

Research Article

The Effect of Living in Rental House on the Household Welfare: Evidence from Ethiopian News Agency's Employees

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Abstract

This study used cross-sectional data from Ethiopian News Agency employees to examine the effect of living in a rental house on household welfare. The data were obtained from 134 households (67 of which were renters and 67 of which were owners). The households were classified as poor or non-poor based on the poverty line, which was established by the World Bank for household expenditure. Descriptive and binary logistic regression were employed in the study to assess the effects. The finding of the study demonstrated that the average monthly household food and nonfood expenditure per adult, possession of essential household material, consuming a variety of foods, and room occupancy status of a house renter are significantly low compared to house owner-employees. The probability of living below the poverty line is more than twice as high for renter households compared to homeowner households. 33% of the studied employees who are living in rented houses are considered to be living under poverty shelter. The result of the binary logistic regression also showed that living house, household size, and dependency ratio negatively affect the household welfare status, while marital status, age, income, and saving positively affect household welfare. The study suggests several recommendations for the government, including expanding the number of housing construction projects, providing subsidies to home builders, empowering mortgage banks for constructing public housing, and also enacting and implementing policy for setting and managing rental houses.

Keywords

House Rental Cost, Household Welfare, Poverty Status, Ethiopian News Agency

1. Introduction

One of the most fundamental human requirements, along with clothing and food, is a place to live. Providing for this fundamental human need has evolved into a worldwide issue that all nations, particularly metropolitan ones, must deal with. In Africa, the housing scarcity issue is also more severe.

The nationwide percentage of home ownership in Ethiopia

is 80%; however, there is a noticeable disparity between rural and urban areas. 95% in the rural and 39% in the urban. About 60% of households in large cities reside in rental houses, according to World Bank data from 2019. According to Kihato and Karuere's report from 2021, 54% of Ethiopian urban households reside in rented homes. The 2007 Census

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report states that in the capital city of Addis Ababa, this rate similarly decreased to 30% [24].

In all of Ethiopia's metropolitan areas, there is a significant discrepancy between the supply and demand of housing. Residents can no longer afford the residence as a result. It is true that rental prices and purchasing costs are rising more quickly in Ethiopia these days than household incomes. The large disparity and accelerating rise in house prices have a substantial impact on people's social and economic lives.

The mismatch between house demand and supply is also very critical in the capital Addis Ababa. According to the Ministry of Urban Development and Housing MUDH (2017) Addis Ababa, which constitutes 15 percent of the country's urban population, the city is experiencing an acute shortage of residential housing. The ministry data shows that there is lack of about 1.2 million houses and also the demand for housing increase by more than 50,000 per year due to high population growth in Addis Ababa. Data obtained from (CAHF 2021) also shows that 61 percent of Addis Ababa residents are living in different forms of rented houses. The rental house from private landlords has also the largest share which accounts for 57.5% [7].

These days, renting a home is becoming more and more expensive, which makes living there difficult for those who do. Rising housing rents are especially detrimental to low-income households. Renting a home can have detrimental effects on a household's privacy, health, and education in addition to its financial impact. Also Mekonen asserts that students who live in rental homes perform worse academically since their families move around a lot [22]. The empirical study conducted by Tunstall further demonstrated that the cost of housing rentals directly and significantly impacts household poverty and material deprivation [32]. Additionally, Welle investigated the effects of renting a home in Addis Ababa and discovered that poverty is higher for households living in rented houses than those living in their own house [37].

Even though the relationship between home ownership and household welfare has been the subject of few studies, little attention has been paid to how fixed-income earners, particularly civil servants, are affected financially because the cost of renting residential properties is rising faster than their incomes, particularly given the proportion of government employees who pay a sizable portion of their income. The well-being of the household is harmed by paying rent since it leaves less money for necessities like food, education, and healthcare. According to UN-Habitat, it is believed that household housing expenditure is considered affordable if it is not greater than 30% of the total income. Otherwise, the household is considered a shelter-poor household [35].

This study tried to examine the effects of living in a rental house on household welfare by taking Ethiopian News Agency employees as the case study. The topic is also selected purposively due to the severity of the housing problem in Ethiopian News Agency employees as part of the whole Addis Ababa and assessing such problem is important from

development perspectives [16].

2. Literature Review

The effects of population growth result from migration [3], insufficient residential house supply, the existence of many house and land brokers, and other factors both the rent price and purchasing house are unaffordable in Ethiopia. Selam and Abebe also strengthen this finding lack of sufficient and affordable housing is one of the major problems in Addis Ababa as well as in other cities and towns across the country [27].

Liu and Chang in terms of the impact of housing price on residents' consumption one view holds that housing price fluctuation is conducive to increases in residents' consumption [19]. Low-cost housing might prevent poverty and material deprivation, as housing costs have a significant and direct impact on poverty and material deprivation [32].

A study by examined that being living in rented house increase the probability of being poor and reduces income. Welle shown that the probability of households to fall into poverty is less by 10% for household that owned house relative to these household that have not owned house [37, 22].

According to McDonald there are three main ways in which housing affects health. The physical characteristics and quality of homes produce environmental effects that may result in health problems [23]. Unstable housing may affect access to health care and may also have mental health effects. High housing costs may affect how much the household spends on other essential items such as nutrition and health care, which may result in health problems. Moreover, considering the relationship between housing costs and health effects, they concluded that low-income households who incur high housing costs spend much less on food and health care as compared to equivalent low-income households with affordable housing. Strong evidence suggests that the average homeowner accumulates a significant portion of wealth in the form of housing equity.

Green and White found children of homeowners stay at school longer than the children of renters [14]. After controlling for income and length of tenure, the effect of homeownership was between 3-27% [5]. After controlling for parental income, education, family mobility, and neighborhood characteristics, found children of homeowners to be significantly more likely to achieve a higher level of education. Gorems assumes controlled for income and mobility and found children of homeowners were more likely to graduate from High School [15].

The idea of household welfare is somewhat vague, and in traditional economic research, it has been measured by a price index [12]; consumption seems to better capture the concept of standard of living. As clearly indicated by consumption is better reflected in welfare [10]. Dong concluded that a good measure of welfare is consumption [13]. According to World Bank, consumption expenditure is probably the most popular and preferred welfare indicator [42].

According to Kiduanga for measuring consumption there is a good guideline which may be considered when trying to construct an accurate measure of consumption. Consumption usually includes: food consumption, non-food items (including health, education and other non-food expenditures) [18]. Food consumption comprises food consumed inside the household from a variety of sources (food purchases, self-produced food, food received as gifts, remittances and payments in kind) and food consumed outside the household (restaurants etc.) [26].

Non-food items refer to education (such as tuition fees, textbooks, etc.), health (medical care and health expenses) and a wide range of other non-food expenses (such as domestic fuel and power, tobacco products, clothing and footwear, transport, recreation, personal care, miscellaneous goods and services).

According to World Bank Poverty is a complex occurrence that includes different dimensions of deprivation, such as incomes or expenditure of consumption, the insufficiency of goods and services. That is to say, can a person considered poor just evaluating his personal condition or evaluating in relation with other social characteristics in which he lives. An individual is considered poor if his expenditure level per capita is under the minimal level that is needed to fulfill his/her basic need for food and nonfood goods. This minimal level of consumption is differently called as the 'poverty line' and is a margin which represent the breaking point among poor and non-poor.

3. Data and Methodology

The study employed a cross-sectional survey research approach as the data is collected from employees of Ethiopian News Agency. Descriptive and explanatory research designs were also used in the study to characterize and explain the extent of employee rental house issues.

The study sample contains treated and control groups in which house renters are treated group and house owners are controlled group for comparison purposes. 140 samples were

determined using a formula developed by Kothari. The stratified random sampling technique was used for selecting 67 participants from treated and control groups. Using structured questionnaires, one person was interviewed for thirty to forty minutes in order to gather data. The data collected through the questionnaire was analyzed by using descriptive and inferential statistics [30].

The study variables

The study's dependent variable is the dichotomous measure of poverty status (incidence) among households. The theoretical money metric was also used to measure the status of consumption expenditures and to classify the participants as poor or non-poor. The international poverty line for 2022 which is set by World Bank at 2.15 USD per capita per day for developing world nations was determined by adding the total amount spent on food and non-food items, dividing the total household expenditure by the size of the household. This computation is predicated on the idea that every household member, regardless of gender or age, uses the same amount of reported spending. By this metric, anyone spending less than \$2.15 USD per day is deemed to be living in poverty [41].

The poverty threshold for the April 2023 study was converted to Ethiopian birr using the official exchange rate of 1\$ = 54.37 birr. Therefore, a household was considered impoverished if the monthly expenditure per adult was less than 3507 birr. So, the response of the variable is binary, taking two values, 1 if the household is no poor, 0 if poor. The probability of being poor depends on a set of variables x so that $\text{Prop}(y_i = 1) = F(\beta x)$ and $\text{Prop}(y_i = 0) = 1 - F(\beta x)$ Where F is the cumulative distribution function for the error term u_i .

Based on prior research findings relevant to the study and the circumstances surrounding the organization under study, the independent variables that were predicted to be associated with poverty status and used in binary logistic regression were chosen. Table 1 shows that the study encompassed a number of independent variables, including the gender, age, and marital status, size of the household, dependence ratio, education level, work experience, income, savings, and place of residence of the household head [26].

Table 1. Description of variables included in the study.

Variables	Type	Description	Expected Sign
Dependent Variable			
Poverty incidence	Binary	Poverty status; 0= poor, 1 =non-poor	
Independent variables			
Gender	Binary	0=Female, 1=Male	+/-
Age	Categorical	18-30 Yrs.	+/-
		30-40 Yrs.	
		41-50 Yrs.	

Variables	Type	Description	Expected Sign
		Above 51 Yrs.	
Marital status	Binary	0=if not married, 1=if married	-
Size of household	Continuous	Total number of members in HH	+
Dependency ratio	Continuous	The member of family who is not engaged in paid jobs	+
		High school & below	
		Certificate	
Education level	Categorical	Diploma/level	-
		First degree	
		Master degree and above	
		Less than one Yr.	
		2-4 Yrs. and below	
Work Experience	Categorical	5-7 Yrs.	+/-
		8-10 Yrs.	
		10 Yrs. and above	
Income	Continuous	The amount of money household earns	-
Saving	Continuous	It is the money set aside for future	+/-
Living House	Binary	0=for renters, 1=for owners	+/-

Source: Authors review based on empirical literature, 2024.

The study used binary logistic regression model to assess the effect of house rental on the household welfare the case of Ethiopian News Agency's employees. Binary logistic regression model is used when the dependent variable is dichotomous and the independent variables are either continuous or

categorical [15]. Therefore, the binary logistic regression model is expressed as follows to analyze the relationship among the variables.

Therefore, the binary logistic regression model is:

$$\text{Household Welfare} = \beta_0 + \beta_1 (\text{Gender}) + \beta_2 (\text{Age}) + \beta_3 (\text{Marital status}) + \beta_4 (\text{Household Size}) + \beta_5 (\text{Dependency Ratio}) + \beta_6 (\text{Education level}) + \beta_7 (\text{Work Experience}) + \beta_8 (\text{Income}) + \beta_9 (\text{Saving}) + \beta_{10} (\text{Living House}) + \dots + u_i$$

Household welfare refers the dependent variable which is poverty incidence (Being poor on non-poor) where β_i is set of coefficients that illustrate relation of poverty with independent variables, x_i is set of explanatory variables (determinants), u_i is the error term, and i represent households that run from 1 to n .

4. Results and Discussions

Descriptive Results

Following receipt of the interview schedule, 134 employees 67 from home owners and 67 from renters participated. The study's dependent variable (poverty status) has a significant correlation with the categorical variables Marital Status (0.014), Education (0.000), and Living House (0.015) based on the Chi-Square results. However, the study's dependent variable is not significantly correlated with the gender of the household head (0.315), age (0.85), or work experience

(0.766). However, since the p-value reported from a t test is less than 0.05, the independent-samples t-test result for continuous variables reveals that household size (.004), dependency ratio (.000), household income (.001), and saving (.046) are statistically significant relations with the dependent variable (poverty status) [9].

Household expenditure

In this section the household expenditure of the studied household was imputed by the participants and the researcher. To assess the whole household monthly expenditure first the participants were asked if their household consume self-produced food and Food and Non-Food item that their household consumed at the time of study in the form of gifts and estimating them to ETB. Next the daily expenses of household members for transportation, communication such as subscription fee for data and voice, Shoeshine, and Cigarettes were imputed. The weekly expenses of the household

were recalculated to include the meals (breakfast, lunch, supper, and snacks) and alcoholic and non-alcoholic beverages that will be eaten outside of the home. Teff, wheat flour, pasta products, bread and other prepared food, beans and peas,

vegetables, fruits, coffee, sugar, salt, oil, milk, meat, egg, baby foods, non-alcoholic beverages, and other foods were among the imputed monthly household expenses for food items. The imputed price was changed to ETB [2].

Table 2. Household expenditure.

Living House	Renters (No=67)		Owners (No=67)		t-value	Sig. (2-tailed)
	Mean	Std. Dev.	Mean	Std. Dev.		
Average HH monthly food expense	9166.57	4852.776	13809.32	6618.544	4.618	.000
Average HH monthly nonfood expenses	5588.46	4218.622	11167.83	7591.628	4.977	.000
Average Household Food and non-Food expense	14755.03	8212.368	24977.15	12324.829	5.697	.000
Average Monthly expenditure per adults	4974.55	2240.753	6196.51	2707.964	2.863	.005
The Probability of being Non Poor	0.69	0.467	0.86	0.346	2.481	.014

Source: Authors computation based on survey data, 2024.

Table 2 shows that there is a large disparity between the two household groups: the average monthly cost for food and non-food expenses for renters is 14,755.03 ETB, while the total monthly expenditure for homeowners is 24,977.15 ETB. The average monthly household cost per adult for a household renting a home is 4974.55 ETB, whereas for a household living in their own home it is 6196.51 ETB. According to the World

Bank 2022 cost of basic needs threshold 31% of households who are living in rented house are living under the threshold line while only 14% of household who are living in their own house are living under the threshold line. Compared to households living in their own home, renters have a more than twofold increased chance of being below the poverty line [8].

House material

Table 3. Summary statistics for house material.

House Material	Renters (No=67)	Owners (No=67)	t-value	Sig. (2-tailed)
	Mean	Mean		
Sofa set	0.60	0.92	4.742	.000
Television	0.84	0.98	3.083	.003
Fridge	0.55	0.89	4.720	.000
Stove	0.84	0.98	3.083	.003
Electric “mitad”	0.67	0.95	4.445	.000
Electric oven	0.24	0.59	4.381	.000
Washing machine	0.18	0.64	6.021	.000
Closet (kumsatin)	0.63	0.94	4.679	.000
Computer or tablet for household use	0.30	0.56	3.143	.002
Total	0.54	0.83	4.742	.000

Source: Authors computation based on survey data, 2024.

The phenomenon of household poverty is multifaceted, encompassing several aspects of deprivation such as earnings or consumption expenditures, as well as insufficient access to goods and services. According to Tunstall, Housing costs have a major and direct impact on poverty and material deprivation [33]. The study's participants were asked if their home had the nine items on the list a television, a refrigerator, a stove, an electric oven, a washing machine, and a closet (Cupboard) and tablet. The response value was denoted by 0 and 1 which is 1 for owned good and 0 for not owned.

Therefore, the household prosperity measure has a value between 0 and 1, where a greater value indicates a higher level of household well-being in terms of durable household items.

Table 3's descriptive statistics demonstrate that the average material deprivation of the households differs in a statistically significant way. According to the result, house renter owned lower house material with average material deprivation index 0.46, than households living in their own houses whose average material deprivation index is 0.17. This shows that the renter households have no more than half of the materials they asked in this study whereas households who are living in their own house owned about 83% of asked house materials. The findings showed that households who are living in rent house are significantly possessed less house material than those who are living in their own house [6].

Housing

Table 4. Basic infrastructure of living house.

Infrastructure	Renters (No=67)	Owners (No=67)	t-value	Sig. (2-tailed)
	Mean	Mean		
Private Kitchen	0.57	0.86	3.930	.000
Private shower/bath	0.38	0.65	3.148	.002
Private toilet	0.43	0.74	3.790	.000
The electric energy for cooking	0.83	0.95	2.322	.022

Source: Authors computation based on survey data, 2024.

According to UN Habitat, household welfare can be roughly equated with the degree of wellbeing associated with housing. Participants were asked if the living house has a separate kitchen, a private shower/bath and toilet, and electricity for cooking. These questions were based on this assumption, and the answers were marked with a 1 for owned and a 0 for not owned. Table 4 indicates having a private kitchen, private shower and toilet, and access to electricity for cooking; the study's findings indicated that 86% of studied households who live in their own house have a private kitchen for cooking, whereas nearly half of the studied households who live in rent have it [18].

A total of 62% of the households surveyed who are living in rented house have no private shower, whereas the lacking of private shower is just 35% for households who are living in their own house. The presence of a private toilet for household is one indicator of household living standard. Regarding having private toilet the study revealed that 43% for house renters have private toilet while 74% for households who are living in their own house. The percentage of home owner households who use electricity for cooking is comparatively high; in contrast, a larger number of renter households use traditional energy sources like wood and charcoal for cooking.

Table 5. Room occupancy.

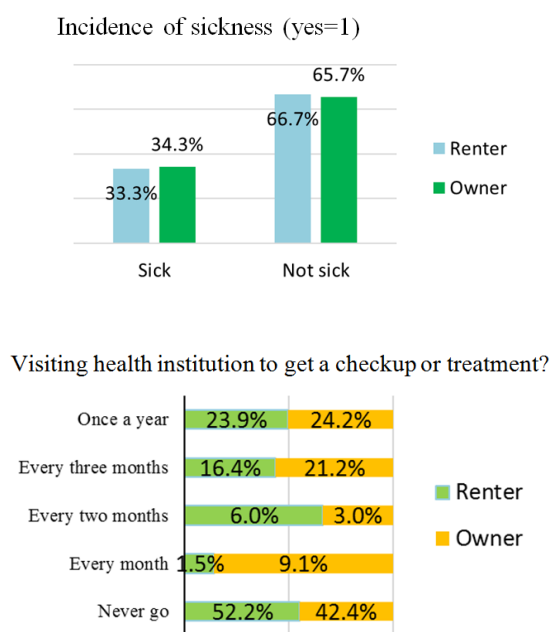
Living House		Renters (No=67)	Owners (No=67)	t-value	Sig. (2-tailed)
No. of rooms	Mean	1.88	3.02	4.969	.000
Under Occupied	%	7.50%	13.60%		
Adequately Occupied	%	53.70%	66.70%		
Overcrowded	%	38.80%	19.70%		

Source: Authors computation based on survey data, 2024.

Regarding the number of rooms, according to the UN recommendation occupancy of housing of less than 1 person per room was considered as under-occupied, 1 to 2.4 person per room as adequately occupied, and 2.5 or more person per room as overcrowded from the point of maintaining the health and private standards. As it is shown on Table 5 this survey also revealed that the average living room for house renter is 1.88 while the room for household who are living in their own house is 3.02 which is quite difference between the room number of living house for house owners and renters [36].

In terms of living rooms, occupancy of less than one person per room was deemed under-occupied, one to 2.4 persons per room as adequately occupied, and 2.5 or more persons per room as overcrowded from the perspective of upholding private and health standards, according to the UN recommendation [36]. The study showed that the average living room for a household living in rented house a home is 1.88 and 3.02 for household living in their own house. 26 (38.8%) households who are living in the rented house are living with the status of overcrowded occupancy of housing while twice less than these households who are living in their own house are living in overcrowded house occupancy status. The households who are living in the adequate occupied house status is 53% for house renter and 66.7% for house owner. From this it can be concluded that there is quite difference regarding the living room occupied by households between two groups [28].

Health of household



Source: Authors computation based on survey data, 2024.

Figure 1. Health of household.

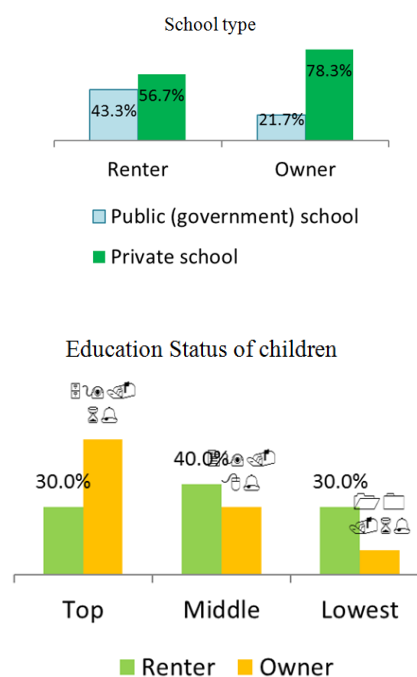
Health is the essence of human life and needs sustainable precaution in daily lives. According to Dawit a good housing

condition with adequate supply of basic facilities and services improve the health, mental and physical well-being of the individual [11]. Figure 1 indicates 22 (33.3%) household living in rented house reported at least one member their family had sick while 23 (34.3%) of household who are living in their own house reported the same incidence [34].

An equal amount of participants who are reported that their household members had sick during the study month also reported that they had gone to the health center/hospital to get medical help even though the amount of health cost they reported was different. In terms of household monthly cost for health household that are living in rented house spends birr 1084.67 monthly for health while households who are living in their own house also spends twice of households who are living in the rented house about 2119.00 ETB per month for health [25]. This can also implies that household who are living in their own house visits relatively a good health institution for health treatment than that of household who are living in rented house.

Regarding the frequency of visiting a health facility for medical treatment, Figure 1 on the right shows households who live in their own house visit at a different interval than households who live in rented house. Consequently, 52.2% of the households who are living in rented house stated that they have not visited a hospital in the past year, but 42.4% of the households who are living in their owned house stated that a family member has not visited a hospital for medical treatment. This indicates comparatively the households living in their own house visit health institution for health treatment than households who are living in rented house [38].

Education of households



Source: Authors computation based on survey data, 2024.

Figure 2. Education of households.

As per Figure 2, in terms of education the majority of households 78.3% who are living in their own house teach their children at private school for need of good education while 56.7% of the households who are living in rented house also teach their children at private school. Most of the participants who are teaching their children at government school prefer government school because of financial constraints. The average monthly education expense for households who are living in rented house is 1915.54 ETB whereas the household who are living in owned house expends 2575.27 ETB for their children education fees.

The majority (59.6%) respondents who are living in their own house stated that the education status of their children is top while 30% or twice less than that of household who are living in rented house replied as the education performance of their children is top. The result of the study showed that the education performances of house owner participants are high than that of house rented participants [15].

Table 6. Summary statistics of house rental cost and poverty status.

Measurements	Mean	Std. Dev.
House Rent Fees	6059.7	3482.513

Measurements	Mean	Std. Dev.
Shelter Poverty Status	0.67	0.473

Source: Authors computation based on survey data, 2024.

According to Table 6, the study's findings, households who are living in rented house spend a significant portion of their income on rent on average, 26.8% of their monthly income which is about in line with the international standard for affordable housing [21]. The monthly average house rent cost of a household living in a rented house is 6059.7 ETB.

UN-Habitat states that housing costs are deemed affordable if it do not exceed 30% of total income. If not, the household is considered a shelter-poor. 33% or one third of house renter participants are living under poverty shelter since they are paying more than 30% of their income for house rent. The other 10 (14.9%) participants who are living in rented houses are also paid between 25-29.9% of their income for house rent. It can be concluded that 47.8% of house renter participants are paying above 25% of their income [40].

Econometric analysis

Table 7. The output of the binary logistic regression Model.

Variables	Coefficient	Std. Err.	Z	P> z	Odds Ratio
A_1 18-30	-0.8910	0.7221	-1.2300	0.217	0.4103
A_2 31-40	0.5159	0.6771	0.7600	0.446	1.6752
A_3 41-50	0.1092	0.6974	0.1600	0.876	1.1154
Household size	-0.2685	0.1389	-1.9300	0.050**	0.7645
Dependency ratio	0.0930	1.1571	4.6000	.040**	-2.3780
ED_1 High school & below	-3.3322	0.9316	-3.5800	0.000**	0.3571
ED_3 Diploma/Level	-1.8971	0.9265	-2.0500	0.041**	0.1500
ED_4 First Degree	1.6520	0.7938	-2.0800	0.037**	0.1917
ED_5 Master's & above	2.185	0.759	2.5314	0.004**	8.889
W_E_2 2-4	-0.6931	0.9100	-0.7600	0.446	2.9756
W_E_3 5-7	-0.5108	0.6012	-0.8500	0.396	1.9494
W_E_4 8-10	-0.2879	0.5183	-0.5600	0.579	2.0711
MS_1 Married	1.7023	0.7640	2.2300	0.026**	5.4865
HH_1 Male	0.4387	0.4388	1.0000	0.317	0.4387
Income	0.0001	0.0000	4.2800	0.000**	1.0001
Saving	0.0006	0.0003	2.2100	0.027**	1.0006
LV1_1 Owner	-1.0617	0.4450	-2.3900	0.017**	2.8911
_cons	3.4330	0.2070	1.9170	0.000	1.2340

Variables	Coefficient	Std. Err.	Z	P> z	Odds Ratio
Log likelihood	17.7520				
LR chi2(12)	30.8200				
Prob> chi2	0.0000				
Pseudo R2	0.7924				

**, Statistically significant at 5% level of significance

Source: Authors computation based on survey data, 2024.

A statistical metric in a regression model called R-squared (also known as R² or the coefficient of determination) indicates how well an independent variable (the regression model) predicts the result of observed data (the dependent variable). R-squared values range from 0 to 1, indicating that a value of 0 indicates that the independent variable is unable to explain variations in the dependent variable. If there is no multi-collinearity among the explanatory variables and no spurious causation in the model, a high R-square model is likewise acceptable [4]. Table 7 indicates that certain factor variables are statistically significant on their own, and the Chi-squared test explains the significance of the total connection. The R-squared (goodness of fit) is high, 79.2%, indicating the high explanatory power of the model.

Seven independent variables living house, marital status, household size, dependency ratio, education, income, and savings were found to be statistically significant in determining household welfare status based on a binary logistic regression model. Contrarily, no statistically significant influence on household welfare was found on the gender of the household head, age of the household head, and work experience of the participants. The detailed analysis of each explanatory variable of the binary logistic regression result is presented as follows [39].

With an odds ratio of 0.765, the variable household size is significant at the five percent significance level. Keeping all other covariates constant, an increase of one unit in household size increases the probability of living below the poverty line by 0.765 factors. Therefore the household size hurts household welfare status. The inverse relationship between household size and per capital expenditure is a common finding in the empirical literature increasing household size raises the probability of being poor as the household is increased; there is a decrease in per capital expenditure in the household.

The dependency ratio variable is found to have a positive impact on the likelihood of being poor [43]. This indicates that as a household size increases, there is a greater chance of living below the poverty line because of an increase in dependents or unpaid household members. When one dependent family member increases by one unit while all other covariates remain constant, the risk of being poor increases by 2.378 factors. This demonstrates that households with a high pro-

portion of economically inactive people typically have lower incomes than households with a similar proportion of economically active members. The study's findings were consistent with those of [17] and [37], who claimed that the higher the dependency ratio, the more likely it is that active households will have to provide for the needs of inactive members, which will reduce capital expenditure and push people below the poverty line.

At a 5% significance level, the household's marital status is a statistically significant variable that influences poverty. Being married negatively correlates with being poor. As one unit change in marital status, other variables were remaining constant, and the household falling to poverty increased by a factor of 5.487. There were two opposing reports that might be inferred from the marital status perspective from the earlier study reports. The chance of falling into poverty increases as one is married [17]. Households who are married are 5.228 times more likely being poor as compared to the household who are not married Welle (2018). The finding of this study is consistent or aligned with these scholars. On the other hand, certain scholars argue that as one is married, the probability of falling into poverty decreases, as there would be more labor forces in the household [20], and unmarried households have a greater probability of falling into poverty [1].

The educational category below high school is found to have a negative and significant influence on poverty status at 5 percent significance level. The binary logistic regression result shows that having low education status negatively affects the welfare status of households. The probability of living under the poverty line increases by 0.3571 factor keeping all the other factors constant when the household head has less than high school education status. The result implies that participants who have relatively high education are less likely to be poor. Having a master's degree reduces the likelihood of poverty by 8.889 factors while holding all other factors constant. The study findings are similar with [17] households with educated members having a lower probability of falling into poverty.

Income and saving are significant at P-value 0.05 and positively affect the poverty status of household. The probability of being non poor increase by one factor as the income of households increase by one unit keeping all the other covariates constant, This also indicates that the incidence of poverty

is higher in the households with lower income for this study. This also might be because earning high income was getting the opportunity to raise household consumption whereas the households who earn low income can expose to food shortages. The probability of being not poor increases when income increase which is similar with many literatures and hypothesis forwarded. Similarly, the probability of being non poor is increased by 1.001 factors as household saving increased by one unit [29].

The factor variable living house is significant at the 5 percent level of significance with the value of odds ratio 2.891. Thus the probability of living above poverty line increases by factor 2.891 keeping all other covariates constant when the household are living in their owned house. Thus the household who are living in a rented house is 2.891 times more likely to be poor as compared to the household who are living in their own house, keeping all other covariates constant. Living in an owned house make the household free from rent fee, this indicates that the household spends more on food, cloth, and education as compared to rented households. The results of this study are consistent with Welle's survey, who found that renting a home raises the likelihood of being poor by 3.571 times [37].

5. Conclusions & Recommendations

This study looked at how employees' household welfare was impacted by the cost of housing rentals at Ethiopian News Agency. The study used a theoretical money meter to measure consumption expenditure of the poverty threshold line 2.15 USD, or 3,507 ETB per day, under the assumption that members of the family of all genders and ages consume the same amount of reported spending. According to study result, employees who are living in rented house are more likely to be impoverished than those who live in their own house. Employees who live in rented house spend less on food and nonfood items on average per adult than do employees who live in own house. According to the international poverty line used for the study, employees who live in rented house have a twice as high chance of falling below the threshold than those who live in their own house. The survey also finds that, in comparison to employees who live in their own house, those who live in rented house are significantly less fortunate in terms of basic necessities [31].

Furthermore, the logistics regression analysis's findings showed that the living house, marital status, household size, dependence ratio, level of education, household income, and savings all had a statistically significant impact on a person's poverty status. Living house, household size, and the dependence ratio have a negative impact on a household's welfare status, while the remaining variables affect the welfare status of the households positively.

The study suggests that the government should increase housing development projects, encourage house builders through subsidizing, empower mortgage banks for con-

structing public houses and should control intra and inter migration. Any effort targeted to alleviate the problem of lacking a house should target employees with low incomes since they are highly affected. The federal and regional urban city administrations should enact and implement a policy for setting and managing housing rent as well as standards of rental houses.

Abbreviations

ANOVA	Analysis of Variance Statistical tool
CSA	Central Statistics Agency
CAHF	Center for Affordable Housing Finance
DESA	Department of Economic and Social Affairs
EDHS	Ethiopia Demographic and Health Survey
ENA	Ethiopian News Agency
ETB	Ethiopian Birr
FDRE	Federal Democratic Republic of Ethiopia
FGT	Foster-Greer-thornback
IHDP	Integrated Housing Development Program
KII	Key Informants
MUDH	Ministry of Urban Development and Housing
OECD	The Organization for Economic Co-operation and Development
SDG	Sustainable Development Goals
SPSS	Integrated Statistical Software Package
UK	United Kingdom
UN	United Nation
UNCHS	The United Nation Center for Human Settlements
USD	United States Dollar
WB	World Bank

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Author Contributions

Tadele Melaku Chala and Tesfaye Boka Megersa contributed on the following roles: Conceptualization, Data curation, Formal analysis, Funding acquisition, Investigation, Methodology, Project administration, Resources, Software, Supervision, Validation, Visualization, Writing original draft, Writing review & editing.

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Data Availability Statement

Data are available upon request from the corresponding author.

Ethical Approval and Informed Consent to Voluntarily Participate

Ethical approval and consent to voluntarily participate and Ethical clearance was obtained from the Institutional Research Ethics Review Committee (IRERC) of Ambo University with the ethical approval letter. The Director of Research and Community Services also provided the permission. Moreover, supporting letter was taken for the field work survey. Verbal informed consent from each participant was obtained during data collection. The farmers' were given the right to refuse to take part in the study as well as to withdraw at any time during the study. All participants, farmers' and experts were assured of confidentiality.

The entire fully informed competent person expressed their voluntary agreement to participate in the research process. They understood that their participation is voluntary and they are free to withdraw at any time, without giving a reason and without cost. Moreover, they are confirmed that they will be given a copy of this consent form. They voluntarily agreed to take part in the study and informed consent was obtained from all participants prior to their involvement in the study.

Consent for Publication

The authors obtained permission from all participants in the study area and Ambo University to publish the work.

Conflicts of Interest

The authors declare no conflicts of interest.

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