

A STUDY ON PRIMACY OF SAVING MOTIVE AND ITS IMPACT DUE TO THE ASSOCIATION WITH INVESTMENT VARIABLES

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Abstract: Savings are low risk funds that are liquid and available when needed. Savings may help in satisfying the immediate or short-term needs. Savings retained does not help much in taking care of the future needs, especially when it is long term as it is exposed to Inflation and economic downturns. Investments, on the other hand, are for wealth building, and targeted for long-term needs. Each investor will have different saving motive based on their needs as they have different financial goals. Understanding the different motives and needs would help to design a better product to channelize the savings in to investments that cater the needs. This study attempts to identify the results on interplay of the various motives of savings and their primacy. This study concludes that the primacy of saving motives of individual investors revolves more around sense of independence and improvement of living standard as they earn more.

Keywords: Saving Motive, Saving Motive Index, Investment Potential, Investment Variables, Primacy

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1. INTRODUCTION

Savings are the results of disposable income available after consumption expenditure, committed expenditure and statutory dues. Savings of the individuals are highly related to the income level of the people, number of dependents, total family income, their experience and their awareness. Savings are low risk funds that are liquid and available when needed. Savings may help in satisfying the immediate or short-term needs. Savings retained does not help much in taking care of the future needs, especially when it is long term as it is exposed to Inflation and economic downturns. Investments, on the other hand, are for wealth building, and targeted for long-term needs. Despite investments involve greater risk, but,

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investments also yield much greater returns when left alone for long enough to ride out the turbulence of the financial market. Investments converted from savings can help to determine the maximum potential of investments that an investor can make. This study attempts to identify the results on interplay of the various motives of savings and their primacy. It also explores the association of Investment variables with saving motives and its impact.

1.1. Significance of the study

Each investor will have different saving motive based on their needs as they have different financial goals. Understanding the different motives and needs would help to design a better product to channelize the savings in to investments that cater the needs. Findings from this study would help the financial advisors to suggest the relevant products that meet investor needs.

2. LITERATURE REVIEW

John Maynard Keynes (1936) in his book “The General Theory of Employment, Interest and Money” confirmed the existence of eight motives might be called the motives of Precaution, Foresight, Calculation, Improvement, Independence, Enterprise, Pride and Avarice. He also found that apart from the savings accumulated by individuals, the modern industrial community has saving motives analogous to Enterprise, Liquidity, Improvement and Financial Prudence.

Katona (1975) evidenced six more saving motives for emergencies, to have funds in reserve for necessities, for retirement or old age, for children’s needs, to buy a house or durable goods, and for holidays.

Charles Yuji Horioka, Koji Yamashita, Shiho Iwamoto and Masashi Nishikawa (2003) found that results concerning bequest motives and attitudes toward bequest division suggest that bequest motives are relatively weak in Japan, both absolutely and relative to the U.S., and that bequests in Japan are primarily unintended bequests arising from lifespan uncertainty or selfish bequests that are a quid pro quo for care and financial assistance, during old age. Moreover, a substantial proportion of the aged in Japan don’t save, and planned bequests have a negative and statistically significant impact on their rate of decumulation. Finally, parents’ bequest motives and attitudes toward bequest division have a strong impact on the residence, care, and financial support behavior of their children, suggesting that not only parents but also children are selfish in Japan. Thus, the results suggest that the applicability of the life cycle model is very high in Japan and that its degree of applicability is much higher in Japan than it is in the United States.

Patricia Fisher (2006) suggests that household saving may be consistent with a prospect theory approach. When investigating household saving behaviors or

developing programs to increase saving, it may be important to consider the role of current income, uncertainty, saving motives and saving horizon.

Frank M. Fossen and Davud Rostam-Afschar (2009) found that large amounts of precautionary savings disappear once the heterogeneity between entrepreneurial and non-entrepreneurial households is accounted for. He also confirmed that the result in a different country by revising estimates of precautionary savings in Germany while Hurst *et al.* (forthcoming) still find some evidence that precautionary savings account for a small fraction of wealth in the USA, the results from this study based on the preferred specifications actually show that no significant estimates of precautionary savings remain in Germany once entrepreneurship is controlled for.

R Kasilingam & G Jayabal (2009) found that the understanding the requirements and characteristics of various segments of investors, the marketers of investment products can tailor different instruments exclusively to fit the needs of different segments of investors. It was also found that people want to save money mainly for the precautionary motive and least priority is given to the speculative motive. It was evidenced that the mean values of two motives, enterprise and avarice are less than three which indicate that most of the people do not accept the existence of such motives for the purpose of saving and the mean values of all other six motives Precaution, Foresight, Calculation, Improvement, Independence, and Pride are more than three, which explains the existence of such motives for saving.

Rui Yao, Feifei Wang, Robert O. Weagley and Li Liao (2011) compared differences in reporting particular saving motives between Chinese and Americans and investigated factors that affect Chinese and American household saving motives. As compared with American households, Chinese households were more likely to report all three saving motives (the precautionary motive, the education motive, and the retirement motive), except that there were no differences in reporting the retirement motive for households in the third and fourth income quartiles. Based on their study results the Chinese households were significantly more likely than Americans to have a precautionary saving motive. It was also identified that the difference between Chinese and Americans in terms of the retirement saving motive was not strong. As saving motives affect saving behaviors the stronger motivation to save for Chinese households than for American households serves as a plausible explanation for the higher rate of saving in China than in the United States.

Patti J. Fisher and Sophia T. Anong (2012) described that Households reporting a retirement saving motive had odds of saving regularly versus irregularly that were 1.5 times higher than those without a retirement saving motive. Other saving motives were not significant. Relative to the lowest income group having income in the fourth or fifth quintile was significantly and positively related to the

likelihood of saving regularly versus saving irregularly. Households in the fourth quintile had odds of saving regularly versus irregularly that were about 2.0 times higher, and households in the fifth quintile had odds of saving regularly versus irregularly that were 2.4 times higher. Income uncertainty and net worth were associated with a significant decrease in the likelihood of saving regularly versus saving irregularly.

2.1. Research Objective

The Objective of the study targets on understanding the priority of saving motive of IT/ITES/Software professionals in Chennai, India. The major objectives of this study are:

- To determine the primacy of savings motive (Savings Motive Index - SMI) among individual investors in Chennai, India belonging to Software/IT/ITES profession.
- To analyze the impact of investment variables over saving motives of individual investors in Chennai, India belonging to Software/IT/ITES profession.
- To determine the potential difference of additional investments that can be channelized from savings.

2.2. Period and area of study

Period of the study and data collection is covering the financial years 2007 to 2014 to cover the economic inflation and recession in the research variables. Area of study mostly covers the Investment Management strategies and decision making behavior.

3. MATERIALS & METHODS

The methodology used in this study is survey research methodology. Based on literature review and identified gaps in the related areas a survey tool, questionnaire was created to capture the saving motives of individual investors. Pilot study was conducted to test the reliability and validity of the questionnaire with the data collected from 60 respondents. After pilot testing, questions in the questionnaire with the lesser reliability value were removed. Baseline questionnaire was circulated to the individual investors of age varying from 23 to 57 years belonging to Software/IT/ITES profession in Chennai city part of various Information Technology Organizations. Sample was carefully considered such that the respondents are part of different strata to belong Pay scale, Age group, Designation, Educational background, Experience level, financial knowledge and Social & Marital status. Below sub-sections section gives a brief description of the Population and Sample, the Survey instrument, Pilot Study and the Survey procedure.

3.1. Research Population and Sample

The methodology adopted for this research is “Descriptive Survey”, to unearth the saving motive and its association with investment variables. The methodology is been chosen so as it is the best way for identifying the needs of investors and suitability of products with the needs. Population considered for this are the active individual investors working in the IT/ITES/Software industry at various levels in Chennai city, India.

Data has been collected from primary sources by means of survey method through questionnaires. The whole population is the total number of IT professionals in Chennai. The sampling method adopted here is Convenience non-probabilistic sampling and the sample size is 573.

The samples are stratified based the income levels and various other factors of the population and the proportion of the population is obtained from some of the related surveys of the various income categories of IT professionals. Below is the sample distribution of different strata:

Table 1
Sample Data Distribution

<i>Factors</i>	<i>Categories</i>	<i>Number of Respondents</i>	<i>Percentage</i>	<i>Cumulative Percentage</i>
Gender	Male	477	83.2%	83.2%
	Female	96	16.8%	100.0%
Age	Young Aged (23 - 35)	298	52.0%	52.0%
	Middle Aged (36 - 45)	241	42.1%	94.1%
	Elderly Aged (46 & above)	34	5.9%	100.0%
Education	Diploma	38	6.6%	6.6%
	U.G.	330	57.6%	64.2%
	P.G.	192	33.5%	97.7%
	Others	13	2.3%	100.0%
Finance	Yes	227	39.6%	39.6%
Education	No	346	60.4%	100.0%
Designation Level	Beginners & Intermediate - Operational	261	45.5%	45.5%
	Middle Level - Tactical	251	43.8%	89.3%
	Senior Level - Strategic	38	6.6%	95.9%
	Executive Level - Visionary	23	4.1%	100.0%
Total Experience in Years	1 - 10 Years	213	37.2%	37.2%
	11 - 20 Years	306	53.4%	90.6%
	21 - 35 Years	54	9.4%	100.0%
Finance Industry	No Experience	176	30.7%	30.7%
Industry Experience in Years	1-10 Years	266	46.4%	77.1%
	11 - 20 Years	119	20.8%	97.9%
	21 - 35 Years	12	2.1%	100.0%

contd. table 1

<i>Factors</i>	<i>Categories</i>	<i>Number of Respondents</i>	<i>Percentage</i>	<i>Cumulative Percentage</i>
Total Monthly Income (INR)	INR 5000 - 20000	3	0.5%	0.5%
	INR 20001 - 50000	45	7.9%	8.4%
	INR 50001 - 80000	71	12.4%	20.8%
	INR 80001 - 120000	77	13.4%	34.2%
	INR 120001 - 150000	96	16.8%	51.0%
	INR 150001 - 200000	111	19.3%	70.3%
	INR 200001 - 250000	76	13.3%	83.6%
	INR 250001 - 300000	54	9.4%	93.0%
	> INR 300000	40	7.0%	100.0%
Maximum Tax Slab %	10%	105	18.3%	18.3%
	20%	116	20.2%	38.5%
	30%	352	61.5%	100.0%
Marital Status	Married	487	85.0%	85.0%
	Single	86	15.0%	100.0%
Self-owned Home	Yes	391	68.2%	68.2%
	No	182	31.8%	100.0%
Self-owned Car	Yes	344	60.0%	60.0%
	No	229	40.0%	100.0%
Planned Retirement Age	Early Retirement Age	115	20.1%	20.1%
	Normal Retirement Age	409	71.3%	91.4%
	Late Retirement Age	49	8.6%	100.0%

3.2. Survey Tool

A five page questionnaire consisting of two sections was developed. First section concentrated on demographic information such as Education, Finance Education, Designation Level, Total Experience in Years, Finance Industry Experience in Years, Total Monthly Income in INR, Maximum Tax Slab in Percentage, Number of Dependents, Various Family expenses, Marital Status, Self-owned Home, Self-owned Car and Planned Retirement Age. Second section deals with five-point Likert rating scale being rated by the investors to rate their level of motives. Five-point Likert rating scale has five different ratings/weightage Strongly Disagree (1), Disagree (2), Neither Disagree nor Agree (3), Agree (4) and Strongly Agree (5). The questionnaire was prepared by referring to some of the similar instruments reported in the literature by previous researchers and enhanced with the feedback from the focus group. The fieldwork was done by means of personal interviews and also through e-Mails to get the questionnaire filled by professionals in 33 IT organizations in Chennai, India.

3.3. Pilot Study

Pilot study was organized with the data collected from 60 individual investors belonging to IT/ITES/Software profession in Chennai, India to test the reliability & validity of the survey instrument. Preliminary analysis of the pilot data had

shown that the respondents who filled the questionnaire were generally happy with the questions, length of questions asked in the questionnaire. Few changes were made to the subscale statements to improve clarity of the presentation and to make the responses more objective than keeping it subjective. To ensure the degree of objectivity and high quality in the survey data, the respondents were personally interviewed to verify the accuracy and integrity of the collected data. Below were the recommendations/impressions from the pilot study

- The reliability looks decent for all the broader sections
- Lower reliability variables needs to be deleted for few questions
- The variables in Section 1 are too many, so should plan to split the variables in to factors before proceeding main study

Above recommendations were accommodated in the base lined questionnaire used for further data collection

4. DATA ANALYSIS & INTERPRETATION

The data collected from the survey was scored and entered in the system for analysis by the SAS 5.1 software. Some preliminary results relating to the sample characteristics, the reliability of the questionnaire are reported in this section.

4.1. Data Collection Procedure and Respondent Characteristics

Questionnaire has been shared with 680 individual investors belonging to IT/ITES/Software profession in Chennai. Data collection is done by sharing the questionnaire thru e-mail and personal interviews. Out of the 680 questionnaires distributed for response, 79 questionnaire response were returned, representing a response rate of 88% but out of this 28 questionnaire response were not considered for research since some of them are not properly filled . So the final ratios of forms which are considered for research are 84%, which is considered as an acceptable level of response rate in the type of research.

4.2. Reliability of Scale

In order to validate the reliability of the questionnaire, the Cronbach (1981) alpha coefficients for the questionnaire and the nine ranking point subscales were calculated. It is evidenced that values given in section 2 were found to have a mean value ranging from 3.65 in the Liker Point scale, where a value of 3 is regarded as neutral point. This indicates that ratings from the respondents tend to lie on the positive side of the rating scale. Furthermore, the standard deviations were found to range from 0.79 indicating a relatively high degree of consensus among the respondents in their perception of the rating the variables in the questionnaire.

4.2.1. Reliability Statistics for Saving Motives:

Cronbach's Alpha	N of Items
.660	19

4.3. Motives to Save

Keynes, 1936 had identified eight saving motives and Browning, Lusardi, 1996 had coined the title for each of the eight motives (Precaution, Foresight/Lifecycle, Intertemporal substitution, Improvement, Independence, Enterprise, Bequest/Pride and Avarice) with an additional motive (the down payment). Although some common motives like Education, Marriage and Entrepreneur are different but they are some forms of Improvement, Foresight and Enterprise saving motive respectively. Other savings motive include Tax savings, Time-Horizon savings and Don't save motives.

1. **Precaution Saving Motive:** Motive to build up a reserve to handle unforeseen contingencies.
2. **Lifecycle/Foresight Saving Motive:** Motive to provide for an anticipated future relationship between the income and needs of the individual for example old age.
3. **Calculation/Intertemporal Substitution Saving Motive:** Motive to enjoy an enlarged future income like interest and appreciation.
4. **Improvement Saving Motive:** Motive to meet the gradually increasing expenditure and maintain the standard of living.
5. **Independence/Retirement Savings Motive:** Motive to enjoy a sense of independence and the power to do things, though without a clear idea or definite intention of specific action.
6. **Enterprise Savings Motive:** Motive to secure and carry out speculative or business projects.
7. **Pride/Bequest Savings Motive:** Motive to pass the fortune to the next generation (bequeath a fortune).
8. **Avarice Savings Motive:** Motive to satisfy pure miserliness (spend less), i.e., unreasonable but insistent inhibitions against acts of expenditure as such.
9. **Down Payment Savings Motive:** Motive to accumulate deposits to buy houses, cars, and other durables.

Mixed forms of Saving Motives

Below three saving motives are mixed mutants of Keynes Savings motives.

10. **Education Savings Motive:** Motive to handle the further education expenses. It is a form Improvement and Foresight saving motive.

11. **Marriage Savings Motive:** Motive to manage for self/family member marriage expenses. It is a form Foresight and Improvement saving motive.
12. **Entrepreneur Savings Motive:** Motive to generate capital to start own empire/organization. It is a mixed form of Enterprise and Independence saving motive.
13. **Recession/Down-turns Savings Motive:** Motive to manage the Economic Recession, Inflation and Industry Down-turns. It is a mixed form of Precaution and Foresight/Lifecycle saving motive

Other Saving Motives

14. **Tax Savings Motive:** Motive to avail tax exemption from government.
Time-Horizon Savings Motive: Motive to save for some purpose in Long-Term & Short-Term.
15. **Long-Term Time-Horizon Savings Motive:** Motive to save for some purpose in Long-Term.
16. **Short-Term Time-Horizon Savings Motive:** Motive to save for some purpose in Short-Term.

Don't save motives

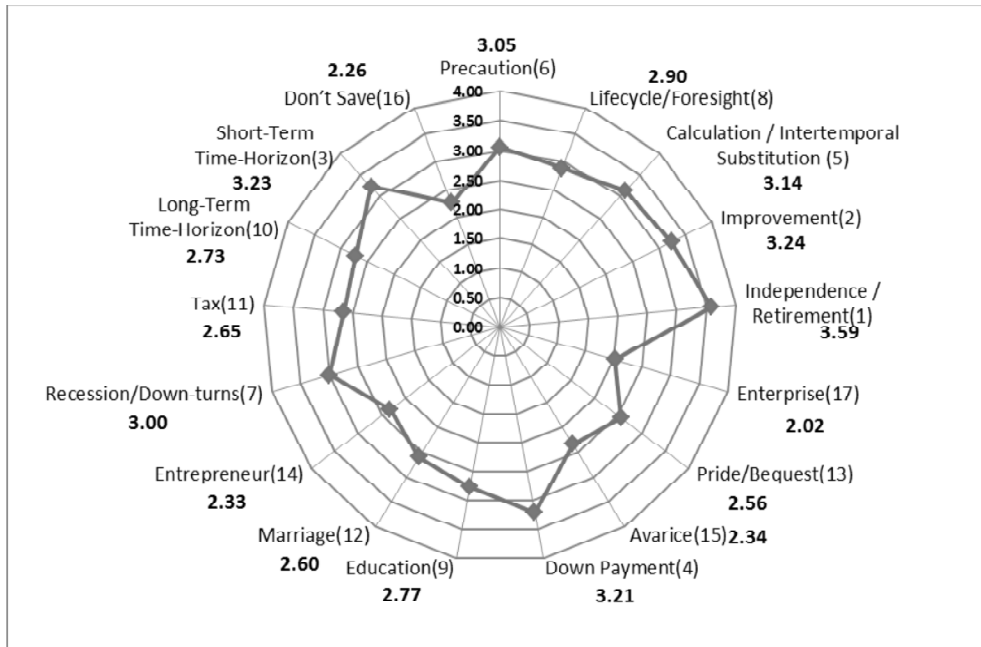
17. **Don't get to save after expenses:** No left out money to invest after monthly expenses and various EMIs
18. **Don't believe in savings:** Don't like or believe in savings for different reasons like wish to enjoy what is being earned etc.
19. **Don't save due to enough available reserves:** Don't save as there are enough reserves or paternal property (Born with the silver spoon).

4.4. Primacy of saving motives

Investors were asked to fill their ratings towards saving motive on a five point Likert scale.1 – Strongly Agree; 2 – Agree; 3 – Neither Agree or Disagree; 4 – Disagree; 5 - Strongly Disagree in their responses to the Survey questionnaire. Mean value for each of the motives were calculated and plotted in the chart. It was observed that investors from IT/ITES/Software Profession were keen towards saving money for achieving Independence (sense of Independence) and Improvement (to improve the standard of living). Primacy for Enterprise (to get into speculative business), Don't Save, Avarice (to spend less) motive is less which proves that investors have rated these as least.

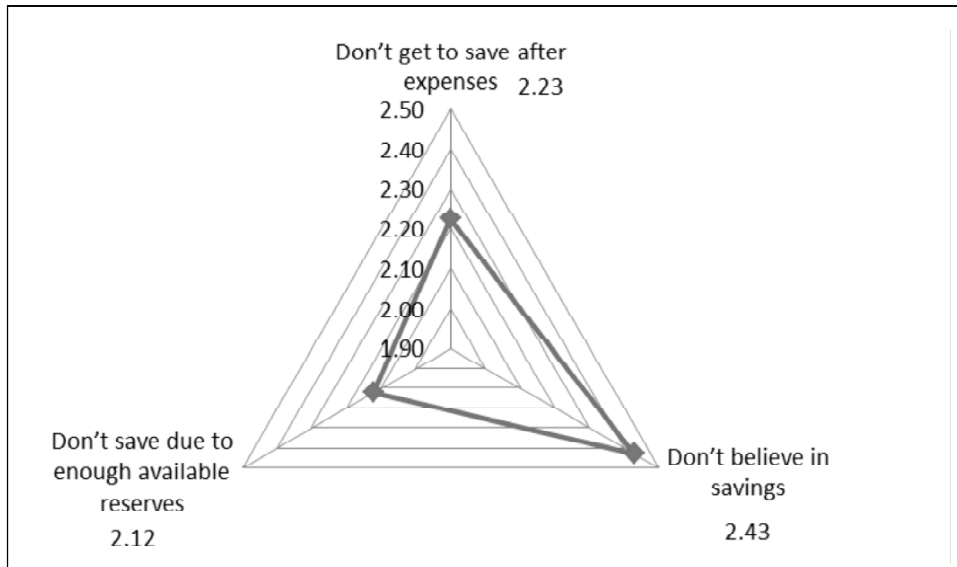
Below chart shows the index of savings motive of individual investors belonging to IT/ITES/Software Profession in Chennai, India.

Chart 1 : Motive Index - Savings



Some of motives like Foresight, Education, Long-Term Horizon, Tax, Marriage, Bequest, Entrepreneur, Don't Save and Avarice are having the mean value less than 3.0 proving these motives are not significant comparing the rest.

Chart 2 : Don't Save Motives



4.4.1. Don't Save Motives

Mean value of Don't Save variables results as Don't Save behavior/motive mostly comes from investors does not believe in savings. Least rated among Don't Save motive is Don't save due to enough available reserves like paternal property. Below chart shows the mean value of the Don't Save motives.

4.5. Impact of investment variables over primacy of Savings motives

Impact of below investment variables over Savings motive of individual investors belonging to IT/ITES/Software profession in Chennai, India is analyzed

- Investors investing regularly
- Percentage of monthly income invested

Above investment variables are measure against savings motive and findings were described as below.

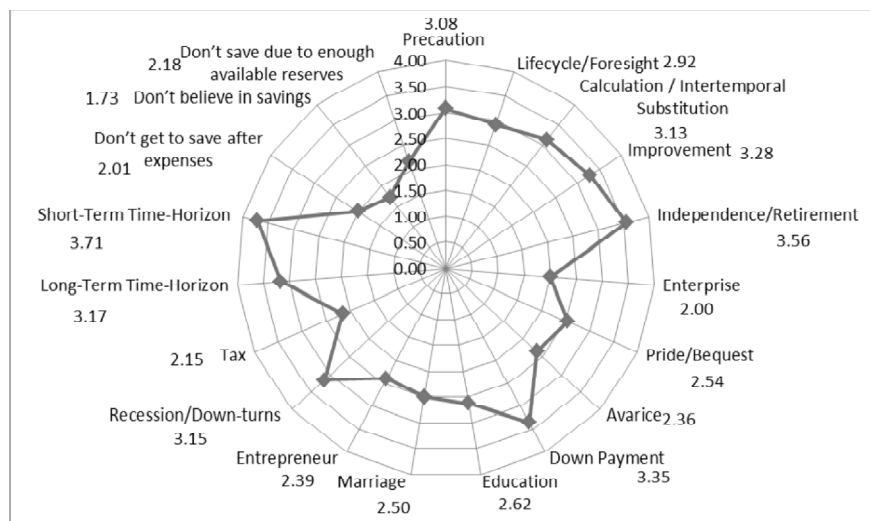
4.5.1. Investors investing regularly

Survey tool had questions to the individual investors belonging to IT/ITES/Software profession in Chennai, India to assess their investment nature and frequency. Based on the responses respondents has been categorized as Investors investing regularly and Investors investing irregularly.

4.5.1.1. Saving Motive of investors investing regularly

It was observed that investors investing regularly has given prioritized Short-Term savings and Independence saving motives. and given least priority for Don't believe in savings and Enterprise savings motives.

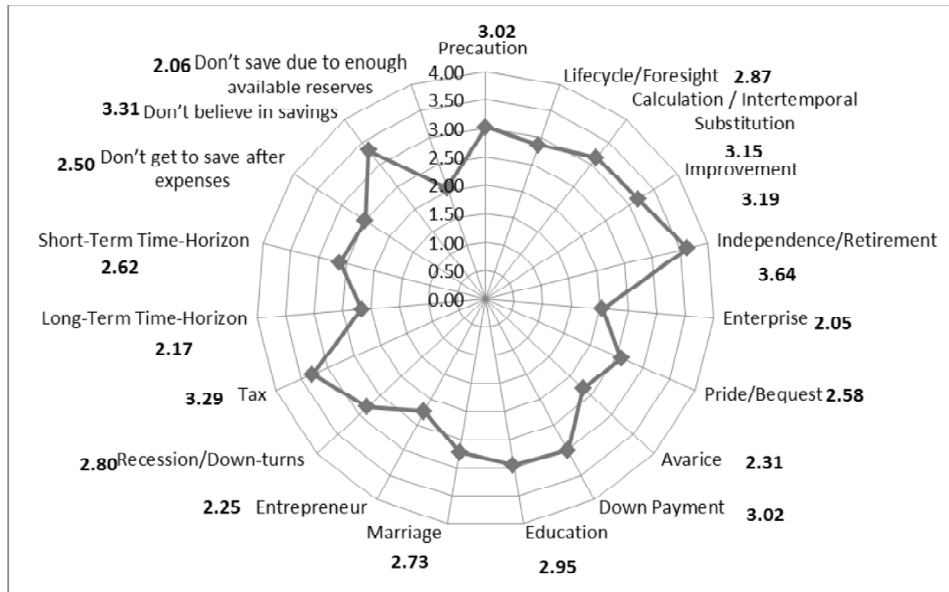
Chart 3 : Motive of investors investing regularly



4.5.1.2. *Saving Motive of investors those investing irregularly*

It was observed that investors those were not investing regularly has given prioritized Independence and Don't believe in savings motives and given least priority for and Enterprise and Short-Term savings motives.

Chart 4 : Motive of investors investing irregularly



4.5.2. *Percentage of monthly income invested*

Survey tool had questions to the individual investors belonging to IT/ITES/ Software profession in Chennai, India to know the Percentage of monthly income invested. Based on the responses respondents has been categorized as Investors investing 0%, 1 -15 %, 16 - 30 %, 31 - 50 % and more than 50 %.

4.5.2.1. *Saving Motive of investors investing zero percentage of monthly income*

It was observed that investors those were investing 0% of monthly income has given prioritized Independence and Education saving motives and given least priority for and Enterprise saving motives and Don't save due to enough available resources.

4.5.2.2. *Saving Motive of investors investing 1 - 15 percentage of monthly income*

It was observed that investors those were investing 1 to 15% of monthly income has prioritized Independence, Calculation and Improvement saving motives and given least priority for and Enterprise saving motives and Don't save due to enough available resources.

Chart 5 : Motive of investors investing zero percentage of monthly income

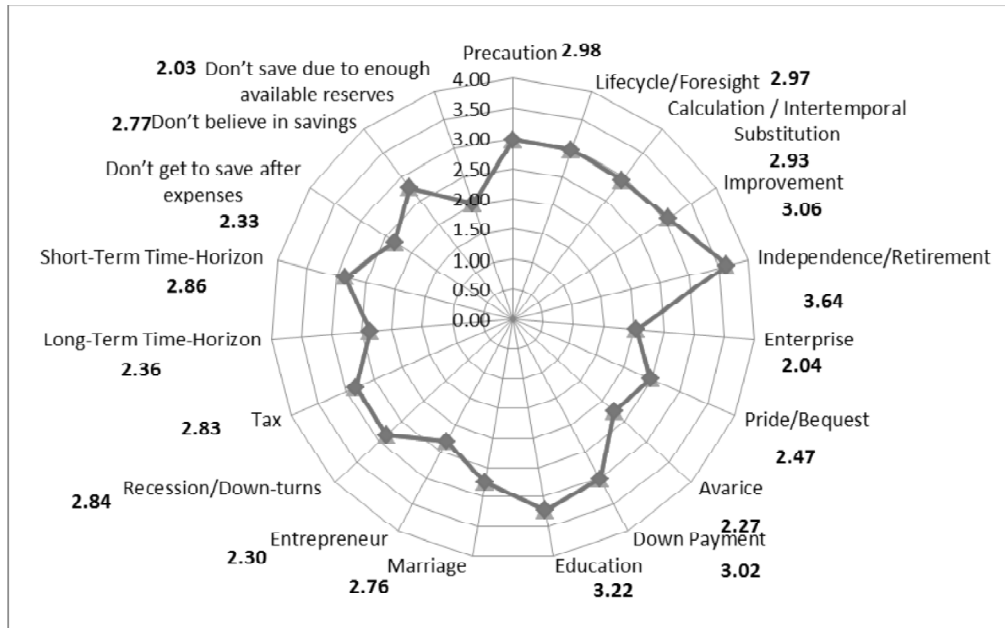
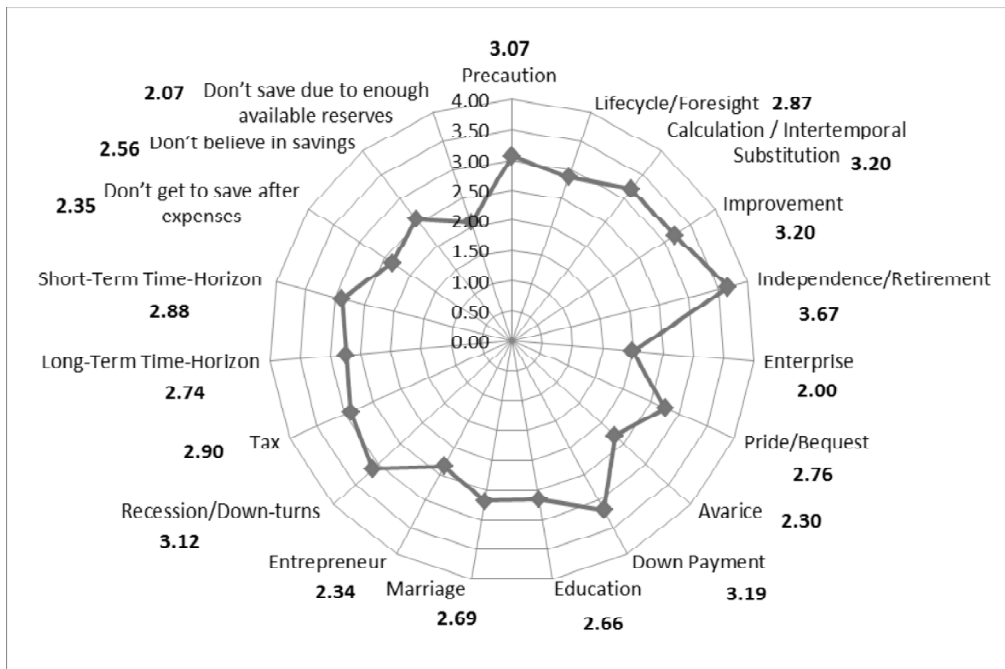


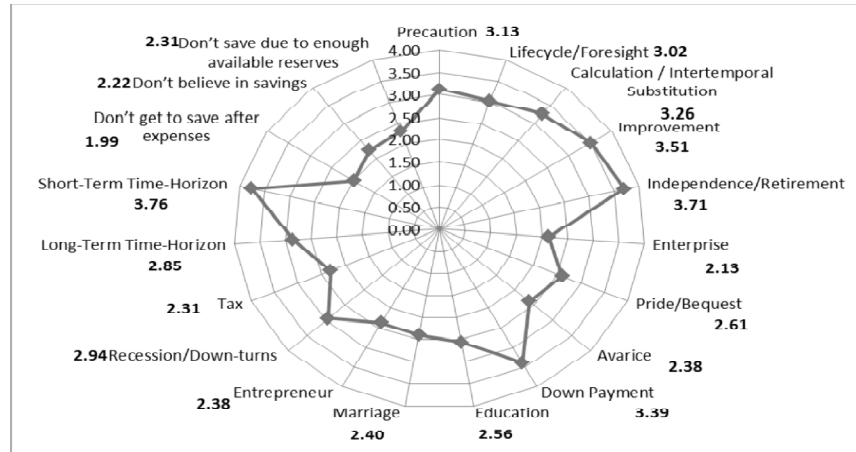
Chart 6 : Motive of investors investing 1 - 15 percentage of monthly income



4.5.2.3. Saving Motive of investors investing 16 - 30 percentage of monthly income

It was observed that investors those were investing 16 to 30 % of monthly income has given prioritized Independence and Improvement saving motives and given least priority for and Enterprise saving motives and Don't get to save after expenses.

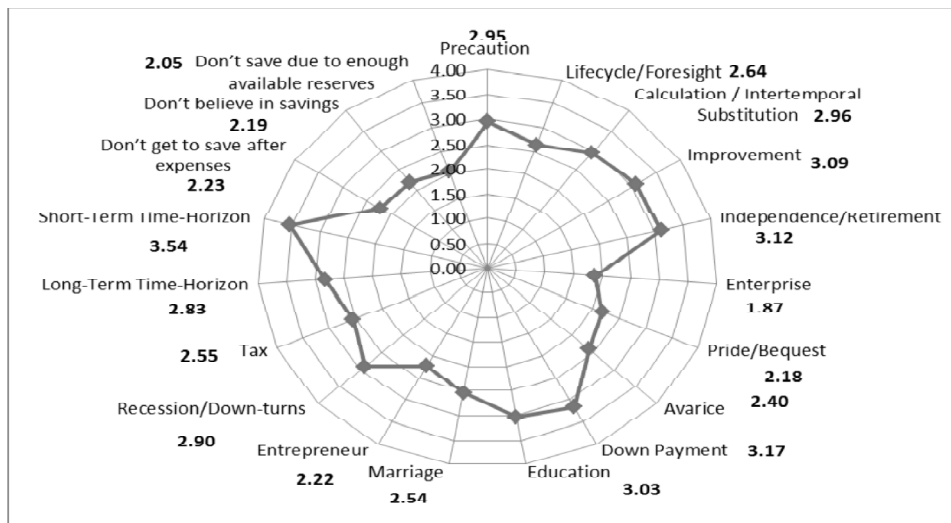
Chart 7: Motive of investors investing 16 - 30 percentage of monthly income



4.5.2.4. Saving Motive of investors investing 31 - 50 percentage of monthly income

It was observed that investors those were investing 31 to 50% of monthly income has given prioritized Short-Term Savings, Down Payment and Independence saving motives and given least priority for Enterprise saving motives and Don't save due to enough available resources.

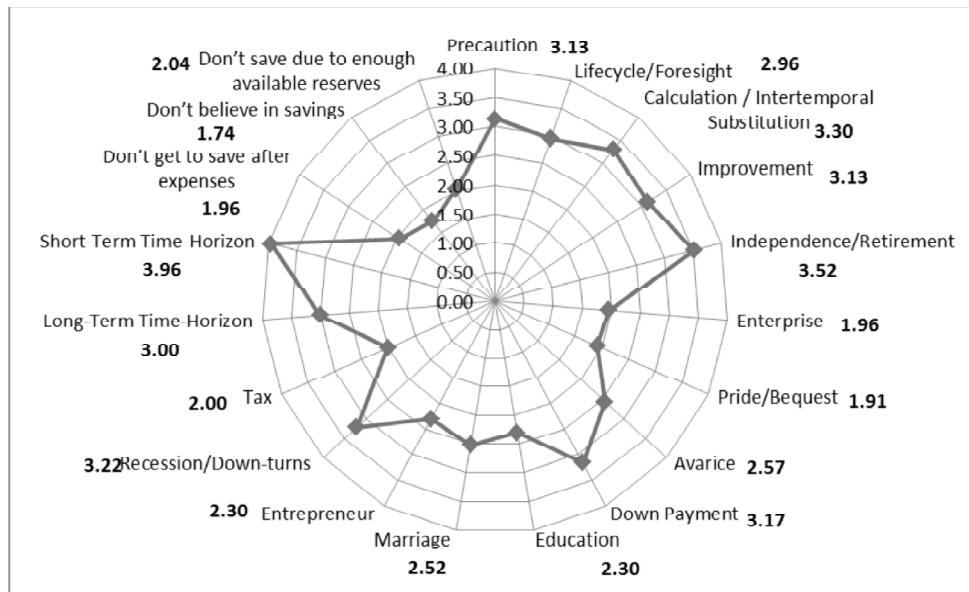
Chart 8 : Motive of investors investing 31 - 50 percentage of monthly income



4.5.2.5. Saving Motive of investors investing more than 50 percentage of monthly income

It was observed that investors those were investing more than 50% of monthly income has given prioritized Short-Term Savings and Independence saving motives and given least priority for Don't save believe in savings, Don't save due to after expenses, Pride/Bequest and Enterprise saving motives.

Chart 9 : Motive of investors investing more than 50 percentage of monthly income



4.5.3. Potential investments in addition from savings

From the variables Total Monthly Income, Total Monthly Expense and percentage of monthly income invested, it was observed that there is a potential of 13 % income could be invested in addition to the investment that investors make. Below formula indicates the calculation done.

$$\frac{(Total\ Monthly\ Income - Total\ Monthly\ Expense)}{Total\ Monthly\ Income} \% - Monthly\ Income\ Invested\ \%$$

4.6. Research Results & Discussions

- It has been found that investors from IT/ITES/Software Profession were keen towards saving money for achieving Independence (sense of Independence) and Improvement (to improve the standard of living). Primacy for Enterprise (to get into speculative business), Don't Save, Avarice (to spend less) motive is less which proves that investors have rated these as least.

- It has been evidenced that some of motives like Foresight, Education, Long-Term Horizon, Tax, Marriage, Bequest, Entrepreneur, Don't Save and Avarice are having the mean value less than 3.0 proving these motives are not significant comparing the rest
- It has been found that there is impact of investment variables on the primacy of saving motives of individual investors belonging to IT/ITES/Software profession in Chennai, India
- It has been observed that there is a potential of 13 % income could be invested in addition to the investment that investors make now

4.7. Limitations of the study and future scope

Some of the Limitations of this study are as follows.

- This study has focused only the saving motives and not considered the motives of consumption. Future research can relate the association of Consumption vs. Savings
- This study focuses only on the salaried group working in IT/ITES/Profession. This doesn't focus on the salaried group of professionals in other industries or entrepreneurs in IT industry which can be focused for future research
- This study has limited the study area only to Chennai city. It can be further extended to other metropolitan cities
- This study has analyzed the impact of only few of the investment variables like Investors investing regularly and percentage of monthly income invested on primacy of savings motive. Future study can consider the impact of other investment variables

5. CONCLUSION AND RECOMMENDATIONS

With the study done, it was concluded that the primacy of saving motives of individual investors belonging to IT/ITES/Software profession in Chennai, India revolves more around sense of independence and improvement of living standard as they earn more.

Although with the initial tenure of career Software professionals tend to have a motive to save for their future studies in the outset education motive seemed to be lesser priority as they move forward in the life. Also the motive to involve in business is also found to have least priority. Surprising precautionary motive was moderately prioritized and does not seem to catch importance among Software professionals.

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