

## Constraints Of Angel Investors For Investment Decision In Innovative Business

**Ms. B. NEERAJA<sup>1</sup>, Dr. Ch. BALA NAGESWARA RAO<sup>2</sup>**

<sup>1</sup>MBA, UGC – NET, (Ph.D.), Research Scholar, Saveetha School of Management, Saveetha Institute of Medical and Technical Sciences, Saveetha University, Chennai – 77.India.

Email ID: neerajabaskar118@gmail.com Mobile: 8012763016

<sup>2</sup>MBA., BL., M.Phil., UGC – NET, Ph.D.Vice-Chancellor, Saveetha Amaravati University, Vijayawada, India

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### Abstract

The research paper tested a model of constraints for nascent, budding entrepreneurs of innovative and creative businesses to attract angel investors for mobilizing investments using path analysis. Variables such as Innovation Efforts, Risk Taking behavior of entrepreneur, Market Orientation, Networking, Proactiveness are taken as independent variables and perception of Angel Investor is taken as dependent variable. Data for hypothesized antecedents of all the variables were collected using secondary data collection method particularly through survey made to 123 budding entrepreneurs of innovative businesses. All the indices shown that the model is said to be fit and the paths are confirmed. The results can be taken as implications for all the young newly upcoming entrepreneurs who want to do business in innovative manner.

**Key words:** Nascent entrepreneur, angel investors, innovative business.

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### Introduction

Business has been taken up as passion of so many young entrepreneurs. But all these entrepreneurs are not succeeding in business. Only those who undertake innovations in business are achieving higher performance. Innovation has become serious driver of economic growth of the country. Feeny and Rogers (2003) found that on an average, entailing innovation increases the performance of the companies which in turn influence the market value. Lee and Chen (2009) suggested by introducing new products, market value can be created for shareholders of such innovative business. Many researchers say that success of the business is completely dependent on innovation. On the other side, one major constraint for the young entrepreneurs is mobilizing funds. Mobilizing funds are not that easy in this competitive edge of the market. There are numerous ways for

mobilizing fund for business startup such as approaching financial institution, banks, loans from friends and family, crowd sourcing etc. one of the main sources of seeking fund is through angel investments. Angel investors are those who provide fund for business at seed stage or early startup. They won't have any relationship with business. They are individual investors who provide fund and more than that they share their expertise and knowledge with the entrepreneurs. They are considered to be angel investors. Wetzel (1981) offered the first definition of business angels: "Investors who provide risk capital other than small business investment corporations, Venture capital, other institutional investors, and public equity markets; those with high net worth and financially sophisticated; excludes family, friends and debt instruments". This study approaches how angel investors provide fund for the entrepreneurs with novel ideas and creatively do innovative business. Apart from looking into normal financial constraints such as return on investment, breakeven point, expected sales, etc. other constraints that impact the innovation of the business are taken into considerations. The main objective of the study is to find the impact of innovative business on mobilizing angel investments. Innovation efforts, risk taking behavior of entrepreneurs, market orientation, networking, proactiveness are taken as independent variables and angel investor's perception is taken as dependent variable.

### **Review of literature**

Zhang et al. (2018) studied how human capital impacts the relationship between financial performance of firms and open innovation. The study also indicated how human capital varied moderately depending upon education level of employees, production oriented firms, technology oriented firm etc. The study demonstrated U-Shape relationship between profitability of firm and open innovation.

Yin (2009) studied small and medium enterprises that used many innovative technologies in their businesses in pattani. Primary data is collected through in-depth interviews, non-participant observation and search through documentaries. The study finally found key results that risk taking, market orientation, networking, learning orientation, proactiveness were the important factors that influenced the innovative businesses.

Gonçalves, Lemos, and de Negri (2011) deliberated the role of individual and territory firms in the innovation of the Brazilian businesses after 1998. The researchers

used PIA and PINTEC databases for the period from 1998 to 2000, and critically analyzed variables such as expenditures on R&D, firm size, origin of capital and total spending on innovation. To measure the impact of the regional environment, various variables related to the education level of the adult population, intensity in R&D spending, patenting per capita, level of industrialization, accessibility to Sao Paulo, and industrial and technological scale were used.

After reviewing various literatures the variables are fixed for the study and hypothesis is made.

- H<sub>1</sub>: Innovative efforts of the business positively influences the angel investor
- H<sub>2</sub>: Risk-taking behavior of entrepreneur positively influences the angel investor
- H<sub>3</sub>: Market orientation positively influences the angel investor
- H<sub>4</sub>: Networking positively influences the angel investor
- H<sub>5</sub>: Proactiveness positively influences the angel investor

### Materials and methods

Primary data is collected through sending structured questionnaire to various angel investors. Non probability sampling method is used particularly convenience sampling is used. Around 160 questionnaires were distributed to angel investors and got 150 filled in questionnaires. Out of this only 123 were usable after cleaning outliers and extremist's responses. The scope of the study is restricted to innovative entrepreneurs and angel investors. The data collected through survey is analyzed using SPSS and AMOS. Multiple Regression can be easily done in iterative way to maximize the explained variances of all the endogenous constructs (Hair, Anderson, Tatham, & Black, 2010). Correlation, multiple regression, path analysis are the tools used to analyze the data.

### Findings and analysis

**Table 1: Reliability Statistics**

Cronbach's Alpha	N of Items
0.882	6

In order to measure reliability of the instruments used, cronbach alpha test is done and the results obtained are greater than the cut off value 0.6 which says that the instrument is reliable.

**Table 2: Correlations**

		IV1_INNO EFF	IV2_RISK AK	IV3_MRKT RNT	IV4_N ET	IV5_PRO ACT	DV_ AI
IV1_INNOEF F	Pearson Correlati on	1	.460**	.564**	.506**	.456**	.556**
	Sig. (2- tailed)		.000	.000	.000	.000	.000
	N	123	123	123	123	123	123
IV2_RISKTA K	Pearson Correlati on	.460**	1	.518**	.576**	.647**	.477**
	Sig. (2- tailed)	.000		.000	.000	.000	.000
	N	123	123	123	123	123	123
IV3_MRKTO RNT	Pearson Correlati on	.564**	.518**	1	.871**	.610**	.661**
	Sig. (2- tailed)	.000	.000		.000	.000	.000
	N	123	123	123	123	123	123
IV4_NET	Pearson Correlati on	.506**	.576**	.871**	1	.643**	.514**
	Sig. (2- tailed)	.000	.000	.000		.000	.000
	N	123	123	123	123	123	123
IV5_PROACT	Pearson Correlati on	.456**	.647**	.610**	.643**	1	.480**
	Sig. (2- tailed)	.000	.000	.000	.000		.000

	N	123	123	123	123	123	123
DV_AI	Pearson Correlation	.556**	.477**	.661**	.514**	.480**	1
	Sig. (2-tailed)	.000	.000	.000	.000	.000	
	N	123	123	123	123	123	123

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

Correlation test helps to find relationship between dependent and independent variables. The test significantly proved that variables are positively correlated since the Karl Pearson correlation coefficients are greater than 0.5 and p values are less than cut off value 0.05.

**Table 3: Model Summary**

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	0.728 <sup>a</sup>	0.530	0.510	0.345

a. Predictors: (Constant), IV5\_PROACT, IV1\_INNOEFF, IV2\_RISK TAK, IV3\_MRKTORNT, IV4\_NET

Regression test is done to find out the extent of relationship between dependent and independent variables. R square value is found as 0.5 which states that the model is significant more than 50% and the R value is also greater than 0.5.

**Table 4: ANOVA<sup>a</sup>**

Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	15.716	5	3.143	26.345	.000 <sup>b</sup>
	Residual	13.959	117	.119		
	Total	29.675	122			

a. Dependent Variable: DV\_AI

b. Predictors: (Constant), IV5\_PROACT, IV1\_INNOEFF, IV2\_RISK TAK, IV3\_MRKTORNT, IV4\_NET

Anova test is done to find the differences among various groups based on dependent variable. It is found that there is significant difference between various groups based on the dependent factor since significant p value is less than 0.05.

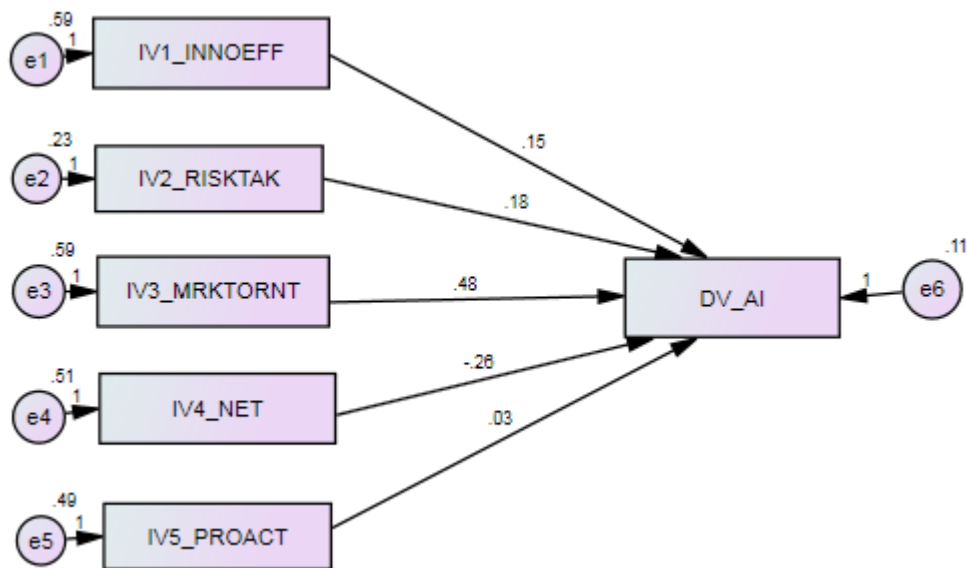
**Table 5: Coefficients<sup>a</sup>**

Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.
		B	Std. Error	Beta		
1	(Constant)	2.351	.272		8.650	.000
	IV1_INNOEFF	.143	.051	.225	2.835	.005
	IV2_RISK TAK	.173	.090	.170	1.933	.056
	IV3_MRKTORNT	.478	.087	.745	5.494	.000
	IV4_NET	-.266	.094	-.386	-2.813	.006
	IV5_PROACT	.043	.065	.061	.656	.513

a. Dependent Variable: DV\_AI

Based on the results obtained from regression analysis, it is found that beta values are significant and the highest beta value is obtained for market orientation. To summarize, the reliability of the questionnaire is checked for the content validity using cronbach alpha test. And the test showed good results which is ranged above 0.8 (Table 1). The correlation ship for various variables are found using Karl Pearson correlation coefficients and proved to be positively correlated with all the variables (Table 2). Multiple regression is run to find the fitness of model. (Table 3, 4, 5). Model summary has shown R Square value to 0.530 which means the model is said to be 53% and Anova table also shown significant P value. The order of importance of the independent variables that influence dependent variable is found using standardized beta coefficients. The order of variables is as such - market orientation, innovative efforts, risk taking behavior of entrepreneurs, proactiveness, and networking.

Path analysis is done using IBM AMOS and the estimates are calculated (Table 6,7) The model summary is found in such a way that CMIN/DF is 37.088, RMR is 0.217, GFI is 0.458, NFI is 0.199, IFI is 0.203, CFI is 0.194, RMSEA is 0.544, ECVI is 3.220



**Table 6: Regression Weights: (Group number 1 - Default model)**

			Estimate	S.E.	C.R.	P	Label
DV_AI	<---	IV1_INNOEFF	.143	.040	3.621	***	
DV_AI	<---	IV2_RISK TAK	.173	.063	2.741	.006	
DV_AI	<---	IV3_MRKTORNT	.478	.040	11.994	***	
DV_AI	<---	IV4_NET	-.266	.043	-6.216	***	
DV_AI	<---	IV5_PROACT	.043	.044	.987	.324	

**Table 7: Standardized Regression Weights: (Group number 1 - Default model)**

			Estimate
DV_AI	<---	IV1_INNOEFF	.201
DV_AI	<---	IV2_RISK TAK	.152
DV_AI	<---	IV3_MRKTORNT	.664
DV_AI	<---	IV4_NET	-.344
DV_AI	<---	IV5_PROACT	.055

Variances: (Group number 1 - Default model)

Considering the results of research hypothesis, it is found that the market orientation have higher influence on angel investments. Next to that is risk-taking and innovative efforts which shows influence on angel investments. Proactiveness shows least



influence. Networking is negatively influence on angel investments. Or simply it has no impacts.

### **Conclusion**

The aim of this study is to analyze the impact of innovative business on mobilizing angel investments. Angel investors provide fund by looking at the innovativeness of the business. For this various variables are used such as Innovation efforts, risk taking behavior of entrepreneurs, market orientation, networking, proactiveness and angel investor's perception. Among this market orientation has greater impacts on angel investors' perception. So it should be given importance. Nascent entrepreneurs should be aware of market conditions.

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