

Determinants of Saving and Investment Behavior of Rural People in Chaukune Rural Municipality, Surkhet District

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Keywords:

opportunity available, financial literacy, investment motive, family investment, saving culture

DOI:

<https://doi.org/10.3126/jnmr.v5i1.61384>

ABSTRACT

This study determines the saving and investment behavior determinants of rural people in Chaukune Rural Municipality, Surkhet district. The research mainly applied primary sources to collect the data required in the study. Among the population, 180 respondents are selected as the sample size using convenience sampling. The study applied a quantitative research method and is based on positivist philosophy. The entire questionnaire is prepared based on the Likert scale. Collected data is processed using a statistical regression analysis tool. Based on multivariate regression analysis, most independent variables significantly impact the dependent variable, i.e., financial literacy, investment motive, and saving culture, which significantly positively impact saving and investment behavior.

1. INTRODUCTION

Saving is an act of refraining from spending one's income on consumption. It is the portion of income saved that is available for expenditure in the future, either for consumption or investment (Wieliczko, Kujawska, & Rzechuła, 2020). The gap between personal consumption expenditures and disposable personal income is personal saving. Saving is a significant aggregate that can be computed for each institutional sector or the entire economy and is defined as disposable income less final consumption expenditure in both instances after accounting for a pension fund adjustment (European Statistical System, 2023). Saving is a crucial component for attaining high economic growth. More spending results from higher saving rates. Due to its significant impact on the circular flow of income in the economy, household savings play a crucial role in economic growth and make up the majority of national savings in both developed and developing countries. Savings are crucial for generating capital, encouraging investment, and promoting economic development

(Kumar, 2018; Tukela, 2018; Andrew et al., 2017). Savings have come to be recognized as one of the main elements influencing economic development in developing nations where agriculture plays a significant role. Income, savings, and investment are the three factors that determine how well a business is doing. Savings serve as the foundation for investment, the single most crucial element in the growth of an economy (Popat & Pandya, 2019).

2. LITERATURE OF REVIEW

Saleem, Mahmood, Usman, Bashir, and Shabbir (2021) stated that financial literacy, risk perception, return perception, investment criteria, and mutual fund awareness influence an investor's conduct toward mutual funds. (FL). Five hundred investors in mutual funds completed a questionnaire to gather data, and 460 of those were used in the analysis. In addition, statistics from various Pakistani cities were gathered using snowball sampling. Financial literacy positively and negligibly impacted investors' conduct in mutual funds. The findings offered greater insight and direction to investors and policymakers on the variables influencing mutual fund investor behavior.

Gogoi (2021) analyzed the factors influencing rural families' saving habits in Assam's Sivasagar District. Findings showed profession, land holding size, family size, and income were essential determinants. The study found a negative relationship between family size and savings, while income significantly influenced savings habits. Age did not significantly impact savings.

Chitra and Aruna (2019) studied household savings and investment behavior in the Theni district. His research was based on primary and secondary data. In this study, 80 respondents were selected for data analysis. This research examined how investors prefer shares, debt instruments, mutual funds, bank deposits, life insurance, etc. Savings and investments made by individuals were significant sources of funding for economic activities in developing nations like India. The researcher explained various justifications for saving, householders' degree of awareness, and the relationship between these two variables.

Mahabub, Kethan, Jaggaiah, and Khizerulla (2022) studied IT professionals' financial literacy and investment behavior in India. The study's primary goal was to comprehend how IT workers made investments and saved for the future. There were many aspects of saving and investing behavior, such as characteristics of investment planning and factors that influence investment choices. Primary data was collected through Google Forms from 100 sample respondents. Data were analyzed using ANOVA, T-test, Chi-square test, and correlation analysis. Their investment goals vary, ranging from financial stability to extra income. The authors examined the behavioral factors influencing investment decisions among IT professionals.

The study used a microeconomic method to analyze the factors influencing Sri Lankan small-scale cinnamon planters' saving and investing behavior. The lack of an entrepreneurial culture necessitates understanding these strategies for success. Data was collected through semi-structured interviews and a snowball sampling questionnaire. Primary investment methods were company expansion and saving deposits. Factors influencing annual savings and business growth included income, dependents, dependability, and convenience, while risk and return influenced total capital investment (Jayasinghe, Liyanage, Wijesundara, & Ranasinghe, 2019).

Pathy (2017) has studied the savings habits of rural households in India, focusing on the perception of rural poverty. Based on a survey of 50 households in the Cuttack district, the research revealed that people's saving habits vary across different regions, with some focusing on immediate expenses and others on saving.

Owusu, Ansong, Koomson, and Addo-Yobo (2022) have examined the relationship between financial literacy and saving and investment behavior among young adults at a public institution in Ghana. A sample of 646 students was surveyed using a questionnaire. Results showed that financial literacy positively correlated with saving and investing behavior. Additionally, the study found that parental financial habits significantly influenced young adults' financial literacy levels, directly affecting their savings and spending habits.

Duressa and Ejara (2018) studied Ethiopia's Wolaita and Dawro Zones to understand the factors influencing rural households' savings. Data was collected through cross-sectional community-based research using questionnaires and interviews. The Tobit model was used to analyze the collected data. The results showed that household saving was significantly and negatively associated with age and inactive family members, with a 5% significance level. This suggests that the amount of money households save diminishes as one of these variables increases. The study highlights the importance of saving as a critical driver of economic development.

Syed, Nigar, and Ullah (2017) have examined saving and investment behavior among urban households in Hayatabad, Peshawar. The research found that literacy rates were high, with a household employment rate of 99.5 percent. The average monthly income was Rs. 87,333, with a family size of 20.5 percent. Income, education, job status, and assets influenced savings and investments.

Based on the above review, there is a significant potential to investigate and analyze the savings and investment behavior and its effect on overcoming financial impediments and achieving success in small-scale cinnamon plantations.

3. CONCEPTUAL FRAMEWORK

A conceptual framework for the research study is developed based on the literature review, as shown below.

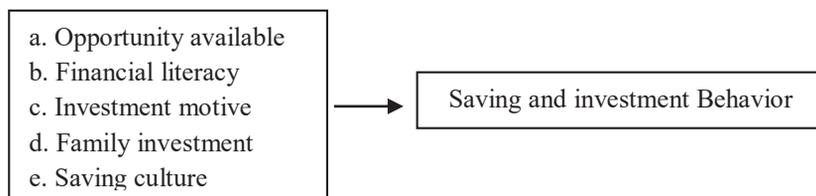


Figure 1: Conceptual framework of the study

4. OBJECTIVES OF THE STUDY

The general objective of this study is to determine the determinants of saving and investment behavior of rural people in Chaukune Rural Municipality, Surkhet district. However, the specific objectives of this study are as follows:

- i. To determine the impact of available opportunities on rural people's saving and investment behavior.
- ii. To assess the impact of financial literacy on saving and investment behavior.
- iii. To determine the impact of investment motive on saving and investment behavior.
- iv. To find out the impact of family investment on saving and investment behavior.
- v. To identify the impact of saving culture on saving and investment behavior.

5. RESEARCH HYPOTHESIS

Considering a set of working hypotheses to empirically test and confirm the statistical significance of relationships among different constructs of the study, the following hypotheses have been considered in this study:

H_{A1}: A significant relationship exists between the perception of determinant factors affecting rural people's savings and investment behavior levels.

H_{A2}: There is a significant relationship between the opportunity available and the saving and investment behavior level.

H_{A3}: There is a significant relationship between financial literacy and the level of saving and investment behavior.

H_{A4}: There is a significant relationship between investment motive and the level of saving and investment behavior.

H_{A5}: There is a significant relationship between family investment and the level of saving and investment behavior.

H_{A6}: There is a significant relationship between saving culture and the level of saving and investment behavior.

6. RESEARCH METHODOLOGY

The location of the study has been selected as ward no. 8 of Chaukune Rural Municipality, Surkhet district. One hundred eighty households out of the total population in ward no. 8 of Chaukune Rural Municipality, Surkhet district, were chosen as the sample size using the convenience sampling technique. Primary data was used to address the study's intended objective. The study applied a quantitative research method and is based on positivist philosophy. The data was collected from the study area with the help of a questionnaire. The entire questionnaire was prepared based on the Likert scale. The collected data was analyzed using regression analysis statistical tools. It was used to depict the relationship between the independent and dependent variables. Data were analyzed through univariate, bivariate, and multivariate analyses of the different constructs.

7. RESULT AND DISCUSSION

Regression analysis is a statistical tool that depicts the relationship between the independent and dependent variables. This section of the study covers the univariate, bivariate, and multivariate analyses of the different constructs designed in the study.

Univariate Analysis

This table reports the univariate regression of saving and investment behavior determinants on pooled cross-sectional data with an opportunity available, financial literacy, investment motive, family investment, and saving culture. In this section, SIB (Saving and Investment Behavior) is regressed with the study's independent variables separately in each model.

Table 1

Univariate Regression Analysis between Independent and Dependent Variable

Model	Intercept	OA	FL	IM	FI	SC	Adj R ²	F -test	N
1	0.858 (2.65)	0.763 (9.718)*					0.343	94.433	180
2	2.462 (17.021)		0.470 (11.005)*				0.402	121.099	180
3	0.534 (2.025)			0.851 (13.186)*			0.491	173.870	180
4	1.391 (6.939)				0.658 (13.157)*		0.490	173.103	180
5	0.841 (4.475)					0.798 (16.989)*	0.616	288.520	180

Note: The figure in the parentheses is t-value, *N* represents the no. of observation, *represents the 1 percent level significance, ** represents the 5 percent level significance, R² represents Saving and investment Behavior, intercept term represents the beta coefficient, OA represents opportunity available, FL represent financial literacy, IM represents investment motive, FI represents family investment, and the SC represents saving culture.

Source: Field Survey 2022

Table 1 shows the results of univariate analyses of determinants of saving and investment behavior (SIB) of rural people in Chaukune Rural Municipality, Surkhet district. The five variables, i.e., the opportunity available, financial literacy, investment motive, family investment, and saving culture, have been taken as the independent variables, and the saving and investment behavior have been taken as the dependent variable. The result depicted in Table 1 shows that all variables significantly positively impact saving and investment behavior. All coefficients are statistically significant. It means saving and investment behavior depends highly on OA, FL, IM, FI, and SC. Though the value of adjusted R² is low, the p-value of the F test confirms the model's fitness.

Table 1 shows the significant positive coefficient of OA on SIB with adjusted R² 0.343 and f value 94.433 (significant at a 1 percent significance level). So, model 1 is the best fit. Similarly, the result in Table 1 shows the significant positive correlation coefficient of FI with SIB with adjusted R² 0.402 and F value 121.099 (significant at 1 percent significance level). Hence, the model 2 is the best fit. Similarly, the result in Table 1 shows the significant positive coefficient of IM on SIB with adjusted R² 0.491 and F value 173.870 (significant at a 5 percent significance level). So, the model 3 is the best fit.

Similarly, the result in Table 1 shows the significant positive correlation coefficient of FI and SIB with adjusted R² 0.490 and F value 173.103 (significant at 1 percent significance level). Hence, model 4 is the best fit. Similarly, the result in Table 1 shows the significant positive correlation coefficient of SC and SIB with adjusted R² 0.616 and F value of 288.520 (significant at a 1 percent significance level). Hence, model 5 is the best fit.

Further, the above analysis also showed that among the maintained independent variables of the study, determinants of saving and investment-specific factors had a significant impact on the dependent variable,

i.e., saving and investment behavior, since it has the highest adjusted R^2 than others (at the 5 percent level of significance).

Bivariate Regression Analysis

Table 2 shows the results based on 180 respondents' cross-sectional data using the regression model. In this section, SIB is regressed with the study's independent variables by making combinations of two independent variables in each model.

Table 2

Bivariate Regression Analysis between Independent and Dependent Variable

Model	Intercept	OA	FL	IM	FI	SC	Adj R ²	F -test	N
1	21.371 (4.428)	0.382 (3.946)*	0.324 (5.867)*				0.447	73.294	180
2	0.234 (0.798)	0.221 (2.243)**		0.702 (7.623)*			0.503	91.421	180
3	0.840 (3.001)	0.259 (2.771)*			0.529 (7.811)*		0.509	93.637	180
4	0.379 (1.542)	0.212 (2.834)*				0.695 (11.826)*	0.631	153.974	180
5	0.791 (3.088)		0.228 (4.618)*	0.607 (7.505)*			0.543	107.53	180
6	1.314 (7.086)		0.254 (5.673)*		0.470 (8.280)*		0.566	117.81	180
7	0.859 (4.805)		0.182 (4.427)*			0.645 (11.386)*	0.653	169.128	180
8	0.570 (2.302)			0.483 (5.098)*	0.370 (5.054)*		0.553	111.698	180
9	0.313 (1.418)			0.327 (4.117)*		0.596 (8.952)*	0.648	165.657	180
10	.735 (3.904)				0.196 (2.788)*	0.630 (8.277)*	0.630	153.632	180

Note: The figure in the parentheses is t-value, N represents the no. of observation, *represents the 1 percent level significance, ** represents the 5 percent level significance, R^2 represents Saving and investment Behavior, intercept term represents the beta coefficient, OA represents opportunity available, FL represents financial literacy, IM represents investment motive, FI represents family investment, and the SC represents saving culture.

Source: Field Survey 2022

Table 2 shows the results of bivariate analyses among OA, FL, IM, FI, SC, and SIB (Saving and Investment Behavior). At 1 5 percent of significance level and 99 95 percent of confidence level, the results showed that-

a. Table 2 shows a significant positive correlation between OA and FL, with an Adjusted R-Square value of 0.447 and the F-test value of 73.294, indicating a positive impact of OA and FL on SIB.

- b. Table 2 reveals a significant positive correlation between OA and IM, with an Adjusted R-Square value of 0.503 and the F-test value of 91.421, indicating a positive impact of OA and IM on SIB, indicating model 2 as the best fit.
- c. Table 2 reveals a significant positive correlation between OA and FI, with an Adjusted R-Square value of 0.509 and the F-test value of 93.637, indicating a positive impact of OA and FI on SIB, indicating model III as the best fit.
- d. Table 2 shows a significant positive correlation between OA and SC, with an Adjusted R-Square value of 0.631 and the F-test value of 153.97, indicating a positive impact of OA and SC on SIB.
- e. Table 2 reveals a significant positive correlation between FL and IM, with an Adjusted R-Square value of 0.543 and the F-test value of 107.53, indicating a significant positive impact of FL and IM on SIB, indicating model 5 as the best fit.
- f. Table 2 shows a significant positive correlation between FL and FI, with an Adjusted R-Square value of 0.566 and the F-test value of 117.81, indicating a positive impact of FL and FI on SIB.
- g. Table 2 reveals a significant positive correlation between FL and SC, with an Adjusted R-Square value of 0.653 and the F-test value of 169.128, indicating a significant positive impact on SIB, indicating model 7 as the best fit.
- h. Table 2 shows a significant positive correlation between IM and FI, with an Adjusted R-Square value of 0.553 and the F-test value of 111.698, indicating a positive impact of IM and FI on SIB, indicating model 8 as the best fit.
- i. Table 2 reveals a significant positive correlation between IM and SC, with an Adjusted R-Square value of 0.648 and the F-test value of 165.657, indicating a positive impact of IM and SC on SIB, indicating model 9 as the best fit.
- j. Table 2 shows a significant positive correlation between FI and SC, with an Adjusted R-Square value of 0.630 and the F-test value of 153.632, indicating a significant positive impact on SIB, indicating model 10 as the best fit.

The bivariate regression analysis found that all fitted models identified positive relationships between independent and dependent variables. However, model 7 showed a more significant impact on saving and investment behavior than other factors. A 1% change in financial literacy and saving culture resulted in a 0.653 percent change in saving and investment behavior. The correlation between available opportunities and financial literacy had less impact, but the test was significant at a 5% level. Overall, all models were considered best.

Multivariate Regression Analysis

To identify the joint effect of all independent variables on SIB, in this section, SIB is regressed with all independent variables (opportunity available, financial literacy, investment motive, family investment, and saving culture) of the study.

Table 3
Model Summary of Multivariate Regression Analysis

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	.820 ^a	0.673	0.663	0.48042

a. Predictors: (Constant), OA, FL, IM, FI, SC

Table 3 above shows the results of multivariate analysis. Here, the adjusted R² is 0.663. That means 66.3 percent of the change in saving and investment behavior is explained by opportunity availability, financial

literacy, investment motive, family investment, and saving culture. However, the other 33.7 percent variation is explained by other factors not recognized in the study.

Table 4
ANOVA of Independent Variable and Dependent Variable

ANOVA ^a						
	Model	Sum of Squares	df	Mean Square	F	Sig.
1	Regression	82.493	5	16.499	71.483	.000 ^b
	Residual	40.160	174	0.231		
	Total	122.652	179			

a. Dependent Variable: SIB

b. Predictors: (Constant), OA, FL, IM, FI, SC

The ANOVA results showed a significant linear relationship between opportunity available, financial literacy, investment motive, family investment, and saving culture (independent variable) and the level of SIB of saving and investment behavior of rural people. The F-test was 71.483, with a P-value of 0.000, indicating a positive relationship between these variables. The fitted linear model was valid at a 5% level of significance.

Table 5
Coefficient of Multiple Regression Analysis

	Model	Unstandardized Coefficients		Standardized Coefficients	t	Sig.
		B	Std. Error	Beta		
1	(Constant)	0.560	0.267		2.100	0.037
	OA	-0.032	0.091	-0.025	-0.350	0.727
	FL	0.141	0.047	0.191	3.023	0.003
	IM	0.197	0.096	0.163	2.055	0.041
	FI	0.085	0.077	0.091	1.102	0.272
	SC	0.499	0.078	0.492	6.367	0.000

a. Dependent Variable: SIB

Note: Field Survey 2023

Table 5 indicates the multiple regression analysis. Here, opportunities available, financial literacy, investment motive, family investment, and saving culture were identified as independent variables, and saving and culture behavior were identified as dependent variables. At 5 percent level of significance and 95 percent level of confidence, since

- The study found no significant linear relationship between opportunity available and saving and investment levels in rural people. However, increasing one unit of opportunity led to a -0.032 unit constant in saving and investment behavior.
- The study found a significant linear relationship between financial literacy and saving and investment levels in rural people. It also revealed that an increase in one unit of macroeconomic factors leads to a 0.141 increase in saving and investment behavior.

- c. The study found a significant linear relationship between investment motive and saving and investment behavior in rural people. Increased corporate governance led to a 0.197 unit increase in saving and investment behavior, with a p-value of 0.041.
- d. The study found no significant linear relationship between family investment and saving and investment behavior in rural people. However, an increase in one unit of family investment led to a 0.085 unit constant in saving and investment behavior.

The study found a significant linear relationship between saving culture factors and rural people's level of saving and investment behavior, with a 0.499 unit increase in saving and investment behavior for each unit of saving culture factors.

Based on univariate, bivariate, and multivariate regression analysis, it can be concluded that the independent variables had a significant impact on the dependent variable, i.e., financial literacy, investment motive, and saving culture had a significant positive impact on rural people's saving and investment behavior. The findings support the study of the work of Saleem, Mahmood, Usman, Bashir, and Shabbir (2021).

8. CONCLUSIONS

Determinants of saving and investment behavior (SIB) of rural people in Chaukune Rural Municipality, Surkhet district had mentioned the five significant variables, i.e., opportunity available, financial literacy, investment motive, family investment, and saving culture, had been taken as the independent variables. The saving and investment behavior had been taken as the dependent variable. The result of ANOVA shows a significant impact of opportunity available, financial literacy, investment motive, family investment, and saving culture on saving and investment behavior.

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