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Measuring the impact of changes in financial assets and financial liabilities on the household sector savings

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Current studyaims to determine the current situtation of financial assets and liabilities of household sector in India. Researchers have also measured the relationship between household sector savings and the changes in financial assets or financial liabilities of the household sector. Study was based on the secondary data derived from the annual publication of Reserve Bank of India tittles 'Statistics of Indian Economy'. Study covered the period from 2011-12 to 2016-17. In order to determine the current situtaion of the financial assets and liabilities of household sector in India, researchers have used graphical and tabular form of data representation while for measuring the impact of changes in financial assets or financial libaiities of the household sector on the savings of houshold sector, linear regression analysis has been used. It was found that the changes in financial assets of the household sector has a positive and significant impact on the savings of household sector while changes in financial liabilities has a negative and insignificant impact on the savings of household sector.

Keywords: household sector, India, financial assets, financial liabilities, household savings, government

Saving can be defined as the amount which is in surplus after deducting all the consumption or expenses from the income earned. Household sector savings can be defined as an internal soruce of funds for an economy. Household sector savings plays an important role in the growth of the economy, because if the household sector savings are huge then government need not to seek finance from other external sources even in the situation of economic slow-down. Household sector savings makes the economic situation of a nation strong enough with reduced level of debt burden on the nation. Household sector savings can be in various forms such as; deposits with the banks, or financial institutions, deposits with the post offices or other government organizations, deposits in the form of provident funds and pension funds, in stock market, or in any other forms. Household sector savings depends on various factors such as; consumption pattern of the nation people, interest rates on the investment, growth in population, employment, income level, financial literacy of the people, increase in young population and the attractive and growth ensuring investment avenues in the country (Dennis & Granbois, 1983). Financial inclusion is the most important step of government to increase the growth rate of the household sector savings especially from rural areas.

Growth of the economy mainly depends on the savings of the household sector, the amount which is saved when invested in order to earn return on the same is called investment (Xiao & Olson, 1993). And if the saving is invested for the purchase of some capital goods or machineries then it is called capital formation. All the three terms, savings, investment and capital formation leads to the growth of the economy. Higher savings leads to higher level of investment and higher investment leads to high level of capital formation. Hence, household sector savings plays an important role in the overall growth of the nation and is an important growth indicator itself.

Household sector savings can be increased with the increase in employment opportunities, competent wage rate determination, increasing the coverage of financial institutions in the country and providing high interest rate on the investments.

Keeping in view the importance of household sector savings, current study was conducted to measure the current situtaion of hosue hold sector savings in India.

Review of literatures

There are numerous studies where researchers have examined factors which may affect the saving behaviour of household sector. It was found from review literature that there are several factors which have a significant effect on the household sector savings such as; income (Hebbel & Serven, 2000) liquidity (Hayashi, 1987; Rundel, 1991) and various external factors namely; economic environment of the country and political environment.

Crockett (1977) measured the risk and return involved in the decision of saving and investment by household sector and concluded that return is the main factor which attracts the household sector to do savings and risk involved in the saving option tend to decrease the motive of the household sector to save the money. Financial assets of the household sector got increase with the increase in the return on the assets. Jianakoplos et al. (1996) also examined the saving behaviour of the household sector and found that the life-cycle have a significant impact on the saving pattern and saving behaviour of the household sector. People from old age tend to save more than the young age, while the young age people believe in investing money on some business ventures to increase the principal amount. Model developed by Modigliani and Brumberg (1954) also pointed out the same that old age people give more weightage to return on assets and believe in saving. Jappelli and Padula (2011) stated that the financial literacy plays an important role in the household sector savings, if the financial literacy is higher, then household sector saving will also be higher and vice

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versa. Lundman (1969) pointed out the importance of education for the growth of household sector savings, educated people tends to save more than uneducated people. Decision of savings comes from the intellect and the market knowledge hence, education plays and important role in the growth of the household sector savings. In the emerging economies where the education level increases the level of household sector will always show an increasing trend. Ferber (1973) and Mozzocco (2004) determined the components of the household sector savings and concluded that the banks are the major sources or modes for the savings of the household sector. Majority of the household sector keeps their money with the banks, and believe in the banking system instead of investing money in stock markets as there are huge risk involved in the stock market transactions. Further, it was found that the decision of the savings gets influenced by the number of members in the family, friends, close relatives and the male members of the family (Mozzocco, 2004). Risk sharing and the total income of the family are the main predictors of the savings behaviour of the household sector. Lindqvist (1981) also argued in the favour of education level of the people for the growth of the household sector savings. Park and Shin (2009) found that the household sector savings get impacted by the type of residence also, urban people tends to save more than the rural people as the source of income and amount of income is higher for urban people and lower for rural people. Khrishnamra et al. (2010) stated that majority of the people save for the retirement benefits, and hence they are risk averse in nature.

It was clear from the review of literature that personal characteristics of the savers affect the household sector savings, but there is a lack of studies where researchers have studied the impact of financial assets and financial liabilities of the household sector on their savings. Keeping in view, the importance of household sector savings current study will aim to measure the impact of changes in financial assets and financial liabilities of the household sector on the household sector savings.

Objective of the study

Research aims to determine the current situtation of financial assets and liabilities of household sector in India. Researchers have also measured the relationship between household sector savings and the changes in financial assets or financial libaiities of the household sector.

Method

Study was based on the secondary data derived from the annual publication of Reserve Bank of India tittles 'Statistics of Indian Economy'. Study covered the period from 2011-12 to 2016-17. Researchers have taken three constructs in the study namely; savings of household sector, changes in financial assets of the household sector and changes in financial libailities of the household sector. In order to determine the current situtaion of the financial assets and liabilities of household sector in India, researchers have used graphical and tabular form of data representation while for measuring the impact of changes in financial assets or financial libaiities of the household sector on the savings of houshold sector, linear regression analysis has been used.

Null hypothesis 1: There is no significant impact of changes in financial assets of the household sector on their savings.

Regression equation 1: $Y=\alpha+\beta 1.\chi+\alpha$

Y is dependent variable i.e. Household Sector Savings, α is contsant term, $\beta 1$is slope of the regression line, χ is independent variable i.e. chnages in financial assets of the household sector, and α is error term.

Null hypothesis 2: There is no significant impact of changes in financial liabilities of the household sector on their savings.

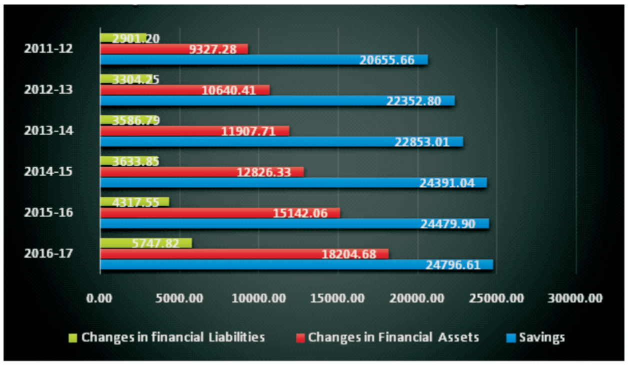
Regression equation 2: $Y=\alpha+\beta 2.\chi+\alpha$

Y is dependent variable i.e. Household Sector Savings, α is contsant term, $\beta 2$ is slope of the regression line, χ is independent variable i.e. chnages in financial liabilities of the household sector, and α is error term.

Researcher has used the SPSS 20.0 version for the purpose of analysis and MS Excel for the graphical representation of the data.

Results and findings

This section discusses the findings and results of the analysis of secondary data related to the savings of household sector, changes in financial assets of the household sector and changes in financial libailities of the household sector.



Graph 1: Household sector savings

Interpretation: Graph 1 shows the household sector savings, changes in financial assets and changes in financial liabilities of the household sector during 2012 to 2017. It can be seen from the graph that the savings of household sectors got increased from 20655 to 24796 during 2012 to 2017, which shows the savings of household sector got increased by 20 percent during 2012 to 2017. Similarly; the changes in financial assets and financial liabilities have shown an increasing trend during the period 2012 to 2017. Percent change in the financial assets of the household sector was recorded 95 percent while percent change in the financial liabilities of the household sector was recorded 98 percent during 2012 to 2017. Hence, it can be said that savings of the household sector have shown less increase when compared to the changes in their financial assets and financial responsibilities.

Interpretation: Table 1 depicts the changes in financial assets of the household sector component wise. Majority of the contribution in the financial assets of the household sector is from bank deposits, followed by life insurance funds and provident & pension funds while least contributing component was found to be trade debt and non-banking deposits by household sector. All the components of the financial assets of household sector have shown an increasing trend except currency, the value of currency got declined in the year 2016-17 and showing a negative value which leads to reduction in the financial assets of the household sector.

Table 1: Financial assets of the household sector

Year	Currency	Bank deposits	Non- banking deposits	Life insurance fund	Provident and pension fund	Claims on Govt	Shares & debentures	Trade Debt (Net)	Changes in financial assets
2016-17	-3168.12	10957.71	341.42	4406.53	2960.78	836.97	1825.78	43.60	18204.68
2015-16	2005.18	6220.94	366.55	2660.63	2768.54	666.39	413.17	40.66	15142.06
2014-15	1333.45	6027.27	335.24	2992.96	1887.77	9.69	198.19	41.76	12826.33
2013-14	995.20	6393.04	228.16	2044.69	1778.41	230.53	189.30	48.38	11907.71
2012-13	1115.21	5750.80	279.11	1799.49	1564.79	-71.09	170.27	31.83	10640.41
2011-12	1062.42	5259.70	100.21	1956.73	956.80	-218.89	165.22	45.09	9327.28

Table 2: Financial liabilities of the household sector

Year	Bank advances	Loans & advances from other financial institutions	Loans & advances from Government	Changes in financial liabilities
2016-17	4419.90	1321.82	6.10	6.10
2015-16	3470.59	837.75	9.21	4317.55
2014-15	2935.83	695.37	2.65	3633.85
2013-14	3023.36	556.78	6.65	3586.79
2012-13	3087.47	215.10	1.68	3304.25
2011-12	2725.09	173.10	3.01	2901.20

Interpretation: Table 2 depicts the changes in financial liabilities of the household sector component wise. Majority of the contribution bank advance and Loans and advances from other financial institutions in the financial liabilities of the household sector is from bank advance and Loans and advances from other financial institutions while least contributing component was found to be Loans and advances from government. Two components of the financial liabilities of household sector have shown an increasing trend namely; bank advance and Loans & advances from other financial institutions while the loans & advances from government has shown a mixed trend (both increasing & declining) during the year 2012 to 2017.

Null hypothesis 1: There is no significant impact of changes in financial assets of the household sector on their savings.

Table 3: Model summary

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	.872[a]	.760	.700	880.31860

a. Predictors: (Constant), Changes in financial assets

Table 4: ANOVA[a]

Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	9799814.014	1	9799814.014	12.646	.024[b]
	Residual	3099843.345	4	774960.836		
	Total	12899657.359	5			

a. Dependent Variable: Household sector savings, b. Predictors: (Constant), Changes in financial assets

Interpretation: It can be interpreted from the results of regression anaysis that changes in financial assets of the household sector causes 87 pecent varaince in the value of household sector savings while 13 percent of the varaince can be caused by other factors. Further, the value of Anova test depicts that there is a significant relationship between dependent variable (Household sector savings) and independent variable (changes in financial assets of household sector). Regression coefficients value shows that there is a positive and significant relationship between the household sector savings and changes in financial assets of the household sector. Regression model emerged from the current study is as follows:

Table 5: Coefficients[a]

Model		Unstandardized Coefficients		Standardized coefficients	t	Sig.
		B	Std. Error	Beta		
1	(Constant)	17605.440	1628.811		10.809	.000
	Changes in financial assets	.434	.122	.872	3.556	.024

a. Dependent Variable: Household sector savings

$$Y = \alpha + \beta 1.\chi + \alpha$$

Houshold Sector Savings = 17605.440 + .872 * Changes in financial assets + α

It implies that if there will be any increase in the financial assets of the household sector their savings will get increase and vice versa. Hence, the null hypothesis which states that there is no significant impact of changes in financial assets of the household sector on their savings, got rejected in the study and it can be said that changes in financial assets of the household sector has a significant impact on their savings.

Null hypothesis 2: There is no significant impact of changes in financial liabilities of the household sector on their savings.

Table 6: Model summary

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	.778[a]	.606	.507	1127.82344

a. Predictors: (Constant), Changes in financial liabilities

Table 7: ANOVA[a]

Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	7811714.556	1	7811714.556	6.141	.068[b]
	Residual	5087942.804	4	1271985.701		
	Total	12899657.359	5			

a. Dependent Variable: Household sector savings, b. Predictors: (Constant), Changes in financial

Table 8: Coefficients[a]

Model		Unstandardized Coefficients		Standardized coefficients	t	Sig.
		B	Std. Error	Beta		
1	(Constant)	18413.443	2007.137		9.174	.001
	Changes in financial liabilities	-1.237	.499	.778	-2.478	.068

a. Dependent Variable: Household sector savings

Interpretation: It can be interpreted from the results of regression anaysis that changes in financial liabilities of the household sector causes 78 pecent varaince in the value of household sector savings while 22 percent of the varaince can be caused by other factors. Further, the value of Anova test depicts that there is an insignificant relationship between dependent variable (Household sector savings) and independent variable (changes in financial liabilities of household sector). Regression coefficients value shows that there is a negtaive but insignificant relationship between the household sector savings and changes in financial liabilities of the household sector.

It implies that if there will be any increase in the financial liabilities of the household sector their savings will get redcue and vice versa. Hence, the null hypothesis which states that there is no significant impact of changes in financial liabilities of the household sector on their savings, got accepted in the study and it can be said that changes in financial liabilities of the household sector has no significant impact on their savings.

Conclusion

It can be concluded from the study that the household sector savings are increasing and also the financial assets and financial liabilities of the household sector are showing an increasing trend. The major component which is responsible for the growth of the financial assets of the household sector was Bank deposits, while bank advances is the major component which is responsible for the increasing trend of financial liabilities of the housheold sector in India. Further, it was found that the changes in financial assets of the household sector has a positive and significant impact on the savings of household sector while changes in financial liabilities has a negative and insignificant impact on the savings of household sector.

Limitations and future scope

Current study is limited to household sector of India only, which can be extended to corporate sector as well. Time period of the data was limited to last six years only which can be extended in future studies. Researches have not discussed the reasons for the growth or decline in the various components of the financial assets and financial liabilities of the hosue hold sector, this can be elaborated in future studies.

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