A SURVEY OF FACTORS AFFECTING INVESTORS INVESTMENT DECISIONS: AN ASSESSMENT OF INVESTORS APPROACH AND PORTFOLIO STRATEGIES

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Abstract

In today's financial marketplace, maximizing the return of an investment strategy is critical to a large super fund's long-term success. Portfolio Management can help one to gain control on investments and deliver some meaningful value to earnings from the investments, like when a strategy is aggressive the chance of attaining a higher goal is higher. An efficient strategy can be obtained from portfolio theory, which shows good estimates on risk and return. In this volatile environment, many investors have questioned the wisdom of thinking about asset allocation solely in strategic terms and have shown renewed interest in tactical approaches but on the flip side there are factors like investment related worries, personal needs, temperament, age, etc of the investors have a significant effect on the portfolio while making investment decision.

The purpose of the research is to analyze the various factors affecting the investors while taking investment decisions and their approach towards portfolio construction and also tried to explore and develop the various critically evaluated strategies, for individual investors as per their age, income level, requirement, etc.

Key words: *Factors affecting investors; Investment strategies; Investors approach; Portfolio management; Risk & Return.*

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Introduction

A portfolio's performance depends on three interrelated decisions: security selection, market-timing, and an investor's policy or long-term, asset allocation an actively managed strategy attempts to exceed the expected return of the policy allocation through security selection or market-timing. There are certain financial and investment strategies that are: a) scientifically grounded, b) completely passive, c) thoroughly diversified, d) savings focused, e) risk adjusted, f) cost effective, and g) tax efficient on the other hand the characteristics of the investment can be understood in terms of as return; risk; safety; liquidity; etc. Standard deviation is a measure of the total risk of an asset or a portfolio. It captures the total variability in the portfolio's return, whatever the source(s) of that variability. There are various factors which will affect the investor decisions regarding portfolio investment, such as age; risk tolerance; time horizon; investment experience; investors approach; gender; occupation; etc. all these factors are dependent and interdependent to each other, like age define investors financial priorities and what are its goal on the other hand investors risk tolerance determine how much investors can invest in risky assets.

Research gap and objectives

From literature review of previous researches, it has been concluded that they all have gave stress on the factors (economic; social; cultural; psychological; etc.) affecting investors while constructing portfolio but no discussion has been done about portfolio tactical strategies after examining affecting factors. Our research is descriptive and exploratory in nature; it will attempt to describe various approaches of investors towards active portfolio management and will try to explore and evaluate various asset allocation strategies and also try to identify various factors which affect the investors while taking investment decision. The objective of the survey is as follows:

- To study different approaches of investors while constructing Portfolio.
- Identify the most influencing factors affecting investors while taking investment decision.
- To suggest strategies so that investors can optimize their return on investment.
- To analyze the relationship between various Factors.

Literature Review

According to Giamouridis, (2010); the optimal mix of assets in the context of a portfolio construction involves "smart" forecasts of asset returns as well as good estimates of the asset return variances and co-variances and evaluate different Approaches for Portfolio Construction. As per Tokat and Stockton, (2010); It is vital to consider the market environment and latest academic research, and develop a better approach to TAA and downside risk protection, including using second generation capital protected strategies to help create more robust portfolios. Bennyhoff, (2011); Conference, 2011three pillars of portfolio construction – markets, strategies and investing conclude that for a well-diversified, strategically managed portfolio research has shown that asset allocation is the primary determinant of risk and return. For these reasons, the asset allocation decision should be the highest priority Huitema, (Dec2011); they investigate portfolio execution strategies that maximize trading revenues for agents with exponential utility. The strategies involve trading market and limit orders simultaneously. We derive a Hamilton-Jacobi-Bellman equation for the optimal combination of these orders. We solve this equation numerically and illustrate the optimal strategies for varying amounts of risk-aversion. We discuss the impact of limit orders on optimal strategies and show how they can reduce trading costs. L. Michel and T. Michel, (2011) ; their article advocates a systematic rebalancing process - Volatility-Driven Asset Allocation or VDAA - for dynamically managing the strategic asset allocation. The goal of the suggested algorithm is to adjust the asset exposures so as to reflect the assumptions investors used when determining their strategic allocation, in terms of balance between risk contributions and expected returns. Such an idea makes sense from the economic point of view of a risk-adverse investor who wishes to achieve a smooth long-run performance. The stable risk contribution is determined by a long-run target, with short-term deviations from this target driving the rebalancing of the portfolio exposure. Rebalancing between asset classes allows smoothing the global volatility of the portfolio by decreasing exposure in asset classes yielding temporarily higher risk contributions and by increasing weight in asset classes with temporarily lower risk contributions. Both our back tests and robustness study demonstrate that this risk rebalancing strategy is superior in terms of information ratio to traditional rebalancing rules. Portfolio Construction

Strategies: A New Way to Approach Investment Risk, Reilly, (2013); this session highlight a new way to view portfolio construction, focused on managing risks rather than generating returns. Economies and markets have evolved, and whereas traditional techniques once delivered diversification levels and returns sufficient to meet investment objectives, they may now present limitations and also discuss a different approach to portfolio construction that addresses common risks such as market volatility, inflation and longevity. Deo and Sunder, (2015); explained the various factors (age, occupation, gender, etc.) influence the investors decision. They had undergone a survey to explain the concept. Singh and Yadav, (2016); also explained the various factors affecting investors decision with special reference of factor (gender).

Hypothesis

H01: Factors such as age, gender, income level, knowledge about financial instruments, investors approach etc. has significant impact on the investors while constructing tactical portfolio construction where risk, profit, liquidity can be traded off.

H02: Higher return on investment has significantly depends upon the risk taking capability of investors.

Research Methodology and analysis tools

The research is empirical in nature and sample of 250 individual investors has been collected through convenience sampling. The data has been collected through a structured questionnaire and primary as well as secondary data has been used. For questionnaire we made a Google link form, so the present study is based on an online survey. Through emails and social media entities were conducted and were asked to participate in the study. Also, through short telephonic communication/emails the potential respondents who were interested were explained in detail about the purpose and aim of the study and for analysis of data we applied one way ANOVA; t-test and factor analysis.

Mediation Effect model

Based on the previous researches, a conceptual framework has been developed in figure1 indicating mediation of investor's portfolio decisions.

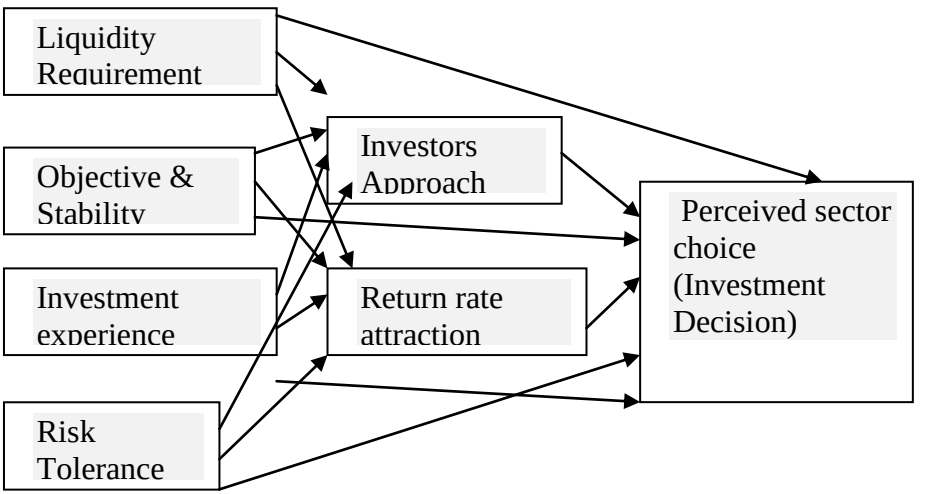

Figure 1: Relationship between components of financial profile and investment decision mediated by investors approach and return rate attraction

Sample inclusion criteria and sample description

One necessary condition for the respondent`s that the respondent should be someone who has major investment knowledge and of course makes some investment whatever be the objective for it. Maximum questions were making compulsory so there was no missing data.

250 respondents those who were meeting the required criteria were examined with the help systematic questionnaire. The sample profile presented in table 1 shows detail demographic and economic description of the respondents. About 58% of the respondents were male with on an average age group range of 25-60 years and most of the male respondents having technical and bachelor degree and maximum are self employed and government servants with handsome earnings range between of 2-8 lakh.

Table 1: Demographic and Economic Profile of Respondents

	All		Men		women	
	N	%	N	%	N	%
	250	100	146	58%	104	42%
Age						
Between 18-25	48	19.2%	32	12.8%	16	6.2%
25-40	63	25.2%	41	16.4%	22	8.8%
40-60	97	38.8%	50	20.0%	47	18.8%
60 and above	42	16.8%	23	9.2%	19	7.6%
Education						
Master`s Degree	39	15.6%	12	4.8%	27	10.8%
Bachelor`s Degree	80	32%	43	17.2%	37	14.8%
Technical Degree	62	24.8%	50	20%	12	4.8%
High School	46	18.4%	28	11.2%	18	7.2%
Less than high school	19	7.6%	13	5.2%	6	2.4%
Marital Status						
Single	85	34.0%	48	19.2%	37	14.8%
Married	165	66.0%	98	39.2%	67	26.8%
others	-	-	-	-	-	-
Occupation						
Professional	37	14.8%	17	6.8%	20	8.0%
Private service	63	25.2%	29	11.6%	34	13.6%
Government service	62	24.8%	47	18.8%	15	6.0%
Self employed	65	26.0%	41	16.4%	24	9.6%
Student (self employed)	20	8.0%	12	4.8%	8	3.2%
Income Range						
Up to 2 Lakh	43	17.2%	32	12.8%	11	4.4%
2-5 Lakh	68	27.2%	40	16.0%	28	11.2%
5-8 Lakh	125	50%	66	26.4%	59	23.6%
8 Lakh and above	14	5.6%	8	3.2%	6	2.4%

On the other hand 42% of the respondents were female with average age group of 25-60 years. Slightly more than half women were having masters and bachelor degree and most of them were self employed and most were doing private job with income range 5-8 Lakh yearly. They were accountant, Executive, administrator, advisor, consultants, etc.

The majority of the respondents were married, among them 59 % were male and 41% were woman. As whole it has been noted that percentage of men respondents were slightly high than women respondents. Both the genders are lied in 5-8 lakh annually income category

Sampling adequacy test

Table: 2 Sampling Adequacy Test (suitability of data for the purpose of factor analysis)

Kaiser- Meyer-Olkin (Sampling Adequacy test)	0.852
Bartlett`s test of sphericity (Chi Square test)	415.008
d.f	6.000
Sig.	0.0000

As shown in table 2, The Kaiser-Meyer olkin (KMO) and Bartlett`s test measure of sampling adequacy was used to examine the appropriateness of factor analysis. The appropriate of chi square is 415.008 with degree of freedom 6, which is significant at 0.000 level of significance. As $p < \alpha$ (0.05), we therefore accept the hypothesis. The KMO statistics of 0.852 is also large (greater than 0.50).hence factor analysis is considered as an appropriate technique for further analysis of the data.

Identification of factors

As there are so many factors like economic, demographic, personal, perceptual, social, etc, which may affects the individual investors directly or indirectly. For the purpose of study we have considered affect of demographic factor on perceptual and personal factor. The view of investors on investment was collected in the likert five point scales and each statement explains one characteristics of interest.

Table 3: Personal and Perceptual factors with variances

Factors	Eigen value	Variance %	Cumulative variance %
Liquidity Requirement	3.876	28.621	28.621
Objective & Stability	2.843	21.733	50.354
Experience and knowledge	2.325	16.873	67.227
Risk tolerance	1.865	12.674	79.901
Investors approach	1.687	8.567	88.468

Return rate attraction	1.305	4.675	93.143
Advice and recommendation	1.287	3.879	97.002
Asset classes	1.178	2.978	100.00

The initial components are the numbers of the variables can be retained. The variables which had common reply and high correlation were grouped under a common factor. However studying all the 42 variables would have been tedious. The rule of thumb to select number of factors for which the Eigen value is greater than one is taken by using principal component analysis method. The 42 variables are first reduced to 22 and then further reduced to eight component factors. These values are recorded in table 3.

Factors loading with variables

As shown in table 4 first factor which affects individual investor is liquidity requirement and financial needs, which includes present, future, emergency financial needs of the investors, the frequency of these needs also depend on, the number of dependent on the investor and other aspect is whether the investor invests in long term, short term or in cash equivalent investment. The second factor influences the investor's decision is their objective and stability. Investments are may be for regular income and capital preservation; aggressive growth and speculation and most important for investment is investor`s financial health and stability. The third factor is Investor`s experience and Knowledge, as there are so many investment options like shares, bonds, stocks, options, futures, etc. the knowledge and experience of these investments has a significant impact on the return from investment.

Table 4: Factors loading with variables

Factors	variables
Liquidity Requirement & financial needs	Within 1 year, Plan to make first withdrawal from my investment.
	Prefer to invest in cash or cash equivalent.
	Investing to meet family current, future and emergency needs.
Objective & Stability	Investing for income & capital preservation
	Investing for an aggressive growth and speculation.
	My personal and financial situation allows me

	to incur short term losses up to 3 years.
Experience & knowledge	Has bought and sold individual shares and bonds.
	Traded stock, options, exercised stock warrants.
	Comfortable with IRAs, mutual funds, banks savings and investments.
Risk tolerance ability	Opt for diversification in case of drowning portfolio.
	Wait for at least 6 months in down market situation.
	Immediately sell my investment in loss portfolio situation.
Investors approach	Not prefer to expose my investment to market fluctuations.
	Prefer take maximum risk with maximum fluctuations.
	Pursue investment growth, accepting moderate to high level of risk fluctuations.
Return rate attraction	Prefer to invest in high rate investment but make sure no tempering of principal amount.
	I will investment in shares immediately after dividend announcement.
Advice & recommendation	Take recommendation from family friend before making investment
	Take advice from financial advisor
Asset classes (perceptual)	Real estate, future and option, blue chip companies share are speculative and high returned asset class.
	Fixed deposits, mutual funds, banks deposits are safer investment.

The fourth and fifth important factors are risk tolerance and investors approach. These both factors are to some extent, correlated to each other. Although Investor`s risk tolerance ability makes investment approach but the only difference is risk tolerance ability is derived by the personal individual factor of the investors and on the other hand investor`s approach derived by the financial need and stability. Another factor is return rate attraction. Investors eventually can invest anywhere but the main lead is return rate from investment. The factor advice and recommendation comprise get advice from friends, relatives, individual stock brokers, etc.

Recommendations from experts also marginally loaded on this factor. Last important factor is choice of asset class; it is again a perceptual factor. Investors generally decide asset class according to their previous experiences and approaches.

Affect of demographic and economic characteristics on eight influencing factors, affecting investment decisions

Table 5: Genders and Factors Affecting Investment Decisions

Factors	Mean Value		t- value	sig.
	Male	Female		
Liquidity Requirement	3.98	4.01	2.992	0.009
Objective & Stability	3.90	3.85	2.164	0.165
Experience & knowledge	4.17	3.96	2.783	0.098
Risk tolerance ability	3.76	3.54	2.557	0.003
Investors approach	3.73	3.51	2.005	0.007
Return rate attraction	4.33	3.82	1.563	0.004
Advice and recommendation	4.15	3.62	1.004	0.002
Asset classes	4.23	3.89	1.097	0.002

The result of the t –test (table 5) reveals, there is a statistically difference in gender in assessing the factors of liquidity requirement (t- 2.992 & p- 0.009), investors approach (t-2.005 & p- 0.007), risk tolerance ability (t-2.557 & p-0.003), return rate attraction (t-1.563 & p-0.004), Advice and recommendation (t-1.004 & p-0.002), asset class (t- 1.097 & p- 0.002). As the figures reveals that male (3.90) and female (3.85) both affected majorly by the financial objective and financial health and stability and of course rest of all other factors are lead by Objective of the investment. It was observed that gender of investor matters while making investment decisions based on all the factors except investment objective and experience of investors. It is also observed that there is no significant difference between both the genders about their investment experience. This is reasonable because both have experience and knowledge and a capability of trade off between risk and return.

Table 6: Age and Factors Affecting Investment Decisions

Factors	Sum of square	d.f	Mean square	F ratio	sig,
Liquidity Requirement	36.503	3	12.167	12.866	0.001
Objective & Stability	28.004	3	9.334	10.483	0.002
Experience & knowledge	21.799	3	7.266	7.994	0.001
Risk tolerance ability	20.665	3	6.888	7.001	0.002
Investors approach	29.943	3	9.981	10.507	0.001
Return rate attraction	35.334	3	11.778	12.086	0.001
Advice and recommendation	20.458	3	6.819	6.904	0.002
Asset classes	32.765	3	10.921	11.683	0.002

The results in table 6 indicate that age is a factor which affects the investor's investment decisions. There are a significant difference among different age group and each of the eight most influencing factors at five per cent significant level. Most affecting factors in different age group are liquidity requirement (F- 12.866 & p-0.001)) and return rate attraction (F- 12.086 & p-0.001)) and on the other hand objective and stability(F-10.483 & p-0.002) and choice of asset classes (F-11.683 & p-0.002) are second most important factor that also affects the investor while taking investment decision.

Table 7: Marital Status and Factors Affecting Investment Decisions (results of one way ANNOVA)

Factors	Sum of square	d.f	Mean square	F ratio	sig,
Liquidity Requirement	28.843	2	14.421	14.871	0.001
Objective & Stability	22.678	2	11.339	12.176	0.002
Experience & knowledge	16.563	2	8.281	8.643	0.002
Risk tolerance ability	23.783	2	11.890	12.302	0.001
Investors approach	24.263	2	12.130	12.745	0.001
Return rate attraction	28.765	2	14.382	14.409	0.002
Advice and recommendation	20.897	2	10.448	10.932	0.001
Asset classes	23.986	2	11.993	12.043	0.002

As shown in table 7, there is statistically significant difference was found for all the eight most influencing factors based on the different marital status of investors group at five or ten per cent significance level. As the figures indicate that the factor return rate attraction (F-14.409 & p-0.002) and liquidity requirement (F-14.871 & p-0.001) most affected by the marital status of the investor. If we are looking for factors risk tolerance (F-11.890 & p-0.001); perception of asset class (F-12.043 & p-0.002) are significantly affected by marital status. The test reveals that marital status is a factor which affects the investor's decision as whole results indicate that married investors are more affected by the liquidity requirement to fulfil the present, future and emergency needs of the family.

Table 8: Education qualification and Factors Affecting Investment Decisions (results of one way ANNOVA)

Factors	Sum of square	d.f	Mean square	F ratio	sig
Liquidity Requirement	18.564	3	6.188	7.447	0.002
Objective & Stability	28.543	3	9.514	9.890	0.001
Experience & knowledge	23.987	3	7.995	8.657	0.001
Risk tolerance ability	12.563	3	4.187	5.296	0.001
Investors approach	20.487	3	6.829	7.994	0.001
Return rate attraction	16.335	3	5.445	5,985	0.002
Advice and recommendation	16.765	3	5.588	5.984	0.001
Asset classes	19.574	3	6.524	7.642	0.002

All the eight factors significantly affected by the different qualification of the investors as statistically shown in table 8 at five or ten per cent significance level. This discloses that education is a factor affecting decision of investors. If we analyze the mean it shows that investors with bachelor and masters degree are more affected by objective and stability than those of vocational and technical degree.

Conclude with Proposed investment strategies

By this survey we came to know that there are lots of factors which affect the investor decisions and these are influenced by certain identified factors and these factors are affected by age, gender, marital status, etc. As we have

discussed and explore above by questionnaire about investors approaches that are also affected by various demographic, economic and personal characteristics. Risk and Return go side by side as they are highly correlated but investor's financial health and needs cannot be ignored. These factors have a significant impact on the investor's decision. High Risk and high return somewhere may not be workout because in this highly volatile market nothing is certain and we can also say that investing in high risky asset class, may not bring high returns. It is nothing but a speculative activity. There are various approaches of investors towards investment like aggressive approach, growth approach, balanced approach and conservative approach these all are related to risk taking capabilities of the investors. Based on above study we segregated the portfolio management strategies according to the investment approaches and we have focused on majority of respondents.

S1: Active portfolio management strategy: Those married investors with age group range of 25-50 having masters and bachelor degree and whose have not stable financial health and more liquidity requirement can invest cash and cash equivalent investment with more attractive return. In case of volatility they can opt for diversification also.

S2: Passive Portfolio management: Married investors with age group range of 50 & above, having masters degree with good financial stability and can bear some short term liquidity requirement can invest in some risky asset classes like real estate, blue chip company stocks, etc. Moreover In case of fluctuation they can wait for some while before go for diversification.

Limitations of the survey

Certain limitations are likely to be there in the study as sample size is restricted to 200 respondents and may not represent the entire population. A few respondents were hesitating to give details and some may not be aware of certain latest procedures and fundamentals of the investment. Also there some biased answers were given by the respondents.

Suggestions for Investors

- Behavioural finance is a new and promising branch of finance. Financial advisors should scan the behaviour of investors and their priorities of investment.
- Investors should try to make evaluate the different asset classes before constructing portfolio. Evaluation should be fundamentally, technically, financially, etc.

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