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DETERMINANTS OF THE SAVING HABITS OF WOMEN EMPLOYEES IN ETHIOPIA: A CASE OF THE WOLAITA ZONE, SOUTHERN REGION

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ABSTRACT

This study aims to identify the determinants of saving habits of women employees in Ethiopia: A Case Study of the Southern region of the Wolaita Zone. To achieve general and specific objectives, the study identified socio-demographic, socio-economic, and institutional factors that affect the saving habits of women employees in the study area. This study used a descriptive research design and a quantitative research approach. The primary data sources were collected from women employees in the Wolaita Zonal Office. However, the sample size used for this study is 113 employees of the Wolaita Zone Office. For data analysis, descriptive statistics and multiple regression models were used. To increase the saving habits of women employees in the study area, this study suggested that government bodies, formal financial institutions, and non-government organizations should encourage the saving habits of women employees by facilitating training for employees to develop knowledge and awareness about saving money and other financial resource utilization to improve the wealth and living standards of women employees.

KEYWORDS

saving habits, woman employees, socio-demographic, economic factors, institutional factors

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INTRODUCTION

Background of the Study

Women suffer more constraints on their choices and opportunities than men worldwide, but sustainable development requires both men and women to participate (Leach, 2016, Krook, True, 2012, Bayeh, 2016, Metcalfe, 2011). However, increasing research suggests that gender equality helps reduce poverty and long-term growth (United Nations Development Programme, 2001). Women's more significant education and labor force participation has enhanced economic success. International experience and in-depth research studies have demonstrated that women can be a significant entrepreneurial force, positively impacting local, national, and global economies (Choudhry, Elhorst 2018, Haque, Zulfiqar, 2016).

Women's Empowerment refers to the process through which both individually and collectively become engaged, informed, and goal-oriented agents who support measures to eliminate gender inequities. According to Brody et al. (2015), Self-Help Groups in India have emerged as a viable technique for improving the socio-economic situations of rural families while incurring low administrative costs. According to Nichols (2021), many SHGs recently founded in India are self-sufficient and independent. Despite primarily being from low-income and disadvantaged groups, they are superior savers, borrowers, and investors. Again, the SHGs mobilized their funds, converting them into loans to members and reinvesting the interest revenue.

Saving is a crucial variable in increasing the economy of one counter; Saving is the loss of present consumption to increase home living standards and meet daily demands for the future life span of individual households. Savings are essential for a household's well-being in developing nations. On the other hand, households cannot afford unplanned income changes unless they save. Furthermore, personal and household funds provide security for future calamities. On the other hand, national savings provide the finances required for all of society's riches (Ribaj, Mexhuani, 2021).

According to Mohamed et al. (2021), savings and investment are critical drivers of increases in capital creation in numerous emerging economies, especially in Africa. Furthermore, it has been argued that saving is the foundation for economic development and capital production; saving plays an essential role in the growth of households and the state economy. As a result, developing country governments, international organizations, and economists have highlighted that increasing urban households' savings and deposit mobilization is vital to achieving long-term economic growth and development.

Unpredictable events will occur throughout the life cycle of homes, according to Kubás et al. (2022). To ensure this event, savings must fill the household's financial deficit. Household funds should be used to cover household expenses. On the other hand, the seasonality of cash flows, work culture, and wage level have curtailed urban residents' savings practices to ensure seasonal and irregular savings. Increasing saving habits is also essential for the well-being of a household; this indicates that saving habits increase at the individual level. It helps families by smoothing their consumption and assuring financial productivity and the company's investment capacity.

According to Morgan et al. (2001), various variables influence salaried employees' saving habits, including access to saving institutions, financial education, proper incentives, and methods for enabling saving, influencing household saving behavior. According to Daud (2015), the study results demonstrated that income tax, job experience, education, family size, and social group participation impacted workers' savings attitudes. On the other hand, findings suggest that when household income and net assets rise, so do household savings in Uganda (Namanya, 2011). The survey also discovered a



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consistent savings rate among Ugandan urban and rural families. Finally, demographic and social factors such as the sex and literacy of the head of the household and the location of the household also significantly influence the behavior of saving in the home in Uganda.

Nyambura (2019) researched the factors of the culture of investing and saving among Kenyan County employees; in a Wells Fargo Limited case study. The findings revealed that certain micro-characteristics (financial knowledge, amount of income, risk (nature) of work, and family size) considerably affected employee savings and investment levels. On the other hand, religion did not affect their savings and investments.

Timerga et al. (2011) are empirical studies on savings in Ethiopia; age, education, number of dependent family members, transportation services, work satisfaction in the sector, cost of expenditure, and inflation all substantial impact employees' savings habits. Furthermore, as a member of a savings society, the cost of recreation and housing is substantially tied to the employees' savings habits. Additionally, monthly wages, distance from home to work, and financial assistance for others were essential predictors of savings practices. Furthermore, education, the number of dependent family members, the cost of expenses, and monthly compensation are the main factors influencing employees' saving habits.

Mirach, Hailu (2014) found that 54.1 percent of the sample families saved, while the remaining did not; the most prevalent reasons for households not to save include low income, inflation, low-interest rates, cultural background, education, social affairs, and unemployment. Furthermore, the spending and planning habits of most respondents were limited. Additionally, economic studies show that income, age, gender, marital status, type of savings institution, and frequency of receiving money are the main predictors of household savings in the research region.

According to Leto (2016), financial institutions have a good effect on savings, but consumers have a knowledge gap. People's mean savings grew as their educational attainment increased, but as the number of family sizes increased, the number of savings fell. In addition, unmarried or single people save more money than married couples. As a result, unforeseen expenditures consume more people's savings than planned expenditures. Similarly, Teshome et al. (2013) discovered that nine variables, including household head, education level, access to credit services, livestock holdings, income, investment, training, participation, contact with extension contacts, forms of savings, and savings motives, had a significant impact on household savings.

According to the issue, saving habits in a particular community would influence the accumulation of capital resources, the socio-economic growth of a country in general, and the financial well-being of people and households. Countries with higher savings rates have reduced their foreign debt burden, and domestic investments will be funded by domestic savings (Zhang et al., 2021). As a result, it is critical to conduct the present study on the factors of saving habits of salaried employees in the Wolaota Zone, Sodo City.

Objectives of the Study

The general objective of this study is to identify the determinants of Women workers' Saving habits in the Wolaita Zone, SNNP Regional State, Ethiopia.

The following specific objectives were addressed below

1. Assess the impacts of socio-demographic factors on the saving habits of women employees.
2. Examine the impact of socio-economic factors on the saving habits of woman employees.
3. Assess the impact of institutional factors on the saving habits of woman employees.



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Hypotheses of the Study

To answer the questions of the research, the following hypothesis was developed.

H1: There is a positive and statistically significant impact of age on the saving habits of women employees in the Wolaita Zone.

H2: There is a statistically positive or significant impact of family size on the savings habits of women employees in the Wolaita Zone.

H3: There is a statistically positive or significant impact of the educational level on the saving habits of women employees in the Wolaita Zone.

H4: There is a statistically positive or significant impact of income level on the saving habits of women employees in the Wolaita Zone.

H5: There is a statistically positive or significant impact of expenditure on the saving habits of women employees in the Wolaita Zone.

H6: There is a statistically positive or significant impact of access to saving institutions on the saving habits of women employees in the Wolaita Zone.

H7: There is a statistically positive or significant impact of incentives on the saving habits of women employees in the Wolaita Zone.

EMPIRICAL EVIDENCE

Several factors influence saving behavior. The researcher focuses on the Determinants of Women Employees' Saving Habits in Ethiopia. A case study of the Wolaita zone. However, the variables that received the most attention and were included in this thesis were socio-demographic factors such as (age, family size, and educational level), as well as socio-economic factors such as (income level, inflation) and institutional elements such as (access to savings institutions and incentives). As a result of the preceding debates, various research on the saving habits of household and salaried employees was done in cross-country Africa and Ethiopia. Thus, to the best of our knowledge, there are still a limited number of types of literature in Ethiopian specifically in the study area; previous literature made by them; Temel Naln's (2013) study investigated the determinants of Turkish households' saving and portfolio choice behavior from 2002 to 2006. The findings demonstrate that household income, education level, employment, site of residence (rural/urban), automobile ownership, and household size explain variance in savings and portfolio choice behavior.

Lidi et al. (2017) researched the factors influencing household savings of rural agro-based company workers in Nigeria's south-south area. The findings found that income tax, job experience, education, family size, and social group participation affected workers' savings attitudes. Namanya (2011) and Nagawa et al. 2020 researched the factors influencing household savings in Uganda. In addition, the findings reveal that demographic and social characteristics such as gender and literacy of the family head and home location substantially impact household saving behavior in Uganda.

Nyambura (2019) researched the factors of the culture of investing and saving among Nairobi County employees; in a case study of Wells Fargo Limited. The findings revealed that certain micro-characteristics (financial knowledge, amount of income, risk (nature) of work, and family size)



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considerably affected employee savings and investment levels. On the other hand, religion did not affect their savings and investments. Furthermore, according to Timerga (2011), age, education, number of dependent family members, transportation services, work satisfaction in the industry, cost of expenditure, and inflation substantially impact employees' saving habits. Furthermore, as a member of a savings society, the cost of recreation and housing is substantially tied to saving habits.

Furthermore, monthly wages, distance from home to work, and financial assistance for others were essential predictors of savings practices. Furthermore, education, the number of dependent family members, the cost of expenses, and monthly compensation are the main factors that influence employees' savings habits. According to Meher (2017), 54.1% of the sample families were saved. Low income, low-interest rates, cultural background, education, social affairs, and unemployment are all prevalent reasons why households do not save. Most respondents' control, planning, and expense habits were also low. Furthermore, economic studies show that income, age, sex, marital status, type of savings institutions, and frequency of receiving money are all significant determinants of household savings in the location studied.

The findings of Leto (2016) demonstrate that the presence of financial institutions has a favorable effect on savings, although there is an information gap. People's mean savings grew as their educational attainment increased, but as the number of family sizes increased, the number of savings fell. In addition, unmarried or single people save more money than married couples. As a result, unforeseen expenditures tend to consume the majority of people's savings rather than planned expenditures.

Bekata (2016) conducted research that found that the age of the household, the head, education, training, participation in cooperatives, the farm and off-farm income, and the size of the farm and the livestock were important and positively affected the savings of rural families. On the other hand, the size of the spending family and the distance from the savings associations were significant factors that negatively affected the saving behavior of rural families. According to Fenta et al. (2017), the elements influencing the choice to save are educational level, the society's work position, relationship with the head of the family, the influence of weather conditions, and current living situation. According to Hando et al. 2022, age and inactive family members were substantially and adversely connected with household savings at a 5% significant level. This means that as one of these factors increases, household savings fall. Household income, total land holdings, and saving interest, on the other hand, were significantly and positively linked to household savings at a significant level of 5%.

According to Lusardi and Mitchell (2014), the primary causes of incapacity to save are inflation, low-interest rates, and inadequate income. In addition, married, female, family income, multiple earning status, family size, peer influence, self-control, financial literacy, and parental specialty were positively related to saving and investing in the teacher's community.

According to Moges et al. (2021), the variables positively connected to the chance of saving include household education, marital status, gender, yearly spending, interest rate, credit, and annual income. On the other hand, family size, age, distance from the financial institution, distance from the market, and transaction cost adversely connect with the likelihood of saving.

This makes the study more pertinent. By looking at the factors influencing salaried employees' saving behaviors in Ethiopia, it seeks to fill these gaps in the literature; the study revealed a problem with the independent variable that needs to be investigated in other countries, including Ethiopia. To identify the knowledge gap, socio-demographic factors such as age, sex, marital status, family size, and educational attainment were just as crucial as socio-economic factors such as income level and expenditure and institutional factors such as access to savings institutions and incentives. Finally, the current study tried to pinpoint the crucial factors that affect the saving habits of Ethiopian women workers, particularly in the Wolaita zone of the southern region.

CONCEPTUAL FRAMEWORK

Following an extensive review of the literature that includes pertinent theories and several empirical studies on the factors that influence the saving practices of Ethiopian women employees, we present a case study of the Wolaita Zone in the southern region. A conceptual framework was created for the research's implications or flow. This demonstrates how the dependent and independent variables are related. The saving behaviors of female employees served as the study's dependent variable, and socio-demographic factors like age, family size, educational attainment, socio-economic factors like income level and expenditure, and institutional factors like (access to savings institutions and incentives).

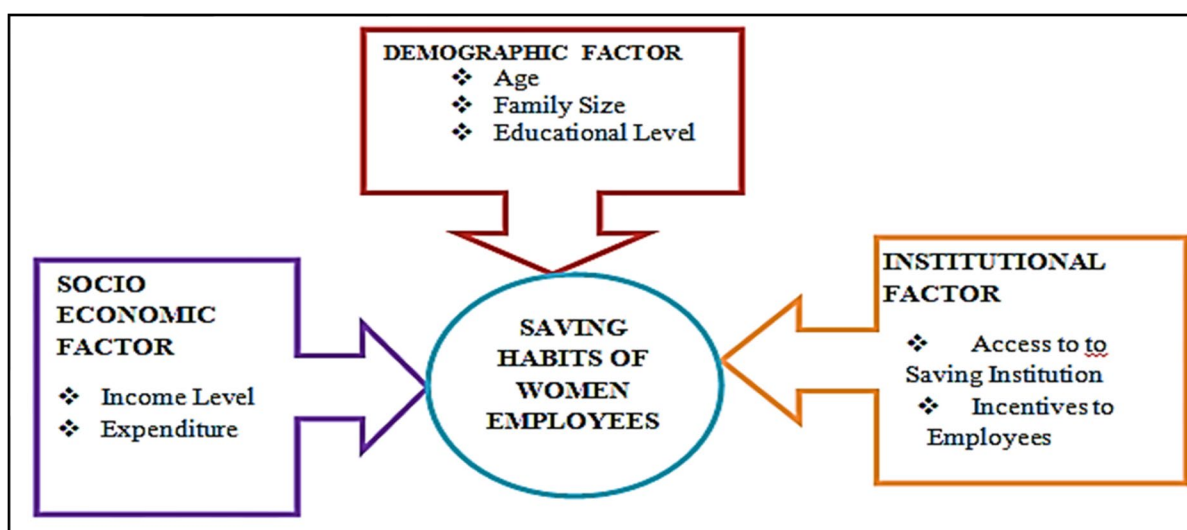


Figure 1: Conceptual Framework

Source: Developed by the researcher based on the various available works of literature

RESEARCH METHODOLOGY

Research Design

A descriptive research design and a quantitative research strategy were used to accomplish the study's objective. The study's target population was 158 female employees of the Zonal Office. Because the sample was chosen from various strata working in NGOs and public offices, the sampling technique used for this study is the stratified sampling technique. Therefore, 113 female employees were the sample size for this study. The following formula from Yamane (1967) was used to calculate the sample size:

$$n = \frac{N}{1 + N(e)^2}, \dots \dots \dots 1$$

where "n" is the sample size, "N" is the population size, and "e" is the level of precision,

$$\frac{158}{1 + 158(0.05)^2} = 113.$$



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Table 1. Sample size distribution

Sectors	Total population	Population ratio	Sample size
Public Office	120	113(120/158)	86
NGO's	38	113(38/158)	27
Total	158	113(158/158)	113

Source: Secondary data, 2022

Method of Data Analysis

Descriptive statistics were the tools used for the analysis of quantitative data. We used percentages, frequencies, means, and standard deviations for the demographic variables of Objective 1. The differences between the saving behaviors of female employees and the continuous independent variables were examined using the t-test. Additionally, binary logistic regression analysis was used to find significant variables influencing how much women save. Savings behaviors were examined using descriptive statistics and econometric models, two different types of data analysis. When the dependent variable had a binary outcome, binary logistic regression was used to identify saving behaviors after computing the descriptive statistics. The STATA 11 statistical program was used for data analysis.

Specifications for the binary logit model by estimating the probability of events, logistic regression analysis examines various factors on a dichotomous result. The logit model was applied when the dependent variable is binary (Dummy), taking either 0 or 1. The output (predicted value) of this non-linear regression model is constrained to either 0 or 1. Instead of using movement estimation, as is done with the Ordinary Least Squares Regression technique, the parameters of this model were estimated using the maximum likelihood estimation method. As a result, the logit method provides consistent and asymptotically efficient parameter estimates. The logit approach yields statistically sound results (Gujarati, 2004). Typically, the logit model comes in two shapes. It can be stated in terms of event probability or logit. When described in logit form, the model is specified as follows; the equation is of the form:

$$Y_i = \alpha + \beta_1 x_1 + \beta_2 x_2 + \beta_k x_k + \varepsilon \dots \dots \dots 2$$

Where:

y_i = probability of saving habits of woman employees,

α = intercept (constant) term

β_k = coefficient of the explanatory variable

x_k = explanatory variables

ε = disturbance (stochastic) term.

The probability of the dependent variable is 1 ($y=1$) and is estimated using the logit model. This is the probability that an event will occur. Typically, the logit model comes in two shapes. First, it can be stated in terms of event probability or logit.



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Description of the variables used in the binary logit model and their hypothesis

Dependent Variable: Practice of women workers to save money. The dichotomous dependent variable measures women's savings behavior in informal and formal financial institutions. This is done to set apart or make a distinction between savers and non-savers in the study area.

The explanatory variables are the following. In addition, the following independent variables were defined and hypothesized for the study: Age of women employees (AG), Family size (FS), Income level (INL), Educational level (EDL), Expenditure (EX), Access to Savings Institutions (ASI), and Incentives (IN).

Age: Its definition as the age of the head of the household in the study, expressed in years, makes it a continuous variable. For example, Dahiya and Chaudhary (2016) discovered that the saving rate of salaried workers in the study area is positively and significantly influenced by age. On the other hand, age was significantly and negatively associated with household savings at a level of significance, which is in line with (Athukorala, Tsai, 2003) of 5%. This suggests that households' ability to save money decreases as one of these factors increases. The findings of Bekata (2016) ultimately showed that the age of the household had a significant and positive influence on the savings of rural households. On the other hand, age was identified by Hailesellasie et al. (2013) as a significant and detrimental factor affecting households' saving behavior, with older households saving less.

Yu's (2012) research also showed that age composition had no discernible impact on saving. However, Faridi and Bashir et al. (2010) discovered a positive correlation between age and household savings; As households age, their savings status declines.

H1: Age has a statistically significant or positive impact on saving habits in the study area

Family size

The total number of family members of salaried employees is represented by this continuous variable, quantified by numbers. A family with many dependents has less money saved up. Bekata's (2016) findings ultimately showed that family size was a significant factor that adversely affected rural households' saving behavior.

Leto (2016) found that savings decreased as the household size increased. According to Moges et al. (2021), family size has a detrimental effect on household savings. As families grew by one unit, the odds ratio favoring household savings would decrease. Family size significantly and adversely affects household savings, according to Faridi and Bashir (2010). The family's size impacts both the tendency to save and consume; As the family grows, there will be a greater need for food, clothing, and other necessities of life, increasing the tendency to consume (Benti et al., 2022). The expected impact of family size on salaried workers' saving behaviors was negative for households with large families.

H2: Family size has a statistically significant or positive impact on saving habits in the study area

Educational Level

The higher education level of households may be the cause, which improves their ability to use technology. As a result, it may be helpful to employ better inputs for its methods of generating revenue, and at the same time, as income rises, so do people's savings. As a result, schooling impacts the household's possibilities for saving and asset accumulation, which impacts saving performance.



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According to Hailesellase et al. (2013), households' saving habits and educational attainment are positively correlated. However, Feng et al. (2011) discovered that education guarantees employment and income stability as a kind of human wealth. Therefore, it could have a detrimental effect on savings.

According to Uttley and Fotios (2017), a person's degree of schooling had little impact on how much they saved. However, according to (Jung 2016), education is seen as a stand-in for human development, which focuses on improving human potential and productivity regarding individual income and savings. As a result, it indirectly positively influences schooling by increasing money. On the other hand, according to Morgan and Long (2020), education has a detrimental effect on savings. Saving grows as a result of increased financial literacy. People know the challenges in obtaining financial items and the returns and risks associated with various financial commodities.

Additionally, some researchers concluded that those with less education are more inclined to save for their financial objectives. According to Ponce et al. (2019), education is a human wealth that encourages household savings. Furthermore, household education level is statistically significant and positively correlated with the savings rate, according to Moges et al. (2021).

H3: Educational level has a statistically significant or positive impact on saving habits in the study area

Income Level

Income is a crucial factor in household savings and plays a vital role in it. Several ideas, including life cycle, relative, and permanent income, influence savings behavior. The total income hypothesis, proposed by Aghion et al. (2016), shows a positive relationship between total income and savings and is consistent with the idea that as income exceeds consumption, savings increase. Therefore, households should save for retirement, take out loans when they are middle-aged, stop saving when they are retired, and earn more money.

According to Malkina's (2019) idea, temporary revenue is preserved while permanent income is devoured. The results of this idea are conflicting, with some people accepting permanent income changes and others rejecting them. According to research by Hailesellase et al. (2013), household saving habits are significantly influenced by income level. The study found that when income levels rise, the savings rate increases by a certain percentage. Similarly, Ma et al. (2021) pointed out savings increase revenue for underdeveloped and impoverished nations. The association between income and savings is neither strong nor consistent in industrialized nations. It is a continuous variable that can be operationalized as the total yearly income a family receives from selling agricultural goods and other sources such as off-farm work and non-farm activities. However, the income level indicates that the saving rate will increase somewhat when family income levels increase. According to Moges et al. (2021) 's research, a household's annual income is favorably correlated with its savings level. This is so because people save more money as their income grows.

H4: Income level has a statistically significant or positive impact on saving habits in the study area

Expenditure

Savings decrease as household spending increases. According to Faridi and Bashir (2010), spending has an enormous negative impact on household savings. The results indicate that the cost of expenses has had a negative and considerable impact on employees' saving behavior, according to Timerga et al. (2011). According to Moges et al. (2021), a household's yearly spending has a statistically significant negative impact on the likelihood of saving. Bekata (2016) discovered that the cost of living was a key



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factor that adversely affected rural households' tendency to save money. Leto (2016) found that unforeseen expenses often consume most people's savings compared to budgeted expenses.

H5: Expenditure has a statistically significant or positive impact on saving habits in the study area

Access to Savings Institutions

Fisher (2010) notes that sometimes people assume they are managing their money correctly, even if their money-saving habits jeopardize the safety of their investments. A budget and regular savings deposits will create a sumptuous cushion in case you run into financial trouble, but doing these things also can make a significant hole in that safety net. The financial institutions in the area help people save money by offering short-term, medium-term, and long-term accounts. Short-term savings are applied daily, monthly, and quarterly, while medium-term savings are applied on a half-yearly, annual, and more than one-year basis. Long-term savings are applied on a two-year, five-year, and more than five-year basis.

H6: Access to savings institutions has a statistically significant or positive impact on saving habits in the study area

Incentives

Szepanski (2022) claims that certain banks provide a contractual savings plan by which the saver must consistently deposit a set amount of money, even little amounts, in exchange for an interest payment or, ideally, the ability to use specific financial services (credit and insurance). Contractual savers may be given loans, subject to specific requirements, for a variety of purposes, including building their own home, financing the purchase of specific farm inputs, paying for their children's education, and covering unforeseen costs like funerals and medical care, among others Anigbogu et al. (2014).

To Davies and Thate (2017), under certain circumstances, savers may benefit from a social service fund, which should assist members in getting out of tricky situations brought on by unforeseeable catastrophes not covered by the insurance service. Furthermore, MitGhamr conducted a successful savings incentive study in Egypt. Finally, if savers have problems with their household's economic activities or budget management, they can consult the bank for financial and technical guidance. This conclusion is consistent with (Egbide 2020; Donkor and Anane 2016). According to these writers, the institutional saving model contends that institutional elements significantly influence people's ability to save. Therefore, institutional structures such as incentives and subsidies encourage people to save and continue to build their wealth. For example, this study supports the idea that people use retirement pension schemes because they are convenient and attractive (Poster and Rosenfeld, 2013).

H7: Incentives have a statistically significant or positive impact on saving habits in the study area

Table 2. Variable Measurement

Types of Variable	Description of Variables	Measurements	Hypothesized Sign
Dependent Variable			
SHW	Saving Habits	Continuous (1-10%=1, 11-20%=2, 21-30%=3 and >30%=4)	
Independent Variables			
AG	Age of women employees	Continuous variable measured in years	+

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FSZ	Family size of woman employees	Continuous variable measured in the number	+
IL	Income Level	Continuous measured in Bir	+
EDU	education status of woman employees	Continuous variable measured in years of schooling	+
EX	Expenditure	Continuous measured in Birr	+
ACSI	Access to saving institutions	Discrete (Formal=1, Informal=2)	+
INC	Incentive to employees	Discrete (Having Incentive=1, not Having Incentive=2)	+

RESULTS AND DISCUSSION

This section discusses the descriptive statistics and logit regression results on the determinants of female employees' saving behaviors. The analysis was carried out in light of the objectives of the study.

Descriptive Results

Table 3. Socio-demographic factors affect the saving habits of women employees

Items		Frequency	Percentage
Age	20-30	40	0.35
	31-40	38	0.33
	41-50	25	0.22
	Above 50 years	11	0.10
	Total	113	100
Family Size	1-3	44	0.39
	4-6	33	0.29
	7-9	22	0.19
	Above 10	14	0.13
	Total	113	100
Educational level	< 12 Grade	6	0.05
	Certificate	10	0.09
	Diploma	14	0.12
	First Degree	65	0.58
	Masters And Above	18	0.16
	Total	113	100

Age of the respondents

According to Table 3, 40(35%) of the respondents were between the ages of 20 and 30; 38(33%) of the respondents were between the ages of 31 and 40; 25(22%) of the respondents were between the ages of 41 and 50, and 11(10%) of the respondents were older than 50 years. According to the statistics, the



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female employees were in the economically active age group. Therefore, it also advocates saving and investing in the older age group since this demographic segment can successfully and efficiently implement. On the other hand, employees' savings status declines as they age. This finding supports the claim that younger women save more and older women save less. Furthermore, this conclusion is consistent with (Faridi, Bashir, 2010), which discovered that age benefits household savings. On the contrary, as a woman's age grows, so does her ability to save.

Family size of the respondents

One element that influences the savings habits of paid employees in the research region is family size. According to Table 3. above, 44 (39%) of the respondents had a family size of 1 to 3, 33 (29%) had a family size of 4 to 6, 22 (19%) had a family size of 7 to 9, and the rest 14 (13%) had family size more than 10. According to statistics, women employees with smaller family sizes save more than women with larger family sizes. As a result of this study, feeding a large family size to one household head is difficult for large family sizes. As a result, their spending exceeds their savings. Large family size often has a significant association with reduced savings as household size increases; the need for household spending increases, but savings fall. Leto (2016) conducted an empirical study that found that as the number of family sizes grew, the amount of savings declined. Moges et al. (2021) discovered that when the size of the home family grows by one unit, the odds ratio in favor of household savings decreases. (Faridi, Bashir, 2010) discovered that the size of the family influences the inclination to save and spend; As the family size grows, so does the propensity to consume due to an increase in the need for food, clothes, and other necessities of life (Nkomoki et al. 2019).

Educational level of the respondents

Education has a considerable impact on the saving habits of female employees. According to Table 4, 6 (5%) of the respondents were less than grade 12, 10 (9%) were certificate holders, 14 (12%) were diploma holders, and 65 (58%) of the respondents were first-degree holders. The remaining 18 (16%) were master holders and above. According to statistics, most female employees have a high degree of education. This means that when the education level of female employees increases, so will their saving habits. A survey by Jayaraman confirmed the results of the current study, and Jambunathan 2018) said that as education levels improved, families' knowledge of savings also increased. Several studies in Africa indicated a similar trend in which highly educated people have more vital saving habits (Matemane 2018), and Timerga reached a similar result in India (2011). According to DeMille et al. (2018), education is a proxy for human development, which is the topic for increasing human potential and productivity in personal income and savings. On the contrary, a study from Nigeria found that educational degrees are not a determinant of savings practices.

Table 4. Socio-Economic factors affect the Saving habits of Women employees

Items		Frequency	Percent
Income Level	Below 2,500 ETB	24	0.22
	2,501-5,000.00 ETB	45	0.40
	5,001-10,000.00 ETB	31	0.27
	Over 10,000 ETB	13	0.11
	Total	113	100
Expenditure	Monthly food expenditure from 1000-5000 ETB	69	0.61
	Monthly non-food expenditure from 5000-15000 ETB	44	0.39
	Total	113	100



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Income level of the respondents

The savings habits of women employees are heavily influenced by their income level. According to Table 4., 24(22%) of the respondents earned a monthly income of less than 2,500 ETB, 45(40%) had a monthly income of 2,501-5000 ETB, 31(27%) earned a monthly income of 5001-10,000 ETB, and the rest 13 (11%) earned a monthly income of more than 10,000 ETB. The data suggest that the income level of female employees influences their saving habits because when monthly income is increased, female employees' saving habits improve. The current study's findings complement the findings of Hailesellase et al. (2013), who discovered that when family income levels rise, so does their savings rate by a certain percentage. Similarly, Chamon et al. (2013) demonstrate that as families' income levels rise, so does their savings rate. Finally, Moges et al. (2021) demonstrate that a household's yearly income is positively associated with household savings since people's savings grow as their income grows.

Expenditure

Expenditure has a considerable impact on the saving habits of female employees. According to Table 4, 69(61%) respondents used food consumption ranging from 1000 to 5000 ETB per month, while 44 (39%) used expenditure for non-food goods ranging from 5000 to 15000 ETB. According to the findings, most female employees used their expenses for food consumption. This spending is determined by the degree of income; As the household consumption rate increases, so make female employees' saving habits. The current study's findings corroborated the findings of (Faridi and Bashir 2010), who discovered that expenditure had a significant and inverse influence on household savings. Households save less as they spend more. Timerga et al. (2011) indicate that the expenditure cost has significantly impacted employees' savings habits. According to Leto (2016), unanticipated expenses consume the majority of people's savings rather than planned expenditures. As a result, the predicted impact of spending on urban household savings was negative.

Table 5. Institutional factors affect the Saving habits of Women employees

Items		Frequency	Percent
Access to Savings Institutions	Formal	92	0.82
	Informal	21	0.18
	Total	113	100
Incentives to Employees	Having incentive	74	0.65
	No incentive	39	0.35
Total		113	100

Access to Saving Institution

Access to savings institutions significantly influences female employees' saving habits. According to Table 4, 92 (82%) of the respondents used official savings organizations, while 21 (18%) used informal savings institutions (such as Equib, Idir, and other traditional savings). Consequently, the statistics indicate that most women employed had access to formal savings institutions, primarily commercial banks, in Ethiopia. In addition, the government paid the employees' wages via bank transfers, which influenced the employees' savings habits. Leto (2016) supported The findings of the current study's findings, finding that 66.67% of depositors and non-depositors saved in various banks and microfinance institutions, and 33.33% were willing to save traditional savings styles like Equip, and they put money in their homes and terms of a different asset.



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Incentives

Incentives have a substantial impact on the savings habits of female employees. According to Table 5, 74 (65%) respondents have incentives, while 39 (35%) have none). The findings demonstrate that most female employees like having incentives; this suggests that the organization has provided incentives and subsidies to encourage female employees to save and build assets. According to Constantine (2017), the institutional saving model implies that institutional variables significantly impact an individual's savings ability. As a result, institutional structures such as incentives and subsidies encourage people to save and build assets. People, for example, join retirement pension schemes because it is simple and appealing.

Table 6. The current status of the respondents decided on saving habits

Items		Frequency	Percent
Do you deliberately save part of what you earn?	Yes	98	86.7%
	No	15	13.3%
	Total	113	100
If your answer is yes, how many presents of the monthly saving rate of salary do you usually save?	1-10%	52	46.02%
	11-20%	30	26.55%
	21-30 %	26	23.01%
	>30%	5	4.42%
	Total	113	100

According to Table 6, of the 113 respondents, 15 (13.3%) said they did not save from their monthly income, while 98 (86.7%) said they did. According to the various explanations for these data, most female employees save money. However, a large number of respondents, 46.02 percent, were simply saving 1 - 10% of their monthly income. The remaining 26.55 percent, on the other hand, saved 11 – 10% of their monthly gross income, 23.01 percent saved 21 - 21-30%, and 4.42 percent saved more than 30%. Respondents who were not saving money from their monthly income because it was too expensive to buy the commodity from the market, economic inflation and large family size, employees earning a lower monthly salary, and a lack of institutional incentives and reinforcements were the significant factors that employees had on saving money from their monthly income.

ECONOMETRIC ANALYSIS

Model Specification

The researcher performed the model specification test before model regression. Model specification mistakes might result when neglected important or irrelevant variables are incorporated. It can have a significant impact on the estimation of regression coefficients. A logistic regression model and basic descriptive statistics were used to uncover characteristics influencing household savings in the research region. The variables in the model were examined for the presence of multi co-linearity. The contingency coefficient and the variance inflation factor were utilized for the multicollinearity test of discrete and continuous variables. The value of the contingency coefficient ranges from 0 to 1. A variable with a contingency coefficient less than 0.75 suggests a weak link, whereas a value greater than 0.75 indicates a significant correlation of variables. The contingency coefficient for the discrete



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variables in the model was less than 0.75, indicating that multicollinearity is a severe issue. Continuous variables with a variance inflation factor of less than 10 are thought to have no multicollinearity. Those with a VIF more significant than 10 are affected by the issue and are omitted from the model (Gujarati and Porter 2004). The dependent variable, the probability of saving, was regressed on several explanatory variables to discover the critical factors influencing the saving habits of women employees in the Wolaita Zone. According to the regression table, the binary logistic model successfully predicted 71% of the responses.

Aside from the % correct predictions, the model Chi-square with "n" degrees of freedom and Hosmer and Lemeshow's are used to test the goodness-of-fit. As a result, p-values assigned the Chi-square 13 degrees of freedom. The value of .0000 indicates that the model is statistically significant and adequately matches the data. Hosmer and Lemeshow's goodness-of-fit test is another popular model-fit test. The Pearson chi-square from the contingency table of observed and predicted frequencies generates the Hosmer-Lemeshow goodness-of-fit statistic. Hosmer and Lemeshow's test judged that a good fit provides a significant p-value, just like a two-way table test.

Consequently, in this study, the test result of $p=1$ indicates that the model was adequately fitted to the data. In binary outcome models, robust logistic regression was used to compensate for heteroskedasticity. Heteroscedasticity affects the "Beta" and standard errors in binary outcome models. In this study, the results of both regressions, earlier and robust logistic regression, were examined. The coefficients remained the same, while the standard errors and Z values altered somewhat. We would have found a more dramatic impact if these data had greater heteroskedasticity. As a result, this model is devoid of heteroskedasticity.

Estimating factors that affect Women employees' Savings in the study area

The binary logit model estimated the factors that affect urban households' savings in the study area. The model's estimation result is presented in the following table.

Logistic regression Number of observations = 113
 LR chi2(12) = 211.7613
 Prob> chi2 = 0.0000
 Log-likelihood = -86.315817 Pseudo R^2 = 0.7662

Table 7. Result of the Binary Logit Model Regression

Saving Habits	Odds Ratio	Std. Error	Z	P>Z
Constant	1.789	0.196	6.959	0.000**
Age	0.628	0.024	-3.215	0.084**
Family Size	0.620	0.048	-3.348	0.094**
Educational Level	1.791	0.030	4.203	0.000*
Income Level	1.960	0.021	4.792	0.000**
Expenditure	0.581	0.024	-3.863	0.130*
Access to Saving Institution	1.844	0.028	4.525	0.006**
Incentives	1.546	0.032	3.108	0.010**

NB: *** Significant at 1%, ** Significant at 5% and * Significant at 10%, Source:

Source: Survey result using STATA 2022



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The factors positively connected to the chance of female employees' saving habits in logistic regression analyses are education level, income level, access to savings institutions, and incentives. Age, family size, and expenditure are characteristics that negatively correlate with the probability of saving behaviors. Four of the seven explanatory factors shown in the table above are education level, income level, access to savings institutions, and incentives that substantially impact female employees' saving habits at 5% and 10% significance levels. Age, family size, and expenditure are explanatory factors with negative values in the table above, indicating that as the units in the independent variable change, the chance of saving habits decreases.

When age (AG), family size (FS), educational level (EDL), income level (INL), expenses (EX), access to savings institution (ASI), and incentives (IN) are all zero in the equation as mentioned above, the significant level of savings habits is 58%, indicating that other factors have influenced the savings habits of salaried employees in the study area. Testing hypotheses based on the output of the regression model is addressed in more detail below.

H1: Age and Saving Habits

In this finding, the female employees' age was negative, and the coefficient is statistically different from zero at a 5% significance level. With all other variables fixed at their mean values, the age of female employees was projected to increase by one unit. Instead, the likelihood of developing good saving habits decreased by 0.628. This conclusion might be explained by the fact that as a woman's age grows, so does her ability to save. The findings of this investigation were congruent with those of Singh et al. (2018). They discovered that age was significantly and adversely related to household savings at a level of 5%. This means that as one of these factors increases, household savings fall. In their study, Hailesellase et al. (2013) discovered that age is a significant and negative determinant of family saving behavior, with older families saving less. However, the findings contradict those of Prime et al. (2020), who discovered that age positively and substantially influenced the savings rate of paid employees in the research region. According to Bekata (2016), the data indicated that the household's age significantly influenced rural households' savings. Yao et al. (2011) discovered a favorable connection between age and household savings. When the age of a household grows, so does its savings status. In line with the previous study, the regression findings of the present study demonstrate that the age of a paid employee is statistically significant and is adversely related to saving habits at a level of 5% since the P-value was 0.084, which is larger than 5%.

As a result, the null hypotheses were rejected, and the alternative hypotheses (H1) offered were accepted.

H2: Family Size and Saving Habits

In this research, the family size of the woman employee negatively affected her savings habits, and the coefficient is statistically different from zero at a 5% significance level. The family size of the employees was projected to increase by one unit if all other variables remained constant at their mean levels. Instead, the likelihood of women's saving habits falls by a factor of 0.62. This means that when the family size is large, there are fewer employment prospects and poor work habits, and family members become unemployed and have a low payment rate. As a result, an extra family member shares the family's limited resources, causing the family to save less. The findings of this research agreed with those of Bekata (2016), who discovered that family size was a critical variable that negatively affected the saving behavior of rural families in the study region. Leto (2016) discovered that when the household size increased, so did the degree of savings. Moges et al. (2021) discovered that family size negatively influenced household savings. It was projected that if the size of the household family increased by one unit, the chance ratio favoring household savings would drop. Rikwentishe et al. show that the family's size also affects the propensity to save and consume; as family size grows, so does the propensity to



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consume owing to the increased need for food, clothes, and other necessities. In line with the previous study, the regression results of the present study demonstrate that employee family sizes are negatively related to saving habits statistically level at 5% since the P-value was 0.094, which is more than 5%.

As a result, the null hypotheses were accepted, but the alternative hypotheses (H4) provided were rejected.

H3: Educational Level and Saving Habits

According to the regression results, even at a level of 10%, education has a largely positive and statistically significant influence on saving behavior. The value of 0.583 suggests that considering additional independent factors is constant. A one-unit or grade improvement in educational level correlates with a 1.791 increase in saving behavior. One possible explanation is that women's education levels improve their ability to capture technology. It may assist in utilizing better inputs for its revenue creation procedures, and as income increases, employee savings rise as well.

The results of this study were consistent with the findings of Hailesellase et al. (2013), who discovered a favorable association between educational level and household saving behavior. According to Frew et al. (2021), household education level is statistically significant and positively related to the savings rate. According to Bag et al. (2021), education is a proxy for human development, which is the theme for increasing human potential and productivity in personal income and savings. Twumasi et al., on the other hand, was not satisfied with the outcome (2020). He discovered that the level of education had little effect on saving. According to Gobena (2018), schooling has a detrimental impact on savings. In line with the previous study, the regression findings of the present study reveal that educational levels are positive and statistically significant at 10% since the P-value was 0.000, which is less than 10%.

As a result, the null hypotheses were rejected, and the alternative hypotheses (H5) offered were accepted.

H4: Income Level and Saving Habits

According to the regression results, income level has a favourable and statistically significant influence on saving behavior, even at a 5% significance level. Furthermore, the coefficient of 0.673 indicates that taking other independent factors into account is constant. As a result, a one-unit increase in income boosts saving habits by a ratio of 1.96. According to Hutchings et al. (2012), one possible reason for this finding is that when monthly pay increases, women employees' saving habits increase. Hailesellase et al. (2013) showed that income significantly affects households' saving behavior. The study revealed that the saving rate increases by some percent when income increases. Similarly, Frew et al. (2021) found that a household's annual income was positively related to household savings. In line with the previous study, the regression results of the current study show that income levels are positive and statistically significant at 5% because the P-value was 0.000, which is less than 5%.

Therefore, the null hypotheses were rejected, and the alternative hypotheses proposed (H6) were accepted.

H5: Expenditure and Saving Habits

According to the regression results, spending negatively and statistically significantly influences saving habits, even at a 10% level. Considering other independent variables, the coefficient of -0.542 indicates the relationship is constant. Therefore, when a one-unit increase in spending leads to a 0.581 decline in saving habits, the inference is that an increase in monthly food expenditure and non-food consumption per family will influence the saving habits of female employees. The findings of this study were consistent with those of (Faridi, Bashir, 2010), demonstrating that expenditure has a significant and negative impact on household savings. According to Timerga et al. (2011), the findings indicate that the



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cost of expenditure has had a negative and significant impact on employees' saving habits. Frew et al. (2021) discovered that a household's yearly spending had a statistically negative influence on the likelihood of savings. Bekata (2016) discovered that the expenditure cost was the critical variable that adversely affected the saving behavior of rural families in the research region. According to Leto (2016), unanticipated expenditures consume more people's savings than planned expenditures. In line with the previous study, the regression results of the present study demonstrate that the expenditure is negative and statistically significant at 10% since the P-value was 0.130, which is more than 10%.

Therefore, the null hypotheses were accepted, and the alternative hypotheses proposed (H7) were rejected.

H6: Access to Saving Institutions and Saving Habit

According to the regression results, even at a significance level of 5%, access to saving institutions has a favorable and statistically significant influence on saving behaviors. The value of 0.612 suggests that considering additional independent factors is constant. A one-unit increase in access to saving institutions boosts saving habits by a ratio of 1.844. The likely explanation for this finding is that the ease of access to formal and informal savings institutions encourages employees to save their resources in a conveniently available institution, which supports the finding (Metcalf 2008). This shows that access to savings institutions is important in the saving habits of female employees in the research region. This study's findings agreed with those of Leto (2016), who discovered that access to savings institutions had a positive and statistically significant influence on household savings rates. Furthermore, in line with the previous study, the regression results demonstrate that access to saving institutions is advantageous and statistically significant at 5% since the P-value was 0.006, less than 5%.

Therefore, the null hypotheses were rejected, and the alternative hypotheses proposed (H8) were accepted.

H7: Incentives and Saving Habits

According to the regression results, rewards benefit and statistically significantly influence saving habits even at a 5% level. The coefficient of 0.436 suggests that considering additional independent factors is constant. A one-unit increase in rewards increases the likelihood of saving behavior by 1.546. The institution might explain this outcome by providing incentives and subsidies to encourage employees to save and acquire assets. The findings of this study were consistent with those of (Hoang and Harrington 2020); the conclusion indicates that incentives have an enormous and beneficial impact on household savings rates. It is also said that the institutional saving model implies that institutional variables significantly impact an individual's ability to save. As a result, institutional structures such as incentives and subsidies encourage people to save and build assets. In line with the previous study, the regression results of the present study reveal that the incentives are positive and statistically significant at 5% since the P-value was 0.010, which is less than 5%.

Therefore, the null hypotheses were rejected, and the proposed alternative hypotheses (H9) were accepted.

CONCLUSION AND RECOMENDATIONS

The study was carried out to determine the factors that affect the saving practices of women employees in Ethiopia, with a focus on the Wolaita zone in the southern area. Data for the study were gathered from 113 women who worked in the Wolaita Zone Office. According to the findings, 103 (35%) of the respondents were between 20 and 30, while 101 (34%) were between the ages of 31 and 40. This shows that most of the responses were between 20 and 40. Consequently, women employees in the



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economically active and productive age group can correctly save and invest scarce resources. On the other hand, when employees' ages grow, their ability to save declines.

Regarding family size, female employees with fewer children save more than male employees with more prominent families. The consequence of this study is that feeding a large family size of one household head is difficult for a large family size. Depending on the level of education, most women have a high degree of education. This means that when the education level of female employees increases, so will their saving habits. Regarding the income level, the income level of female employees influenced their saving habits because when the monthly income increased, the saving habits of the employees increased by the same units. According to the expenditure findings, most female employees spent their expenditures on food consumption. This spending is determined by the degree of income; as the household consumption rate increases, so do female employees' saving habits. Regarding access to savings institutions, statistics suggest that most female employees have access to formal savings institutions, notably the Ethiopian Commercial Bank. Finally, the results revealed that 262 (88%) of the respondents had incentives, while 35 (12%) did not. According to the findings, the majority of employees who provide feedback have incentives. The organization provided incentives and subsidies to encourage employees to save and build their assets.

The regression findings of this study revealed that age is statistically related to saving behavior at a level of 5% since the P value was 0.084, which was greater than 5%. As a result, the null hypotheses were rejected, and the alternative hypotheses (H1) offered were accepted. Family sizes are statistically related to poor savings practices at 5% since the P value was 0.094, which is more than 5%. Because the P-value was 0.000, less than 10%, the educational level is positive and statistically significant at 10%. The income level is positive and statistically significant at 5% since the P-value was 0.000, less than 5%. The expenditure is negative and statistically significant at the 10% level since the P-value was 0.130, greater than 10%. Because the P value was 0.006, less than 5% access to saving institutions is beneficial and statistically significant at the 5% level. Finally, the incentives are positive and statistically significant at 5%, as the P-value was less than 5%.

Based on the above findings and conclusions of the research, this study has recommended specific points:

1. According to the findings, this study found a factor influencing female employees' saving behaviors. As a result, the study proposed that governments and financial institutions increase the saving habits of female employees by increasing knowledge about how to manage and save money for personal purposes and enabling financial literacy development training.
2. The competent organization should raise awareness in urban and rural regions by providing financial education and training on savings and financing. These initiatives have the potential to change people's attitudes to saving.
3. The research advised that the responsible body adopt compelled savings, stabilize society's regular income, and minimize inflation to achieve a real savings rate.
4. Official financial institutions should encourage and boost savings incentives and offer financial instruments capable of mobilizing funds.
5. It is also necessary to enhance and grow financial institutions such as banks, as well as to strengthen government and private employee social security schemes, as well as to strengthen savings for housing programs and investment equipment schemes.
6. Finally, to increase the saving habits of women employees in the study area, this study recommended that government bodies, formal financial institutions, and nongovernmental organizations facilitate training for employees to develop knowledge and awareness in saving money and other financial resource utilization to improve the wealth and living standards of women employees.



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