

An Analytical Review of the Factors Affecting Saving Behaviour

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Abstract

Saving is one of the crucial factors which effects capital formation in any country. It is the part of the income which is kept by individuals for the future. Savings can be divided into three parts — Public Savings, Private Savings and Household Savings. It has been observed that household saving has a major share in the total savings of country over the period of time. Therefore, household savings can be separated into two parts — Financial Savings and Physical Savings. There are various studies in literature which measure different aspects of savings like markets, emotions, personality and reason which affect on saving-decisions of individuals. In this paper, numerous literature prevailing worldwide have been examined using interpretative approach viz., objectives, sample, research methodology and results of the studies to diagnose the saving behaviour. The paper exhibits the various factors that administer saving behaviour of households.

Key Words

Saving Behaviour, Household Savings, Behavioural Finance, Capital Formation, Financial Savings, Physical Savings.

INTRODUCTION

Behavioral finance is helpful to examine the psychological and sociological factors that impact the decision-making process of individuals, groups, and organizations. However, saving behavior expresses the behaviour of persons towards savings pattern. Savings by individuals are important both for personal financial well-being and for economic growth (Lewis and Messy, 2012). Domestic

savings can be divided into three parts — Public Savings, Private Savings and Household Savings. Furthermore, household savings can be separated into Financial Savings and Physical Savings. In their financial savings deals with finance and physical savings means doing savings in physical assets. There are various financial schemes for household savings like Post Office Saving Schemes, Schemes by Cooperative Banks, Schemes by State Governments etc. The main purpose of all these types of schemes is to achieve revenue for the future. Therefore, various studies on savings proved that there are numerous factors that affect the saving behaviour of individuals like age, education, occupation, dependency ratio etc. These factors are helpful for them to choose their saving schemes. In brief, the aim of the study is to review various published empirical research studies available worldwide for identifying the factors that are helpful to govern the saving-decision.

Researchers across different countries have analysed the saving behaviour and have attempted to enhance our understanding of why people save in different ways. It is believed that saving-decisions are based on modern portfolio theory and the efficient market hypothesis (Anju and Anuradha, 2015). However, most of the researchers have provided various determinants that directly or indirectly affect the saving behaviour of individuals and help them to choose their decisions regarding savings in financial and physical assets. Furthermore, a lot of literature found in this regard which examined the portfolio practices, preferences, risk perceptions, intentions, saving pattern, their awareness level, factors affecting their saving behaviour and also the problems faced by them in order to understand their saving behaviour.

RESEARCH METHODOLOGY

In this paper, a systematic review of the prevailing empirical literature from the year 1988 to 2017 has been done using interpretative approach viz., objectives, sample, research methodology and results of the study. The data is collected from various journals, thesis and websites such as SSRN, Science Direct, INDIASTAT, ProQuest, JSTOR, Google scholar etc.

OBJECTIVES

- To present a contemporary and comprehensive review of empirical studies on saving behaviour.
- To identify the factors from worldwide literature that administrate saving-decision and saving behaviour of households.

Table 1
Empirical Literature on Saving Behaviour

Sr. No.	Author & Year	Research Objective	Sample Size	Research Methodology	Result
1.	Jocelyn, A.; Rodriguez, A.; and Richard L. M. (1988)	To study saving behaviour of rural households in Philippines	180 Respondent	Average and Percentage Analysis	The study suggested facilitating the introduction of improved technology, providing appropriate farm support services as income increasing incentives to encourage farm investment. Further, it emphasised that long-term measures toward the creation of employment opportunities should boost the volume of rural savings.
2.	Bautista, R. M.; and Lamberte, M. B. (1990)	To explore comparative saving behaviour of rural and urban households in Philippine	16971	T-test	This study found that income positively affects the saving behaviour of respondents. Whereas dependency ratio had negative effect on savings in all regions of Philippine. It observed permanent and transitory income as inducing factors towards savings rates.
3.	Collins, S. M. (1991)	To examine saving behaviour in nine Asian developing countries plus Turkey since the early 1960s.	10 Countries	Time Series Analysis	The study observed that the countries with the highest saving rates in the 1980s were also the ones with the fastest real growth rates during the period 1960-84. The population share of children, the standard of living, and the real growth rate had significant impact.
4.	Burney, N. A.; and Khan, A. H. (1992)	To examine the effects of socio-economic and	16580	Ordinary Least Square Method	The study found income, earning, occupation & age positively related to household savings. However,

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		demographic factors on the savings of households of both urban and rural in Pakistan				dependency ratio, children's education, employment, secondary earners and age had negative relationship with households saving in urban and rural Pakistan.
5.	Masson <i>et al.</i> (1998)	To analyse the determinants of saving behaviour of developed and industrial countries	23 Industrial Countries and 40 Developing Countries	Least Square Test		It showed that demographic & growth rate proved as important determinants of savings but interest rate and terms of trade had a positive but less robust effect on deposits. It observed negative relationship between income and savings.
6.	Unny, C. J. (2002)	To analyse the determinants of the saving behaviour of rural households in Kerala	100	Chi-square		The level of income, extent of income inequalities, assets value and level of education had a positive influence on savings. It showed negative impact of dependency ratio and number of male children.
7.	Nasir and Khalid (2004)	To examine the behaviour of savings and investment in Pakistan		Ordinary Least Square Method		It highlighted government expenditures, growth rate of Gross Domestic Product and remittances growth had positive and significant influence on National Savings. They believed that people, irrespective of their location, had their own bias and reacted differently when made investment in financial assets.

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8.	Adeyemo, R.; and Bamire, A. S. (2005)	To identify the Saving and Investment pattern of cooperative farmers in Southwestern Nigeria	400	Multiple Regression	It revealed age, income, household size, farming experience, loan repayment and amount of money borrowed as significant variables and had influence on saving behaviour.
9.	Oluwakemi, A. O. (2005)	To identify the saving behaviour of rural households of Kwara State of Nigeria.	116	Descriptive Analysis	It revealed that the household heads that combine farming with other non-farm activities had higher income, also made savings. Most household heads spend their income on food. Age-squared, farming experience and diversification into non-farm activities positively influenced rural saving rate.
10.	Rajamohan, R. R. (2006)	To examine the impact of financial knowledge on household portfolio in Coimbatore city of Tamilnadu	345	Regression	It showed positive and significant effect of financial knowledge on risky assets investments. There was impact of financial knowledge and financial education on financial decisions of households.
11.	Fasoranti, M. (2007)	To examine the influence of rural savings in mobilization on economic development of rural dwellers in Nigeria	100	Regression	It found that rural savings was positively related to investment, asset acquisition, personal income and human development. In economic development of the country, efficient mobilization of rural savings played a vital role.

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12.	Newman, C.; Finn, T.; Katleen V. B.; Chu Tien Quang; and Luu Duc Khai (2008)	To examine the determinants of household savings in rural areas of Vietnam	2324	Percentage Analysis	It revealed that age of the household head had negative effect on savings and education had no effect on savings. Financial saving was low in rural areas and share of formal savings was small in rural area.
13.	Kibet <i>et al.</i> (2009)	To examine the factors that affect savings among teachers, entrepreneurs and farmers in rural parts of Nakuru.	359	Regression	It showed that household income, nature of businessmen, occupation, gender, and education level positively influenced the saving behaviour of the rural households, while credit access, age, and dependency ratio influenced negatively.
14.	Otto, A. M. C. (2009)	To study the economic psychology of adolescent saving	1470	T-test	It showed that adolescents think of saving as a means of accumulating larger sums of money. It suggested parents can promote the development of saving skills in their children.
15.	Dalakoti, C. (2010)	To study the impact of household savings & investment behaviour on the economic development of Uttarakhnad	320	Regression	It revealed urban households as more diversified in their investment because of availability of investment services. Both rural and urban households rely greatly on banks, post offices & gold and households had a very positive perception towards banks' services.

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16.	Phiri (2010)	To examine household saving behaviour and financial services in urban, peri-urban and rural areas in Malawi	2000	Descriptive Statistics and T-test	It showed that household income levels significantly determine the ability to open a bank account or to save. Low incomes, low interest rates, high bank charges, and unfriendliness of banks were some of the main factors that inhibit potential customers from making savings with banks.
17.	Rehman, H.; Faridi, M. Z.; and Bashir, F. (2010)	To identify the determinants of household savings in Multan District of Pakistan	293	Multiple Regression	It found that age had positive relationship and square of age had negative relationship with household savings. Spouse participation, dependency rate, total income and size of landholdings, children's education, family size, liabilities & marital status had significantly affected household savings.
18.	Delafrooz, N. and Laily, H. P. (2011)	To find out the impact of financial literacy influence on the saving behaviour in Malaysia.	2246	Regression	Saving behaviour was significantly influenced by the financial literacy. Individuals with low level of financial literacy were not intended to save more and face financial problems.
19.	Issahaku, H. (2011)	To examine the determinants of financial saving and investment in Ghana	60	Multiple Linear Regression	It showed that age composition and assets didn't have a major effect on saving while income level, occupation and expenditure had. There was the propensity to save & invest.
20.	Lim Chee; Seong Sia Bik Kai; and	To analyse the psychological factors	500	Ordinal Regression	It revealed that those who were able to exercise self-control and receive parental influence during childhood

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		affecting savers in Malaysia		Technique	were tending to save more. Attitudes towards saving did not have significant impact on saving.
21.	Gan Guan Joo (2011) Seong, L. C.; Kai, S. B.; and Joo, G. G. (2011)	To identify the psychological factors affecting savers in Malaysia	500	Ordinal Regression	It showed significant impact of self-control on saving behaviour. It depends on the strength of two opposing forces known as desire and will power. People were more likely to save if they were able to control themselves via implementing sound budgeting and economic cost assessment.
22.	Achar, A. (2012)	To identify the saving and investment behaviour of teachers in Karnataka.	535	Chi-square, Correlation and Multiple Regression	It revealed individual characteristics of teachers such as age, gender, marital status, lifestyle and family characteristics such as monthly family income, stage of family life cycle and upbringing status emerged as determinants of their savings and investment behaviour.
23.	Aggarwal R. (2012)	To identify factors influencing preference towards Post Office Saving Schemes	320	Chi-square	It revealed meaningful relationship between preference towards post office saving schemes and educational qualification and negative relationship between occupation and saving schemes.
24.	Amu, M. E. K.; and Amu, E. K. (2012)	To study the saving behaviour of rural households of the Volta Region of Ghana	160	Descriptive Statistics	It showed that unawareness of savings among family heads. More savings were in the informal forms. It identified personal, societal and organizational factors which constraint the respondent families' ability to save.

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25.	Arent, S. (2012)	To analyse expectations and saving behaviour of German households	1351	Regression	It showed that higher unemployment results into decreased savings. Good health expectations increased savings.
26.	Chakraborty, S. (2012)	To analyse the investment pattern, saving objective and preferences of individual investors for various investment options available in India.	200	Chi-square, ANOVA, Factor Analysis	It showed that demographic factors such as age, occupation & income as significant factors. It revealed that females had more tendency to save than the males but women were risk averse & save more than the males.
27.	Gedela Rao, S. P. (2012)	To find out the determinants of saving behaviour of rural and tribal households in Visakhapatnam District	150	Multiple Regression Model and Logistic Regression Model	It showed that the household head's age, sex, dependency ratio, income & medical expenditure influenced the saving behaviour. In the tribal areas, expenditure on medical & dependency ratio had severe effect.
28.	Jain, D.; and Jain, P. (2012)	To determine the relationship between the savings and investments literacy among the school teachers.	100	Descriptive Analysis	It showed that teachers save more for future needs. Bank deposits are the main avenues of investment. It revealed education of children, marriage, & retirement security as the main factors of savings.

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29.	Kea and Kim (2012)	To identify individual motivations and effects of determinants that guide saving decisions of households.	189	Descriptive Analysis	It identified that obligation to family, upbringing and employment experiences as determinants which had major effect toward saving.
30.	Obayelu, O. A. (2012)	To identify the saving behaviour of Kwara State of Nigeria	116	Tobit Regression	It found that rural entrepreneurs had higher savings than one source of livelihood households. They spend their income on food and investment purposes & age, farming diversification had positive influence on it.
31.	Pandiyan, L.; and Aranganathan, T. (2012)	To study the factors that influence savings and investment behaviour of the salaried class in Cuddalore District	520	Correlation	It showed that more people saved money for children's education, emergency and future life. Bank deposit, house property, insurance, & provident fund as the main investment avenues. They made investment in chit funds and insurance for children's marriage.
32.	Samudra, Aparna; and Burghate, M. A. (2012)	To know the preference of investment instruments, objectives of investment and savings.	300	Descriptive Analysis	It revealed bank deposits, insurance and small saving schemes such as PPF, Post office saving deposits as preferred saving options.

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33.	Thung, C. M., Kai, C. Y.; Nai F. S.; Chiun, L. W.; and Tsen, T. C. (2012)	To examine determinants of saving behaviour among the university students in Malaysia	420	Pearson Correlations and Multiple Regression	It found financial literacy, parental socialization, peer influence and self-control had significant influence on the saving behaviour and parents had important role in ensuring their children saving behaviour.
34.	Virani, V. (2012)	To study saving and investment pattern of school teachers of Rajkot city in Gujarat	100	Chi-square	It showed income as the major determinant behind savings. It revealed bank deposits as the main avenue for saving for the safety of an unpredictable future, children's marriage, education and retirement.
35.	Chhedup, T. (2013)	To find out the determinants of household savings in Bhutan	404	Correlation and Ordinary Least Square Method	It revealed that increase in income & age had significant impact on household savings. Family size, dependency, liabilities had negative impact on household savings. It showed no relationship between savings and household assets. Savings increased with age but declined after crossing a certain age limit.
36.	Nayak, S. (2013)	To examine the determinants and pattern of saving behaviour of rural households in Western Odisha	300	Linear Regression	It showed that low educational households had less awareness of the people towards saving avenues. It showed their careless behavior towards their health due to consumption of local liquor. It had negative impact on their financial condition.

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37.	Teshomel, G.; Kassa, B.; Emana, B.; and Haji, J. (2013)	To find out the determinants of rural household savings in Ethiopia of East Hararghe zone of Oromia Regional State	700	Descriptive Statistic and Tobit Model	Education level, livestock holdings, credit service access, investment, forms of savings, income, training, extension contacts, & saving motives as determinants which had significant influence on household's savings.
38.	Chahal, P. S. B.; and Rupali Khanna, R. (2014)	To examine the saving & investment behaviour of salaried-class people of Punjab.	200	Descriptive Analysis, Factor Analysis and Mann Whitney Test	It found shares and gold as the main saving avenues due to their liquidity and returns. However, less awareness among people about exchange – traded funds and infrastructure bonds. It revealed that salaried-class invested in PPF due to tax deduction benefits.
39.	Geetha, N.; and Vimala, M. (2014)	To identify the popular perception of individual investors towards investment avenues and the predominant factors which influence individuals to go for savings in that instrument.	500	One Sample T-test, Chi-Square	People revealed a remarkable change in the investment avenues due to establishment of different financial institution, attractive return, and tax concession. Changes in demographic factor such as age, income, education, and occupation had an influence in the investment preference.
40.	Senthil Kumar, K.;	To identify the	600	Percentage	Household investment will help for economic

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	and Kannaiyah, D. (2014)	investors' attitude towards savings in Post Offices of Tamil Nadu		Analysis, Chi-square, Factor Analysis, ANOVA & Correlation	development of the country, savings create a feeling of security. There was no relationship between investors' attitude towards savings and age, education and income.
41.	Mathumitha, S. (2015)	To examine investors' attitude towards post office saving schemes in Cumbum town.	120	Percentage Analysis and Weighted Ranking Technique	It revealed that mostly females and illiterate people showed their interest in post office saving schemes. Most respondents made savings in recurring deposits.
42.	Shiva Kumar; and N. Babitha, Thimmaiah (2015)	To examine the savings & investment behaviour of school teachers of Mysore city of Karnataka	100	Chi-square	It revealed significant relationship between savings and annual income. It showed risk coverage and children education as the major objective behind saving and investment.
43.	Sood, D. (2015)	To evaluate the saving habits and investment pattern of salaried-class	200	One Way ANOVA	It revealed relationship between annual savings and age, income, employment & education of Chandigarh people. It showed LIC and bank deposits as most preferred options Further, it showed high returns, tax benefit and safety as major determinants of savings.
44.	Jeyachadran, S. (2016)	To examine the determining factors which influence their savings.	30	Chi-square	It revealed age and family setup as the factors which significantly influence the saving habits.

REVIEW OF LITERATURE

In literature, there are various studies related to behavioural finance which investigates the psychological and sociological issues that impact the decision-making process of individuals, groups, and organizations. However, there exist numerous empirical studies on the saving behaviour worldwide also. In those studies, academic researchers have accepted various factors that influence the saving-decision process. Empirical studies conducted earlier on saving behaviour have been reviewed and presented in Table 1.

ANALYSIS AND INTERPRETATION

There are various studies which describe the behaviour of individuals towards savings. The study of behavioural finance shows how cognitive and emotional factors affect the saving-decisions of households and particularly how they affect the rationality in decision-making. It is not only describes the saving behaviour of households, but also studies why they behave so. From the review of the empirical literature given in Table 1, researchers have proved that households are different in saving decision-making. There are various factors which influence their decisions to save. Major factors that affect saving behaviour are as given below.

SCOPE FOR FUTURE RESEARCH

The literature revealed that for the development of any country, efficient economic planning is necessary. For this purpose the planners should have an idea regarding saving behaviour of different groups of people so that they can make the methods for improving the savings in a better way. An understanding of the saving preferences will also help in designing saving instrument which effectively stimulate savings. It was observed by Mody (1983) and other classical economists that only household sector saving has a power to step up the savings in the economy of India. So, there is the need to deeply understand all the factors of household savings and the pattern of savings which is followed by households. However, in India, the composition of total saving has changed before eight to ten years ago. We can see that with the rise of advanced financial products, financial saving of household has been increasing continuously. So, a survey regarding this sector can be done in any specific areas. Also, there is scope for examining state level saving behaviour, given the diversity of Indian states. Further study can be done on rural and urban areas. If we are talking about

Table 2
Major Factors Affecting Household Savings

No.	Factors	Variables
1.	Demographic Factors	Income
		Age
		Gender
		Dependency Ratio
		Education
		Nature of Employment
		Family Size
		Household size
		No. of earners
		Assets
		Expenditure
		Retirement
		2.
Fiscal Policy		
Inflation		
Tax Incentives on Savings		
3.	Financial Markets and Environment	Availability and Spread of Financial Services
		Inward Remittances
		Trade Changes
		Inflation
		Environments that Promotes Financial Development
4.	Financial Knowledge	Awareness about Available Saving and Investment Options
5.	Cultural Effects	Personal, Societal and Organizational Constraints

rural areas, about 70 percent people of India live in rural areas. So, saving behaviour of rural households is an important indicator for economic development of our country. There are studies that have considered macroeconomic level variables for explaining the determinants of total domestic saving or private saving (see Athukorala & Sen, 2004; Grigoli *et al.*, 2014; Loayza *et al.*, 2000). A study by IMF (2006) considered macroeconomic level variables for developed economies and Ozmen *et al.* (2012) have also looked at the same for Turkey for identifying the drivers of corporate saving. However, in India, there

has not been any attempt to understand macroeconomic level variables that determine firm level saving.

CONCLUSION

This paper has reviewed published work relating to saving behaviour. Their portfolio practices, preferences, risk perceptions, intentions, pattern of saving, their awareness level, factors affecting their saving behaviour and the problems faced by them have been studied. Based on the extensive study, variables that administrate saving-decision are discussed according to their demographic factors, policy factors, financial markets and financial instrument knowledge environmental and cultural factors. This could be of great significance to the individuals for their wealth management and to the policy makers. The saving rate of any country is a vital indicator of economic development since the domestic saving rate is directly related to the saving rate and the lending capacity of the banking system. Hence, this domain belongs to the under-researched area and there is a need for further research.

References

- Achar, A. (2012), Saving and Investment Behaviour of Teachers : An Empirical Study, *International Journal of Physical and Social Sciences*, 2(8) : 263-286, Retrieved Dec. 17, 2015, 6:10 p.m. from http://www.ijmra.us/project%20doc/IJPSS_AUGUST2012/IJMRA-PSS1560.pdf.
- Adeyemo, R.; and Bamire, A. S. (2005), Saving and Investment Pattern of Cooperative Farmers in Southern Nigeria, *Journal of Social Science*, 11(3) : 183-192, Retrieved Feb. 7, 2017, 1:33 p.m. from <http://krepublishers.com/02-Journals/JSS/JSS-11-0-000-000-2005-Web/JSS-11-3-173-258-2005-Abst-PDF/JSS-11-3-183-192-2005-254-Adeyemo-R/JSS-11-3-183-192-2005-254-Adeyemo-R-Full-Text.pdf>.
- Agrawal, P.; Sahoo, P.; and Dash, R. K. (2009), Savings Behaviour in South Asia. *Journal of Policy Modeling*, 31(2), 208-224, Retrieved Dec. 17, 2015, 5:20 p.m. from <http://dx.doi.org/10.1016/j.jpolmod.2008.11.002>.
- Amudha, J.; and Varathan, A. V. (2015), Savings and Investment Behaviour of Rural Households in Salem, *International Journal of Multidisciplinary Research and Development*. 2(5), 128-133. Retrieved Nov. 19, 2015, 1:01p.m. from <http://allsubjectjournal.com/archives/2015/vol2issue5/partc/134.pdf>.
- Amu, M. E. K.; and Amu, E. K. (2012), Saving Behaviour in Ghana : A Study of Rural Households in the Ho Municipality of the Volta Region, *Online Journal of Social Sciences Research*, 1(2) : 54-61. Retrieved Nov. 6, 2015, 2:20 p.m. from

- <http://onlineresearchjournals.org/JSS/pdf/2012/apr/Amu%20and%20Amu.pdf>.
- Arent, S. (2012), Expectations and Saving Behavior : An Empirical Analysis, *Ifo Working Paper No. 128*, 1-29, Retrieved Nov. 3, 2016, 11:41 a.m. from [http://file:///C:/Users/p/Downloads/Ifo WorkingPaper-128%20\(2\).pdf](http://file:///C:/Users/p/Downloads/Ifo%20WorkingPaper-128%20(2).pdf).
- Athukorala, P.; and Sen, K. (2001), The Determinants of Private Savings in India, *Economic Development and Cultural Change*, 1-46, Retrieved Feb. 5, 2016, 4:05 p.m. from https://crawford.anu.edu.au/acde/asarc/pdf/papers/2001/WP2001_13.pdf.
- Bautista, R. M.; and Lamberte, M. B. (1990), Comparative Saving Behaviour of Rural and Urban Households in the Philippines, *Journal of Philippines Development*, 17(2) : 149-181. Retrieved Feb. 5, 2017, 10:45 a.m. from <http://dirp3.pids.gov.ph/ris/pjd/pidsjpd90-2saving.pdf>.
- Bhardwaj, R.; Raheja, R.; and Priyanka (2011), Analysis of Income and Savings Pattern of Government and Private Senior Secondary School Teachers, *Asia Pacific Journal of Research in Business Management*, 9(2) : 44-56.
- Blanc, J. L.; Porpiglia, A.; Teppa, F.; Zhu, J.; and Ziegelmeyer, M. (2014), Household Saving Behaviour and Credit Constraints in the Euro Area. De Nederlandsche Bank Working Paper No. 428, 1-28, Retrieved Oct. 25, 2016, 11:17 a.m. from <https://www.ecb.europa.eu/pub/pdf/scpwps/ecbwp1790.en.pdf>.
- Burney, N. A.; and Khan, A. H. (1992), Socio-economic Characteristics and Household Savings : An Analysis of the Households' Saving Behaviour in Pakistan, *The Pakistan Development Review*, 31(1) : 31-48.
- Chakraborty, Suman (2012), A Study of Saving and Investment Behaviour of Individual Households – An Empirical Evidence from Orissa. *TIJ's Research Journal of Economics & Business Studies*, 2(1) : 24-34.
- Chanu, W. S. (2014), *Small Savings and Investment in Manipur*, A Ph.D. Thesis submitted to Department of Commerce of School of Social Science of Manipur University, Retrieved Feb. 18, 2017, 3:36 p.m. from <http://shodhganga.inflibnet.ac.in/handle/10603/41141>.
- Chhoedup, T. (2013), Analyzing Household Saving Determinants in Bhutan. *International Journal of Humanities and Management Sciences*, 1(2) : 179-183, Retrieved Nov. 29, 2015, 1:26 p.m., from <http://www.isaet.org/images/extrainages/p413158.pdf>.
- Collins, S. M. (1991), *Saving Behavior in Ten Developing Countries*, National Saving and Economic Performance, Chicago : University of Chicago Press.
- Dalakoti, C. (2010), *A Study of Impact of Household Savings & Investment Behaviour on the Economic Development of Uttarakhand*, A Ph.D. Thesis submitted in the Department of Commerce of Kumaun University, Nainital, Retrieved Nov. 1, 2016, 4:43 p.m. from <http://shodhganga.inflibnet.ac.in/bitstream/10603/48803/9/title.pdf>.
- Delafrooz, N.; and Laily, H. P. (2011), Determinants of Saving Behavior and Financial Problem among Employees in Malaysia, *Australian Journal of Basic and Applied Sciences*, 5(7) : 222-228.

- Desai, B. M. (1983), Research on Rural Savings in India, *Colloquim on Rural Finance*, 8(2) : 136-141. Retrieved Nov. 25, 2015, 2:23 p.m. from <http://journals.sagepub.com/doi/pdf/10.1177/0256090919830207>.
- Fasoranti, M. (2007), The Influence of Rural Savings Mobilization on Economic Development of the Rural Areas : A Study of Akoko Region in Ondo State in Nigeria, *International Business Management*, 1(2) : 20-23.
- Gedela, S. P. R. (2012), Determinants of Saving Behaviour in Rural and Tribal Households : An Empirical Analysis of Visakhapatnam District, *International Research Journal of Social Sciences*, 2(3) : 108-118. Retrieved Feb. 14, 2015, 2:42 p.m. from www.ijmra.us/project%20doc/IJRSS_AUGUST2012/IJMRA-RSS1414.pdf.
- Geetha, S. N.; and Vimala, K. (2014), Perception of Household Individual Investors Towards Selected Financial Investment Avenues (With Reference to Investors in Chennai city). *Procedia Economics and Finance*, 11,360 – 374.
- Ghosh, Rajarshi; and Kumar, A., Pain (2005), What Determinants Household Savings in India? *Journal of Social Science*, 11(3) : 183-192, Retrieved Feb. 3, 2016, 11:58 a.m. from https://papers.ssrn.com/sol3/papers2.cfm?abstract_id=747046.
- Harris, M. N.; Loundes, J.; and Webster, E. (2002), Determinants of Household Saving in Australia, *Economic Record*, 78(241) : 207-223.
- Issahaku, H. (2011), Determinants of Saving and Investment in Deprived District Capitals in Ghana: A Case Study of Nadowli in the Upper West Region of Ghana. *Continental Journal of Social Sciences*, 4(1), 1-12.
- Jain, G.; and Baliyan, M. (2014), Determinants of Saving and Investment in India, *Scientific Study of Advanced Research and Social Change*, 1(1) : 1-13. Retrieved Dec. 15, 2015, 10:27 p.m. from http://www.ssarsc.org/documents/menu_balan_6.pdf.
- Jocelyn, A.; Rodriguez, A.; and Richard, L. M. (1988), The Analysis of Saving Behaviour : The Case of Rural Households in the Philippines, *Working Paper Series No. 88-12, Philippine Institute for Development Studies*. Retrieved Nov. 21, 2015, 10:45 p.m. from <http://dirp3.pids.gov.ph/ris/wp/pidswp8820.pdf>.
- Koopmans, T. C. (1965), *On the Concept of Optional Economic Growth*, The Econometric Approach to Development Planning, Amsterdam : North Holland.
- Kulikov, D.; Paabut, A.; and Staehr, K. (2007), A Micro Econometric Analysis of Household Saving in Estonia : Income, Wealth and Financial Exposure, *Working Paper Series 8/2007* Estonian National Bank.
- Lim, C. S.; Sia, B. K.; and Gan, G. J. (2011), The Analysis of Psychological Factors Affecting Savers in Malaysia, *Middle Easter Finance and Economic*, ISSN : 1450-2889, 12 : 77-85.
- Masson, P. R.; Bayoumi, T.; and Samiel, H. (1998), International Evidence on the Determinants of Private Saving, *The World Bank Economic Review*, 12(3) : 483-501. Retrieved Feb. 5, 2017, 11:00 p.m. from https://crawford.anu.edu.au/acde/asarc/pdf/papers/2001/WP2001_13.pdf.

- Nayak, S. (2013), *Determinants and Pattern of Saving Behaviour in Rural Households of Western Odisha*, A Master's Thesis submitted in the department of Humanities and Social Sciences of National Institute of Technology Rourkela. Retrieved Nov. 6, 2015, 1:25 p.m. from <http://ethesis.nitrkl.ac.in/4839/1/411HS1004.pdf>.
- Newman, C.; Tarp, F.; and Vanden, K. (2008), Household Savings in Vietnam : Insights from a 2006 Rural Household Survey, *Economic Management Review of Vietnam*, 3(1) : 34-40. Retrieved Feb. 8, 2017, 3:04 p.m. from https://mpra.ub.uni-muenchen.de/62453/1/MPRA_paper_62453.pdf.
- Obayelu, O. A. (2012), Saving Behaviour of Rural Households in Kawara State, Nigeria, *African Journal of Basic and Applied Sciences*, 4(4) : 115-123. Retrieved Nov. 19, 2015, 2:02 p.m. from [http://www.idosi.org/ajbas/ajbas4\(4\)12/3.pdf](http://www.idosi.org/ajbas/ajbas4(4)12/3.pdf).
- Otto, A. M. C. (2009), *The Economic Psychology of Adolescent Saving*, A Ph.D. Thesis, submitted to the Faculty of Economics of University of Exeter, Retrieved Feb. 16, 2017, 12 p.m. from <https://ore.exeter.ac.uk/repository/bitstream/handle/10036/83873/OttoA.pdf>.
- Pandiyani, L.; and Aranganathan, T. (2012), Savings and Investments Among Salaried Class : An Evaluation, *IJEMR*, 2(6) : 1-13. Retrieved Feb. 14, 2016, 3:07 p.m. from <http://ijemr.in/Savings%20and%20investments%20among%20salaried%20class%20An%20Evaluation.pdf>.
- Rajamohan, R. R. (2006), An Empirical Study on the Impact of Financial Knowledge on Household Portfolio, *Indian Institute of Capital Markets 9th Capital Market Conference Paper*, Retrieved from Dec. 8, 2017, 1:38 p.m. from https://papers.ssrn.com/sol3/papers.cfm?abstract_id=876876.
- Rao, V. K. R. V. (1980), Saving, Capital Formation and National Income, *Economic and Political Weekly*, 15 : 965.
- Rehman, H.; Faridi, M. Z.; and Bashir, F. (2010), Household Saving Behaviour in Pakistan : A Case of Multan District, *Pakistan Journal of Social Science*, 30(1) : 17-29. Retrieved Nov. 29, 2015, 8:50 p.m. Retrieved from http://www.bzu.edu.pk/pjss/vol30no12010/final_pjss-30-1-03.pdf.
- Seong, L. C.; Kai, S. B.; and Joo, G. G. (2011), The Analysis of Psychological Factors Affecting Savers in Malaysia, *Middle Eastern Finance and Economics*, 12 : 77-85, Retrieved Jan. 3, 2016, 11 a.m. from <http://eprints.utar.edu.my/884/1/6446.pdf>.
- Senthilkumar, K.; and Kannaiah, D. (2014), Investors' Attitude Towards Savings in Post Office, *Research Journal of Finance and Accounting*, 5(15) : 158-176, Retrieved Nov. 29, 2016, 10 a.m. from http://researchonline.jcu.edu.au/35400/1/D%20Desti_%20Research%20Paper%20%20n%20Investors%20Attitude.pdf.
- Sood, D. (2015), A Study of Saving and Investment Pattern of Salaried-Class People with Special Reference to Chandigarh (India). *International Journal of Research in Engineering, IT and Social Science*, 5(2) : 1-15. Retrieved Dec. 11, 2015, 12:59

- p.m. from [http:// www.indusedu.org/pdfs/IJREISS/IJREISS_369_98980.pdf](http://www.indusedu.org/pdfs/IJREISS/IJREISS_369_98980.pdf).
- Teshome, G.; Kassa, B.; Eman, B.; and Jema, H. (2013), Determinants of Rural Household Savings in Ethiopia : The Case Study of East Hararghe Zone, Oromia Regional State, *Journal of Economic and Sustainable Development*, 4(3) : 66-75. Retrieved Nov. 20, 2015, 1:52 p.m. from [http://file:///C:/Users/p/Downloads/4329-6391-1-PB%20\(1\).pdf](http://file:///C:/Users/p/Downloads/4329-6391-1-PB%20(1).pdf).
- Thung, C. M.; Kai, C. Y.; Nai, F. S.; Chiun, L. W.; and Tsen, T. C. (2012), *Determinants of Saving Behaviour Among the University Students in Malaysia*, A Bachelors' Thesis submitted in the Faculty of Business and Finance Department of Commerce and Accountancy, University of Tunku Abdul Rahman Malaysia. Retrieved Nov. 3, 2016, 11:34 a.m. from [http:// eprints.utar.edu.my/607/1/AC-2011-0907445.pdf](http://eprints.utar.edu.my/607/1/AC-2011-0907445.pdf).
- Turner, Kea; and Manturuk, Kim (2012), Individual, Institutional and Structural Determinants of Household Savings Decisions, *Utrecht University, Working Paper*.
- Unny, C. J. (2002), *Determinants of Saving Behaviour of Rural Households in Kerala*, A Ph.D. Thesis submitted to the Faculty of Social Sciences of the Mahatma Gandhi University, Kerala. Retrieved Nov. 12, 2015, 9:17 a.m. from <http://www.shodhganga.inflibnet.ac.in/handle/10603/338?mode=full>.
- Virani, V. (2012), Saving and Investment Pattern of School Teachers — A Study with Special Reference to Rajkot City, Gujarat, *Abhinav National Refereed journal of Research in Commerce and Management*. 2(4) : 2277-1166, Retrieved Feb. 9, 2017, 11:56 a.m. from https://www.abhinavjournal.com/images/Commerce_&_Management/.../3.pdf.