

ROLE OF DEMOGRAPHICS IN INVESTMENT DECISIONS

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Abstract— *The primary purpose of this study is to investigate the impact of investor's demographics on different investment options. Investors consider several factors before making investments like safety, returns, time horizon. But psychographic and demographic factors also play an important role. Age, gender, educational qualifications and many more also influence investors' money management decisions knowingly and unknowingly. Marital status and family size are considered as demographic variables for the purpose of study while Banking, Insurance and Stock Market has been considered as investment avenues. The study investigates how investment choice in banking, insurance and stock market gets affected by marital status and family size. Chi Square test has been performed on the study and the results indicate that there is a significant effect of marital status and family size on investment choices. The results will be highly useful to the wealth managers as it will help them suggest their clients regarding different avenues with respect to their demographic profiles. Also different financial products can be designed considering marital status and number of dependents in family.*

Index Terms— *Demographics, Investment Avenues, Marital Status, Family Size, Banking, Insurance, Stock Market.*

I. INTRODUCTION

India being the fourth largest economy in the world and second largest GDP among developing nations has a vast potential to attract foreign investments and foreign institutional funding. It is evident from various studies that India and China will rule the world in the 21st century. A supreme decline in global GDP share of wealthy countries has been witnessed. Like Europe by 4.9% points, followed by the US and Japan with a decline of about 1 percent. Recent studies shows the share of the US in world GDP is expected to fall from 21 percent to 18 percent while India to rise from 6 % to 11% by 2025. India is going to emerge as the third pole in the global economy after the US and China. In India, numerous kinds of investment media or channels are accessible for making investments. Investment is one of the essential aspects of wealth maximization. Investment alternatives are continuously increasing with development of financial market. Financial investment is allocation of funds to different financial assets that will be held over some future time period. Current sacrifice of money and future benefits are two important elements of investments. Financial saving can be done either by controlling the extra expenses or else increasing the income. However the investors should be careful about their hard earned money. Proper investment analysis of financial and real assets can be done by understanding risk and return profiles of investors. Through investments, investors want to increase their financial security, standard of living and ability to meet up financial requirements. At the same time investors can also achieve financial freedom, income growth, fulfill personal goals and reduces future risks. As investors are interested in safety, security and profitability, investment decisions should consider the balance of risk and return. Investment now-a-days has become much more complex. Like investments in high risk options (stocks and unsecured bonds) gives higher return but at the same time all the conditions must be verified by investors. Investor also needs to check the alternatives and its suitability with present and future needs. Selecting appropriate investment options and booking higher returns can be done through diversification of fund (Fama E, 1998). A personal investment leads to capital formation and give the benefit to society as well as to the economy. Earlier people were more inclined to save in traditional forms i.e. Banks, FD's, Jewelry, stones etc. but with the advancement of financial market and introduction of new saving instruments the investment practices get changed. Selecting appropriate financial instruments and options develop sound portfolio. It also depends upon investor's requirements and characteristics as well. A few investments are fitting for one kind of investor and another might be appropriate to someone else. However with organized investments one can get the security and surety of returns. At the same time demographics also impact the choice of investment options. Investor's age, gender, educational qualification, family size matters while designing portfolios and selecting investment alternatives.

II. LITERATURE REVIEW

Investment aims to reap benefit in later life. Equity, Government deposit, property, shares, bonds, etc. are different forms of investments. People invest in different financial avenues for fulfilling financial, social and psychological need (Filbeck, et.al, 2008). It has been studied that investors are more comfortable with the traditional investment options than new financial products like LIC and bank/ post office deposits. They believe that traditional options are secure and risk free as compared to the modern options. This indicates that retail investors don't have proper investment awareness and knowledge (A.Lalitha and M.Surekha, 2008). Investments are directly associated with returns. As investors were more interested in the safety of their

investment than other benefits arising from the investment, most of the investors prefer medium risk factor options (P.Bhanu Sireesha and Sree Laxmi, 2013). Efficient portfolio management helps investors to invest their saving for their secure life and for bright future (Mahajan M.A, 2012).

After the review of studies related to investment objectives and different financial instruments, the next section will focus on role of demographics and psychographic variables on investment decisions. A demographic factor plays an important role on the investment decisions of the investors. And at the same time demographic factors need to be taken care of by marketers and designers of financial product (Bodla and Sushant Nagpal, 2011). Investment decisions are taken after due consideration of factors like age, education level, income of the investors for better investment results. (C. Sathiyamoorthy, 2015). Like most of the teachers are saving for their children education, marriage and their family future needs inspite of low income level. They prefer bank deposits which involve less risk and provide regular returns (Dhiraj Jain & Parul Jain, 2012, Varsha Virani, 2014). The investment preference about financial assets is influenced by other factors, such as family size, number of earning members in the family, nature of family, stage in life cycle, experience of investing, nature of occupation, lifestyles and personality characteristics. (Turan and Bodla, 2004, EmbreyLori and Fix Jonathan, 1997). Various studies investigated personality traits as a significant influencer on investment choice (Manu Verma, 2008, Chitrak and RamyaSreedevi, 2011, Mehta and Aggarwal, 2011). Similarly emotional stability is also one of the important traits which influence investment decisions. The study by Manish Mittal and Vyas (2011) provides interesting insights into gender differences in investment behavior and risk preference. A person is more likely to invest in known companies and avoids unknown avenues. Research suggests that investors with higher education hold more risky portfolios (Diane and Debra, 2003). Professionally managed investment accounts are more diversified and generate higher returns compared to independent investors. At the same time males and females have different risk appetite. Women tend to take less risk than men (Byrnes and David, 1999). However returns, retirement plans, tax benefits, family security, education and marriage are important investment objectives for women (Rajeshwari Jain, 2014, Siddika H, 2020). The differences among genders were found to be significant for traditional investment instruments like provident funds, fixed deposits, and real estate. Females were found more conservative than males (Sireesha B and ShreeLaxmi, 2013). The study also highlighted that percentage of equity holding decreases over time with increase in age (Shapira and Venezia, 2001). High age groups investors are more inclined to post office as an investment option in comparison to lower age group investor. Many investors consult their family members before making investment. Some studies found that investors are conservative in nature and show less concern for money multiplication and liquidity (Sireesha B and ShreeLaxmi, 2013). On the other hand some studies suggest that there is no significant relation between demographic and personality variables when considering the effect on investment choice. Financial products are popular and purchased if they are good in customer service, management and efficient quality services and prompt distribution (Powell and Ansic, 2002). Some studies revealed that there was a negative correlation between Marital Status, Gender, Age, Educational Qualification and Occupation of the investors also there is a positive correlation between Cities, Income Level and Knowledge of the investors (Dhiraj et.al, 2012). Specific studies on industries have been carried out to understand the influence of demographics on certain industry investors. Deo R. and Jagtap U. R. (2017) understand the effect of demographic factors like gender, age and marital status on mutual fund investment decision. A significant difference of gender and age on investment preference of mutual fund investment decision has been found while no significant impact of marital status has been found on the mutual fund investment decision. Makwana Chetna (2015) explains interaction between demographic variable and behavior bias of mutual fund investors. The study explains how the Heuristics, Bias, and psychological dimensions influence investment decisions of individual investor and perception affects the mutual funds market. The results indicates that age group of investors was most prominent factors among other demographic factors which affect the overconfidence of investors. It has also been observed that behavioral biases occurs while mutual fund investments due to demographic factors i.e. Age, Income, Education and perception while Gender and awareness is not showing any evidence of effect.

III. OBJECTIVES OF THE STUDY

- i. To analyze the relationship between marital status and investment in banking, insurance and stock market.
- ii. To analyze the relationship between family size and investment in banking, insurance and stock market.

IV. HYPOTHESIS FORMULATION

Hypothesis – 1: Association between investment pattern and marital status

H0: "Investment pattern (Stock Market, Bank and Insurance) is not associated with marital status of investors."

H1: "Investment pattern (Stock Market, Bank and Insurance) is associated with marital status of investors."

Hypothesis – 2: Association between investment pattern and number of dependents

H0: "Investment pattern (Stock Market, Bank and Insurance) is not associated with number of dependents in a family."

H1: "Investment pattern (Stock Market, Bank and Insurance) is associated with number of dependents in a family."

V. RESEARCH METHODOLOGY

The study is analytical in nature based on primary and secondary data which has been collected through survey method using a structured questionnaire. Both open ended and closed-ended questions are used in questionnaire. Stratified random sampling method is used for collecting data of male and female investors of Central India. Demographic factors i.e. Marital Status and Number of Dependents in family are considered as independent variables while investment avenues i.e. Banking, Insurance and Stock market are considered as dependent variables. Sample size of 550 investors is taken to conduct the research. Cronbach Alpha test and Chi Square analysis has been applied in this study.

VI. RESULTS AND DISCUSSION

Marital status is very important because it is associated with responsibilities related to family. The studies of Bajtelsmit, & Bernasek, (2003) and Lyons et al. (2007) revealed that married individuals do not make investment decisions on their own as they do consider their spouse decisions as the important element for financial matters.

Association between investment pattern and Marital Status: To analyze the association chi square test performed and consolidate table is drawn for chi square value which is shown by below table.

Table 1

Chi-Square Tests for marital status and size of investment in stock market, bank and Insurance

Demographic Element	Size of investment	Pearson Chi-Square Value	Df	Asymp Sig. (2-sided)
Marital	Stock Market	304.520	4	.000
	Bank	195.477	3	.000
	Insurance	140.178	4	.000

i) H0: “No significant association between size of annual investment in stock market and marital status”

Chi square value is 304.520 and Value of P sig. value is .000 which is less than 0.05 at 95 % confidence level therefore null hypothesis “There is no significant association between size of annual investment in stock market and marital status of investor” is rejected and alternative is accepted. It means size of annual investment in Stock Market is associated with marital status of investor.

ii) H0: “Significant association between size of annual investment in Bank and marital status”

Chi square value is 195.477 and Value of P sig. value is .000 which is less than 0.05 at 3 degree of freedom therefore as per the rule null hypothesis “There is no significant association between size of annual investment in bank and marital status of investor” is rejected and alternative is accepted. It means size of annual investment in bank is associated with marital status of investor.

iii) H0: “No significant association between size of annual investment in Insurance and marital status of investor”

From the table it is clear that Value of P sig. value $> .000$ at 4 degree of freedom therefore as per the rule null hypothesis “There is no significant association between size of annual investment in insurance and marital status of investor” is rejected and alternative is accepted. It means size of annual investment in insurance is associated with marital status of investor.

Association between investment pattern and Number of dependents: To analyze the statistical association between size of annual investment in Stock Market, Bank and Insurance and No. of dependents on investor the chi-square test employed. The consolidate table is drawn for chi square values which is shown by below table.: To analyze the statistical association between size of annual investment in Stock Market, Bank and Insurance and No. of dependents on investor the chi-square test employed. The consolidate table is drawn for chi square values which is shown by below table.

Table 2

Chi-Square Tests for No. of dependents on respondent and size of investment in stock market, bank and Insurance

Demographic Element	Size of investment	Pearson Chi-Square Value	Df	Asymp Sig. (2-sided)
No. of dependents	Stock Market	241.572	8	.000
	Bank	362.061	6	.000
	Insurance	506.416	8	.000

Here value of P sig. value is in all three cases are same therefore there is no need to divide it in sub hypotheses. The sig. value is in all are 0.000 which is less than 0.05 which shows the null hypothesis "Investment pattern (Stock Market, Bank and Insurance) is not associated with No. of dependents on investors" is rejected and alternative is accepted. It means size of annual investment in all cases i.e. Stock Market, Bank and Insurance is associated with No. of dependents.

i) H0: "No significant association between size of annual investment in stock market and number of dependents"
Chi square value is 241.572 and Value of P sig. value is .000 which is less than 0.05 at 95 % confidence level therefore null hypothesis "There is no significant association between size of annual investment in stock market and number of dependents" is rejected and alternative is accepted. It means size of annual investment in Stock Market is associated with number of dependents.

ii) H0: "Significant association between size of annual investment in Bank and number of dependents"
Chi square value is 362.061 and Value of P sig. value is .000 which is less than 0.05 at 6 degree of freedom therefore as per the rule null hypothesis "There is no significant association between size of annual investment in bank and number of dependents" is rejected and alternative is accepted. It means size of annual investment in bank is associated with number of dependents.

iii) H0: "No significant association between size of annual investment in Insurance and number of dependents"

From the table it is clear that Value of P sig. value > .000 at 8 degree of freedom therefore as per the rule null hypothesis "There is no significant association between size of annual investment in insurance and number of dependents" is rejected and alternative is accepted. It means size of annual investment in insurance is associated with number of dependents.

Marital Status is an important demographic factor which affects the size of investment. The present study has find out major observations in respect of marital status and investment size. Married couples hold significantly higher wealth than unmarried couples. This is even after controlling for the presence of two earners in a married household (Díaz-Giménez, Quadrini, & Ríos-Rull, 1997; Schmidt & Sevak, 2006). The analysis reflects that unmarried individuals are less interested in investments because of lesser liability and responsibility. However married individuals are interested to invest in banking, insurance and stock market financial products. Size of investment in stock market is significantly associated with marital status which indicates that married and unmarried individuals do investment differently in stock market products. Similar results can be seen in investments related to banking and insurance products. The size of investments in bank and insurance is related to age of investors. From descriptive statistics it has been observed that unmarried individuals are investing less or in smaller amount in stock market and banking and insurance products. David (2008) examined the effects of marital status and dependents' in investment choices. The study revealed that family shocks, unexpected changes, expectations and family composition lead to adjustment in household savings and portfolio choices. Similar results can be seen in case of number of dependents in a family or family size which influence the expenses associated with household and therefore it affects the size of investment. Majority of studies suggest that family size has a negative effect on savings and investments. More dependent members draw down the savings resulting in reduced tendency to save of an individual (Bendig et al., 2009). The descriptive statistics indicates that majority of respondents have nuclear families and less have maximum number of dependents. It is evident from results that respondents having more number of dependents' do not invest in any financial product or services. However individuals having less number of dependents are investing in stock market and banking and insurance. Family size is negatively related to current income levels of the household. It leads to the diversion of income towards consumption (Dornbusch et al., 2004).

CONCLUSION

The Indian financial sector is witnessing a rapid growth due to infrastructural development, more usage of personal financial assets, rise in foreign investments, growing risk appetite, high standard of living, and increasing awareness for financial service instruments such as mutual funds, bank fixed deposits and post office savings. The results revealed that there is a significant association of marital status and family size on investments in insurance, bank deposits and stock market. The results will help the financial industry to design new and innovative products as per customers need and requirement. Industry can considers marital status & family size of potential investors while making financial schemes. It can attract more of customers and generate revenues for organization. This research work provides platform to all such companies which are engaged in wealth creation. It also suggests considering demographic profile, especially profession while making any investment scheme.

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