

Relevance of Investor Behaviour in Retirement Planning

Dr. Noor Afza, Ms. Kiran Patil
Professor & Dean, Tumkur University, Tumkur
Research Scholar, Tumkur University, Tumkur

ABSTRACT

India has population of 1.3 billion people with median age of 28 years and sixty-five percent of the population is below the age of 35 years. Hence, we do not need great imagination to understand that after a decade or two they would be ready to retire from their professional activities. At the time retirement, one must have financial security to lead comfortable life post retirement. As per RBI report (2016) on household finance, seventy-seven percent of Indians do not save for retirement. Therefore, financial planning for retirement should be essential part of financial planning during the working years. This paper aims to evaluate demographic and psychological factors in making investment decision with focus on retirement financial planning. This research would be relevant in getting insight into factors and issues faced by the individual while making financial plans for retirement.

KEY WORDS: *retirement planning, demography, planned behavior, financial prudence*

Date of Submission: 09-07-2020

Date of Acceptance: 25-07-2020

I. INTRODUCTION

Money is the means to acquire goods and services to take care of necessities of life and lead comfortable life. An individual has a work life of approximately 38 years (22 years to 60 years). The income earned during this period needs to be managed prudently to take care for current responsibilities as well as save to take care of golden years of retired life. In case, financial planning for retirement is not done, many elderlies cannot afford to retire and need to extend their work life. A report on Global Human Capital, by World Economic Forum, states that only 12 percent of working age population is under pension program. Individuals not covered by pension scheme, need to depend on their family members for the support. Therefore, young working population of India will have to take care of their children needs as well as their parents' needs. When individuals start their work life, at that time they feel it is too early to think about retirement and prefer to spend and save only for goal in immediate future and it might be too late to save for retirement. Reserve Bank's report on household finance (April, 2016) reveals that, seventy-seven percent of the Indians do not have retirement plan.

In India, social, economic and demographic factors are changing rapidly. Few examples of social changes are, shift from joint family system to nuclear family system, literacy levels are increasing, life expectancy is increasing, sixty-five percent of Indians are below the age of 35 years. Economic changes can be noticed in rapid digitization, introduction of Goods and Service Tax, foreign direct investment, intellectual property laws to name a few. Among such social and economic changes, if an individual does not do financial planning for retirement, then it might result in hardship in old age.

Many studies have been undertaken to understand the influence of attitude and personality traits to understand individual behavior towards savings and financial planning for retirement, but such studies have failed to predict the individual's behavior. General attitude and motivation of the individual would indicate individual's intention to save (Icek, 1991). But when it comes to taking action in this respect, there are many other behavioural factors which influence individual's behavior. To plan for retirement an individual must understand various financial products, their advantages and issues, clarity in financial goals are few dimensions which can be clubbed under term 'financial prudence', has influence on financial planning for retirement. Besides financial prudence, the effort taken by an individual to plan for future, called as 'planned behavior' also has influence over planning for retirement.

II. LITERATURE REVIEW

Lusardi A. (2009) In United States of America it was found that individuals who planned for their retirement had higher wealth after retirement compared to the individuals who did not do financial planning for retirement. The wealth also had impact on the financial market's performance. In the study author has evaluated the link between financial literacy and financial planning. Financial literacy leads to better financial planning for

retirement. In US it was found that financial literacy was very low. The author has found out that with financial education, financial planning for retirement improved for the low income group.

Beshears et.al.(2011) In this paper, authors have provided an overview of the public sector pension landscape in the U.S., which mainly categorized into Defined Benefit (DB) plans and Defined Contribution (DC) Plans. These plans have many differences and are complicated. Authors have applied recent behavioral economics research on savings and investing behavior to the choices that employees face in case of retirement plans. Most public sector DC plans do not allow employees any choice in how much gets contributed to the plan, and employees' assets are directed by default into target date retirement funds. By limiting the amount of choice employees have in the primary DC plan, public sector retirement plan designers are likely to have eliminated most of the left tail of savings outcomes that arise in private sector DC plans due to financial illiteracy, procrastination, and time-inconsistent tastes for immediate consumption gratification, although it is unknown how large of a welfare cost reducing choice exacts due to rational employees' reduced ability to smooth marginal utility intertemporal. Public sector supplemental DC plans are typically more complicated and confusing than those found in the private sector, since there are often multiple supplemental plans offered, and since each supplemental plan may be operated by a different financial services company. The authors conclude the paper by stating that further research is required to understand the reasons for having complicated pension plans.

Bipul Kumar (2012) has applied the theory of planned behavior to the environmentally sustainable products. Consumption of sustainable products is important as it has impact on the sustainable development of the country. Consumers' attitude towards sustainable products has strong association to individual's buying behavior in respect to environmentally sustainable products. The author has used the Theory of Planned Behaviour framework developed by ajzen, to assess the association between environmental knowledge and attitude towards environmentally sustainable products. The study revealed relative strength of determinants of purchase intention with regards to environmentally sustainable products.

M Krishna Moorthi et.al. (2012) Understand influence of demographic factors and psychological factors on retirement planning behavior. The authors have considered three demographic factors namely - age, education and income. Besides these two psychological factors such as goal clarity, potential conflicts in retirement planning and attitude towards retirement are considered for the study. Primary data is collected from 300 respondents between the ages of 25 to 55 years. Statistical tools such as correlation, one-way ANOVA and regression used to analyse the data. The authors conclude the research paper by stating that demographic factors, education and income have significant influence on retirement behavior. Psychological factors namely goal clarity, attitude toward retirement and potential conflict in goals also has impact on the retirement behavior of the individual.

Pant Gargi (2013) Author has considered female faculty members of Banasthali University, Rajasthan for the study. The female faculty members are divided between married and unmarried. The author has concluded the study by stating that married women are more aware about the retirement planning and done more for retirement as compare to unmarried women and they are moderate risk bearer and like to invest in less risky avenues. These design features help less sophisticated investors while maintaining flexibility for more sophisticated types.

Kadam and Thakar (2014) Human resource is the prime asset for IT companies as it is knowledge based industry. High attrition rate would have adverse impact on organization's performance. The author has conducted the study in the city of Pune to identify the reasons for attrition in It industry. The study reveals that the average age of employees is 26 years with 2 to 4 years of experience. Prime reasons for employees to leave the job is dissatisfaction with salary and career advancement. Besides this study also shows that non-monetary benefits are valued by the employees. Chi square analysis is done to draw the inference from the data analysis.

FatemehKimiya ghalam, et.al(2017) The authors has studied financial retirement planning in Malaysia. The motivation for the study was a report by Employees Provident Fund (2015), government agency which manages savings for retirement. The report said that employees engaged in private sector do not have enough savings for retirement and therefore it compels individuals to work after retirement. The authors have considered two behavioural theories relevant for retirement financial planning. These theories are 'planned behavior' and 'time perspective theory'. Primary data is collected from 900 respondents and structural equation is used to analyse the data. The study revealed that individual's planned behavior and future orientation has direct relationship with retirement planning behavior.

NurulFaezahMohdTalib et.al. (2017)The research regarding retirement behavior was carried out among the employees of 'Employees Provident Fund' (EPF). The study is interesting as EPF is a government agency in Malaysia, which is in charge of managing savings of private sector employees for retirement. The study considered 'self-awareness', 'organization role' and 'environmental factors' as independent variables, dependent variable being 'retirement planning behavior. It is worth noting that 71 percent of the respondents never followed any retirement plan even though all of them agreed that retirement plan would help them to have

secured retired life with regular income. There is no correlation between self-awareness and retirement planning as employees are aware of the financial needs after retirement but have very little financial literacy.

Objectives of the study

1. To understand the impact of demographic factors on saving for retirement.
2. To identify behavioural factors.
3. To assess the impact of behavioural factors on saving for retirement.

Hypothesis

H₀₁: There is no relationship between financial plan for retirement and behavioural factors.

H₀₂: There is relationship between financial plan for retirement and behavioural factors.

Research Design

This study has been conducted to understand retirement preparedness of individuals. For the purpose primary data is collected from the 95 respondents. Structured questionnaire was developed to collect the data. Google forms were sent through emails and Whatsapp to 120 individuals, working in Bangalore. Convenient sampling method has been used to select the respondents. Correlation has been used to assess the association between demographic factors and various dimensions of saving. Factor analysis is used to identify number of factors having impact on financial planning for retirement. Finally, regression analysis is used to assess the relationship between behavioural factors and personal financial plan for retirement.

Model

$$X = \beta_0 + \beta_1PB + \beta_2FL$$

X – Personal financial Plan for Retirement

PB – Planned Behaviour

FL – Financial Literacy

III. RESULTS, ANALYSIS AND DISCUSSION

Profile of the respondents

Table 1: Demographic Profile of the respondents

Variable	Frequency	Percentage	
Gender	Male	52	55
	Female	43	45
Age	Below 25 years	13	14
	26 to 30 years	16	17
	31 to 35 years	15	16
	35 to 40 years	7	7
	41 to 45 years	13	14
	Above 46	31	32
Marital Status	Married	73	77
	Unmarried	22	23
Income	Below Rs.4 lakh	19	20
	Rs. 4 to 8 lakh	34	36
	Rs. 8 to 12 lakh	23	24
	Above Rs. 12lakh	19	20
Education	Diploma	3	3
	Graduate	19	20
	Post-Graduate	44	46
	PhD	2	2
	Professional	27	29
Occupation	Private	49	52
	Professional	26	27
	Self-employed	9	9
	Other	11	12

Primary data is collected from 95 individuals, among them 55 percent of the respondents are male. Highest respondents, 32 percent, are aged above 46 years and least, 7 percent of the respondent are between 36 to 40 years. Majority of the respondents are married (77 percent). Median salary range of the respondents is 4 to 8 lakhs, with 36 percent of respondents belong to this group and rest of the groups are equally populated. 46 percent of the respondents are post graduate followed by professionals with 29 percent. More than 50 percent of respondents are employed in private organizations.

Table 2: Saving Preference

Variable	Options	Percentage	Options	Percentage
Save part of Income	Yes	88	No	12
	Annual	10	Monthly	48
Saving pattern	Half Yearly	1	No Pattern	28
	Quarterly	1	Do not save	12
	Tax	20	Vacation	7
Saving Objective	Higher Education	14	Start Business	5
	Buy House	10	Retirement	24
	Marriage	5	Any Other	10
			Do not save	5
Saving Avenues	FD	17	Debt instruments	3
	Real Estate	12	Insurance	16
	Gold	10	Chit Funds	4
	Mutual Funds	19	Any Other	6
	Shares	8	No Savings	5
	Savings for Retirement	Yes	41	No
Save but not for retirement			47	
Investment avenues for retirement	Real Estate	31	Mutual Fund	18
	Pension	8	PPF	23
	Stocks	10	Any Other	10

Almost ninety percent of the respondents save part of their income. Approximately fifty percent of the respondents save on monthly basis. Twenty four percent of the respondents save for retirements followed by twenty percent of the respondents save for tax purpose. Most popular saving avenue is mutual funds, closely followed by fixed deposit and insurance. Only forty one percent of individuals are saving for retirement, forty seven percent of the respondents save but their objective for saving is not for retirement. Most preferred investment avenue for retirement is real estate, followed by PPF, mutual funds, stocks and pension schemes.

Table 4: Correlation Matrix – Demographic variables and saving pattern

Variables	Do you Save?	Saving Pattern	Saving Objectives	Personal Retirement Plan	Investment for Retirement	Saving Avenues
Gender	-.067	-.062	.047	-.083	-.121	.020
Age	-.101	-.050	-.086	-.103	-.084	-.099
Marital Status	.266**	.247*	.253	.265**	.096	.171
Annual income	-.060	.056	-.083	-.066	-.087	-.103
Education	-.019	.023	-.060	-.063	-.250*	-.022
Occupation	.124	.213*	.148	.136	.154	.130

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

* . Correlation is significant at the 0.05 level (2-tailed).

Correlation between demographic factors and saving preference shows, there is no strong correlation between these two factors as correlation values, positive or negative are very weak. In case of significance, only three values are significant at 10 percent and two values are significant at 5 percent. Based on significance we can say that marital status has weak positive relationship with propensity to save, saving pattern and personal plan for retirement. Occupation has weak positive relationship with occupation. And it is worth to note that education has weak negative correlation with planning for retirement.

Table 5: Correlation Matrix – Intention to save and preference for saving

Variable	Do you save?	Saving Pattern	Saving Objective	Personal RTM Plan	Inve-Ave-4-Ret	Saving Avenues
Do you Save?	1	.871**	.646**	.985**	.285**	.590**
Objective for saving	.646**	.786**	1	.639**	.253	.567**

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

* . Correlation is significant at the 0.05 level (2-tailed).

Table five shows that, there is strong to moderate correlation of variable theact of saving with pattern of saving, objective of saving, personal retirement plan and saving avenues at 5 percent significance level. Similarly variable, objective for saving has moderate to strong correlation with act of saving, saving pattern, personal retirement plan and saving avenues at 5 percent significance level.

Behavioural Factors

To identify the behavioural factors, fourteen questions were served to respondents. Five point ordinal scale was used to collect response, 1 being strongly disagree and 5 being strongly agree. Descriptive analysis of the responses is given below.

Table 6: Descriptive Analysis of variables

Sr. No.	Variable	Mean	Standard Deviation
BF1	I am able to resist current spending to save for retirement.	3.5263	1.1563
BF2	I have very good understanding of money required after retirement to lead comfortable life.	3.7789	1.1686
BF3	I am very efficient in planning investments for retirement.	3.1053	1.2672
BF4	I do watch out for new investment schemes for retirement benefits.	3.0947	1.3134
BF5	I am aware of various investment avenues available for investment for retirement purpose.	2.9158	1.3019
BF6	I have a plan for saving for retirement and I stick to the plan.	3.0860	1.2489
BF7	I know how to invest in various financial plans for retirement (websites, broker etc.)	2.7766	1.3453
BF8	I started saving for retirement from time I started earning.	2.5213	1.3968
BF9	I can develop my own financial plan to take care of my financial needs after retirement.	3.3368	1.2767
BF10	I am aware of the various types of bank accounts and method of calculating interest on the deposit.	3.0632	1.3976
BF11	I am able to evaluate various investment avenues based on risk and return.	2.9263	1.2653
BF12	I understand that rate of inflation has impact on savings for retirement.	3.4632	1.3274
BF13	I understand the functioning of credit cards.	3.4421	1.2692
BF14	I know various provisions of Income Tax Act and I use it for tax planning.	3.1579	1.3473

Mean score for these factors range between 3.78 to 2.52. To understand the factors affecting retirement planning, factor analysis is used.

Factor analysis

Factor analysis is used to identify the factors affecting financial planning for retirement. Before running factor analysis, Cronbach’s alpha was calculated to check the internal consistency of the factors. Value for cronbach’s alpha was .914 for 14 items. Cronbach’s Alpha value greater than .6 is considered to be reliable. Since Cronebach’s alpha value is more than the threshold limit, this scale is used to identify the factors. To measure sampling adequacy for factorability, Bartlett’s test of sphericity and Kaiser-Mayer-Oklin measure was calculated.

Table 7 :KMO and Bartlett's Test

Kaiser-Meyer-Olkin Measure of Sampling Adequacy.		.888
Approx. Chi-Square		743.492
Bartlett's Test of Sphericity	df	91
	Sig.	.000

Bartlett sphericity test is significant as $p = .000$ and Kaiser-Meyer-Oklin measure has a value of .888, which is greater than .6. Verimax Rotation Method was used to identify factors.

Table 8: The Total Variance Explained

Factor	Rotation Sums of Squared Loadings		
	Total	% of Variance	Cumulative Percentage
1	4.280	30.569	30.569
2	4.084	29.172	59.741

Based on factor analysis two factors were identified. Factor one includes seven variables namely BF1, BF2, BF3, BF4,BF6,BF8,BF9 and factor 2 is made up of remaining seven factors namely BF5, BF7, BF10, BF11, BF12, and BF13.

**Table 9:
Rotated Component Matrix^a**

	Component	
	1	2
BF1		.747

BF2		.690
BF3		.740
BF4		.564
BF5	.605	
BF6		.732
BF7	.723	
BF8		.706
BF9		.614
BF10	.822	
BF11	.821	
BF12	.609	
BF13	.712	
BF14	.754	

Extraction Method: Principal Component Analysis.

Factor one can be named as ‘Planned Behaviour’ and Factor two can be named as ‘Financial Prudence’.

Regression Analysis

Table 10: Model Summary^b

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate	Durbin-Watson
1	.286 ^a	.082	.062	2.677	1.532

a. Predictors: (Constant), Financial Prudence, Planned Behaviour

b. Dependent Variable: Personal RTM Plan

Table 10 shows the details pertaining to regression model, through ENTER method that reveal personal financial plan for retirement is moderately dependent on behavioural factors as value of ‘R’ (29%) is found to be weak. The value of Durbin Watson is 1.532 and the tolerance level for Durbin Watson is 1.5 to 2.5.

Table 11: Coefficients^a

Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.
		B	Std. Error	Beta		
1	(Constant)	5.263	1.068		4.930	.000
	Planned Behaviour	-.289	.382	-.094	-.757	.451
	Financial Prudence	-.586	.331	-.220	-1.771	.080

a. Dependent Variable: Personal RTM Plan

The model describes the regression equation as below

X = 5.263 - .289 PB - .586FP

Table 12: ANOVA^a

Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	58.579	2	29.290	4.088	.020 ^b
	Residual	659.147	92	7.165		
	Total	717.726	94			

a. Dependent Variable: Personal RTM Plan

b. Predictors: (Constant), Financial Prudence, Planned Behaviour

Table 12 reveals the details pertaining to ANOVA of IT firms. Since Sig. ‘F’ is lesser than 0.05, at 5% level of significance, we reject the null hypothesis and conclude that Personal financial plan for retirement depends significantly on behavioural factors.

IV. CONCLUSION

Financial plan for retirement is very important for an individual to lead financially comfortable life in old age. The study explored two dimensions for retirement planning, namely demographic factors and behavioural factors.

The study revealed that almost ninety percent of the respondents save part of their income. Among them only 24 percent of the respondents have 'saving for retirement' as their objective. Mutual fund is the most preferred investment avenue. This finding is contradictory to earlier studies where Fixed Deposit was the most preferred investment avenue. This is a welcome change as the direction of change is in the right direction. Only 39 respondents have financial plan for retirement. Among them, 31 percent of the respondents invest in real estate as a financial plan for retirement and only 8 percent of the respondents invest in pension fund.

The study also reveals that there is strong correlation between act of saving with personal retirement plan and pattern for saving. While objective for saving has moderate correlation with act of saving, saving pattern, and personal retirement plan. Notably study did not find any of the demographic factors influencing saving patterns. Two behavioural factors were identified based on factor analysis. The information collected by these variables, can be categorized as 'Planned behavior' and 'Financial Prudence'. Based on the significance level, we rejected null hypothesis and can conclude that these behavioural factors has influence on the personal financial plan for retirement. Hence, based on the primary data and its analysis, it can be concluded that 'Planned Behaviour' and 'Financial Prudence' has influence over 'saving for retirement'.

REFERENCES:

- [1]. Ajzen, Icek. (1991). The theory of planned behaviour. *Organizational Behaviour and Human Decision Process*, 50, 179-211
- [2]. Lusardi, A. (2009). Planning for Retirement: The Importance of financial Literacy. *Public Policy and Aging Report*. Volume 19 (3), pp 7-13
- [3]. Beshears, J., Choi, J. J., Laibson, D., & Madrian, B. C. (2011). Behavioral economics perspectives on public sector pension plans. *Journal of pension economics & finance*, 10(2), 315-336.
- [4]. Kumar, Bipul. (2012). Theory of Planned Behaviour Approach to Understand the Purchasing Behaviour for Environmentally Sustainable Products. Working Paper - IIM Ahmedabad.
- [5]. Moorthi, K. M., Durai, Thamil, Sien, C. S., Liang, L. C., Kai, N.Z., Rhu, W.C. & Teng, W.Y. (2012). A Study on Retirement Behaviour of working Individuals in Malaysia. *International Journal of Academic Research in Economics and Management Sciences*, 2(1).
- [6]. Pant, Gargi. (2013). Retirement Planning of Female Faculty Members -An Expense or Saving for the Future. *Global Journal of Management and Business Studies*. Volume 3(5), pp. 541-544.
- [7]. Kadam, Sunita., Thakar, H .M. (2014). A Study of Attrition in IT Industries in Pune. *International Journal of Advanced Research*. Vol 2(3), pp. 650-656. Retrieved from https://www.researchgate.net/publication/281678515_A_study_of_Attrition_in_IT_industries_in_Pune.
- [8]. Kimiyaghalam, Fatemeh& Safari, Meysam& Mansori, Shaheen. (2017). The Effects of Behavioral Factors on Retirement Planning in Malaysia.
- [9]. Talib, N.F.M., Manaf, H.A. (2017). Attitude Towards Retirement Planning Behaviour among Employees. *International Journal of Business and Management*, 1(1), pp 12-17

Dr. Noor Afza. "Relevance of Investor Behaviour in Retirement Planning." *International Journal of Business and Management Invention (IJBMI)*, vol. 09(07), 2020, pp. 09-15. Journal DOI- 10.35629/8028