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**Working Paper**

## The Role of other Economically Active Household Members in Poverty Alleviation

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Philippine Institute for Development Studies  
*Surian sa mga Pag-aaral Pangkaunlaran ng Pilipinas*

## The Role of other Economically Active Household Members in Poverty Alleviation

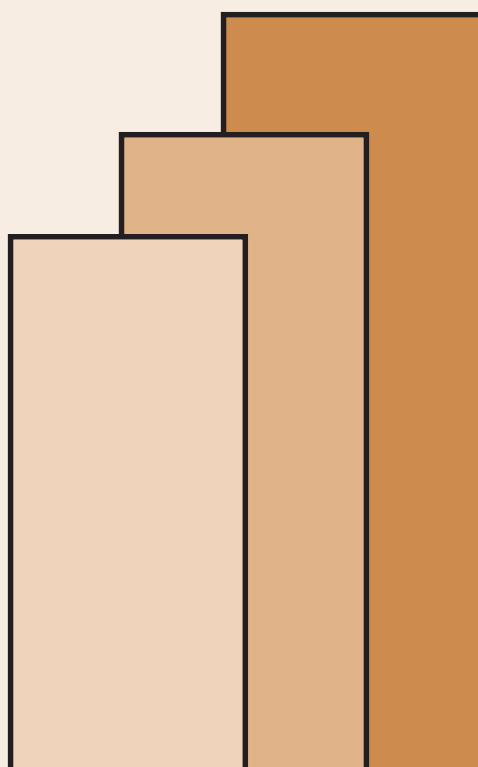
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## **Abstract**

This paper extends the analysis on microfinance and poverty from the household perspective by focusing on the role of other economically active household members in alleviating household poverty. Results show that additional other economically active household members expand the pool of income earners in the households and this points to the significance of mobilizing additional household labor in the reduction of dependence on a single source of income in the household. Specifically, results from the earnings regression analysis and logit analysis indicate congruence with generally accepted theory on poverty, that is, the number of other economically active household members, their education, age (as proxy to experience) and employment status contribute to the income generation of a household and therefore, have a positive effect in reducing the probability of a household being poor. This implies that a household is more likely to be nonpoor if it has a greater number of other economically active household members because the effects of these explanatory variables to the households' total income are interpreted as having the opposite effects on poverty.

Keywords: microfinance, poverty, other economically active household members

# **The Role of Other Economically Active Household Members in Poverty Alleviation**

*Ma. Chelo V. Manlagñit \**

## **I. Introduction**

Over the past several years, the state of poverty in the Philippines has been widely examined and written in various literatures. However, amidst plethora of studies, the role of other economically active household members is always put at the backseat as the usual emphasis of analysis of household-focused empirical studies is on the relationship between headship and poverty.

The link between poverty and headship has been well-studied and documented [Buvinic and Gupta 1997; Quisumbing et al. 1995; Rosenhouse 1988; and Haddad et al. 1996, among others]. A recent study by Lamberte and Manlagñit (2003) on the development of the microfinance market in the Philippines from the household perspective focused on analyzing the differences in poverty incidence between male-headed and female-headed households and between clients and non-clients of the community oriented financial intermediaries (COFIs). Results show that there is a large disparity in poverty incidence between COFI clients and non-clients while the results on the comparison between male-headed and female-headed households reveal that there is hardly any difference between these two groups.

Policy discussions particularly on female headed households (FHHs) and poverty are no longer new in the literature but still the issue remains controversial and the findings far from conclusive. Efforts have been made in an attempt to adopt a

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more meaningful definition of headship but these have been met with limited success.

Rosenhouse (1994) suggested that part of the reason is on the difficulty of establishing the economic responsibility and chief authority in cases where there are multiple earners and the possibility of multiple decision makers within a household. Furthermore, she stated that as a sole indicator of welfare, headship fails to take into account the role of other household members in income contribution and active participation in intra-household decisions on the allocation of work and household maintenance responsibilities. Thus, she said that the use of the concept of household head, which implies a single or dominant earner and decision maker, may be unrealistic where multiple earner households are the norm.

In an attempt to fill this gap in household and poverty studies, the objective of this paper, as it exploits the available household level information, is to extend the analysis on microfinance and poverty from the household perspective by focusing on the role of other economically active household members in the households' survival.

While the importance of incorporating the role played by other household members in household-focused studies can be a good source of information particularly for policy analysis, empirical works in the country relating microfinance to poverty at the household level are still relatively scarce. Thus, this paper aims to provide additional empirical studies on microfinance that relates to poverty from a household perspective.

By putting on the forefront the analysis on the contributions of other household members, this paper suggests that for policy consideration, there is a need to expand the area of concern in dealing with household poverty by examining the role of other members in the households.

The remaining sections of the paper are structured as follows. Section 2 presents the profile of the other household members. Taking this a start-off point, section 3 takes a closer look at the attributes of other economically active household members. Section four presents empirical results from econometric analyses. Section five extends the discussion on the role of other household members by focusing on the case of dual and multiple income households that dominate in the sample households of the study. The last section makes some concluding remarks.

## **II. A Household Level Analysis: Profile of the Other Household Members<sup>1</sup>**

Most empirical studies employ the household as the unit of analysis. It is usually defined as a social and economic institution consisting of one or more individuals regardless of kinship and who live together and share in both dwelling and food (de la Rocha undated). However more than the shared dwelling and food, households are social institutions that are bound together by the intricate duty of generating income and managing labor.

Specifically, the National Statistics Office (NSO) employs the term *family* and defines it as a group of persons usually living together and composed of the head and other persons related to the head by blood, marriage or adoption. It also utilizes different categories of households in its national survey: single family, extended family and two or more non-related members.

It is well noted that in the Philippine setting, households consist of more than just the nuclear family. As noted in Jocano (1998), the Tagalog word for household, *magkakasambahay*, is “somewhat bigger than the family” and can include both related and unrelated individuals living in one house. It is a well-known fact that the existence of this household category in the country is within a cultural context of strong family ties.

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<sup>1</sup> The use of the term “other household members” excludes the household heads unless otherwise stated. This should not be confused with the household heads. If referring to the household heads, this would be explicitly stated.

This study utilizes a nationwide household survey<sup>2</sup> which includes 333 households that were interviewed in August to September 2002 using a structured interview schedule. Of these households, 167 have access to the services of the community oriented financial intermediaries (COFI) system or these are the clients of the COFI system (CHHs for short) while 166 households do not have the access to the services of the COFI system and thus, referred to as non-clients of the COFI system (NCHHs for short). **Table 1** presents the distribution of the sample households per survey area.

<b>Table 1. Distribution of Sample Households</b>		
<b>Survey Area</b>	<b>Clients</b>	<b>Non-Clients</b>
<b>Luzon</b>		
Pangasinan (Region I)	28	28
Albay (Region V)	25	28
<b>Visayas</b>		
Iloilo (Region VI)	29	27
Leyte (Region VIII)	28	27
<b>Mindanao</b>		
Misamis Oriental (Region X)	29	28
Davao (Region XI)	28	28
<b>Total</b>	<b>167</b>	<b>166</b>

## 1. Demographic Characteristics and Educational Attainment

Female household members constitute 65 percent of the total other household members while male household members consist of 35 percent. Among the CHHs, 63.5 percent of the total household members are females and 36.5 percent are males. For NCHHs, 66.6 percent are females while 33.4 percent are males.

The average age of other household members is 24.4 years. For CHHs, the average age is 25.2 years while for NCHHs, 23.7 years (**table 2**). Taking a closer look, for both types of households, female household members are on the average

<sup>2</sup> See Lamberte and Manlagñit (2003) for a detailed discussion of the survey.

older than the male members, at 29.1 years and 26.7 years for CHHs and NCHHs, respectively as compared to 18.4 years and 17.8 years for CHHs and NCHHs, respectively. Meanwhile, the average number of other household members is 5.4. The average number of other household members of the CHHs is 5.2 while 5.6 for NCHHs. The table also shows that there is a statistical difference between the number of other household members of the COFI clients and non-clients but not on the average age of the members.

<b>Table 2. Age and Number of Other Household Members</b>		
<b>Average</b>		
	<b>Age</b>	<b>Other HH Size</b>
<b>Clients</b>		
Male	18.43	5.46
Female	29.1	5.14
Total	25.19	5.26
<b>Non-Clients</b>		
Male	17.78	6.06
Female	26.71	5.41
Total	23.71	5.62
P-value	0.9381	0.0002*

*\* Significant at 5% confidence level*

In terms of the number of other household adult members (i.e., those who are more than 15 years old), the average number is 3.7. Disaggregating this number, the average number of household adult members is 3.6 for CHHs and 3.8 for NCHHs.

**Table 3** presents the results of the logit analysis on the impact of demographic factors on other household member's access to the COFI system. The findings show that except for the age, demographic factors like household size and gender have effects on the other household members access to the COFI system.

With respect to educational attainment of the other household members, on the average, the members of CHHs spent 10.9 years in school while members of



NCHHs have 9.8 years. It is noteworthy that regardless of the household type, female other household members have higher years spent at school. In particular, the average number of years in school of female other household members of CHHs is 11.6 while 10.3 for NCHHs as compared to 9.5 and 8.72 for male other household members of CHHs and NCHHs, respectively.

**Table 3. Results of Logit Analysis: Demographic Characteristics**  
HH Type: Client=1; Non-Client=0

	Coef.	Std. Err.	z	P> z	[95% Conf. Interval]	
HH size	(0.120)	0.033	(3.670)	0.000*	(0.183)	(0.056)
Age	0.007	0.004	1.820	0.068	(0.000)	0.014
Sex	0.254	0.127	2.010	0.045*	0.006	0.503
Constant	0.390	0.214	1.820	0.069	(0.030)	0.809

\* Significant at 5% confidence level

## 2. Economic Activities and Employment Status

For both households, majority of the other household members are students with 45.3 percent and 43.8 percent for CHHs and NCHHs, respectively. This is true except for female members of CHH with more currently active members than students at 45.1 percent. More specifically, some 35.3 percent of CHH members are currently active; 5.6 percent are housewives; and the rest are economically inactive. Meanwhile, for NCHH, there are 38.3 percent economically active members; 8 percent housewives; and the rest economically inactive. **Table 4** shows the distribution of the household members according to their dominant activities.

It can be gathered from the table that NCHHs have more currently active household members than CHHs and with more female active household members for both household types. However, the opposite is true for the number of students, which constitutes the highest proportion among household members, having more male household members at 61 percent and 57.5 percent for CHHs and NCHHs, respectively.

**Table 4. Dominant Activity  
Of Other Household Members  
In percent**

Dominant Activity	Clients			Non-Clients			Grand Total	P-value
	Male	Female	Total	Male	Female	Total		
Currently active	17.44	45.10	35.33	29.61	42.58	38.25	36.76	0.35
Inactive but searching for job	12.82	3.64	6.88	6.70	4.48	5.22	6.07	0.91
Housewife	0.00	8.40	5.62	0.00	11.76	8.02	6.80	0.09
Student	61.03	36.69	45.29	57.54	34.73	42.35	43.84	0.94
Retired	1.03	1.96	1.63	0.00	0.56	0.37	1.01	0.98
Inactive	7.18	4.20	5.25	5.59	5.88	5.78	5.51	0.42

Although results of the t-test show that there is no significant difference between CHHs and NCHHs in terms of dominant economic activity, nevertheless the results of the logit analysis show that the dominant economic activities of the other household members particularly that of inactive but searching for job, student and retired members do matter when it comes to access to the COFI system (**table 5**), which have positive significant effect in the access to the COFI system. This indicates that the more dependent members a household has, the greater the tendency for a household to obtain access to the services of the COFI system.

**Table 5. Results of Logit Analysis: Dominant Activity  
HH Type: Client=1; Non-Client=0**

	Coef.	Std. Err.	z	P> z	[95% Conf. Interval]	
Currently active	0.343	0.200	1.720	0.086	(0.048)	0.735
Inactive but searching for job	0.699	0.303	2.300	0.021*	0.105	1.293
Housewife	0.066	0.292	0.230	0.821	(0.507)	0.639
Student	0.490	0.196	2.500	0.012*	0.106	0.874
Retired	1.898	0.801	2.370	0.018*	0.328	3.467
Inactive	0.327	0.311	1.050	0.293	(0.283)	0.936
Constant	(0.393)	0.173	(2.280)	0.023	(0.732)	(0.055)

\* Significant at 5% confidence level

### III. Other Economically Active Household Members: A Closer Look<sup>3</sup>

#### 1. Demographic Characteristics and Educational Attainment

Narrowing down to the *other* household members who are *economically active*, the average age of these household members is 36 years. Regardless of the household types, other economically active female household members are on the average older than the other economically active male members, at 38 and 29 years, respectively (**table 6**). However, there is no statistical difference between the age of the economically active members of CHH and NCHH.

Table 6. Age and Number of Years Spent in School Of Other Economically Active Household Members Average		
	Age	Year in School
<b>Clients</b>		
Male	27.41	13.19
Female	38.14	14.12
Total	36.27	13.96
<b>Non-Clients</b>		
Male	29.30	12.02
Female	37.90	12.29
Total	35.68	12.22
P-value	0.684	1.000

Meanwhile, the average number of years spent by other economically active household members in school is 13 years. The CHH members have an average of 14 years in school while NCHH members have 12 years. For both household types, female household members have, on the average, higher number of years spent in school than male members, with 14 years and 13 years for female and

<sup>3</sup> This section refers only to the other household members who are economically active and will be referred to as *other economically active household members*. If deviations are made in referring to the household members, it will be explicitly stated.

male members for CHHs and 12.3 years and 12 years for NCHH female and male members, respectively.

With respect to the employment status of the other economically active household members, of the 35.3 percent other active members of CHHs, 83.2 percent are employees; 8 percent are own-account workers; while the rest are comprised of very few unpaid family workers, contributing family members and employers. Meanwhile, of the 38.3 percent other economically active members of NCHHs, 62 percent are employees; 25.8 percent are own-account workers; and the rest are unpaid family workers, contributing family members and employers. These results are presented in details in **table 7**.

<b>Table 7. Employment Status Of Other Economically Active Household Members In percent</b>							
Status	Client			Non-Client			Grand Total
	Male	Female	Total	Male	Female	Total	
Employer	3.45	1.28	1.62	4.00	3.57	3.68	2.44
Employee	79.31	83.97	83.24	66.00	60.71	62.11	69.27
Own-account worker	0.00	9.62	8.11	18.00	28.57	25.79	16.83
Unpaid family worker	6.90	3.21	3.78	6.00	3.57	4.21	5.61
Member of producers' cooperative	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Contributing family member	10.34	1.92	3.24	6.00	3.57	4.21	5.85

## 2. Economic Activities and Income

**Table 8** presents a comparison between household heads and other household members in terms of the household members' dominant activities. It can be gathered that more household heads are economically active. Around 90 percent of household heads are economically active. Retired household heads comprise 5.2 percent of the total. The rest are housewives, students and economically

inactive. While for other household members, 37 percent are economically active. Other household members who are students consist of 43.8 percent.

**Table 8. Dominant Activity**  
**A Comparison Between Household Heads and Other Household Members**  
**In percent**

Dominant Activity	Household Head			Other Household Member		
	Client	Non-Client	Total	Client	Non-Client	Total
Currently active	89.09	89.63	89.36	35.33	38.25	36.76
Inactive but searching for job	0.00	1.83	0.91	6.88	5.22	6.07
Housewife	1.82	2.44	2.13	5.62	8.02	6.8
Student	0.61	0.00	0.30	45.29	42.35	43.84
Retired	6.06	4.27	5.17	1.63	0.37	1.01
Inactive	2.42	1.83	2.13	5.25	5.78	5.51

However, in terms of the actual number of the members, of the 333 households included in the survey, the number of other household members who are economically active is greater than the number of the household heads who are economically active, at 400 and 294 members, respectively. Needless to say, other household members who are economically active play a significant role in the household's economic condition and this would be investigated further below.

Meanwhile **table 9** shows the distribution of the average gross incomes of both the household heads and the other household members. It is worth noting that although NCHHs have more other economically active household members than CHHs, the average gross income of CHHs is higher than that of NCHHs. In addition, the table shows that even though female other household members dominate other economically active members in both household types, it is only in CHHs that female other household members' average gross income is higher than the male other household members' average gross income.

Specifically, the average total gross income of CHH other household members is higher than those of NCHH other household members by 9.7 percent. For CHHs, the average gross income of female other household members is higher by less than 1 percent than the income of the male other household members while for NCHHs, the average income of male other household members is higher than the income of the female other household members by 7 percent.

**Table 9. Average Gross Income**  
**A Comparison Between Household Heads and Other Household Members**  
**In pesos**

	Client			Non-Client		
	Male	Female	Total	Male	Female	Total
<i><b>Household Heads only</b></i>						
Household heads	261,640	186,662	248,171	212,275	259,858	221,033
Economically active heads	263,262	173,723	248,643	210,130	219,716	211,575
<i><b>Other Household Members only</b></i>						
Household Members	264,971	265,257	265,152	252,204	236,482	241,748
Economically active members	257,841	284,441	279,803	266,079	243,192	249,139

In terms of the gross income of the other currently active household members, the average income of the CHH members is higher by 12.3 percent than those of NCHH members. More specifically, for CHHs, the other economically active male household members have higher income than the other economically active female household members by 9.4 percent. Interestingly, the opposite is true for NCHHs where on the average, the other economically active female household members' gross income are higher by 10.3 percent than those of the other economically active male household members' income.

Moreover, among the currently other active household members, CHHs have a higher proportion of members who plan to invest and borrow in the next twelve months: 32 percent and 44.7 percent, respectively for CHHs while 30.7 percent and 37 percent, respectively for NCHHs.

### **3. Participation in Household Business and Outstanding Credit**

The households with business enterprise where the other household members belong constitute 27 percent and 26 percent of NCHHs and CHHs, respectively. It is worth noting that female other household members devote more of their time to family business regardless of the household types. On the average, the time devoted by female and male CHH other household members are 59 percent and 50 percent, respectively, while for female and male CHH other household members, 33 percent and 18 percent, respectively.

The average number of loans obtained by CHH other household members excluding the loans obtained from COFIs is 6. Male other household members have greater number of loans than female other household members at 7 and 5, respectively. But for other economically active household members, the average number of loans obtained by female members is higher than those of male members.

With respect to the amount of COFI loans, interestingly male CHH other household members obtained loans that were on the average 106.6 percent higher than those of female CHH other members. However, focusing on the currently active household members, the loans obtained by other economically active female household members are on the average 49.6 percent higher than those of male other economically active household members.

The average loan maturity and annual interest rate were 15 months and 21 percent respectively, for all other household members, and 17 months and 16.5 percent, for other economically active household members. Meanwhile, for both male and female CHH other members, the salary of the members serves as the main collateral in obtaining a loan.

#### IV. The Case of Dual and Multiple Earner Households: An Extension

This section is an extension of the discussion above by focusing on the case of multiple earner households. In order to do so, the households were classified based on the number of economically active members. This approach is expected to provide a clearer picture on the position of the household members in expanding the pool of income earners within the households.

Focusing in all<sup>4</sup> economically active members of the households (**table 10**), dual-income households account for about half of the total households at 49.2 percent. This is followed by households with multiple-income earners at 24.8 percent while households with single-income earner at 23.6 percent and the rest comprised of households without reported economically active members at 2.4 percent. It can be noted from the table that there are few households that depend on single-income earners and thus, the participation of members in income-generating activities for the households is very apparent.

**Table 10. Distribution of All Economically Active Members\***  
By Household Types  
In percent

Household Type	Clients			Non-Clients			Grand Total
	MHH	FHH	Total	MHH	FHH	Total	
None	0.75	6.67	1.83	2.99	3.23	2.99	2.42
Single-earner Households	20.30	46.67	25.61	19.40	25.81	21.56	23.56
Dual-earner Households	54.14	26.67	48.78	53.73	35.48	49.70	49.24
Multiple-earner Households	24.81	20.00	23.78	23.88	35.48	25.75	24.77

\* Include household heads and other household members

Furthermore, disaggregating the data on the household earners, the proportion of dual-income households that account for the highest category of earners for NCHHs is slightly higher than the CHHs at 49.7 percent and 48.8 percent,

<sup>4</sup> It is important to note that in this case, all household members include the household heads and the other household members who are economically active. There are few cases of households however with heads who are not economically active.



respectively. This is also true for the number of multiple-earners: 25.8 percent for NCHHs and 23.8 percent for CHHs. With respect to single-income households, CHHs have 25.6 percent while NCHHs have only 21.6 percent.

Among the CHHs, male-headed households (MHHs) have a higher proportion of dual-income households than female-headed households (FHHs) at 54.1 percent and 26.7 percent, respectively. Meanwhile, FHHs have higher proportion of single-income households at 46.7 percent than MHHs at 20.3 percent. Multiple-earner households comprised of 24.8 percent and 20 percent for MHHs and FHHs, respectively. For NCHHs, MHHs have 53.7 percent dual-earners, 23.9 percent multiple-earners and 19.4 percent single-earners while FHHs have 35.5 percent dual-earners and multiple-earners and 25.8 percent single-earners.

In terms of the distribution of these economically active household members by region, **table 11** shows that Iloilo of Region 6 has the highest proportion of single-earner households at 23 percent and this is followed by Albay of Region 5 at 20.7 percent. Misamis Oriental of Region 10 has the highest proportion of dual-earner households at 18.4 percent and this is followed by Iloilo and Davao of Region 11 at 17.8 percent. Meanwhile, Leyte of Region 8 has the highest proportion of multiple-earner households at 26.8 percent.

**Table 11. Distribution of Economically Active Members  
By Province  
In percent**

Province	Single-earner	Dual-earner	Multiple-earner
Albay	20.69	14.11	12.20
Pangasinan	19.54	16.56	10.98
Leyte	10.34	15.34	26.83
Iloilo	22.99	17.79	15.85
Misamis Oriental	12.64	18.40	17.07
Davao	13.79	17.79	17.07

## V. Econometric Analyses

Aside from the descriptive analyses in investigating the role of other economically active household members, this section provides econometric analyses. First, to determine if other economically active household members are among the factors that would affect poverty, a linear regression particularly an earnings equation is employed. The effects of explanatory variables on income are interpreted as to have the opposite effects on poverty.

**Table 12** presents the definitions of the variables included in the linear regression model with their descriptive statistics. It is to be noted that the unit of analysis is the household since there are no information on individual allocations or individual incomes. Although consumption-based poverty measures are generally more stable than those of income (Lipton and Ravallion 1995 cited by Baulch, et. al 1998), this paper employed an income-based definition of poverty for this analysis due to data constraint.

The dependent variable is the natural logarithm of the households' total real annual income while the explanatory variables consist of the characteristics of the other economically active household members. To further investigate the matter at hand, different employment status and employment sector/workplace of these other economically active household members are considered.

The results of the regression are presented in **table 13**. The estimated coefficients show statistically significant positive effects of the number of other economically active household members, their educational attainment and age on the households' total income. As expected, households' income increases as the number of economically active members increases, other variables being equal. Also, the contribution of the other economically active household members to the household's total income increases as the level of their educational attainment increases and as they become older. On the other hand, it can be noted that the

gender of these members has no significant effect on the households' total income.

**Table 12. Definition of Variables and Their Characteristics**

Definition	Variable Name	Mean	Std. Dev.
Total Households real income in pesos, deflated by the 2001 Consumer Price Index (1994=100) and expressed in natural logarithm	lnrealinc	7.062	0.829
<b>Characteristics of Other Economically Active Household Members</b>			
Number, expressed in natural logarithm	lnactivm	0.381	0.493
Gender (1=Male; 0=Female)	sexactm	0.221	0.415
Education in years	educactmem	13.088	2.787
Age in years	ageactmem	35.801	12.355
<b>Employment status</b>			
Employer	employerm	0.006	0.080
Employee	employeem	0.176	0.381
Own-account worker	ownacctm	0.041	0.199
Unpaid family worker	unpaidm	0.010	0.101
Member of producers' cooperative	coopm	0.000	0.000
Contributing family member	contrim	0.009	0.094
<b>Employment sector/Workplace</b>			
Family owned agricultural business	wpagrim	0.008	0.091
Family owned non-agricultural business	wpnonagrim	0.031	0.173
Other agricultural business	wpothagrim	0.006	0.076
Other non-agricultural business	wpothrnonagrim	0.146	0.353
Others	wpothem	0.035	0.183

With respect to employment status, only the variable for employee has a positive effect on the households' total income. Meanwhile, for the employment sector of these other economically active household members, only the variable for family owned agricultural business is statistically significant but indicates a negative effect on the households' total income. This may suggest that maintaining a family agricultural business is costly or the contributing economically active other household members may not be receiving adequate compensation given that these members are working for the family business. This concern needs to be further investigated.

**Table 13. Estimated Coefficients of the OLS Regression**

<b>Explanatory Variable</b>	<b>Coeffecient</b>	<b>P-value</b>
Constant	5.708	0.000
<b>Lnactivm</b>	<b>0.299</b>	<b>0.000*</b>
Sexactm	(0.120)	0.209
<b>Educactmem</b>	<b>0.052</b>	<b>0.001*</b>
<b>Ageactmem</b>	<b>0.007</b>	<b>0.028*</b>
Employerm	0.449	0.123
<b>Employeeem</b>	<b>0.464</b>	<b>0.016*</b>
Ownacctm	(0.108)	0.610
Unpaidm	0.156	0.551
Contrim	0.280	0.277
<b>Wpagrim</b>	<b>(0.511)</b>	<b>0.041*</b>
Wpnonagrim	(0.103)	0.546
Wpothagrim	(0.496)	0.074
Wpothronagrim	0.069	0.619
Wpothrm	0.180	0.262

*\*Significant at 5% confidence level*

Further, a series of regressions are done to address the issue of endogeneity, which is when variables are determined within the model and therefore are correlated with the error term. In doing so, this would establish if including certain groups of variables have effects on the relationship between the economically active other household members and income. However, the results from this exercise show the same results as above.

However, caution must be exercised in making further interpretations of the results. The data used in this study is cross-sectional which means that the date set was taken at one point in time and therefore, does not reflect changes over time implying that it is difficult to determine which way causality flows. Resolving this issue is interesting and can be included for future direction of research.

Meanwhile a logit analysis<sup>5</sup> was also conducted to determine whether other economically active household members and their characteristics have effects on being poor and non-poor of the households. More specifically, the dependent variable is one for poor households and zero for non-poor households. Poor households are households that have per capita income below the designated poverty threshold of PhP14,841.00, which was computed based on the poverty thresholds of all the regions included in the survey.<sup>6</sup>

**Table 14** presents the results of the logit analysis using attributes of other economically active household members and their employment status. It can be noted that variable for the number of other economically active household members has no significant effect on the households' poor or non-poor status. Meanwhile, the educational attainment of the other economically active household members explains the difference between the poor and non-poor households implying that that a household is more likely to be non-poor if its other economically active household members' level of educational attainment increases.

<b>Table 14. Results of Logit Analysis</b>		
<b>Poor=1; Non-Poor=0</b>		
<b>Variable</b>	<b>Coefficient</b>	<b>P-value</b>
Constant	1.289	0.236
Activm	(0.013)	0.938
<b>Sexactm</b>	<b>0.816</b>	<b>0.037*</b>
<b>Educactmem</b>	<b>(0.146)</b>	<b>0.019*</b>
<b>Ageactmem</b>	<b>(0.034)</b>	<b>0.019*</b>
Employerm	(1.106)	0.073
Ownacctm	0.820	0.187
Unpaidm	0.413	0.603
Contrim	0.194	0.816

*\*Significant at 5% confidence level*

<sup>5</sup> It is to note that in a logit model, opposite signs for the estimated coefficients are generated compared to the estimated coefficients from the earnings regression equation (Bardhan 1985).

<sup>6</sup> The designated poverty threshold is the average of all the urban poverty thresholds in 2000 of the regions included in the survey adjusted by the inflation rates for 2001 and 2002. See Lamberte and Manlagrit (2003) for a more detailed discussion.

This suggests that a higher education level implies a more remunerative profession and thus, less vulnerability to employment and income shocks. In addition, the age of the other economically active household members, which is a proxy for experience and hence, most likely to earn more, reduces the probability of the household being poor.

On the other hand, the gender of the other economically active household members has positive effect on the poverty status of the household suggesting that a household with more other economically active male household members is more likely to be poor. This is understandable since on the basis of the gross income, households with more other economically active female household members have higher gross income than households with more male economically active other household members by 2 percent. It could also be that male household members contribute less of their income to household income while female members readily contribute more of their income to household income, an observation usually given by sociologists.

It is interesting to note that from the same analysis conducted incorporating the employment sector of these economically active other house, the variable for family owned agricultural business increases the probability of the household being poor.

As a whole, the results of both analyses indicate congruence with generally accepted theory on poverty, that is, the number of economically active other household members, their education, age as proxy to experience, employment status contribute to the income generation of a household and therefore, has a positive effect in reducing the probability of a household being poor, that is, a household is more likely to be non-poor if it has a greater number of other economically active household members.

## **VI. Concluding Remarks**

This paper has aimed at providing a clearer picture of the contribution of other household members who are economically active in alleviating household poverty by particularly focusing on their role in household income generation. It was evident that additional other economically active household members expand the pool of income earners in the households. This points to the significance of mobilizing additional household labor in the reduction of dependence on a single source of income in the household.

From these results, it is suggested that the benefits received by other household members who are economically active and with access to the COFI system and other credit markets will surely have a positive effect on the household's welfare. A more rigorous and systematic analysis on this aspect is needed for future research.

More particularly, the results from the regression analysis further enhance the results from descriptive analyses on the survey results. It was shown that the number of other economically active household members, their educational attainment and age which is a proxy for experience are statistically significant and have positive effects on the level of the total earnings of the households. The effects of these explanatory variables to the households' total income are interpreted as to have the opposite effects on poverty.

Meanwhile the results of the logit analysis show that except for the number of other economically active household members, their characteristics such as educational attainment, gender and age are statistically significant in explaining the difference between poor and non-poor households.

However, it is worth emphasizing that poverty status regressions and in this study, an earnings equation for OLS and logit analysis, may provide an insight on the objective of this paper. But for anti-poverty policies, it is necessary to explore on

the dynamics of poverty in order to be more comprehensive, that is, dealing with both the causes of poverty in general and the movements in and out of poverty in particular.

On the other hand, there are significant factors affecting the way households respond to the broader economic and social changes and these include among others, the stage of the family/domestic cycle, and therefore the number of members and potential contributors to the household economy (Gonzalez de la Rocha undated). The dependence on one source of income of a household increases its chances of becoming more susceptible to poverty in the face of changing environment. The study of Gonzalez de la Rocha (undated) particularly noted that households with single-income earners are associated with greater vulnerability and this suggests the significance of having different sources to draw incomes from.

This suggests that having additional currently working and other economically active members in the households aside from the household heads gets more cooperation from each other and thus, get more out of their household incomes than would be possible if household heads operated as single earner households. Thus, the contribution of other household members particularly of the economically active in the households plays a significant role in the maintenance and survival of many households in the Philippines.

The usual emphasis of analyses of household-focused studies is on the relationship between headship and poverty. This paper, however, suggests that for policy consideration, there is a need to expand the area of concern in dealing with households by examining the role of other members in the households. More often than not, these members are disregarded even though they have a vital role in the households' survival. This points to another significant concern, that is, re-examining the existing policies designed to alleviate poverty at the household level in order to make them more relevant and effective in addressing poverty at the household level. This suggestion then implies the need to broaden the way



poverty is understood and measured where headship should not only serve as a basis of policy measures but also giving consideration to the other household members.

Access to microfinance could offer new employment opportunities for other economically active members of poor families and therefore, can provide a secondary source of income for the household. At the same time, it also indicated that employment opportunities available to female members of the household would likely increase the household income. Filling the gap on this particular household issue on microfinance is critical to improve particularly the understanding on this growing market. To fully understand the effect of the microfinance market at the household level, there is a need to simultaneously consider the micro conditions of the households as well as the dynamics at the macro level.

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