

INVESTOR INTENTIONS FOR MUTUAL FUND INVESTMENTS IN INDIA: EXTENDED TPB APPROACH

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ABSTRACT

Mutual Funds have been promoted as a medium for retail investors to get into equity investments and increase their stock market participation. With the ease of investing in small amounts and regular intervals, along with the advantages of diversification of risk and professional management of funds, mutual funds present an attractive avenue of investment. Still the data from Association of Mutual Funds in India (AMFI) does not seem to be reflecting this in terms of growth in mutual fund investments. There is a need to analyse the factors influencing an individual investor's intentions to invest in mutual funds so as to understand the reasons behind slow growth of mutual fund investments in India and to devise ways to increase the same.

This paper analyses the attitudinal, social and behavioural control factors influencing the investor intentions of mutual funds investments using constructs from an extended model of Theory of Planned Behaviour.

Keywords: Mutual Funds, Investor Intentions, Theory of Planned Behaviour

INTRODUCTION

There has been a keen interest in mutual funds among investors globally with mutual fund investments having increased tremendously across the globe during recent years. Mutual funds can be instrumental in filling the gap between savings and equity investments in developing countries as they provide an avenue of diversifying risk along with ease of investing. Mutual funds can serve as an important tool for long term disciplined investment for retail investors. The relative advantage and compatibility with the financial investment needs of the retail investors make mutual funds an attractive avenue of investment.

As small investors usually invest in mutual funds through Systematic Investment Plans (SIP), the number of SIP accounts which stood at around 26.9 million in May 2019 as per data from Association of Mutual Funds of India (AMFI), can be considered as a reflection of retail investors participation in Indian stock market through mutual funds. This number reflects the low rate of mutual fund investments in India. This study aims to analyse investor behavioural intentions of

investing in mutual funds using an extended version of Theory of Planned Behaviour (TPB).

EARLIER STUDIES

Earlier studies on mutual fund investment decisions have explored different factors like knowledge, risk and return perceptions, socio-economic conditions among others which influence the investment by individuals in mutual funds. Capon et.al. (1996) explores the investment decisions for mutual funds by grouping investors by similarity of investment decision process based on their knowledge. Chawla, D. (2014) identifies fund's credibility and features as significant factors influencing investor behaviour towards the mutual fund and studies the relationship of these factors with demographic variables. Among the recent studies, Schmidt (2010) surveyed participants from Germany and the results indicated that attitudinal and social factors influenced the willingness and intention to invest in mutual funds. Kaur & Kaushik, (2016) studies the influence of factors like awareness and attitude on behaviour of investors towards investment in mutual funds using TPB. Kaur (2018) found the effect of knowledge and perception to be significant on investor behaviour towards mutual funds. Similarly, Octarina et.al. (2019) studied the influence of TPB variables, religiosity, knowledge, and risk perception on intentions to invest in sharia mutual funds. This paper uses an internet survey to study factors influencing mutual fund investment intentions using an extended TPB Model including moral norms (Ajzen 1991, Sparks 1994) and introducing self- efficacy as a separate and independent predictor (Bandura

1992, Mc Caul et.al. 1993, Manstead & Eekelen 1998). The extended model is expected to help in developing a better understanding of factors influencing the stock market participation.

RESEARCH FRAMEWORK

The research framework for this study is adapted from the Theory of Planned Behaviour (TPB) (Ajzen 1985) which has been extended using the relevant variables suggested by Conner & Armitage (1998) and decomposing the attitudinal factors regarding mutual fund investment intentions using constructs from innovation literature.

An extension of the theory of reasoned action (TRA; Fishbein and Ajzen 1975; Ajzen and Fishbein 1980), the theory of planned behavior (TPB) was developed by Icek Ajzen (1985, 1991). TPB was developed as a general model to predict and explain behavior across a wide range of different types of behaviors. A key assumption in the TRA is that behaviors are under one's volitional control. However, this assumption is likely to be unrealistic in some contexts, as one can imagine that the volitional control of behaviors may vary across different situations. Due to this assumption of Volitional Control the TPB model was developed.

By decomposing the subjective norms and perceived behavioural control into specific dimensions, this paper examines them more extensively and also takes into consideration the moral norms in the motivational factors.

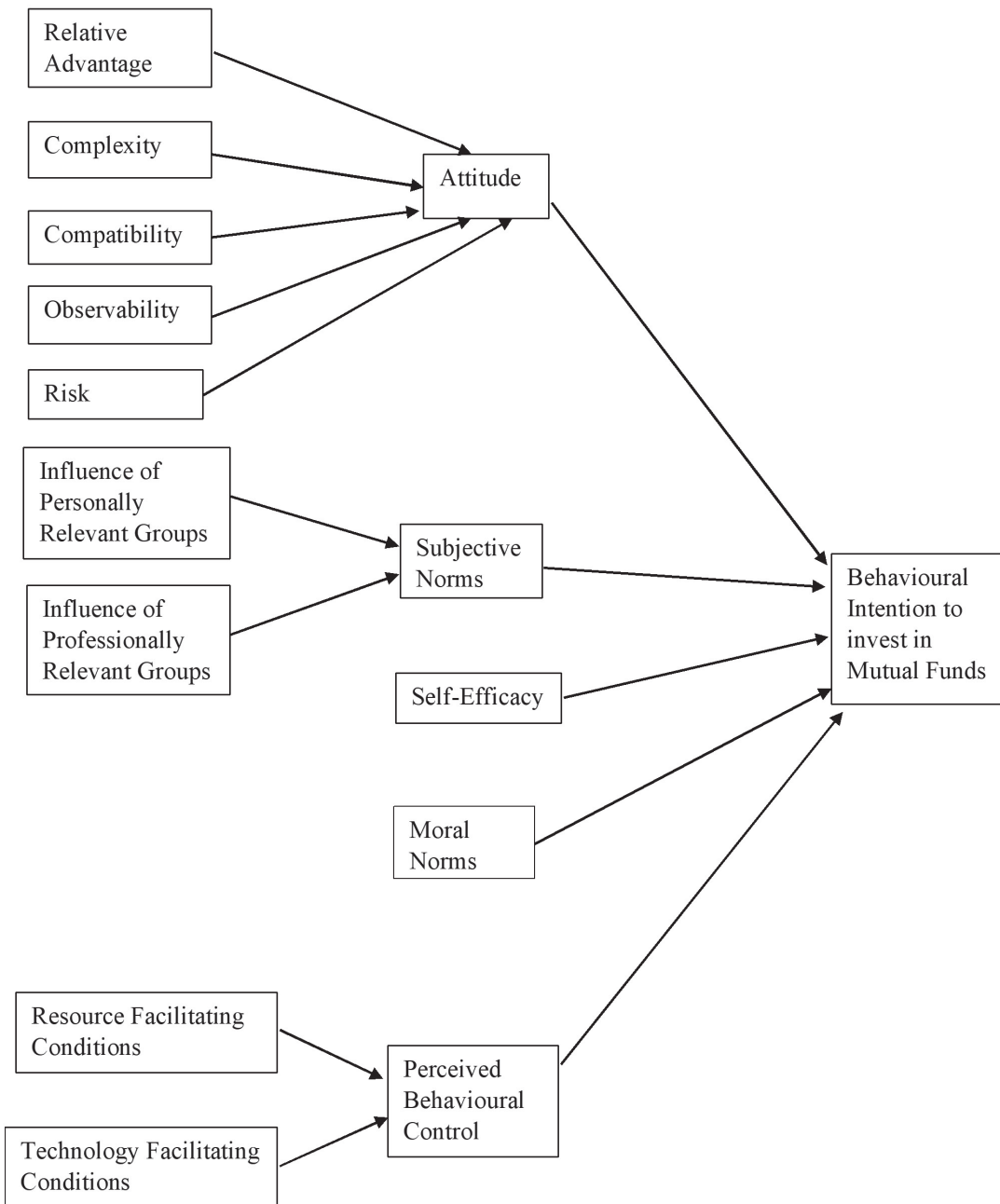


Figure 1: Fig 1: Extended TPB Model for Mutual Funds Investor Intentions

The extended TPB model describes that the investor intentions regarding mutual fund investments are determined by: (i) attitude, which relates to the investor's perception towards mutual fund investments; (ii) subjective norms, which refer to the influence of social groups that may have an influence on an investor's intention to invest in mutual funds; (iii) moral norms, which refer to the perceived moral correctness of investing in mutual funds; (iv) self-efficacy which describes an investor's confidence in having the required knowledge and skills to invest and (v) perceived behavioural control, which refers to the beliefs about having the required resources for mutual fund investments.

RESEARCH METHODOLOGY

Data was collected through an internet survey using services of a commercial internet survey platform to reach the representative sample of users from across the country. Out of the registered survey panellists on the panel of the commercial survey firm, respondents fulfilling these criteria were stratified in terms of northern, southern, central, western and eastern regions of India and then from each region on the basis of their gender.

The final completely filled questionnaires received were 481 out of which after making the proportional random selection based on regional population and gender ratio, 324 responses were finally used for analysis.

Structural equation modelling (SEM) approach was applied to test the model using AMOS software. The tests of reliability and validity of the measurement model were conducted using confirmatory factor analysis (CFA). The model

goodness-of-fit, overall explanatory power, and postulated individual causal links of the structural model were analysed to examine the various factors influencing investor intentions.

ANALYSIS & FINDINGS

Reliability and Validity Measures

The research instrument used confirmatory factor analysis (CFA) to examine the reliability and validity. Reliability is defined as the extent to which results are consistent over time and an accurate representation of the total population under study and the research instrument is reliable if the results of a study can be reproduced under a similar methodology, whereas Validity determines whether the research truly measures that which it was intended to measure or how truthful the research results are. In other words, does the research instrument allow the researcher to hit "the bull's eye" of the research object?

Table 1 summarizes the results of internal reliability and convergent validity for constructs used in the survey instrument. Values of all reliability and validity are above the acceptable threshold levels and thus the measures show that the instrument developed has the requisite internal reliability as well as convergent validity which makes it suitable to be used for the study.

Table 1: Results of CFA for measurement model

Construct	Item	Internal Reliability Cronbach's Alpha	Convergent Validity		
			Factor Loading	Composite Reliability	Average Variance Extracted
Behavioural Intention (BI)		0.76		0.71	0.52
	BI 1		0.66		
	BI 2		0.72		
Relative Advantage (RADV)		0.84		0.81	0.58
	RADV1		0.78		
	RADV2		0.81		
	RADV3		0.78		
	RADV4		0.76		
Complexity (CMX)		0.79		0.80	0.71
	CMX1		0.72		
	CMX2		0.74		
	CMX3		0.71		
Compatibility (CMP)		0.73		0.85	0.72
	CMP1		0.68		
	CMP2		0.73		
	CMP3		0.77		
Observability (OBS)		0.78		0.86	0.54
	OBS1		0.69		
	OBS2		0.71		
	OBS3		0.74		

Risk (RISK)		0.71		0.72	0.61
	RISK1		0.76		
	RISK2		0.73		
	RISK3		0.81		
Attitude (ATTD)		0.89		0.82	0.65
	ATTD1		0.72		
	ATTD2		0.76		
	ATTD3		0.73		
Subjective Norms (SUBN)		0.72		0.79	0.67
	SUBN1		0.70		
	SUBN2		0.68		
	SUBN3		0.74		
Moral Norms (MN)		0.77			
	MN1				
	MN2				
	MN3				
Self Efficacy (SEFF)		0.79		0.87	0.70
	SEFF1		0.84		
	SEFF2		0.78		
	SEFF3		0.79		
Perceived Behavioural Control (PBC)		0.80		0.84	0.68
	PBC1		0.71		
	PBC2		0.66		
	PBC3		0.74		

Resource Facilitating Conditions (RFC)		0.83		0.73	0.64
	RFC1		0.71		
	RFC2		0.77		
	RFC3		0.72		
Technology Facilitating Conditions (TFC)		0.91		0.78	0.72
	TFC1		0.81		
	TFC2		0.76		
	TFC3		0.84		

Source: Authors' calculations

Note: All values significant at $p < 0.005$.

STRUCTURAL MODEL RESULTS

Table 2 shows the model goodness of fit statistics of the structural model developed to study the factors influencing mutual fund investment intentions of investors. Table 2 also exhibits the coefficients of determination R^2 for the structural equations.

Table 3 shows the path coefficients for the model. Out of the decomposed dimensions of attitudinal factors, observability was not found significant while all the other factors were found to be significantly influencing the investors' behavioural intentions. Out of the significant factors, the three factors of complexity, risk and moral norms were found to exert a negative influence on intention to invest in mutual funds.

Attitude, self-efficacy, subjective norms and behavioural control factors turned out as the factors which significantly influence the investor intentions to invest in mutual funds.

Table 2: Fit Indices and Explanatory Power of the Structural

Fit index	Value
Normed Chi-Square (χ^2/df)	1.71
AGFI _a	0.84
CFI	0.91
NNFI	0.90
RMSEA _b	0.047

Explanatory power (R2)	
R2 Behavioural Intention	0.51
R2 Attitude	0.46
R2 Subjective Norms	0.21
R2 Moral Norms	0.14
R2 Self-Efficacy	0.51
R2 Perceived Behavioural Control	0.43

All values of fit indices are within recommended ranges of the respective indices and therefore suggest a good model fit.

Table 3: Path coefficients

Paths	Coefficient
β Intention, Attitude	0.66*
β Intention, Subjective Norms	0.21*
β Intention, Moral Norms	- 0.14*
β Intention, Self-Efficacy	0.35**
β Intention, Perceived Behavioural Control	0.17*
μ ATTD, RADV	0.37**
μ ATTD, CMX	- 0.13*
μ ATTD, CMP	0.04**
μ ATTD, OBS	0.16
μ ATTD, RISK	- 0.48*
μ SUBN, Personal Group Influence	0.24*
μ SUBN, Professional Group Influence	0.19*
μ PBC, Resource Facilitating Conditions	0.24**
μ PBC, Technology Facilitating Conditions	0.31*

Note: *Significant at 5% level of significance

** Significant at 1% level of significance

DISCUSSION AND CONCLUSION

The dimensions of decomposed attitudinal beliefs i.e., relative advantage and compatibility were found to be significant, which shows that investors who believe that mutual funds investment can yield greater returns than other forms of investment perceive relative advantage in mutual funds and are more willing to take up investing in the mutual funds which they find to be compatible with their values and financial needs.

The factors which negatively influence the motivational intentions to invest in mutual funds are complexity, risk and moral norms. The investors who find the process of investment in mutual funds a difficult proposition are less willing to invest. Mutual funds are perceived as a risky alternative to investment in debt instruments such as bank deposits or traditional investment options like gold or real estate. This perceived risk is found to have a significant negative influence on investment intentions. The extended TPB model used in this study included moral norms as in conservative societies of developing countries like India, equity linked investments are often considered as a form of gambling and is discouraged on moral grounds. Investors who consider mutual fund investments as morally wrong tend to avoid them which is evident from the significant negative influence of moral norms on behavioural intention to invest in mutual funds.

Observability was not found to be significant as a factor in influencing investor intentions. This may be attributed to the fact that those who invest in mutual funds must be maintaining

their privacy and it is difficult to actually observe someone investing directly.

Self-efficacy and Perceived Behavioural Control are significantly related to investment intention. Self-efficacy in this model incorporates the aspects of financial literacy and knowledge of economic environment. The more confident investors are regarding these aspects, the more likely they are to invest in mutual funds. Perceived behavioural control incorporates the resource facilitating conditions and technology facilitating conditions which have a significant positive influence on mutual fund investment intentions. The influence of subjective norm on motivational intention of investors is also found to be significant. This points to the tendency of investors following the peer group expectations in forming intentions for mutual fund investments.

Significant relationship of all major attitudinal factors as well as self-efficacy implies that awareness and financial literacy initiatives of AMFI and other voluntary organizations can play a major role in promoting mutual fund investments in India. Risk playing a negative influence on stock market participation intentions calls for a convincing safety net for investors.

Further research can be directed towards the non-internet using population to understand their behavioural intentions of stock market participation and analyse the difference in factors affecting these intentions in this segment of population to arrive at a more generalized conclusion.

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