

## The role of foreign direct investment on increasing the amount of export

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### CHRONICLE

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### ABSTRACT

Improving livelihood and increasing in welfare and life quality of people always have been some of the most important concerns among politicians in each country. Therefore, addressing economy and trying to reach maximum growth play essential role on having sustainable growth. One of the determinant factors in the economic growth is attraction of direct foreign investments, successfully. Direct foreign investment not only leads to capital and modern technology in absorbent country but also it causes increasing in production capacities particularly in export products. Therefore, it helps host country in context of communicating with international economy through development of export markets and research and development (R & D). In this paper, we present an empirical study to find important factors influencing foreign direct investment based on factor analysis. The study designs and distributes a questionnaire consist of 30 questions among some experts. The proposed study uses Skewness analysis to reduce the factors into 22 items and reports 5 important factors including Economic, Feasibility, Infrastructure, Incentive and Resource.

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## 1. Introduction

Over the last two decades foreign direct investment (FDI) has grown at remarkable rates both in absolute value and in terms of percentage growth domestic product (GDP) growing from \$59 billion in 1982 to a record \$105.7 billion in China along in 2010. Thereafter, FDI levels declined largely in response to the global economic slowdown although there has been recovery since 2003 reaching \$916 billion in 2005 (Luiz & Charalambous, 2009; Froot, 2008).

Lee et al. (2009) investigated the phenomenon that foreign direct investment flows among the developed countries rather than flowing from the developed ones to the developing ones, which indicates a vital flow in the neoclassical prediction on capital flows. Since the beginning of the 1990s, 10% of the world FDI has flown into China (Feenstra & Hanson, 1997). This amount is amazing

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because the approximate 150 non-developed countries share only one-third of the world's FDI inflows. Luiz and Charalambous (2009) investigated an over-arching reason that why firms engage in FDI is to advance their competitive position. The International Monetary Fund (IMF) (2008) defines globalization as “the process through which an increasingly free flow of ideas, people, goods, services and capital leads to the integration of economies and societies”.

Underwood (2012) examined the substantial growth of foreign direct investment into the United States by international automotive firms over the past 25 years. The author investigated Global macro-environmental factors influencing this investment, which were the resulting impacts on numerous stakeholders including global automotive firms, consumers, and regional and state economies. The findings indicated effective adaptive strategies that both automotive firms and economic development stakeholders follow in an increasingly global environment, resulting in substantial economic, market, and quality-of-life benefits. As mentioned earlier, FDI enhances the productivity of host countries and promote economic development. This notion stems from the fact that FDI may not only provide direct capital financing but also it can create positive externalities via the adoption of foreign technology and know-how (Alfaro et al., 2006, 2010; Lizondo, 1993; Balasubramanyam et al., 1996; Borensztein et al., 1998; Markusen & Venables, 1999; Moosa, 2002).

Li and Liu (2005) argued that FDI could influence the growth rate both directly and indirectly through its interaction with human capital. De Maeseneire and Claeys (2012) investigated that foreign firm could face some special disadvantages including governmentally instituted barriers to trade, incomplete understanding of local laws, and language and business practices. Many of these challenges could be associated with the liability of foreignness and newness. FDI needs a fundamental departure from current business practices and increases the risks of failure.

## 2. The proposed method

In order to accomplish the purpose of the present study, a questionnaire was designed and distributed amongst the 240 executives and chief managers of the foreign investment organizations in Iran. Collecting 200 questionnaires, the core data was analyzed adopting the factor analysis. In order to ensure the reliability of the questionnaire the Cronbach alpha was calculated. The obtained result was equal to 0.932, which is higher than the minimum acceptable level of 0.70 indicates the questionnaire's reliability. In addition, Kaiser-Meyer-Olkin Measure of Sampling Adequacy and Bartlett's Test of Sphericity were equal to 0.793 and 2201.798, respectively and they were statistically meaningful when the level of significance was five percent. The study designs and distributes a questionnaire consist of 30 questions among some experts. The proposed study uses Skewness analysis to reduce the factors into 22 items and reports 5 important factors including Economic, Feasibility, Infrastructure, Incentive and Resource. Fig. 1 demonstrates the results of Scree plot.

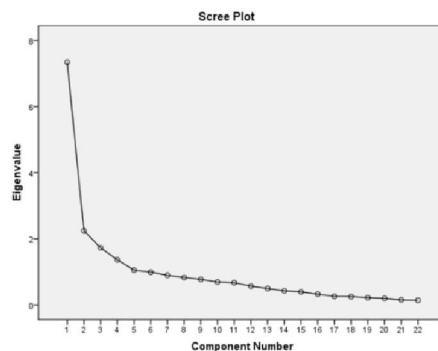


Fig. 1. The Scree plot

In addition, Table 1 demonstrates the results of communalities and the results indicate that all components are within acceptable limits.

**Table 1**  
The results of communalities

Factors	Initial	Extraction
Increasing the share of the international markets	1.000	.658
Human capital	1.000	.596
Attractive market	1.000	.584
Political stability	1.000	.653
Transparent regulatory framework	1.000	.387
Inflation	1.000	.688
Utilization rates	1.000	.701
Economic security	1.000	.617
Enhance transport facilities	1.000	.491
Relationships with foreign banks	1.000	.668
Taxes and tariffs	1.000	.539
Government incentives (export awards )	1.000	.627
Having a strong and stable national currency	1.000	.661
Trade liberalization	1.000	.713
Taking advantage of the bargaining and political power	1.000	.716
Participation in international organizations	1.000	.517
Technology transfer to the host country	1.000	.593
Payroll costs	1.000	.717
Ensuring return on investment	1.000	.636
Log management and marketing skills	1.000	.610
The rules	1.000	.738
Rate of exchange	1.000	.620

**Table 2**  
The results of principal component analysis

Component	Initial Eigenvalues			Extraction sums of squared	
	total	% of Variance	Cumulative %	Total	
1	7.341	33.368	33.368	7.341	
2	2.244	10.201	43.569	2.244	
3	1.728	7.857	51.425	1.728	
4	1.364	6.199	57.625	1.364	
5	1.051	4.755	62.400	1.051	
6	.991	4.507	66.906		
7	.897	4.075	70.982		
8	.829	3.768	74.749		
9	.770	3.499	78.249		
10	.692	3.145	81.394		
11	.670	3.044	84.438		
12	.568	2.581	87.018		
13	.495	2.250	89.268		
14	.426	1.937	91.204		
15	.393	1.787	92.992		
16	.325	1.475	94.467		
17	.258	1.173	95.640		
18	.251	1.143	96.783		
19	.219	.994	97.777		
20	.197	.896	98.673		
21	.152	.690	99.363		
22	.140	.637	100.000		

### 3. The results

The results of the implementation of factor analysis have provided five factors explained next.

#### 3.1 Economic

First, the economic factors with 6 items were analyzed. It includes having a strong and stable national currency, inflation, log management and marketing skills, economic security, rate of exchange and transparent regulatory framework summarized in Table 1.

**Table 1**

The results of the factor analysis for the economic factor

Factor	Factor Weight	Eigenvalues	% of variance	Accumulated
Having a strong and stable national currency	.802	4.241	19.279	19.279
Inflation	.784			
Log management and marketing skills	.641			
Economic security	.580			
Rate of exchange	.557			
Transparent regulatory framework	.508			

Cronbach alpha = 0.8

### 3.2 Feasibility

Feasibility includes utilization rates, ensuring return on investment, taking advantage of the bargaining and political power, increasing the share of international markets and the rules. Table 2 demonstrates the results of our survey.

**Table 2**

The result of factor analysis for the feasibility factor

Factors	Factor weight	Eigenvalues	% of variance	Accumulated
Utilization rates	.782	3.608	16.402	35.681
Ensuring return on investment	.778			
Taking advantage of the bargaining and political power	.741			
Increasing the share of international markets	.733			
The rules	.500			

Cronbach alpha = 0.824

### 3.3 Infrastructure

Infrastructure is the third item to analyze, which includes trade liberalization, participation in international organizations, relationships with foreign banks, taxes and tariffs and attractive market summarized in Table 3.

**Table 3**

The result of factor analysis for the infrastructure factor

Factors	Factor weight	Eigenvalues	% of Variance	Accumulated
Trade liberalization	.823	2.235	10.160	45.841
Participation in international organizations	.571			
Relationships with foreign banks	.481			
Taxes and tariffs	.463			
Attractive market	.436			

Cronbach alpha = 0.776

### 3.4 Incentive

Incentive is the fourth analyzed item, which includes technology transfer to the country's investment, payroll costs and government incentives (export awards) summarized in Table 4.

**Table 4**

The result of factor analysis for the incentive factor

Factors	Factor weight	Eigenvalues	% of Variance	Accumulated
Technology transfer to the host country	0.705	1.927	8.757	54.598
Payroll costs	0.683			
Government Incentives (Export awards )	0.524			

Cronbach alpha = 0.75

### 3.5 Resource

The last analyzed item is resource, which includes political stability, human capital and enhance transport facilities and details of our findings are summarized in Table 5.

**Table 5**

The result of factor analysis for the resource factor

Factor	Factor weight	Eigenvalues	% of variance	Accumulated
Political stability	0.730	1.716	7.802	62.400
Human capital	0.644			
Enhance transport facilities	0.547			

#### 4. Conclusion

This paper was an empirical attempt to determine the important factors influencing the FDI based on the factor analysis. A questionnaire, as an instrument, including thirty questions was designed and using Skewness analysis, we have reduced them into 22 factors and distributed among some experts. Relying on the statistical results, 5 items including economic, feasibility, infrastructure, incentive, and resource were determined as the most important influencing factors on the FDI. The present study suffers from some limitations, one of which is being limited to the chief managers of foreign investment organization in Iran. Actually, the results cannot be over generalized to wider range of organizations. To find more comprehensive and generalizable results, this research could be extended for a wider range of organizations through other interested researchers.

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