,516
Number of family members	-0,08148	0,9217	0,000*
Average level of education productive-aged family members	0,13405	1,1434	0,000*
Youth Dependency Ratio	0,05409	1,0555	0,371
Old Dependency Ratio	0,07218	1,0748	0,572
Gender of the patriarchs			
Males	-0,56419	0,5688	0,000*
Females			
Employment status of the patriarchs			
Formal	0,05141	1,0527	0.391
Informal			
Field of employment of the patriarchs			
Farm	0,18809	1,2069	0,025*
Non-farm			
Credit status			
Own credits	0,08905	1,0931	0,176
Do not own credits			
Residential location			
Urban areas	0,25188	1,2864	0,000*
Rural areas			
Total family income			
Quintile 1			
Quintile 2	0,18313	1,2009	0,074*
Quintile 3	0,49363	1,6382	0,000*
Quintile 4	0,86507	2,3751	0,000*
Quintile 5	1,62799	5,0936	0,000*
_cons	-1,948008		0,000

*Significants $\alpha \leq 0.10$; Number of obs   = 9.159 ; Prob > chi2   = 0,0000 ; Pseudo R2   = 0,1475

Tabel 3: The OLS regression result on the influence of socio-demographic variable in accordance with the value of household savings, IFLS 2007

Value of household savings	Coef.	T	P>t
(1)	(2)	(3)	(4)
Age of the patriarchs	86.035	2,05	0,040*
Age of the patriarchs squared	-449.874	-0,98	0,326
Number of family members	-48.619	-0,49	0,624
Average level of education productive-aged Family members	278.942	6,29	0,000*
Youth Dependency Ratio	53.118	0,29	0,770
Old Dependency Ratio	-252.119	-0,65	0,514
Gender of patriarchs			
Males	-135.704	-0,68	0,496
Females			
Employment status of the patriarchs			
Formal	575.669	2,36	0,018*
Informal			
Field of employment of the patriarchs			
Farm	223.910	0,56	0,574
Non-farm			
Credit status			
Own charge account	-406.529	-1,22	0,221
Do not own charge account			
Residential location			
Urban areas	261.462	1,36	0,175
Rural areas			
Total family income			
Quintile 1			
Quintile 2	-215.210	-2,24	0,025*
Quintile 3	-203.115	-1,36	0,173
Quintile 4	131.569	0,58	0,560
Quintile 5	4.783.724	12,23	0,000*
_cons	-4.065.865	-3,61	0,000

*Significants $\alpha \leq 0,10$; Number of obs= 9.159 ; Prob > F   = 0,0000; R-squared = 0,1768

Tabel 4: The OLS Regression result on the influence of socio-demographic variable in accordance with household savings ratio, IFLS 2007

Household savings ratio	Coefficient	t	P>t
(1)	(2)	(3)	(4)
Age of the patriarchs	0,005366	0,21	0,832
Age of the patriarchs squared	-0,000034	-0,14	0,889
Number of family members	-0,042366	-1,72	0,085*
Average level of eduaction productive-aged family members	0,038112	2,28	0,022*
Youth Dependency Ratio	0,268755	1,03	0,301
Old Dependency Ratio	-0,144816	-1,40	0,161
Gender of the patriarchs			
Males	-0,462098	-1,47	0,142
Females			
Employment status of the patriarchs			
Formal	-0,096557	-0,91	0,362
Informal			
Field of employment of the patriarchs			
Farm	-0,081063	-1,39	0,165
Non-farm			
Credit status			
Own charge account	-0,095522	-1,92	0,054*
Do not own charge account			
Residential location			
Urban areas	0,014699	0,12	0,907
Rural areas			
Total family income			
Quintile 1			
Quintile 2	-0,509872	-2,55	0,011*
Quintile 3	-0,505267	-2,77	0,006*
Quintile 4	-0,503174	-2,94	0,003*
Quintile 5	-0,504702	-2,91	0,004*
_cons	0,619378	0,72	0,470

*Significants $\alpha \leq 0,10$

Number of obs = 9.159

Prob > F = 0,0000

R-squared = 0.0126

Tabel 4.1: The distribution number and percentage of respondents based on gender, employment status, field of employment, credit status, and residential location, IFLS 2007

Variable	Number	Percentage
(1)	(2)	(3)
Gender of the patriarchs		
Females	7.946	86,76
Males	1.213	13,24
Total	9.159	100,00
Employment status of the patriarchs		
Formal	3.728	40,70
Informal	5.431	59,30
Total	9.159	100,00
Field of employment of the patriarchs		
Farm	1.441	15,73
Non-farm	7.718	84,27
Total	9.159	100,00
Credit status		
Own charge account	1.664	18,17
Do not own charge account	7.495	81,83
Total	9.159	100,00
Residential location		
Urban areas	4.779	52,18
Rural areas	4.380	47,82
Total	9.159	100,00

Sources: The result of IFLS 2007

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