RESEARCH PAPER

Impact of Inflation on Household Savings: A case of Lahore, Pakistan

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ABSTRACT

The study has undertaken to examine the impact of inflation on household saving, where household saving is dependent and inflation is independent furthermore there are household income and interest rate which are independent. To draw results, primary data has collected directly from 150 respondents of different backgrounds representing the effect of these variables in their houses. To analyze the data gathered spss software is used and data descriptive statistics has been used to check validity of sample class and to check minimum, maximum, mean and St. Deviation. Correlation has used to measure the relation between household income, inflation, interest rate and household savings. There is positive relationship between variables. There is negative impact on dependent variable of inflation, if inflation increases savings will decrease and vice versa. Regression has used to check the relationship of all four variables in the study including one household saving, dependent variable. The results revealed that inflation directly affect household savings and other factors have their influence too, which includes household income and interest rate.
Key words: Household Savings, Lahore, Inflation

INTRODUCTION

State Bank of Pakistan issued a report in December 2014 which was printed in Dawn news paper which revealed that domestic saving touch the lowest point in fiscal year 2014 although it was top in last five years in 2011. Saving is basically the deference between income and expenditure. It is the portion of our income that is set aside after meeting all of our expenditures for the future needs. Savings are very important for individual or individuals to keep aside extra money as savings so that it can be used when it is highly needed. It reduces the elasticity of demand for loan in various need hours, (Bishop & Cassidy, 2012). The decision to save and consume are inter-related. The more we spend, less we save and vice versa. There are number of factors which influence individual's savings but our focus of study is inflation, household income and interest rate. Household saving is the aggregate amount which is saved by all households in a country or it is the sum of savings of all households in a country. Household income is obtained by deducting consumption from income after tax the concept after-tax income can be define as the amount of gross income minus income tax of household earnings or it is the deference of spending on various goods and services and household income. Expenditures or consumptions from the spending is done for the purpose of obtaining direct satisfaction or utility. Household saving is the aggregate amount of income which is not spent by all households in a country, (Bishop & Cassidy, 2012). In this paper we analyze

inflationary impacts of household savings. This will help us determining the sensitivity of different component of saving to changes in its determinants.

LITERATURE REVIEW

Azam et al (2010) viewed relationship among saving and investment which is essential for the socioeconomic development of the country via capital accretion. The learning shows that throughout 1970-2009 there has been descending trend in household saving for several developing countries. The observed finding of study reflects that there is a affirmative impact of the per-capita income on the national saving and there is negative impact of inflation. The ending of the study is straightforward that there may be enhance in the level of the per-capita which can enlarge household saving and can speed up economic. They also discuses that unemployment, increase in the population enlargement, decline in the economic development and other supply shocks particularly in Food and energy supply also sluggish down the saving rate in Pakistan.

Siddiqui & Siddiqui (1993) stated that household's saving is central for economic development and richness. In his study, they discuses that in 1960-90 rate of the household's saving in the total national saving was near 83 percent and the Gross domestic product was near about 6.6 percent to 10 percent. It is the utmost rate of household's saving that emerged in the record of Pakistan. Observed outcome shows that there are several factors, which are accountable for it. Firstly, capital creation helps in growing labor efficiency and future income. Secondly, changes in the economic and demographic factors also raise the household's saving more quickly than utilization.

Kazmi (1990) examines the cause of low saving rate in Pakistan compared with the persistently rising rates in regional countries. The factors of low savings rate are the outcomes of many economics, demographic, political, social, cultural and religious matters. In which some factors are quantitative and other are qualitative. However socio-political and religious factors are basically the leading factors responsible for low saving rates in Pakistan.

Burney & Khan (1992) tests the hypothesis of low savings in Pakistan for last two decades. They argue that there are many factors behind it. These include socio economics and administrative factors which are responsible for it. The conclusion of the study is the simple that there may be increase in the level of per capita which can increase household saving and accelerate economy. They also discuss that unemployment, increase in population growth and other supply shocks especially in food and energy supply also slow down the saving rate in Pakistan.

Smyth (1993) implies that there are economic factor that motivate household's saving. On the one hand, future demands for credit can motivate household's savings but on the other hand, supply of saving also creates demand for credit. The study is carry out in the rural area of Nakuru District The choice of a rural region as area of study is based on the fact that a majority of the household's live in the rural areas, and hence the investment demand for loan will contribute to the increase household saving as well as growth and development agricultural sector. The research study analyzed savings behavior among is monetary savings among farmers, entrepreneurs and teachers whose members live in the rural areas of Nakuru District over the period of November 2005 to May 2006.

PROBLEM STATEMENT

The state bank of Pakistan reported in December 2014 that the private savings kept falling during the last five years. The household savings fell to 10.6 per capita in fiscal year 2014 which was highest 15.1 per capita in fiscal year 2011. It is the lowest savings in the last five years. Savings are crucial for the growth of the economy but it never crossed 20 per capita of GDP. Inflation has started falling in fiscal year 2015 but the interest rate is still high. In this context the determinants of household savings are vital to investigate in Pakistan or in other world. It is very urgent to know the leading factors which can

influence the household savings. This study is an attempt to investigate the impacts of inflation, family income and interest rate on household savings and constitute a useful investigation in the light of its importance for national economy.

OBJECTIVES
1. To analyze the relationship of inflation and savings.
2. To assess the role of interest rate on household savings.
3. To study household income and savings relationship.

HYPOTHESIS
H_0: Inflation has a negative impact on household savings.
H_1: Inflation has a positive impact on household savings.
H2: Household income has impact on savings.
H3: interest rate has significant influence on savings.

VARIABLES
There are four total variables in this model, three of them are independent and one is dependent variable-
1. Household Income.
2. Inflation.
3. Interest rate.
4. Household savings.

HOUSEHOLD INCOME
It is the income of the individuals the total individual are earning and the sum of other sources incomes, the sum of all income is called as house hold income.

INFLATION
Inflation is the degree/rate at which prices of the commodities are increased or over priced in the country is called as inflation.

INTEREST RATE
It is the rate which gives money power to earn money with it termed as interest rate. Loan lender can earn through lending a loan. Interest rate is declared by the state bank of the state.

HOUSEHOLD SAVINGS
Household saving is the portion which is kept or set aside from total income of the house to use it in needy hours, for future needs and for future plans.

RESEARCH FRAMEWORK
The study was designed as a descriptive study with the intention to check the impact of inflation on household savings. The theoretical framework of study based on one dependent and three independent variables.

Effect of Household Income on Household Savings:
There appears a direct relationship between them; these two variables had great influence on each other performance, change in one variable causes change in other. If household income increases the savings also increases vice versa.

Effect of Interest Rate on Household Savings:
There appears direct relationship between these two variables here, the increase in interest rate will attract individual saving behavior with the mind to save more and invest his savings to earn more with his savings and vice versa.

Effect of Inflation on Household Savings:
In these two variables there is a significant negative relationship as inflation hits the savings of the individuals directly; increase in prices causes the increase in expenditure proportion which leads towards the decline in household savings proportion. This in future hits the needy hour's plans savings.

PROPOSED EQUATION

1. Inflation effect on savings.
2. Interest rate on savings.
3. Income relationship with savings

Dependent Variable= ∞ β 1+ Independent variable, β 2 + independent variable, β 3 + Independent variable.

HS = $\infty\beta1$+IN, $\beta2$+IR, $\beta3$+HI.

METHODOLOGY

The data for this research paper has been collected from primary source through questionnaire, which is directly collected from 150 respondents from self-employed and salaried persons to analyze their saving behavior under the umbrella of inflation and variation in interest rates and family income. The respondents were from different residential areas of Lahore; respondents were from public and private sector. Data analysis has done through SPSS.

RESEARCH DESIGN

This was a non-contrived research design. A non-contrived research design was appropriate for this study because it allows collection of information for both independent and dependent variables using questionnaires. This design allowed the researcher to conduct quantitative research approaches. In the present study, household income has been treated as a dependent and inflation as an independent variable. Mathematically, relationship between employee's performance and Job Satisfaction is as below:

$$HS = f (IN)$$

'HS' stands for household savings and 'IN' stands for inflation.

POPULATION

The target population of this study was the self employed persons living in Lahore. Due to the shortage of time, the researcher selected the specific employee. Thus employees in UET, UMT, Lahore Airport and some others areas were selected in the study.

UNIT OF ANALYSIS

The unit of analysis of this study is "Household income" work at the different sectors of Lahore, Pakistan.

INSTRUMENT

The questionnaire comprised of two parts, the first part was used to quantify the effects of different economic factors on household savings supported by the literature review. The first section included the questions about gender, age, education. The Likert scale was used to get the response indicating a score of 1 for strongly agree, 2 for agree, 3 for neutral, 4 for disagree and 5 for strongly disagree.

TIME HORIZON

This research is based on cross-sectional study as data has been gathered at one point of time from individual.

RESULTS AND FINDINGS

Response Rate:

The 150 questionnaires were completed through different employed of Lahore, Pakistan. A total number of 120 usable questionnaires were used and retrieved which represents 80%; while 15 questionnaires were un retrieved representing 20%, these means therefore that the distribution and retrieval process was successful in view of the above retrieval percentages.

Data is collected through this questionnaire 81 respondents are male representing (67%) while 39 respondents representing (33%) are female.

Data Analysis:

Table 1: Variables Entered/Removed[b]

Model	Variables Entered	Variables Removed	Method
1	Average Interest Rate, Average Inflation, Average Household Income	.	Enter

a. All requested variables entered.
b. Dependent Variable: Average Household Saving

This table shows the list of independent variables and a depending variable added and method used for the entrance of the variable in SPSS for data analysis

Descriptive statistical analysis:

Table 2: Descriptive Statistics

	N	Min.	Max.	Mean	Std. Deviation
Average Household Saving	120	1.00	4.75	2.6958	.70277
Average Inflation	120	1.00	3.50	2.1875	.56625
Average Household Income	120	1.57	4.00	2.7010	.51377
Average Interest Rate	120	1.00	5.00	3.1504	.97947
Valid N (list wise)	120				

Descriptive statistics analysis states that the sample class is 120. All of these 120 samples are valid; result from this could be highly authentic to study behavior of the class. Finding of the test are mean and standard deviation, according to mean average except interest rate is bellow neutral, but it is above par in interest rate scenario. Standard deviation shows sample diversion in the class from which sample is selected, there is high diversion in savings and interest rate scenario. This indicates relationship between them.

Correlations Analysis:

Correlation analysis indicates the interdependency of variables, here correlation analysis states there is a positive relationship among all variables especially when it comes to savings and inflation there is a considerable bounding among them, and when these two variables interdependently studied it shows a weak but a true relationship between inflation and household savings. Here 2-tailed result shows that the variables are significantly expelling each other results.

Table 3: Correlations

		Average Household Saving	Average Inflation	Average Household Income	Average Interest Rate
Average Household Saving	Pearson Correlation	1	-.323**	.118	.160
	Sig. (2-tailed)		.000	.199	.080
	N	120	120	120	120
Average Inflation	Pearson Correlation	-.323**	1	.113	.058
	Sig. (2-tailed)	.000		.221	.531
	N	120	120	120	120
Average Household Income	Pearson Correlation	.118	.113	1	.130
	Sig. (2-tailed)	.199	.221		.157
	N	120	120	120	120
Average Interest Rate	Pearson Correlation	.160	.058	.130	1
	Sig. (2-tailed)	.080	.531	.157	
	N	120	120	120	120

**. Correlation is significant at the 0.01 level (2-tailed).

Regression Analysis:

Table 4: Model Summary

Model		R	R Square	Adjusted R Square	Std. Error of the Estimate	Change Statistics				
						R Square Change	F Change	df1	df2	Sig. F Change
Dimension	1	.359a	.129	.106	.66449	.129	5.703	3	116	.001
a. Predictors: (Constant), Average Interest Rate, Average Inflation, Average Household Income										

This table provides the R and R^2 values. The R value represents the simple correlation and is 0.359, which indicates a weak but a positive correlation. The R^2 value indicates how much of the total variation in the dependent variable, savings, can be explained by the independent variables, inflation, household income, interest rate. In this case, 12.9% can be explained, which is moderate.

Table 5: ANOVA[b]

Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	7.554	3	2.518	5.703	.001a
	Residual	51.219	116	.442		
	Total	58.773	119			
a. Predictors: (Constant), Average Interest Rate, Average Inflation, Average Household Income						
b. Dependent Variable: Average Household Saving						

This table indicates that the regression model predicts the dependent variable significantly well. The regression row Sig. indicates the statistical significance of the regression model that was run. Here, it is < .001 which is less than 0.05, and indicates that; overall, the regression model statistically significantly predicts the outcome variables predictability with significance of .001, which shows there predictability significance is very strong and authentic.

Table 6: Coefficient

Model		Unstandardized Coefficients		Standardized Coefficients	T	Sig.
		B	Std. Error	Beta		
1	(Constant)	1.314	.410		3.205	.002
	Average Inflation	.382	.108	.308	3.522	.001
	Average Household Income	.090	.120	.066	.752	.454
	Average Interest Rate	.096	.063	.134	1.532	.128
a. Dependent Variable: Average Household Saving						

The coefficients table provides us with the necessary information to predict relationship of dependent factor with the independent factors, as well as determine whether inflation contributes statistically significantly to the model by looking at the Sig. furthermore, we can use the value "B" column under the "Unstandardized Coefficient" column, as shown.

CONCLUSION

This research paper has made to know the impact of inflation on household savings for which findings of State Bank of Pakistan has used as base which was printed in December 2014. The study contains one dependent variable Household savings and three independent variables in which inflation, household income and interest rate included. The study has examined the impact of inflation on household saving and to draw results, primary data has collected directly from 150 respondents of different backgrounds representing the effect of these variables in their houses. To analyze the data gathered data descriptive statistics has used to check validity of sample class and to check minimum, maximum, mean and Standard deviation. Correlation has used to measure the relation between household income and household savings. There is positive relationship between these two variables. If household increases saving will also increase and vice versa. Regression has used to check the relationship of all four variables in the study including one household saving, dependent variable. The results revealed that inflation directly affect household savings but other factors have their influence too, which includes household income and interest rate

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