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# Determinants Of Saving And Investment Of Households: A Study Of NCR

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***Abstract:** India is among the world's most resourceful financial markets in terms of technology, regulation and systems. While savings are more in India, where the savings are invested is a ground for concern. Investments by households have been more into moreover bank fixed deposits, risk-free government-backed securities and low acquiescent instruments, or in non-financial assets. This paper examines the expenditure or consumption pattern of households and different pattern of saving and investment. This paper examines the determinants of saving and investment of households of selected districts of NCR by using linear regression method, Chi square test. The present study empirically examines the relationship between saving, income and consumption showing a positive relationship between saving, income and consumption.*

***Keywords:** India, saving rate, financial intermediation, macroeconomic policy*



## I. INTRODUCTION

Saving have a very important position in economic growth as it involves mobilization of capital, which is as a result invested with an aim to speed up the growth process. Understanding the savings behavior is therefore critical in formulating strategy procedures. As a result, the study has investigated the determinants of household savings behavior.

An understanding of the relationship between saving and investment provides an important insight into the process of economic expansion. This is because economic growth critically depends on capital accumulation and capital accumulation stems from investment which depends on domestic and foreign capital. Hence, increased saving leads to higher financial growth through capital formation. The relationship between saving and investment has been the subject of extreme research over the precedent 2 decades. In a seminal study, Feldstein and Horioka (1980)[9] examine the extent of correlation between saving and investment across 16 organizations for economic cooperation and development (OECD) countries. They argue that there should be no relationship between a country's domestic saving and its domestic investment in the presence of perfect wealth mobility. Extra saving in any country will be channeled to the world capital market to fund other countries with constructive investment climate.

For better explain the difference in their saving rates and to understand the differences in their saving behaviors. This study also examines determinants of household saving motives, which will discard light on factors of household saving behavior. Investigating households' saving motives can also provide confirmation about which saving theory is more applicable in the real world.

## OBJECTIVES OF THE STUDY

- ✓ To identify the expenditure pattern of household.
- ✓ The pattern of investment made by households

## HYPOTHESIS

- ✓ Household are indifferent in attitude while taking the decision of their expenditure pattern.
- ✓ People are indifferent in attitude while taking the decision of saving and investment.

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## II. LITERATURE REVIEW

De Vita and Abott (2001) found that there is high correlation between saving and investment in the U.S.A by applying Autoregressive Distributive Lag (ARDL) bounds testing. This correlation however weakened during the more liberalized floating exchange rate period. Sinha (2002) found that savings and investment rates are co integrated for Myanmar and Thailand indicating the growth of savings rate causes the growth of investment rate. Interestingly, reverse causality between savings rate and investment rate has been observed for Hong Kong, Malaysia, Myanmar and Singapore..

Sandhu and Singh (2004) The study was based on structured primary data. The survey was conducted during October and November 2002. The sample of 50 adopters and 50 non-adopters from the universe comprising the city of Amritsar was selected. The study analyzed in case of adopters that transparency, safety, convenience and economy judged as an important feature of net trading followed by market quality and liquidity whereas in case of non-adopters economy and convenience were the important features followed by the other factors like market quality, safety and liquidity.

Kasuga (2004) employed cross sectional analysis and concluded that the impact of domestic savings on investment depended on financial systems and their development. Usually in developing countries with bank-based and/or relatively inefficient financial sectors, the lower saving and investment correlation is not unexpected .Sinha and Sinha (2004) used a huge sample of 123 countries to estimate the short run and longrun relationship between savings and investment rates in an Error Correction framework. And, the results suggest capital should be more mobile for the countries with high per capita income. They also found that the capital is mobile for 16 countries most with a low per-capita income.

Bichitrananda Seth(2005) examines the long-run and short-run relationship between domestic savings and investment on the one hand and between private corporate savings and private corporate investment on the other hand. Also, it focused on their rate of adjustment in disequilibrium in the long-run. Chinn and Ito (2007) found that increased financial liberalization may also encourage outflows of funds, resulting in fewer resources available to fund domestic investment projects, and thereby curtail the correlation between saving and investment. Moreover, the effect of financial liberalization on the relationship is further confounded by the theoretically ambiguous effect of financial liberalization on savings, although its effect on investment has generally been found to be positive.

Verma (2007) considered savings, investment and economic growth for India using annual time series data for the period 1950-51 to 2003-04. The study finds that saving unambiguously determines investment in both the short run and long run. And, no evidence has been found to support the commonly accepted growth models in India, that investment is the engine of economic growth.

Avinash Kumar Singh (2006) the study analyzed the investment pattern of people in Bangalore city and Bhubaneswar & analysis of the study was undertaken with the help of survey method. After analysis and interpretation of data it is concluded that in Bangalore investors are more aware about various investment avenues & the risk associated with that. All the age groups give more important to invest in equity & except people those who are above 50 give important to insurance, fixed deposits and tax saving benefits.

Prasad (2009) examined the perception of the investors and their awareness on various investment alternatives available. A sample of 100 investors has been taken from the twin cities of Hyderabad and Secunderabad. The result of findings showed 75% Net traders were using online stock trading requiring strong technology base whereas Traditional traders felt online trading not an acute process of stock trading and they didn't participate in net trading due to risk of a system failure. V. R. Palanivelu & K. Chandrakumar (2013) examined the Investment choices of salaried class in Namakkal Taluk, Tamilnadu, India with the help of 100 respondents as a sample size & it reveals that as per Income level of employees, invest in different avenues. Age factor is also important while doing investments.

## III. RESEARCH METHODOLOGY

- ✓ *RESEARCH DESIGN:* Research Design of this study was exploratory as this study was tried to explore the variables affecting the determinants of saving and investment of households. Also the research design of this study was descriptive because this study was based on the hypothesis testing using various statistical tools.
- ✓ *DATA COLLECTION:* This research is based on primary data. Questionnaire was used to collect the primary data in this study.
- ✓ *SAMPLE SIZE:* at 95% (Z) level of confidence with ±5 confidence interval (margin of error: c) and 50% (p) response percentage the sample size was 400.

## ANALYSIS AND INTERPRETATION

The present study empirically examines the relationship between saving, income and consumption showing a positive relationship between saving, income and consumption. As the income of the individual increases, consumption increases and simultaneously saving also increases. Economic studies have shown that income is the primary determinant of consumption and saving. Wealthy people save more than poor people, both absolutely and as a percent of income. The very poor are unable to save at all. Instead, as long as they can borrow or draw down their wealth, they tend to save. That is they tend to spend more than they earn reducing they are accumulated saving or going deeper into debt. So we can say that there is a deep relationship between consumption, income and saving and they all affects to each other which can be shown with the equation:

The difference between the household income and expenditure is taken as household saving. Symbolically the household saving may be expressed as below:

$$S = Y - C$$

Where,
S = Household saving
Y= Income
C =Consumption



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We begin our analysis with the Absolute Income Hypotheses, which relates household saving behaviour with household income and other socio-economic variables.

$$S= \alpha + \beta 1\ Y + Z + Ui$$

Where,

S = Saving

Y = Income

Z = other socio-economic variables

ui = Error term

Here, the analysis of the saving and income of the households with the other independent variables are given through a linear regression analysis. This can be given through the following description:

S= f (GEN, AGE, MAR_STA, QUA, OCCU, DEPR, IN_COME)

S= α+ β1GEN+ β2AGE+ β3MAR_STA+ β4QUA+ β5OCCU+ β6DEPR + β7INCOME

Here,

I=Income of the Household

GEN=Gender

AGE=Age of the Respondents

MAR_STA =Marital Status

QUA =Qualification

OCCU= Occupation

DEPR= Dependency Ratio

IN_COME= Income of Household

| Model | R | R Square | Adjusted R Square | Std. Error of the Estimate |
|---|---|---|---|---|
| 1 | 0.342 | 0.117 | 0.101 | 0.659 |
| 2 | 0.342 | 0.117 | 0.103 | 0.658 |
| 3 | 0.334 | 0.111 | 0.1 | 0.659 |
| 4 | 0.325 | 0.106 | 0.097 | 0.661 |

*Source: Survey data*

*Table 1.0: Result of multiple regression of Demographic variables and Expenses*

The table shows that the multiple R values (0.342, 0.342, 0.344 and 0.345) depict a highly positive correlation between demographic factors and total expenses. The reliability of the estimates depends upon the closeness of the relationship. The closer R is to +1 or -1, the closer the relationship (Gupta, S.P., 2001).

I= 0.799 + (.107) GEN+ (.054) AGE+ (-.162) MAR_STA+ (.003)QUA+ (-0.014) OCCU+ (-0.025) DEPR+ (0.067)TO_INC

't' Statistics= 4.154+ (1.953) GEN+ (1.737) AGE+ (-2.885)MAR_STA +0.099EDU+ (-0.840)OCCU + (-1.157)DEPR+ (2.983)TO_INC

| | Un standardized Coefficients | | Standardized Coefficients | T | Sig. |
|---|---|---|---|---|---|
| | | Std. Error | Beta | | |
| (Constant) | 0.799 | 0.192 | | 4.154 | 0.000 |
| Gender | 0.107 | 0.055 | 0.066 | 1.952 | 0.052 |
| Age | 0.054 | 0.031 | 0.071 | 1.737 | 0.083 |
| marital status | -0.162 | 0.056 | -0.126 | -2.885 | 0.004 |
| Qualification | 0.003 | 0.035 | 0.003 | 0.099 | 0.922 |
| Occupation | -0.014 | 0.016 | -0.027 | -0.840 | 0.402 |
| Dependency ratio | -0.025 | 0.021 | -0.037 | -1.157 | 0.248 |
| Total Income | 0.067 | 0.023 | 0.157 | 2.983 | 0.003 |

*Source: Survey data*

*Table 1.1: (Expenditure pattern of households)*

The above table examines the relationship between the monthly expenses of households and with the other independent variables i.e., age, marital status, Gender, occupation, and Age and Educational qualification, dependency ratio and total income. The result shows the relationship of the expenses of the households with other independent variables as Gender (male and female) 0.107 is positively related to expenditure of the households showing an significant relation, the age 0.054 is positively significant. Marital status (-0.162) occupation (-0.014) and dependency ratio (-0.025) of the respondents have negative relationship with the monthly expenses of the households and significant. Qualification (0.003) and total income (0.067) a positive relation with the expenditure and significant.

I= 0.811+ (.108) GEN+ (.054) AGE+ (-.162) MAR_STA + (-0.014) OCCU+ (-0.024) DEPR+ (0.000) TO_INC

't' Statistics= 4.154+ (1.953) GEN+ (1.737) AGE+ (-2.885)MAR_STA +0.099EDU+ (-0.840)OCCU + (-1.157)DEPR+ (2.433)TO_INC

| | Un standardized Coefficients | | Standardized Coefficients | T | Sig. |
|---|---|---|---|---|---|
| | | Std. Error | Beta | | |
| (Constant) | 0.811 | 0.147 | | 5.528 | 0.000 |
| Gender | 0.108 | 0.055 | 0.066 | 1.977 | 0.049 |
| Age | 0.054 | 0.031 | 0.071 | 1.737 | 0.083 |
| marital status | -0.162 | 0.056 | -0.126 | -2.916 | 0.004 |
| Occupation | -0.014 | 0.016 | -0.028 | -0.849 | 0.396 |
| Dependency ratio | -0.024 | 0.021 | -0.037 | -1.157 | 0.248 |
| Total Income | 0.067 | 0.022 | 0.155 | 2.966 | 0.003 |

*Source: Survey data*

*Table 1.2: (Expenditure pattern of households)*

| | Un standardized Coefficients | | Standardized Coefficients | T | Sig. |
|---|---|---|---|---|---|
| | | Std. Error | Beta | | |
| (Constant) | 0.811 | 0.147 | | 5.528 | 0.000 |
| Gender | 0.108 | 0.055 | 0.066 | 1.977 | 0.049 |
| Age | 0.054 | 0.031 | 0.071 | 1.737 | 0.083 |
| marital status | -0.162 | 0.056 | -0.126 | -2.916 | 0.004 |
| Occupation | -0.014 | 0.016 | -0.028 | -0.849 | 0.396 |
| Dependency ratio | -0.024 | 0.021 | -0.037 | -1.157 | 0.248 |
| Total Income | 0.067 | 0.022 | 0.155 | 2.966 | 0.003 |

*Source: Survey data*

*Table 1.2: (Expenditure pattern of households)*

The above table examines the relationship between the monthly expenses of households and with the other independent variables i.e., age, marital status, Gender, occupation, and Age and qualification, dependency ratio and total income. The result shows the relationship of the expenses of the households with other independent variables as Gender (male and female) 0.108 is positively related to expenditure of the households showing an significant relation, the age 0.054 is positively significant. Marital status (-0.162) occupation (-0.014) and dependency ratio (-0.024) of the respondents have negative relationship with the monthly expenses of the households and significant.

| | Un standardized Coefficients | | Standardized Coefficients | T | Sig. |
|---|---|---|---|---|---|
| | | Std. Error | Beta | | |
| (Constant) | 0.767 | 0.1372 | | 5.5911 | 0.0000 |
| Gender | 0.109 | 0.0546 | 0.0673 | 2.0035 | 0.0458 |
| Age | 0.056 | 0.0308 | 0.0745 | 1.8430 | 0.0661 |
| marital status | -0.162 | 0.0557 | -0.1263 | -2.9230 | 0.0037 |
| Dependency ratio | -0.023 | 0.0211 | -0.0361 | -1.1265 | 0.2607 |
| Total Income | 0.068 | 0.022 | 0.159 | 3.054 | 0.002 |

*Source: Survey data*

*Table 1.3: (Expenditure pattern of households)*

The above table examines the relationship between the monthly expenses of households and with the other independent variables i.e., age, marital status, Gender, age, dependency ratio and total income. The result shows the relationship of the expenses of the households with other independent variables as Gender (male and female) 0.109 is positively related to expenditure of the households showing a significant relation, the age 0.056 and total income 0.00 is positively significant. Marital status (-0.162) and dependency ratio (-0.023) of the respondents have negative relationship with the monthly expenses of the households and significant.

| | Un standardized Coefficients | | Standardized Coefficients | T | Sig. |
|---|---|---|---|---|---|
| | | Std. Error | Beta | | |
| (Constant) | 0.676 | 0.111 | | 6.090 | 0.000 |
| Gender | 0.111 | 0.055 | 0.068 | 2.027 | 0.043 |
| Age | 0.059 | 0.031 | 0.077 | 1.906 | 0.057 |
| marital status | -0.165 | 0.056 | -0.128 | -2.968 | 0.003 |
| Total Income | 0.74 | 0.22 | 0.172 | 3.336 | 0.001 |

*Source: Survey data*

*Table 1.4: (Expenditure pattern of households)*

The above table examines the relationship between the monthly expenses of households and with the other independent variables i.e., age, marital status, Gender, total income. The result shows the relationship of the expenses of the households with other independent variables as Gender (male and female) 0.111is positively related to expenditure of the households showing a significant relation, the age 0.059 and total income 0.00 is positively significant. Marital status (-0.162) and dependency ratio (-0.023) of the respondents have negative relationship with the monthly expenses of the households and significant.

TO IDENTIFY THE PATTERN OF INVESTMENT MADE BY HOUSEHOLDS

For identifying the investment pattern of household four different hypotheses have been set according to four different avenues of investment.

$H_{O1}$ People are indifferent in attitude while taking the decision of investment in Debt.

$H_{a1}$: People are different in attitude while taking the decision of investment in debt.

| Model | R | R Square | Adjusted R Square | Std. Error of the Estimate |
|---|---|---|---|---|
| 1 | 0.214 | 0.046 | 0.029 | 0.629 |
| 2 | 0.214 | 0.046 | 0.031 | 0.628 |
| 3 | 0.214 | 0.046 | 0.034 | 0.627 |
| 4 | 0.206 | 0.042 | 0.033 | 0.628 |
| 5 | 0.194 | 0.038 | 0.030 | 0.628 |
| 6 | 0.180 | 0.032 | 0.028 | 0.629 |

*Source: Survey data*

*Table 2.0: (Result of pattern of investment of households)*

- ✓ *Predictors:* (Constant), Dependency ration, marital status, Occupation, gender, qualification, Income, age
- ✓ *Predictors:* (Constant), Dependency ration, Occupation, gender, qualification, Income, age
- ✓ *Predictors:* (Constant), Occupation, gender, qualification, Income, age
- ✓ *Predictors:* (Constant), gender, qualification, Gross, age
- ✓ *Predictors:* (Constant), gender, qualification, Income
- ✓ *Predictors:* (Constant), qualification, Income

The table shows that the multiple R values (0.214, 0.214, 0.214, 0.206, 0.194, and 0.180) depict a highly positive correlation between demographic factors and investment made by households in banks. The reliability of the estimates depends upon the closeness of the relationship. The closer R is to +1 or -1, the closer the relationship (Gupta, S.P., 2001).

The square of the correlation coefficient ($R^2$), called coefficient of determination is a convenient way of interpreting the value of R. $R^2$ gives the percentage variation in the dependent variable as explained by the independent variable (Gupta, S.P., 2001). Further, the greater the value of $R^2$, the better is the regression line fit and the more useful the regression equation as a predictive device for the estimation of the dependent variable from the values of the independent variables (Gupta, S.P., 2001).

| | Un standardized Coefficients | | Standardized Coefficients | T | Sig. |
|---|---|---|---|---|---|
| | | Std. Error | Beta | | |
| (Constant) | 2.178 | 0.271 | | 8.040 | 0.000 |
| Gender | 0.119 | 0.076 | 0.080 | 1.577 | 0.116 |
| Age | 0.047 | 0.044 | 0.067 | 1.070 | 0.285 |
| marital status | -0.006 | 0.078 | -0.005 | -0.073 | 0.942 |
| Qualification | 0.122 | 0.049 | 0.127 | 2.476 | 0.014 |
| Occupation | -0.027 | 0.023 | -0.059 | -1.169 | 0.243 |
| Income | 0.043 | 0.022 | 0.109 | 2.002 | 0.046 |
| Dependency ratio | 0.007 | 0.030 | 0.012 | 0.244 | 0.807 |

*Source: Survey data*

*Table 2.1: (Result of investment in debt made by households)*

REGRESSION EQUATION

I= 2.178 + (.119) GEN+ (.047) AGE+ (-0.006) MAR_STA+ 0.122QUA+ (-0.027) OCCU+ (0.043) IN_COME + (0.007)DEPR

't' Statistics= 8.040 + (1.577) GEN+ (1.070) AGE+ (-0.073)MAR_STA +2.246 EDU+ (-1.169)OCCU + (2.002)IN_COME + (0.244)DEPR

The above table examines the relationship between the investment in debt made by households and with the other independent variables i.e., age, marital status, Gender, qualification, occupation, dependency ratio and income. The result shows the relationship of the investment in debt made by households with other independent variables as Gender (male and female) is pos 0.119 positively related to showing an significant relation, qualification (0.122), income (0.043) age (0.047) and dependency ratio (0.007) is positively significant. Marital status (-0.006) occupation (-0.027) of the respondents have negative relationship with the monthly expenses of the households and significant

REGRESSION EQUATION 2

I= 2.178 + (.119) GEN+ (.047) AGE+ 0.122QUA+ (-0.027) OCCU+ (0.043) IN_COME + (0.007) DEPR

't' Statistics= 8.249 + (1.578) GEN+ (1.256) AGE+(2.511) EDU+ (-1.175)OCCU + (2.102)IN_COME + (0.241)DEPR

| | Un standardized Coefficients | | Standardized Coefficients | T | Sig. |
|---|---|---|---|---|---|
| | | Std. Error | Beta | | |
| (Constant) | 2.174 | 0.264 | | 8.249 | 0.000 |
| Gender | 0.119 | 0.076 | 0.080 | 1.578 | 0.115 |
| Age | 0.045 | 0.036 | 0.064 | 1.256 | 0.210 |
| qualification | 0.122 | 0.049 | 0.128 | 2.511 | 0.012 |
| Occupation | -0.027 | 0.023 | -0.060 | - 1.175 | 0.241 |
| Income | 0.043 | 0.020 | 0.108 | 2.102 | 0.036 |
| Dependency ratio | 0.007 | 0.030 | 0.012 | 0.241 | 0.810 |

*Source: Survey data*

*Table 2.2: (Result of investment in debt made by households)*

The above table examines the relationship between the investment in debt made by households and with the other independent variables i.e., age, Gender, qualification, occupation, dependency ratio and income. The result shows the relationship of the investment in debt made by households with other independent variables as Gender (male and female) is pos 0.119 positively related to showing an significant relation, qualification (0.122), income (0.043) age (0.047) and dependency ratio (0.007) is positively significant. Occupation (-0.027) of the respondents have negative relationship with the monthly expenses of the households and significant.

REGRESSION EQUATION 3

I= 2.202 + (.119) GEN+ (.045) AGE+ (0.122) QUA+ (-0.028) OCCU+ (0.042) IN_COME

't' Statistics= 9.314 + (1.576) GEN+ (1.251) AGE+(2.517) EDU+ (-1.185)OCCU + (2.095)IN_COME

| | Un standardized Coefficients | | Standardized Coefficients | t | Sig. |
|---|---|---|---|---|---|
| | | Std. Error | Beta | | |
| (Constant) | 2.202 | 0.236 | | 9.314 | 0.000 |
| Gender | 0.119 | 0.075 | 0.080 | 1.576 | 0.116 |
| Age | 0.045 | 0.036 | 0.064 | 1.251 | 0.212 |
| Qualification | 0.122 | 0.049 | 0.128 | 2.517 | 0.012 |
| Occupation | -0.028 | 0.023 | -0.060 | -1.185 | 0.237 |
| Income | 0.042 | 0.020 | 0.108 | 2.095 | 0.037 |

*Source: Survey data*

*Table 2.3: (Result of investment in debt made by households)*

The above table examines the relationship between the investment in debt made by households and with the other independent variables i.e., age, Gender, qualification, occupation, dependency ratio and income. The result shows the relationship of the investment in debt made by households with other independent variables as Gender (male and female) is pos 0.119 positively related to showing an significant relation, qualification (0.122), income (0.042) age (0.045) is positively significant. Occupation (-0.028) of the respondents have negative relationship with the investment in debt of the households and significant.

REGRESSION EQUATION 4

I= 2.099 + (.122) GEN+ (.050) AGE+ (0.126) QUA + (0.047) IN_COME

't' Statistics= 9.538 + (1.615) GEN+ (1.389) AGE+(2.603) QUA + (2.363)IN_COME

| | Un standardized Coefficients | | Standardized Coefficients | t | Sig. |
|---|---|---|---|---|---|
| | | Std. Error | Beta | | |
| (Constant) | 2.099 | 0.220 | | 9.538 | 0.000 |
| Gender | 0.122 | 0.075 | 0.082 | 1.615 | 0.107 |
| Age | 0.050 | 0.036 | 0.071 | 1.389 | 0.166 |
| qualification | 0.126 | 0.049 | 0.132 | 2.603 | 0.010 |
| Income | 0.047 | 0.020 | 0.119 | 2.363 | 0.019 |

*Source: Survey data*

*Table 2.4: (Result of investment in debt made by households)*

The above table examines the relationship between the investment in debt made by households and with the other independent variables i.e., age, Gender, qualification and income. The result shows the relationship of the investment in debt made by households with other independent variables as Gender (male and female) is 0.122 positively related to showing an significant relation, qualification (0.126), income (0.047) age (0.050) is positively significant.

REGRESSION EQUATION 5

I= 2.232 + (.111) GEN+ (0.114) QUA + (0.050) IN_COME

't' Statistics=11.242+ (1.473) GEN+(2.383) QUA + (2.541)IN_COME

| | Un standardized Coefficients | | Standardized Coefficients | t | Sig. |
|---|---|---|---|---|---|
| | | Std. Error | Beta | | |
| (Constant) | 2.232 | 0.199 | | 11.242 | 0.000 |
| Gender | 0.111 | 0.075 | 0.074 | 1.473 | 0.142 |
| qualification | 0.114 | 0.048 | 0.119 | 2.383 | 0.018 |
| Income | 0.050 | 0.020 | 0.127 | 2.541 | 0.011 |

*Source: Survey data*

*Table 2.5: (Result of investment in debt made by households)*

The above table examines the relationship between the investment in debt made by households and with the other independent variables i.e., Gender, qualification and income. The result shows the relationship of the investment in debt made by households with other independent variables as Gender (male and female) is 0.111 positively related to showing an significant relation, qualification (0.114), income (0.050) is positively significant.

REGRESSION EQUATION 6

I= 2.353 + (0.123) QUA + (0.046) IN_COME

't' Statistics=12.974+ (2.607) QUA + (2.331)IN_COME

| | Un standardized Coefficients | | Standardized Coefficients | t | Sig. |
|---|---|---|---|---|---|
| | | Std. Error | Beta | | |
| (Constant) | 2.352 | 0.181 | | 12.974 | 0.000 |
| qualification | 0.123 | 0.047 | 0.129 | 2.607 | 0.009 |
| Income | 0.046 | 0.020 | 0.115 | 2.331 | 0.020 |
| | | | | | |

*Source: Survey data*

*Table 2.6: (Result of investment in debt made by households)*

The above table examines the relationship between the investment in debt made by households and with the other independent variables i.e., qualification and income. The result shows the relationship of the investment in debt made by households with other independent variables as qualification (0.123), income (0.046) is positively significant.

Investment pattern of household in Equities

$H_{O2}$ People are indifferent in attitude while taking the decision of investment in Real Estate.

$H_{a2}$: People are different in attitude while taking the decision of investment in Real Estate.

| Model | R | R Square | Adjusted R Square | Std. Error of the Estimate |
|---|---|---|---|---|
| 1 | 0.282 | 0.79 | 0.063 | 0.733 |
| 2 | 0.281 | 0.79 | 0.065 | 0.733 |
| 3 | 0.281 | 0.79 | 0.067 | 0.732 |
| 4 | 0.280 | 0.78 | 0.069 | 0.731 |
| 5 | 0.277 | 0.77 | 0.070 | 0.731 |
| 6 | 0.270 | 0.73 | 0.068 | 0.731 |

*Source: Survey data*

*Table 2.2.0: (Result of investment in Equities made by households)*

- ✓ *Predictors:* (Constant), Dependency ratio, marital status, Occupation, gender, qualification, Gross Income, age
- ✓ *Predictors:* (Constant), Dependency ratio, Occupation, gender, qualification, Gross Income, age
- ✓ *Predictors:* (Constant), Dependency ratio, Occupation, qualification, Gross Income, age
- ✓ *Predictors:* (Constant), Dependency ratio, qualification, Gross Income, age
- ✓ *Predictors:* (Constant), Dependency ratio, qualification, Gross Income
- ✓ *Predictors:* (Constant), qualification, Gross Income

The table shows that the multiple R values (0.282, 0.281, 0.281, 0.280, 0.277, and 0.270) depict a highly positive correlation between demographic factors and investment made by households in real estate

The table shows the Model Summary. It is depicted that in Model 1, $R^2$ = 0.79 which means that 79 percent of the total variation in the dependent variable i.e. investment made by households in real estate is explained by independent variable (demographic variable i.e. Dependency ration, marital status, Occupation, gender, qualification, Income, age). With the exclusion of marital status in Model 2, $R^2$ =0.79 which means that 79 percent of the total variation in the dependent variable is explained by independent variables and by excluding the marital status there would not be any effect on equation. Similarly with the exclusion of marital status and gender in the Model 3, $R^2$ =0.79 which means that 79 percent of the total variation in the dependent variable is explained by the independent variables. With the exclusion marital status gender and occupation Model 4, $R^2$ =0.78 which means that 78percent of the total variation in the dependent variable is explained by the independent variables.. With the exclusion of marital status gender and occupation Model 5, $R^2$ =0.77 which means that 77 percent of the total variation in the dependent variable is explained by the independent variables. With the exclusion marital status gender and occupation and dependency ratio Model 6, $R^2$ =0.73 which means that 73 percent of the total variation in the dependent variable is explained by the independent variables. The second output generated was regarding regression coefficients. The *t* values of all the variables in the model are statistically significant as their sig. values lie below 0.05.

REGRESSION EQUATION 1 FOR HYPOTHESIS 2

I= 0.451 + (0.037) GEN+ (.047) AGE+ (-0.025) MAR_STA+ (0.142) QUA+ (-0.014) OCCU+ (0.111) IN_COME + (-0.040) DEPR

't' Statistics= 1.427 + (0.418) GEN+ (0.928) AGE+ (-0.018)MAR_STA +(2.426) EDU+ (0.515)OCCU + (4.426)IN_COME + (-1.150)DEPR

| Model | | Un standar dized Coeffic ients | | Standar dized Coeffici ents | T | Sig. |
|---|---|---|---|---|---|---|
| | | | Std. Error | Beta | | |

| | | | | | | |
|---|---|---|---|---|---|---|
| 1 | (Constant) | 0.451 | 0.316 | | 1.427 | 0.154 |
| | Gender | 0.037 | 0.088 | 0.021 | 0.418 | 0.676 |
| | Age | 0.047 | 0.051 | 0.057 | 0.928 | 0.354 |
| | marital status | -0.025 | 0.090 | -0.018 | -0.277 | 0.782 |
| | Qualification | 0.142 | 0.057 | 0.126 | 2.484 | 0.013 |
| | Occupation | 0.014 | 0.027 | 0.026 | 0.515 | 0.607 |
| | Income | 0.111 | 0.025 | 0.238 | 4.426 | 0.000 |
| | Dependency ratio | -0.040 | 0.035 | -0.056 | -1.150 | 0.251 |

*Source: Survey data*

*Table 2.2.1: (Result of investment in Equities made by households)*

The above table examines the relationship between the investment in real estate made by households and with the other independent variables i.e., age, marital status, Gender, qualification, occupation, dependency ratio and income. The result shows the relationship of the investment in real estate made by households with other independent variables as Gender (male and female) is 0.037 positively related to showing an significant relation, qualification (0.142), income0 (0.111) age (0.047) and occupation (0.014) is positively significant. Marital status (-0.025) dependency ratio (-0.040) of the respondents have negative relationship with the investment made in real estate by the households and significant.

REGRESSION EQUATION 2 FOR HYPOTHESIS 2

I= 0.431 + (0.037) GEN+ (.039) AGE + (0.145) QUA+ (0.014) OCCU+ (0.109) IN_COME + (-0.041) DEPR

't' Statistics= 1.402 + (0.416) GEN+ (0.940) AGE +(2.547) EDU+ (0.503)OCCU + (4.605)IN_COME + (-1.167)DEPR

| Model | | Unstandardized Coefficients | | Standardized Coefficients | T | Sig. |
|---|---|---|---|---|---|---|
| | | | Std. Error | Beta | | |
| 2 | (Constant) | 0.431 | 0.307 | | 1.402 | 0.162 |
| | Gender | 0.037 | 0.088 | 0.021 | 0.416 | 0.677 |
| | Age | 0.039 | 0.042 | 0.047 | 0.940 | 0.348 |
| | Qualification | 0.145 | 0.057 | 0.127 | 2.547 | 0.011 |
| | Occupation | 0.014 | 0.027 | 0.025 | 0.503 | 0.615 |
| | Income | 0.109 | 0.024 | 0.233 | 4.605 | 0.000 |
| | Dependency ratio | -0.041 | 0.035 | -0.057 | -1.167 | 0.244 |

*Source: Survey data*

*Table 2.2.2: (Result of investment in Equities made by households)*

The above table examines the relationship between the investment in real estate made by households and with the other independent variables i.e., age, Gender, qualification, occupation, dependency ratio and income. The result shows the relationship of the investment in real estate made by households with other independent variables as Gender (male and female) is 0.037 positively related to showing an significant relation, qualification (0.145), income (0.109) age (0.039) and occupation (0.014) is positively significant. dependency ratio (-0.041) of the respondents have negative relationship with the investment made in real estate by the households and significant

REGRESSION EQUATION 3 FOR HYPOTHESIS 2

I= 0.478 + (.037) AGE+ (-0.025) + (0.147) QUA+ (0.013) OCCU+ (0.108) IN_COME + (-0.041) DEPR

't' Statistics= 1.672 + (0.90) AGE+ (2.613) EDU+ (0.490)OCCU + (4.599)IN_COME + (-1.177)DEPR

| Model | | Unstandardized Coefficients | | Standardized Coefficients | T | Sig. |
|---|---|---|---|---|---|---|
| | | | Std. Error | Beta | | |
| 3 | (Constant) | 0.478 | 0.286 | | 1.672 | 0.095 |
| | Age | 0.037 | 0.042 | 0.045 | 0.900 | 0.369 |
| | Qualification | 0.147 | 0.056 | 0.130 | 2.613 | 0.009 |
| | Occupation | 0.013 | 0.027 | 0.024 | 0.490 | 0.624 |
| | Income | 0.108 | 0.023 | 0.230 | 4.599 | 0.000 |
| | Dependency ratio | -0.041 | 0.035 | -0.057 | -1.177 | 0.240 |

*Source: Survey data*

*Table 2.2.3: (Result of investment in Equities made by households)*

The above table examines the relationship between the investment in real estate made by households and with the other independent variables i.e., age, qualification, occupation, dependency ratio and income. The result shows the relationship of the investment in real estate made by households with other independent variables as qualification (0.147), income (0.108) age (0.037) and occupation (0.013) is positively significant. Dependency ratio (-0.041) of the respondents have negative relationship with the investment made in real estate by the households and significant

REGRESSION EQUATION 4 FOR HYPOTHESIS 2

I= 0.528 +(.037) AGE+ (0.145) QUA + (0.105) IN_COME + (-0.042) DEPR

't' Statistics=1.427+(0.853) AGE +(2.587) EDU+ (4.594)IN_COME + (-1.195)DEPR

| Model | | Un standardized Coefficients | | Standardized Coefficients | T | Sig. |
|---|---|---|---|---|---|---|
| | | | Std. Error | Beta | | |
| 4 | (Constant) | 0.528 | 0.267 | | 1.978 | 0.049 |
| | Age | 0.035 | 0.041 | 0.042 | 0.853 | 0.394 |
| | Qualification | 0.145 | 0.056 | 0.128 | 2.587 | 0.010 |
| | Income | 0.105 | 0.023 | 0.225 | 4.594 | 0.000 |
| | Dependency ratio | -0.042 | 0.035 | -0.058 | -1.195 | 0.233 |

*Source: Survey data*

*Table 2.2.4: (Result of investment in Equities made by households)*

The above table examines the relationship between the investment in real estate made by households and with the other independent variables i.e., age, qualification, occupation, dependency ratio and income. The result shows the relationship of the investment in real estate made by households with other independent variables as qualification (0.147), income (0.108) age (0.037) and occupation (0.013) is positively significant. Dependency ratio (-0.041) of the respondents have negative relationship with the investment made in real estate by the households and significant

REGRESSION EQUATION 5 FOR HYPOTHESIS 2

I= 0.616 + (0.136) QUA + (0.108) IN_COME
't' Statistics= 2.506+(2.467) + (4.753)IN_COME

| Model | | Un standardized Coefficients | | Standardized Coefficients | t | Sig. |
|---|---|---|---|---|---|---|
| | | | Std. Error | Beta | | |
| 5 | (Constant) | 0.616 | 0.246 | | 2.506 | 0.013 |
| | Qualification | 0.136 | 0.055 | 0.120 | 2.467 | 0.014 |
| | Gross Income | 0.108 | 0.023 | 0.231 | 4.753 | 0.000 |
| | Dependency ratio | -0.042 | 0.035 | -0.058 | -1.195 | 0.233 |

*Source: Survey data*

*Table 2.2.5: (Result of investment in Equities made by households)*

The above table examines the relationship between the investment in real estate made by households and with the other independent variables i.e., age, qualification, occupation, dependency ratio and income. The result shows the relationship of the investment in real estate made by households with other independent variables as income (0.108) and qualification (0.136) is positively significant. Dependency ratio (-0.042) of the respondents have negative relationship with the investment made in real estate by the households and insignificant.

REGRESSION EQUATION 6

I= 0.462 + (0.135) QUA + (0.109) IN_COME
't' Statistics= 2.192+(2.446) + (4.810)IN_COME

| Model | | Un standardized Coefficients | | Standardized Coefficients | t | Sig. |
|---|---|---|---|---|---|---|
| | | | Std. Error | Beta | | |
| 6 | (Constant) | 0.462 | 0.211 | | 2.192 | 0.029 |
| | Qualification | 0.135 | 0.055 | 0.119 | 2.446 | 0.015 |
| | Gross Income | 0.109 | 0.023 | 0.233 | 4.810 | 0.000 |

*Source: Survey data*

*Table 2.2.6: (Result of investment in Equities made by households)*

- ✓ DEPENDENT VARIABLE: AMOUNT OF INVESTMENT IN REAL ESTATE

The above table examines the relationship between the investment in real estate made by households and with the other independent variables i.e., age, qualification, occupation, dependency ratio and income. The result shows the relationship of the investment in real estate made by households with other independent variables as income (0.109) and qualification (0.135) is positively significant with the investment made in real estate by the households and significant.

## IV. CONCLUSION

- ✓ Study examines the relationship between the monthly expenses of households and with the other independent variables i.e., age, marital status, Gender, occupation, Age, Educational qualification, dependency ratio and total income. The result shows the relationship of the expenses of the households with other independent variables. Income, gender, age and qualification are the most crucial factor of the expenses or consumption behavior in the entire study.
- ✓ Study examines the relationship between the different investment avenues like debt, equities, and real estate made by households and with the other independent variables. Income, gender, age and qualification are the most crucial factor of the investment behavior of households.
- ✓ The Dependency ratio (DEPR) is inversely related to the saving behavior of the households. In this study, the dependency ratio is create to have a strong negative influence on household savings in the total study area. The results suggest that as the number of dependent members in the household increases leads to the households savings declines hugely.

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