# FACTORS AFFECTING RISK-TAKING OF INVESTORS IN ARAS FREE ZONE

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Abstract. This research is applied in terms of purpose and is descriptive and correlation type in terms of data collection method. The study population consisted of all active investors of Aras Free Zone Organization that is a limited community including 460 investors. Statistical sample of research is a part of this population that 210 samples were selected based on Krejcie and Morgan table according to the 460-person sample size for community using available sampling method. Researcher made questionnaire was used to collect data that its validity is confirmed by 10 experts, including Supervisors and specialists and reliability coefficient is estimated 0.86 through Cronbach's alpha. The research results show that investigated factors of research are effective on investors risk taking in Aras Free Zone.

Keywords: Educational-psychological factors, social factors, cultural factors, political factors, economic factors, managerial-administrative factors, geographic and risk taking

## 1. Introduction

Investment is of important economic variables that have always allocated major issues to itself and different schools of thought, have presented different definitions of investment. Theoretically, about the role of capital, economists believe that capital is a necessary condition for economic growth and development. Private sector investment has characteristics that gives it special importance in economy of that country (Ghanbari et al. 2007). According to occurred changes in today's world, especially in developing countries that are faced with numerous threats, these countries to solve their economic problems need proper planning to make better use of their facilities and God-given riches. In this regard, one of the main strategies, is expansion and developing investment (Modarres and Hesarzadeh, 2008) which investment is always associated with various for investors, so researcher in present study tries to investigate factors affecting risk taking of investors in Aras Free Zone.

## 2. Research Hypothesis

- Psycho-educational factors are effective on risk taking of investors in Aras Free Zone.
- Social factors are effective on risk taking of investors in Aras Free Zone.
- Cultural factors are effective on risk taking of investors in Aras Free Zone.
- Political factors are effective on risk taking of investors in Aras Free Zone.
- Economic factors are effective on risk taking of investors in Aras Free Zone.
- Management-administrative factors are effective on risk taking of investors in Aras Free Zone.
- Geographical factors are effective on risk taking of investors in Aras Free Zone.

#### 3. Research method

Present study is applied in terms of purpose and is descriptive and correlation type in terms of data collection. It is applied because it follows new knowledge that has certain applications on product or process in fact. It is descriptive because it describes and interprets whatever is and focuses on conditions or existing relations, common beliefs, ongoing processes, clear effects or expanding trends. Statistical population of research, based on official figures of Aras Free Zone, includes all active investors of this organization that is a limited community including 460 investors. And also for 460-person community sample of 210 persons is selected. To collect research data both library and field studies have been used and finally collected data are entered into SPSS after sorting, and statistical analysis have been done on them.

#### 4. Research background

Douglas (2010) in his study concluded that venture investors play a major role in creating added value in investee entrepreneurial firms by providing advice in the areas of financial, administrative, marketing and strategic issues. Also accessing network of accounting consultants, lawyers, banks and financiers, and other professional firms in the subject provide Investee Company's activity.

Barokomora (2010) in the joint research have examined major obstacles of investment in developing countries. They divided obstacles into 2 formal and informal categories. According their findings the most important formal obstacles of investment in the studied countries include capital account restrictions, legal obstacles, problems of taxation system and informal obstacles included political risks, institutions, lack of rule of law, administrative corruption, economic instability and currency risks. In total, two types of formal and informal obstacles represent investment risk levels in different countries.

Jyaraman (2001) study examined investment status in less developed countries with special attention paid to Fiji. Her research results that are applicable to many countries with similar economic structure, Represents a significant and negative effect of private sector investment of these countries on inhibiting factors such as regulation weakness, poor economic infrastructure, corruption and bribery and other factors that causes an increase in the cost of risk in the studied countries.

Abzari et al. (2014) have done a study entitled "Factors Affecting the risk and return on investment in financial products" the results of which is as follows: Macro-economic factors affecting the systematic risk of investment in financial products, microeconomic factors affecting unsystematic risk of investment in financial products and non-economic factors affecting overall risk of investment in financial products. On the other hand, non-economic factors of risk perception with willingness to investment risk has negative correlation, historical return rate positively correlated with willingness to risk, perceived risk is negatively correlated with the rate of expected return, Information on past performance is positively correlated with the expected rate of return.

Bahraini and Malek Alsadaty (2012) in a study entitled "Institutional obstacles to investment and doing business in Iran" reviewed business environment in Iran and compared it with other countries and according to results, insecurity and concerns of investors and business people in Iran regarding unpredictability of changes in laws and policies, the government is not committed to the policy announced, not into play investors and business people in the process of legislation and new policies, suddenly cancel current rules and regulations by the government, the incidence of major changes in rules and policies after the election (in case of changing government) and introduced several other factors as the main factors increasing the risk of investing in the country.

#### 5. Data analysis

### 5.1. Demographics

#### 5.1.1. Distribution of respondents' age

Table 1 is related to the age of the respondents to research questionnaires. As can be seen in table 11.4% of whole sample aged 21 to 30 years, 29.5% are in the age group of 31 to 40 years, 43.8 percent aged 41 to 50 years and 15.2 percent are 51 years and older.

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age group	Frequency	Percentage				
21 to 30 years	24	11.4				
31 to 40 years	62	29.5				
41 to 50 years	92	43.8				
51 years and older	32	15.2				
Total	210	100				

Table 1: Frequency distribution and percentage of respondents by age

#### 5.1.2. Distribution of respondents' gender

Table2 is allocated to gender of respondents. As the table shows of a total of 210 persons of investors that were evaluated in this study, 98.1 percent are men and 1.9% are women.

Table 2: Distribution	of respond	dents' gender
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gender	Frequency	Percentage
Men	206	98.1
women	4	1.9
total	210	100

#### 5.1.3. Distribution of respondent's degree of education

Table 3 is related to the education degree of the respondents to the questionnaire of research. As can be seen in Table of the total review sample 3.3 percent have educational Degree lower diploma, 11.9 percent have a secondary diploma, 18.6 percent have Associate Degree, 8 percent have Bachelor's degree and 11.4 percent have Master's degree or higher.

Table 3: Frequency distribution	and percentage of respondents
according	to degree

according to degree					
Educational	Frequency	Percentage			
Lower	7	3.3			
Diploma	25	11.9			
Associate	39	18.6			
Bachelor's	115	54.8			
Master's	24	11.4			
total	210	100			

5.1.4. The distribution of participants by type of investment

Table 4 is related to the type of investment of respondents to the questionnaire of research. As can be seen in Table 1.4% of whole sample are active in primary industries, 45.7 percent in manufacturing companies, 16.2 percent in service section and 36.7 percent in other types of investment.

Table 4: Frequency distributior	and percentage of participants
according to the t	vpe of investment

U		
type of investment	Frequency	Percentage
primary industries	3	1.4
Manufacturing industries	96	45.7
service section	34	16.2
Other activities	77	36.7
total	210	100

# 5.1.5. Distribution of respondents based on the time spent in Aras Free Zone

Table 5 is concerning the duration of presence of reviewed investors of this study in Aras Free Zone. As seen in the table of the total review sample 28.1% is less than 2 years, 35.7 percent of 2 to 4 years, 21.0 percent 4 to 6 years and 15.2 percent 6 years and above that have invested in Aras Free Zone.

Table 5: Frequency and percentage of respondents based on time	
spent in Aras Free Zone	

Time Spent	Frequency	Percentage
Less than 2 years	59	28.1
2 to 4 years	75	35.7
4 to 6 years	44	21.0
6 years and higher	32	15.2
Total	210	100

# 5.2. Central characteristics and dispersion of research variables

For factors affecting the risk taking of investors in Aras Free Zone and also for risk-taking, the sample size, average, median, mode, variance, minimum and maximum are calculated in detail which are given in Table (4-6).

research components	size	average	median	mode	variance	minimum	maximum
Educational-psychological factors	210	3.621	3.600	3.60	0.482	1.40	5.00
social factors	210	4.108	4.200	4.00	0.199	3.00	5.00
cultural factors	210	3.692	3.800	3.80	0.299	2.20	5.00
Political factors	210	3.895	4.000	4.40	0.475	1.00	5.00
Economic factors	210	4.105	4.200	4.20	0.183	2.80	5.00
Managerial-administrative factors	210	4.081	4.000	4.00	0.187	2.80	5.00
Geographical factors	210	3.917	4.000	4.00	0.238	2.80	5.00
risk taking	210	3.455	3.400	3.40	0.232	2.40	4.80

5.3. Examining normality of variables distribution

Kolmogorov - Smirnov've test is used in order to evaluate the normality of variable distribution. In this normality test of

variable distribution the null hypothesis is variable and opposite hypothesis refers to the abnormal distribution. If the significance level of test is less than 0.05 the null hypothesis is rejected and it is conclude that the target variable distribution is not normal.

Table 7. The results of Romogorov - Similiov test to study the normality of variable distribution				
Dimensions	size	Z-statistic of Kolmogorov- Smirnov	significance level	
psycho-educational factors	210	1.351	0.052	
social factors	210	1.314	0.063	
cultural factors	210	1.354	0.051	
Political factors	210	1.329	0.058	
Economic factors	210	1.344	0.054	
Managerial-administrative factors	210	1.351	0.052	
Geographical factors	210	1.322	0.061	
risk taking	210	1.354	0.051	

Table 7: The results of Kolmogorov - Smirnov test to study the normality of variable distribution

#### 5.4. Testing hypotheses of the study

5.4.1. The first hypothesis: the psycho-educational factors are effective on risk taking of investors in Aras Free Zone

Regression analysis was used to test the hypotheses that the results are as follows:

Initially linearity of the relationship between variables is confirmed using ANOVA test that the results are in Table 8:

		Table 8: The	results of ANOVA	test	
	Model	freedom degree	Mean Square	F	significance level
	Regression	1	0.348	1.500	0.022
	Residual	208	0.232		
	Total	209			

As specified in the table, amount of significance level is 0.022 which it is smaller than the 0.05, so linearity assumption of model can be approved. Now, the impact of psycho-educational

factors on risk taking of investors in Aras Free Zone can be predicted using Table regression analysis that the results are given in Table 9:

Table 9: The results of regression analysis test to examine the effect of psycho-educational factors on risk taking of investors in Aras Free

Zone	
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model		Standardized coefficients	t	significanc e level
		Beta		
	(Constant)		18.333	0.000
	psycho-educational factors	0.850	12.291	0.022

Given that the sigma test is smaller than 0.05, it can be stated that Psycho-educational factors affect amounted to 0.85 on risk taking of investors in Aras Free Zone and with increasing of one unit on the amount of the psycho-educational factors, the risk taking of investors in Aras Free Zone will be changed as much as 0.85 units. 5.4.2. The second hypothesis of the research: social factors are effective on the risk taking of investors in Aras Free Zone

Table 10: The results of ANOVA test

Model	freedom degree	Mean Square	F	significance level
Regression	1	0.487	2.107	0.048
Residual	208	0.237		
Total	209			

Table 11: regression test results to examine the impact on social factors on risk taking of investors in Aras Free Zone

model		Standardized coefficients t		significanc
		Beta		e level
	(Constant)		9.775	0.000
	social factors	0.100	1.451	0.048

# **5.4.3.** The third hypothesis of research: cultural factors are effective on the risk taking of investors in Aras Free Zone

Table 12: The results of ANOVA test

Model	freedom degree	Mean Square	F	significance level
Regression	1	0.040	0.174	0.007
Residual	208	0.233		
Total	209			

Table 13: regression test results to examine the impact of cultural factors on the risk taking of investors in Aras Free Zone

model		Standardized coefficients	t	significanc
		Beta		e level
	(Constant)		15.573	0.000
	cultural factors	0.290	0.409	0.007

# 5.4.4. Fourth research hypothesis: Political factors are effective on the risk taking of investors in Aras Free Zone

Table 14: The results of ANOVA test						
	Model	freedom degree	Mean Square	F	significance level	
	Regression	1	0.602	2.611	0.008	
	Residual	208	0.231			
	Total	209				

Table 15: regression test results to examine the impact of political factors on the risk taking of investors in Aras Free Zone

model		Standardized coefficients	t	significanc
		Beta		e level
	(Constant)		16.544	0.000
	political factors	0.480	8.333	0.008

5.4.5. Fifth hypothesis of research: economic factors are effective on risk taking of investors in Aras Free Zone

Table 16: The results of ANOVA test

Model	freedom degree	Mean Square	F	significance level
Regression	1	0.000	0.000	0.006
Residual	208	0.231		
Total	209			

Table 17: Results of regression tests to examine the impact of economic factors on risk taking of investors in Aras Free Zone

model		Standardized coefficients	t	significanc e level
		Beta		
	(Constant)		10.721	0.996
	political factors	0.001	0.005	0.006

5.4.6. Research sixth hypothesis: managementadministrative factors are effective on the risk taking of investors in Aras Free Zone

Table 18: The results of ANOVA test

Model	freedom degree	Mean Square	F	significance level
Regression	1	0.109	0.470	0.004
Residual	208	0.233		
Total	209			

Table 19: Results of regression analysis to evaluate the effect of management-administrative factors on risk taking of investors in Aras Free Zone

model		Standardized coefficients t		significanc e level
		Beta		
	(Constant)		11.595	0.000
	management-administrative factors	0.470	5.233	0.004

# 5.4.7. Research seventh hypothesis: geographical factors are effective on the risk taking of investors in Aras Free Zone

Table 20: The festilis of ANOVA lest					
	Model	freedom degree	Mean Square	F	significance level
	Regression	1	0.418	1.808	0.000
	Residual	208	0.231		
	Total	209			

Table 20: The results of ANOVA test

Table 21: Results of regression tests to assess the impact of geographical factors on the risk taking of investors in Aras Free Zone

model		Standardized coefficients t		significanc
		Beta		e level
	(Constant)		11.495	0.000
	geographical factors	0.093	1.345	0.000

## 5.5. Multiple regression test

First, linearity of relationship between variables is confirmed using ANOVA test that the results are given in Table (4-22).

Multiple regression test results is as follows:

Table 22: The results of ANOVA test

Model	freedom degree	Mean Square	F	significance level
Regression	7	0.324	1.413	0.002
Residual	202	0.229		
Total	209			

As specified in the table the amount of significance level is 0.002 that because it is smaller than the 0.05, So linearity assumption of model can be approved. Now, using multiple

regression analysis table, the effect of each of research variables on the risk taking of investors in Aras Free Zone are given in Table (4-23).

Table 23: Results of regression testing to examine the impact of research variables on the risk taking of investors in Aras Free Zone

Model	Standardized coefficients	t	significance level	
Model	Beta			
psycho-educational factors	0.205	3.368	0.032	
Social factors	0.111	1.511	0.015	
Cultural factors	0.101	1.583	0.005	
Political factors	0.128	0.260	0.009	
Economic factors	0.021	1.831	0.001	
management-administrative	0.120	0.305	0.006	
factors				
geographical factors	0.101	0.747	0.049	

Results in Table 23 shows linear multiple regression test of the effect of each of the factors affecting risk taking of investors in Aras Free Zone.

## 6. Conclusion

The first research hypothesis is confirmed, linear regression test was used to assess this hypothesis, since the test sigma is smaller than 0.05, it can be stated that psycho-educational factors affect risk-taking of investors in Aras Free Zone in amount of 0.85 that the amount of this impact is high.

The second research hypothesis is confirmed, linear regression test was used to assess this hypothesis, since the test sigma is smaller than 0.05, it can be stated that social factors affect risktaking of investors in Aras Free Zone amounted to 0.10, results of this study is consistent with Rahbari, (2008) studies that in a joint study have examined obstacles of investment and its impact on economic growth in Iran and in this study, the positive impact of social factors on the risk taking of investors has been approved. Also the results of the present study is consistent with studies of Karimzadeh (2010) that in a study examined the obstacles of production in Iran and called them "factors that increase the risks of investment" in the country and assess the impact of social factors on these risks as positive. The third research hypothesis is confirmed, linear regression test was used to assess this hypothesis, since the test sigma is smaller than 0.05, it can be stated that cultural factors affect risk-taking of investors in Aras Free Zone amounted to 0.29. Results of this study is consistent with studies of Rahbari, (2008). Also the results of the present study is consistent with studies of Goladestone et al. (2004) that and showed in their research that in Canadian companies backed by venture capital, trading sales have been doubled common than initial public offering of take stock.

The forth research hypothesis is confirmed, linear regression test was used to assess this hypothesis, since the test sigma is smaller than 0.05, it can be stated that political factors affect risk-taking of investors in Aras Free Zone amounted to 0.48. Results of this study is consistent with studies of Rahbari, (2008).

The fifth research hypothesis is confirmed, linear regression test was used to assess this hypothesis, since the test sigma is smaller than 0.05, it can be stated that economic factors affect risk-taking of investors in Aras Free Zone that the extent of this impact is very minor. Results of this study is consistent with studies of Rahbari, (2008).

The sixth research hypothesis is confirmed, linear regression test was used to assess this hypothesis, since the test sigma is smaller than 0.05, it can be stated that management-administrative factors affect risk-taking of investors in Aras Free Zone amounted to 0.47. Results of this study is consistent with studies of Karimzadeh (2010).

The seventh research hypothesis is confirmed, linear regression test was used to assess this hypothesis, since the test sigma is smaller than 0.05, it can be stated that the geographic factors affect risk-taking of investors in Aras Free Zone amounted to 0.093. The results of the present study is consistent with studies of Goladestone et al. (2004).

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