



EFFECTS OF DOMESTIC REMITTANCE ON EXPENDITURE PATTERN OF RURAL HOUSEHOLDS IN SOUTH-WESTERN NIGERIA

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ABSTRACT

This study assessed the channels, utilization and effect of domestic remittances on expenditure shares of rural households in Ogun and Osun States South-West Nigeria. A multistage sampling procedure was used to select 482 rural households. A structured questionnaire was used to obtain primary data from the respondents. Data were analysed using descriptive statistics and Heckman regression model. Findings revealed that 56.2% of the household heads were male, 67.4% were married, 42.3% had primary education and 58.2% received domestic remittances with a mean age and household size of 54.8 years and 5 persons respectively. Most (57.0%) of the respondents received an average cash remittance of \(\mathbb{H}23\), 278.21 per month, 49.0% received quarterly remittances and 69.0% received remittances through personal delivery. Remittance utilization was mainly on household farm investments (27.0%), housing (17.1%), education (13.8%) and health (12.5%). The Probit result of the first stage of the Heckman model showed that access to remittance will increase the probability of the rural households to increase expenditure on education (p > 0.01), health (p > 0.01), farm investment (p > 0.01), housing (p > 0.05) and clothing (p > 0.05), but will decrease the budget share allocated to food (p > 0.01), while the second stage of the Heckman model revealed that increase in the proportion of remittance would increase expenditure on health $(\beta = 0.090, p < 0.01)$, farm investment $(\beta = 0.062, p < 0.05)$ and education $(\beta = 0.052, p < 0.01)$. In conclusion, remittances increased rural household expenditure on education, health and farm investment in the study area. The study recommended that continuous flow of remittances into rural households should be enhanced such that internal migrants should continue to remit back home in order to facilitate further positive effects on human capital development in the study areas.

Keywords: Remittance, Expenditure, Heckman Regression, Rural Households

INTRODUCTION

Remittances, as a source of income are referred to as unrequited transfer sent by migrant workers back to relatives in their countries of origin (Ratha, 2007). Remittances (both international and internal often called domestic) are defined as person-to-person transfers of resources (both money and in-kind) sent by migrant workers to other members of the households. (Plaza et. al., 2011).

Remittances are well targeted to the needs of the recipients, who are often poor, and do not typically suffer from the government problems that are associated with official aid flows. As reported by Dilip and Sanket (2008), remittances are personal flows from migrants to their families and friends. Remittances (both international and internal) are defined as person-to-person transfers of resources (both money and in-kind) sent by migrant workers and others (McKay and Deshingkar, 2014). Remittances can be in form of money, assets or informal or non-monetary forms. Non-monetary forms include clothing, medicine, gifts, tools and equipment. Remittances can form a "family welfare system" that can help to smooth consumption, alleviate liquidity constraints and provide a form of mutual assistance (Orozco et al., 2005). There is evidence that remittances alleviates poverty at household level in some countries by helping to fund schooling, reduce child labour, increase family health and expand durable ownership (World Bank, 2006).

In the 2014 survey on Access to Financial Services in Nigeria, it was reported that 26.3 million adults (28.1 percent of the 93.5 million adults) received money from family/friends within Nigeria, 17.5 million adults (18.7 percent) sent money to family/friends within Nigeria

and 10.4 million adults (11.1percent) both sent money to and received money from family/friends within Nigeria. (EFInA, 2014). The survey also revealed that 50.7percent (13.3 million) of the 26.3 million adults that reported having received money from within Nigeria were female while 49.3percent (13.0 million) were male. Furthermore, about 8.1 million (30.8percent) were between 18 and 25 years of age, 14.1 million (53.7percent) resided in rural areas compared to 12.2 million (46.3percent) that resided in urban areas (EFInA, 2014)

Theoretical models for analyzing remittances include, classical theory, neoclassical theory, structuralist and dependency theories, neo-marxist theory, new economics of labour migration and livelihood approach theory, social network theory and theories of motives for migrant's remittance these models are required to provide a theoretical underpinning for the study with emphasis on the theory of Pure Altruism (Englama, 2009)

Remittances have been recognized as an important driver of the economy of most developing countries. It plays vital roles in poverty reduction, income redistribution and economic development, especially in rural areas. In Nigeria, as in most developing countries, remittances form a large part of the income of rural households (Akay et al, 2012; Olowa, et. al., 2013). Remittances are believed to have huge impact on the socio-economic conditions of families (Babatunde and Martinetti, 2010). Econometric analysis and household surveys suggest that unrecorded flows through informal channels may add 50 percent or more to recorded flows (Ratha, 2005). Including these unrecorded flows means that remittances are larger than foreign direct investment flows and more than twice as large as official aid received by developing countries, as

reported by Ratha (2005). Remittances are seen to be more significant in low income countries and is one of the least volatile sources of foreign exchange earnings for developing countries during the 1990s (Ratha 2005, World Bank, 2008). Globally, remittances have been reported to have overtaken income from agriculture in sheer size and importance (Deshingkar and Anderson, 2004), as persistent socio-economic and structural problems continue to depress the level of rural wages and availability of work (Deshingkar and Anderson, 2004). Remittances are received under imperfect information, uncertainty and with different regularity (Seshan, 2012; Chami et al., 2005); therefore households' remittance perception is not straightforward. Although poverty implications remittances have been analyzed in different developing countries, relatively little is known about the its effect on household expenditure share among rural households.

Studies (Olowa, et. al., (2013), Babatunde and Martinetti, 2010) on impact of remittances on household expenditure in Nigeria have focused more on household housing investments in Eastern part of Nigeria (Osili, 2004) but did not address the other categories of expenditure and the peculiarities of the rural sector. It may be interesting to see as well whether households receiving remittances make unnecessary spending such as vices and luxuries or invest them in education, housing and health, however no recent studies in this area has included these expenditure categories in research. To bridge this gap, this study attempted answering the following research questions: what are the channels and forms of domestic remittances received by the rural households and what is the effect of domestic

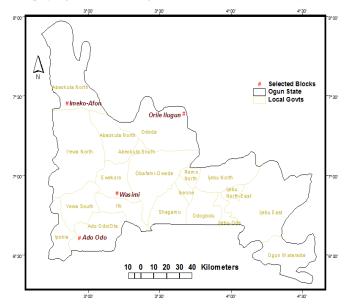
remittance on rural household expenditure pattern in the study area? Specifically, the study aims to identify and describe the channels and utilization of domestic remittances received by the rural households, as well as, examine the effect of domestic remittances on expenditure pattern of the rural households.

MATERIALS AND METHODS

The study was carried out in South-west, Nigeria using Ogun and Osun States, Nigeria as representative sample of the South-west geopolitical zone of Nigeria. Ogun State is located within latitudes 3°30'N - 4°30'N and longitudes 6°30'E- 7°30'E. The State is bounded in the west by the Republic of Benin, in the south by Lagos State and the Atlantic Ocean, in the East by Ondo State and in the North by Oyo State. The State covers a land area of 16,762 square kilometer with a male population of 1,847,243 and a female population of 1,880,855 making a total population of 3,728,098 (NPC, 2006), while Osun State is landlocked and occupies 9,251 square kilometres. Osun State shares borders Kwara State to the North, Ovo State to the West, Ogun State to the South and Ondo and Ekiti States to the East. The coordinates of the State is located within latitudes 7°30'N 4°30'E and longitudes 7.500°N 4.500°E. It has a land area of 8,882 square kilometer, with a total population of 4,137,627, consisting of 1,740,619 males and 1,682,916 females (NPC, 2006). The primary occupation of the people in the two States were farming, handcraft, trading, hunting and paid employment according to the Ogun and Osun State Agricultural Development Programmes (OGADEP and OSADEP).

Figure 1:

Map of Ogun State showing the selected blocks in the study area.



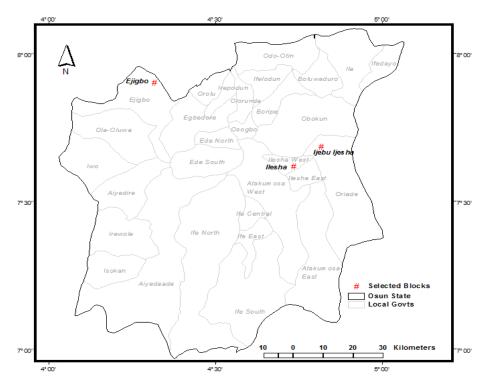


Figure 2: Map of Osun State showing the selected blocks in the study area.

Sampling procedure and Sample size and Method of Data Collection,

Multistage sampling procedure was adopted in this study. The first stage involved the random selection of Ogun and Osun States in the South-West zone in Nigeria. At stage two, simple random sampling technique was used to select two ADP zones each from the four and three OGADEP and OSADEP zones in Ogun and Osun States respectively. The sampled zones are Ilaro and Abeokuta (Ogun State), as well as Ife-Ijesha and Iwo (Osun State). At stage 3, four blocks were randomly selected from Ogun and three blocks from Osun, to capture 50 percent of each zone this gave a total of

seven blocks. The fourth stage also involved a simple random selection of four cells each in Ogun and Osun from the randomly selected blocks. The final stage involved a simple random sampling of ten and fifteen households from each of the selected cells in Ogun and Osun respectively. In all, a total of six hundred and eighty (680) households were sampled (320 in Ogun and 360 in Osun) but responses from only four hundred and eight two (482) respondents were valid for the data analysis for this study (giving a 70.9percent response rate). Primary data collected from selected households was used for this study.

Table 1: Distribution of Respondents by Selected Agricultural zones in Ogun and Osun States.

States/ADP Zones	ADP Zones Selected Selected Blocks Cells		Targeted Households	Final number obtained
Ogun State				
Ilaro	Imeko	Aiyetoro, Idofa	80	55
	Ado-Odo	Ilaro, Iwoye	80	57
Abeokuta	Ilugun	Ilugun, Osiele	80	60
	Wasimi	Wasimi, Arigbajo	80	51
Sub-total			320	223
Osun State				
Iwo	Ejigbo	Labo, Ago-Ireti	120	79
Ife/Ijesha	Ilesa	Igangan	120	83
	Ijebu-jesha	Era	120	97
Sub-total			360	259
TOTAL			680	482

Method of Data Analysis

The analytical tools employed for this study include Descriptive Statistics and Heckman Regression Model. The Heckman (1976) two-step estimator, also known simply as h₅ = Expenditure share on Housing (ratio) the Heckman was adopted for this study. In the first step, a Probit expressed in equation 1 is estimated for participation in each expenditure category as follows:

$$P*_{hi} = f(\delta'X_h) + u_{hi}....(1)$$
where:

P_{hi}= 0 if P_{hi}*
$$\frac{e_{hi}}{E_h} \le 0$$

P_{hi}= 1 if P_{hi}* $\frac{e_{hi}}{E_h} > 0$

In equation 1, Phi is the latent variable governing the decision of a household participating in expenditure on good i. That is the dependent variable in each Probit is equal to 1 if ehi>0 and zero otherwise; Xhis a vector containing E_h , Z_h and R_h ; δ is a vector of parameters to be estimated. The Probit model is then used to calculate a set of Inverse-Mills ratios as Stated for equation 2:

$$IMR_{hi} = \phi(\delta'X_h) / \Phi(\delta'X_h)(2)$$
 where:

IMR_{hi} denotes inverse mills ratio

 $\phi(\delta'X_h)$ denotes the standard normal density function $\Phi(\delta'X_h)$ represents the cumulative distribution function.

In the second step, the Inverse-Mills ratios are included as right-hand-side variables in the corresponding expenditure equations to correct for self-selection bias. In this second stage, the key dummies (such as remittance-receiving) in vector Rh is replaced with the key variables (such as remittance) included as shares in total income. Thus, this system of equations has the form:

$$\frac{e_{hi}}{E_h} = \alpha_i + \beta_{1i}X_h + \beta_2R_{hr} + \beta_{4i}IMR_{3i} + u_{hi}$$
.....(3)

where:

 $\frac{e_{hi}}{r}$ the share of household's expenditure on good i,(h_{il}- E_h

 h_1 = Expenditure share on Education (ratio)

 h_2 = Expenditure share on Health (ratio)

 h_3 = Expenditure share on Food (ratio)

 h_4 = Expenditure share on Farm investment (ratio)

 h_6 = Expenditure share on Clothing (ratio)

 h_7 = Expenditure share on Others (ratio)

 X_h = Independent variables (Socio-economic variables i.e.

 $X_1, X_2, X_3 ... X_n$:-

 $X_1 =$ Age of the household head (years).

 X_2 = Age Squared of the household head (years).

 $X_3 =$ Marital status of the household head ($X_3 = 1$ If married, 0 if otherwise).

 $X_4 = Sex$ of household heads ($X_4 = 1$ if Male, 0 if otherwise).

 X_5 = Household size (number of persons).

 X_6 = Education level of household head (years).

 $X_7 = Farm size (hectares).$

 $X_9 = \text{Remittance access } (X_9 = 1 \text{ if yes, } 0 \text{ if otherwise})$

 X_{10} = Distance to nearest food market (Km)

 X_{11} = Distance to modern clinic (Km)

 X_{12} = Access to motorable road (X_{12} = 1 if yes, 0 if otherwise)

 $X_{13} = Off$ -farm participation ($X_{13} = 1$ if yes, 0 if otherwise)

 X_{14} = Rearing of small livestock asset (X_{14} = 1 if yes, 0 if otherwise)

 $R_{hr} = Remittance Income (N).$

 $\frac{e*hi}{r}$ = as previously defined.

 $i = 1, 2, 3, \ldots, 7.$

In this second stage, the remittance-receiving dummies in vector R_h, is replaced with the remittance variables included as shares in total income. The set of equations were estimated using two-step estimator following Shonkwiler and Yen (1999).

RESULTS AND DISCUSSIONS

Table 2 shows the distribution of the respondents according to their remittance categories, which revealed that 58.3 percent of the total households were remittance receiving households (RRHHS), while 41.7 percent were not receiving any form of domestic remittances (NRHHS). In Ogun State, 62.4 percent of the households were receiving remittances, while 58.3 percent of the households were recipients of domestic remittances.

Table 2: Distribution of Respondents by Remittance Receipt

Category	Ogun State		Osui	1 State	Pooled		
	Freq.	percent	Freq.	percent	Freq.	Percent	
RRHHS	139	62.4	142	54.8	281	58.3	
NRHHS	84	37.6	117	45.2	201	41.7	
TOTAL	223	100.0	259	100.0	482	100.0	

Note: RRHHS = Remittance Receiving Households NRHHS = Non-Remittance Receiving Households

The result on Table 3 shows the distribution of the average monthly remittance income received by the rural households. It was observed that over half (54.2 percent) of the households received between \$\frac{\textbf{N}}{20,001} - \frac{\textbf{N}}{30,000}\$,

while as low as 2.87 percent received between N30,001 – ₩40,000 in Ogun State and 3.52 percent of the rural households in Osun State received below ¥10,000 as their remittance

Table 3: Distribution of Respondents by Remittance Recipients

Average monthly Remittance received (N)	Ogun State		Osun	State	All Households		
	Freq	percent	Freq	percent	Freq	percent	
< 10,000	10	7.19	5	3.52	15	5.4	
10,001 – 20,000	35	25.17	40	28.17	75	26.7	
20,001 – 30,000	75	53.79	77	53.23	152	54.2	
30,001 – 40,000	4	2.87	10	7.04	14	4.9	
> 40,000	15	10.79	10	7.04	25	8.8	
Total	139	100	142	100	281	100	

Further findings from the study area revealed that over half (55.5percent) of the respondents were male (56.2percent), within the age range of 51- 60 years (55.4percent),

42.2 percent had completed primary school, 67.0 percent were married, with mean household and farm sizes as 5.0 persons and 0.89 ha respectively (Table 4).

Table 4: Distribution of Respondents by General Household characteristics

Household characteristics	Ogun	State	Osun	State	Pooled	
Trousenord endructer issues	Freq.	Percent	Freq.	Percent	Freq.	Percent
Age (years) (Mean $= 54.8$)						
30 - 40	13	5.8	7	2.7	20	4.1
41 - 50	62	27.8	47	18.1	109	22.6
51 -60	117	52.5	150	57.9	267	55.4
61 - 70	30	13.5	52	20.1	82	17.0
71 and above	1	0.4	3	1.2	4	0.8
Educational level (years)						
No Formal education	14	6.3	35	13.7	49	10.2
Primary school (uncompleted)	12	5.4	17	6.6	29	6.0
Primary school (completed)	99	44.3	105	41.0	204	42.2
Secondary school	72	32.3	48	18.8	120	24.8
Vocational training	26	11.7	54	19.9	80	16.5
Sex of household head						
Male	128	57.4	143	55.2	271	56.2
Female	95	42.6	116	44.8	211	43.8
Marital Status						
Married	129	57.9	196	75.7	325	67.0
Separated/Divorced	87	39.0	59	22.8	146	30.2
Widowed	7	3.1	4	1.5	11	2.8
Married	129	57.9	196	75.7	325	67.0
Farm size (Ha) (Mean = 0.89)						
<1.0	127	57.0	209	81.0	336	69.7
1.0 - 2.0	90	40.4	40	15.0	130	27.0
2.1 - 3.0	6	2.6	10	4.0	16	3.3
Household size						
1-4 persons	144	64.6	105	40.5	249	21.78
5-8 persons	77	34.5	145	56	222	30.08
Above 8 persons	2	0.9	9	3.5	11	1.87
Mean	4.08	-	5.01	-	5	-
Total	223	100.0	259	100.0	482	100.0

Channels through Which Remittances Are Received By the Rural Households.

Remittances were sent to the households through various channels to the study area. Majority (69.0percent) of the respondents received their remittances during visitation of the member living in another location to the household and 11.02percent through friends or relatives. (Table 5)

Table 5: Distribution of Households by Channels of Receipt of Remittances.

	Ogun State		Osui	ı State	All households		
Channels	Freq.	Percent	Freq.	Percent	Freq.	Percent	
Brought Back Home during visits	96	61.87	98	58.45	194	69.0	
Through Friends or Relatives	17	12.24	14	9.86	31	11.02	
Transfer to personal bank account	13	9.35	11	7.75	24	8.50	
Others	13	9.35	19	13.38	32	11.38	
TOTAL	139	100.0	142	100.0	281	100.0	

The results in (Table 6) show that domestic remittances received are put into diverse uses by the recipients. 26.6percent of remittances were used on farm investment, 17.0percent on housing, 13.9percent on education, 13.6percent on other uses and as low as 9.2percent and

7.2percent on clothing and food respectively. This implies that the major cash remittances received by the households were usually spent on their farm holdings to boost their farming enterprises.

Table 6: Distribution of Respondents According to Utilization of Remittances.

Uses	Og	Ogun State		un State	All Households		
	Freq.	Percentage	Freq.	Percentage	Freq.	Percentage	
Food	11	7.91	9	6.34	20	7.2	
Education	21	15.11	18	12.68	39	13.9	
Health	15	10.79	20	14.08	35	12.5	
Farm Investment	35	25.18	40	28.17	75	26.6	
Housing	21	15.11	27	19.01	48	17.0	
Clothing	16	11.51	10	7.04	26	9.2	
Others	20	14.39	18	12.68	38	13.6	
TOTAL	139	100.0	142	100.0	281	100.0	

Freq. = Frequency

Effect of Remittance on Expenditure Shares of Rural Households

The results of the first stage of the two step Heckman model which is the Probit regression are presented on Tables 7a - 7b, and the second stage results on Tables 8a-8b, for all the rural households. The Probit result revealed that access to remittance will increase the probability of the rural households to increase expenditure on education (p > 0.01), health (p > 0.01), farm investment (p > 0.01), housing (p > 0.05) and clothing (p > 0.05), but will decrease the budget share allocated to food (p > 0.01). This implies that the households will allocate more on education, health care, farming investments, housing and clothing whenever they receive remittances, but will not spend more on food, this may be due to the fact that 60.6 percent of the households are farmers, so they can afford to stick with their present food budget even with the receipt of remittances, but will give more attention to other basic necessities of life which include clothing, health care and shelter for an improved standard of living. (Table 7a) Furthermore, the result of the second stage of the Heckman model also revealed that with an increase in the proportion of remittance income into the households, there is also the likelihood for increased expenditure on education (p > 0.01), health (p > 0.01) and farm investment (p > 0.05), but will also decrease the share devoted to food. This goes to affirm the result of the first stage showing that remittance is of great importance in improving the standard of living of the rural households in terms of better human development, health care and increased farming investments. The significance of the Inverse Mills Ratio revealed that the model was corrected for selectivity bias due to lack of observations of that income share for nonparticipants (i.e non- remittance households), and as a result it would have been incorrect to estimate using OLS, which would have produced downward biased estimates. The result from this study corroborates studies such as Viet (2008) that revealed that receiving remittances had household income and increased remarkably, but decreased poverty only slightly for the remittance recipients. On education, Hanson and Woodruff (2003) found that remittances were associated with higher education attainment. Fajnzylber and Humberts (2007) showed that children from remittance recipient households are less likely to drop out from school, which they attribute to the relaxation of budget constraints affecting poor recipient households. Tabuga (2007) found out that with remittances, households allocated more on education, housing and durable goods, likewise Yang (2005) showed that there is a positive impact on potentially investment related to disbursement, particularly, education and on ownership of durable goods. On the health outcomes, Hildebrandt and Mckezie (2006) showed that migrant households have lower rates of infant mortality and higher birth rates and weights, as remittances were expended on improved health status of household members to ensure good and healthy living.

Table 7a: First Stage Probit result for all Households

Variables	Educat	ion	Health		Food		Farm Investment	
variables	Coeff.	t	Coeff.	t	Coeff.	t	Coeff.	t
Age	-0.012	1.08	0.145	0.45	0.133	0.51	0.013	0.41
Age Squared	-0.161**	-2.21	0.005*	1.99	-0.081	-1.50	-0.097**	-2.01
Marital status	0.147	0.551	0.549*	1.65	0.125**	2.13	0.885***	2.60
Sex	0.103**	2.13	0.109	1.33	0.019	0.64	0.107	0.21
Household size	-2.412***	-2.47	0.564**	2.02	1.131**	2.26	-1.434**	2.07
Education	0.863***	3.76	0.913	1.62	1.144	1.62	-0.031**	-2.02
Farm size	-1.547***	-3.45	-0.057**	-1.95	0.338	1.23	1.193***	2.69
Remittance access	0.970***	3.10	0.701***	4.23	-1.254***	-2.83	0.917***	3.80
Distance to modern clinic	-1.311**	-2.02	-0.089**	-1.99	0.915	1.52	0.743	0.125
Distance to market	1.802**	2.25	-2.716	-1.01	0.345*	1.73	0.012**	2.01
Access to motorable road	-0.052	-0.10	-1.657	-0.67	-0.103	0.67	0.041*	1.99
Off-farm participation	0.545**	2.00	0.703*	1.69	0.140	0.47	0.068	0.20
Rearing of small livestock	0.342***	2.65	1.414	1.62	1.329***	2.71	0.375	1.48
Constant	26.913	15.13	12.14	5.48	25.48	14.06	17.89	10.51
Pseudo R ²	0.301		0.335		0.405		0.463	
Obsv.	482		482		482		482	

^{***, **, *} coefficients are significant at 10percent, 5percent and 1percent respectively

Table 7b: First Stage Probit Result for all Households (Continued)

Variables	Hous	sing	Cloth	ing	Others	
variables	Coeff.	t	Coeff.	t	Coeff.	t
Age	-0.007	-0.14	0.376	1.50	-0.042	-0.22
Age Squared	-0.951*	-1.88	0.018	0.19	-0.203	-1.28
Marital status	0.104	0.12	0.093	0.22	0.004	0.06
Sex	0.357	0.57	0.017	0.09	0.128	1.20
Household size	0.010*	1.85	0.076**	2.21	0.372**	2.06
Education	0.385	1.47	0.035	0.35	-1.507	-3.60
Farm size	0.066	0.19	-0.841	0.90	-0.496	-3.22
Remittance access	0.095**	2.23	0.066**	2.19	0.171	0.65
Distance to modern clinic	-0.540	-1.40	0.016	1.18	-0.031	-0.20
Distance to market	0.345	1.60	0.884*	1.98	0.203	0.18
Access to motorable road	0.171	0.79	0.161	0.86	0.346	0.14
Off-farm participation	0.035	0.13	0.349	1.55	1.453	0.92
Rearing of small livestock	0.113	1.28	0.235	1.42	1.126*	1.98
Constant	12.45	7.49	21.13	9.34	29.04	10.07
Pseudo R ²	0.449		0.249		0.415	
Obvs.	482		482		482	

^{***, **, *} coefficients are significant at 10percent, 5percent and 1percent respectively

Table 8a: Stage 2 Heckman model Result for all Households

V. 4.11	Educa	tion	Heal	lth	th Food		Farm Inv	estment
Variables	Coeff.	t	Coeff.	t	Coeff.	t	Coeff.	t
Age	-0.475	-0.30	0.263	1.59	0.220	1.08	0.423	1.51
Age Squared	-0.015**	-2.00	0.112**	2.40	0.252***	2.95	-0.013	-0.72
Marital status	-1.442	-1.49	0.223	1.69	0.112**	2.35	0.167**	2.00
Sex	0.212**	2.03	-0.025	-0.30	0.359	1.45	1.035	1.39
Household size	-3.924**	2.55	2.115***	3.00	3.003**	2.11	-2.004**	-2.24
Education	1.220**	2.11	0.121**	2.12	0.157**	2.00	-0.093*	-1.99
Farm size	-0.285**	-2.05	-0.142	-1.62	-0.203**	-2.09	1.045**	2.00
Prop.Remt.Tot.Incm	0.052***	3.20	0.090***	3.15	-0.222**	-2.13	0.062**	2.35
Distance to modern clinic	0.081	0.100	-0.428**	-2.01	0.067	0.23	-0.042	-1.10
Distance to market	1.003	1.05	-0.435	-0.18	1.032**	2.15	-0.210*	-1.96
Access to motorable road	0.501	0.92	0.173*	1.79	0.027	0.09	0.360**	2.08
Off-farm participation	0.235**	2.00	0.695*	1.82	1.020*	1.75	0.275	0.33
Rearing of small livestock	0.121**	2.03	0.015	1.29	0.065**	2.25	1.200**	2.11
Inverse Mills ratio	-2.45**	2.25	-1.545**	2.01	-1.325***	-4.50	1.216***	2.90
Constant	13.681	5.76	11.16	9.36	8.73	3.44	15.06	4.79
Pseudo R ²	0.34		0.30		0.36		0.43	
Obsv.	281		281		281			

^{***, **, *} coefficients are significant at 10percent, 5percent and 1percent respectively

Table 8b: Stage 2 Heckman Model Result for all Households (Continued)

Variables	Housi	ng	Clothi	ng	Others	
v at lables	Coeff.	t	Coeff.	t	Coeff.	t
Age	0.095	0.23	0.034	0.17	-0.143	-0.19
Age Squared	-0.135**	2.10	0.896	0.95	0.010*	1.92
Marital status	0.283*	1.90	0.103	1.17	0.020**	2.00
Sex	0.515**	2.30	0.124*	1.84	-0.152	-0.35
Household size	1.215**	2.05	0.078**	2.20	0.032**	2.21
Education	-0.060	-0.52	-1.117*	-1.99	0.037*	1.96
Farm size	0.219	0.70	0.377	0.82	-0.033**	-2.14
Prop.Remt.Tot.Incm	0.015*	1.98	0.004*	1.92	1.102**	2.05
Distance to modern clinic	0.192	0.89	-0.045	-0.28	0.008	0.01
Distance to market	0.017	0.15	0.113**	2.05	0.218	0.16
Access to motorable road	0.032	0.12	0.207	0.33	0.327	0.71
Off-farm participation	0.012*	1.99	0.434	1.27	0.020*	1.97
Rearing of small livestock	0.025	0.17	0.079	0.19	0.512*	1.98
Inverse Mills Ratio	-5.236***	-3.15	-1.543**	-2.31	3.734***	3.01
Constant	11.236***	4.02	14.33***	3.14	13.143***	3.16
Pseudo R ²	0.30		0.38		0.49	
Obvs.	281		281		281	

^{***, **, *} coefficients are significant at 10percent, 5percent and 1percent respectively

CONCLUSION

From this study it can be concluded that utilization of domestic remittances are mainly to improve farm investment also that increase in the flow of domestic remittances will significantly increase the standard of living of the rural households in terms of allocating more to education, health, housing and clothing which are the basic essentials of life, hence the following recommendations are suggested; Remittances-receiving households should not over hinge on remittances by working less which may negatively affect the development of their own financial and economic resources, even though, it has been shown that remittances have positive effects on human capital development in the study area, likewise receiving households should diversify their investment options by using the higher share of their remittances on other income generating business activities other than farming, also households can as well save some portion of their remittances for future investments, and migrants should not relent in ensuring continuous flow of remittances to the rural households.

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