

**APPLICATION OF OLI-PARADIGM OF GERMAN FDI INFLOWS IN TURKEY**

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**ABSTRACT**

*Foreign direct investment (FDI) plays a pivotal role in economic development. Most important advantages of this are new technology, management ability, marketing ability and modern know-how. However, the literature dealing specifically with the issue of German direct investments in Turkey is fairly sparse. Regarding this, the purpose of study is not only to explore the main determinants of German FDI inflows in Turkey, but also to increase our understanding of the relationship between FDI and its determinants. The conceptual framework used in this study was firstly designed by Dunning and became known as "The eclectic paradigm of international production". The results of a literature review about the German direct investments made in Turkey and the determinants of FDI related to the market entry are shown in the text. Portfolio investments as well as foreign debt are ignored. When considering market policy, there are numbers of investment motives that are critical for German companies, i. e. management potential and popularity. The entrepreneurs believe in "market potential, dynamics, growth", existing "High-and low-skilled" workers and "Political and economic stability" in Turkey. From the characterization of German direct investments, it is possible to conclude that the transfer of factors that influence competitiveness of German companies is major priority of companies positioned in Turkey. According to survey results, in majority of cases most advanced technology was transferred to Turkey.*

**Keywords:** FDI, OLI-Paradigm, Turkey-Germany Relationship

**JEL classification:** F16, F23, F53

**1. INTRODUCTION**

Unavailability and lack of access to reliable data about institutions and public authorities both in Germany and Turkey, resulted in a need to use questionnaire as primary source of data to determine market entry strategies, technology transfer, human capital transfer and benefits of decisions made by German investors in Turkish market. For this reason, questionnaire based on very careful selection of questions was generated. List of surveyed companies and information about them is available at Turkish-German Chamber of Commerce based in Istanbul (23<sup>rd</sup> edition, September 2006). When it comes to questions with available answers (closed form of questions), the scope covered five possible answers based on rating scale (from 1="not important at all" to 5 = "very important"). Information gained in this way provide basis to answer the following questions:

- For Germany as trade-dependent economy, FDI has an important role. Which determinant in terms of ownership-location-internalization is most favorable for German investors in Turkey?
- Which market entry alternatives, including equity of investment, do German companies choose and why?

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- Developed economies became creditor nations of capital, technology and human resources. What kind of effect do German investments have on the Turkish economy?

The specification of the various factors that determine the company's proprietary, location and benefits internalization, was taken from various studies, out of which the following are most important: The determinants of FDI in Spain (Galan & González-Benito 2001); Berger break 1982<sup>nd</sup>, importance of the OLI-determinants of FDI (Müller & Grain Meier 2002, Kulhavy 1981, Dunning 1979, Stein 1991); Internalization and location advantage (Erramilli & Rao 1993, Dunning 1998); Agglomeration advantages (Porter 1998); Trade barriers, barriers for FDI (Stern 2000 and Deardorff & Stern 1997). These provide the basis for the factors of the sub-question "obstacles" in context of the questionnaire. The main principal motives associated with a foreign investment, can be summarized in a literature as motive groups (Dunning 1993). The retention of this group was also the subject of the online survey. The following table summarizes key points of this theoretical classification:

- "Resource Seekers" (procurement-oriented)
- "Strategic assets" or "Capability Seekers"
- "Efficiency Seekers" - Cost thrive Orientals (Vertical MNU)
- "Market Seekers", market and sales oriented (Horizontal MNU)

## 2. METHODOLOGY

Paper's research methodology requires relevant data from the survey that was mainly done by means of internet and e-mail possibilities. In order to analyze the gathered data, it is necessary to have relevant and complete understanding point of FDI of

Germany in Turkey. The aim of this paper was to use research to discover answers on following questions: 1.) What are the interests of German investors in Turkish capital? 2.) Which industries are being highly graded? 3.) What are the constraints that embody these procedures? Which factors are making Turkey preferable for foreign investors?

### 2.1. Structure and procedure of the online survey

The companies were alerted by a postal letter about this study and its relevance. It was noted that the survey would be carried out as an online. The subjects were given the opportunity to own homepage for this study (<http://www.fditu.uni-siegen.de>) and it was possible to store the log information in electronic questionnaire until the fill date. Regarding data protection responsibilities, the response data is confidential and in accordance with the privacy policy. More accurately said, evaluation of written questionnaires was done in anonymous way, without revealing the name and address, along with details of other companies. Thus whatever company responded cannot be revealed.

The formal structure of the questionnaire is designed to avoid different interpretations and misunderstandings. Regarding this, for the explanation and clarification of the issues for individual respondent, guidelines were in the letter in which it was mentioned that in a case of incomplete response or failure to answer the questions that are essential for the study, the contact should be made using phone or email. It was also emphasized in the cover letter that the data collected is used only for research purposes.

### 2.2. Validity and reliability of the questionnaire

In order to ensure that the questionnaire is not misunderstood by the respondents, a "prototype" of the questionnaire was

broadcasted to an expert from the Centre for European Economic Research (ZEW Mannheim) and valuable advices were obtained. It is not enough to know only what is measured by the questionnaire (validity) but also it is necessary to find out how exactly the targeted feature is measured (reliability), which indicates whether a repetition of the measurement process always yields the same results. In order to increase the reliability, the questionnaire was written in German as well as in Turkish, with the assumption that the subject is expected to have the potential to comprehend and answer the questions. Originally, data, from the individual questionnaire, were then processed in a table, and thus provided the raw material for the statistical analysis. The statistical study is limited to the information collected and processed data, which is the method of descriptive statistics used. Using charts, graphs and metrics, a clear presentation of statistical information has been given in order to achieve high level of results presentation. The U-test was also used.

### 3. LITERATURE REVIEW OF FDI IN TURKEY

Even in the mid and late nineties there were relevant studies about FDI relations between Germany and Turkey. Some of most important are: those started in 1996 (Tatoglu & Glaister); those that deal with a comparative analysis of incoming and outgoing ADI in Turkey (Erdilek 2003); comprehensive analysis of location determinants in the context of market entry alternatives contributed (Demirbag, Tatoglu & Glaister 2008).

The literature review showed two important properties of previous studies on the determinants of FDI in Turkey. First, they are based on the results of survey activities, which have been carried out at the Turkey-based multinational companies. Second, there are no specific studies that have explicitly used the OLI paradigm of German corporations in

Turkey. The aim of this work is to obtain answers about motives of German corporations for action in Turkey.

## 4. MOTIVATION FOR AND DETERMINANTS OF GERMAN FDI

### 4.1. Properties of the Samples

Only those enterprises included in the address list of the AHK Istanbul were used for the survey. Most of the companies approached took part in this online survey. Reasons of non-participation were: Business secret; Lack of interest; German company has no shareholders; People in charge of the division being currently on a business trip; from technology-related security, no access to the Website; Address unknown; Personal reasons or criticism statement such as: "...Our company is in operation since 1990s - with limited Turkish foreign capital and two German executives. Despite the right to a permanent work and residence permit, this is on flimsy grounds or simply refused without giving a reason for some time (on the work permit we have been waiting for 15 months), because of which we had significant difficulties and costs... About persistent harassment by imports from Europe Customs Union it is better not to speak. We have the reason to believe that the deterioration is arranged systematically and insidiously."

### 4.2. Form of engagement and their importance for German investors

German companies invested in building new production facilities, where investments (joint ventures) are actuated by buying in the Turkish market for start up, or by taking advantage of favorable conditions of production. When it comes to construction of production facilities, it is important to bear in mind that production and increased profits are basis for long-term operation in Turkey. Regarding this issue, respondents were asked to indicate which market strategy they used for entering Turkish market. They were able

to select among joint ventures, mergers or acquisitions, and 100 percent owned subsidiary. Survey showed that up to 52.7 percent, German parent companies were mainly joint venture. Twenty out of fifty five companies or 36.4 percent were 100 percent owned subsidiary. Only six of responding companies (10.9 percent) used mergers and acquisitions as an entry strategy. In order to learn perceived importance of market entry strategy for German investors, they were asked to give a mark from one to five (1 = “not important at all” to 5 = “very important”).

Table 4.1. Strategic Considerations in different market entry alternatives

\*Joint venture

Long-standing business relationship with foreign partner	Low capital outlay and thus minimized risk	Easier access to (system) Suppliers, Government agencies, Customers	Lack of resources	Use of the know-how of the partner
%	%	%	%	%
9.1	12.7	3.6	3.6	12.7
7.3	10.9	9.1	3.6	10.9
5.5	12.7	16.4	3.6	3.6
3.6	1.8	10.9	18.2	7.3
16.4	3.6	1.8	12.7	7.3
41.8	41.8	41.8	41.8	41.8
9.1	9.1	9.1	9.1	9.1
49.1	49.1	49.1	49.1	49.1

\*Fully-owned subsidiary

Control motive of the subsidiary abroad	Sufficient resources and know-how	Avoidance of know-how drain	Lack of joint venture partner	Restructuring expenses in the event of an acquisition is too high
%	%	%	%	%
20.0	7.3	1.8	1.8	3.6
5.5	5.5	12.7	3.6	7.3
3.6	5.5	14.5	3.6	14.5
1.8	12.7	1.8	21.8	5.5
30.9	30.9	30.9	30.9	30.9
5.5	5.5	5.5	5.5	5.5
63.6	63.6	63.6	63.6	63.6
100.0	100.0	100.0	100.0	100.0

\*Mergers & Acquisitions

Access to distribution channels	(Turkish) market-specific Management experience	Established brand names reputation	Fast market entry	Reduction of competition
%	%	%	%	%
1.8	1.8	1.8	3.6	1.8
	7.3			3.6
3.6	1.8	1.8	1.8	
3.6		5.5	3.6	
1.8		1.8	1.8	5.5
10.9	10.9	10.9	10.9	10.9
89.1	89.1	89.1	89.1	89.1

Many German and Turkish companies, which have been examined, merged resources to start up a new company. The participation level of joint venture partnership expressed in percentage was collected in order to closely analyze international alliances.

**4.2.1. German-Turkish Cooperation (JV) as a form of engagement**

Studies showed that the match of Turkish industrial companies that was formed by foreign MNCs and JVs is as important as local mutual compatibility (Demirbag, Mirza & Weir 1995). If there is mutual trust, this will lead to permanent partnerships, constructive dialogue promotions and facilitation of conflict resolution (Parkhe 1998a, 1998b). It is proved to be advantageous that entrepreneurs with great cultural differences can separate their subsidiaries due to strategic and tactical reasons. In their analysis, Demirbag, Mirza & Weir (1995), show the dynamics of the joint ventures in Turkey. They noted that the most cited reasons for the executives represented are the acquisition of a direct market share locally, creating a local identity, and ensuring good quality production (Demirbag, Mirza & Weir 1995).

There may be considerable differences of unequal management systems, cultures and philosophies in the strategic motives between Turkish and European JV partners. In addition, we also meet with diversities in political, cultural, economic, and environmental features. The underlying

motives of local companies in developing countries may differ from those of the MNCs of the developed countries. Within the online survey on type of cooperation and importance of resources and skills, were the Turkish Joint Venture queried partners in the success case. Regarding the ownership interests, the investigator could be between the: minority participation: 0–49 percent; parity participation: 50–50 percent; majority participation: 51 percent-choose 100 percent.

The results are:

- 10,9 percent for Minority participation,
- 18,2 percent for Parity participation and
- 21,8 percent for Majority participation.

It can be said that a foreign partner has an incentive to protect his property rights and to increase its share to control the usage of its intangible assets. The table shows that 27.3 percent of the German capital firms marketing products or services of their company in the target market are for the creation of a joint venture in Turkey in the spotlight, while 12.7 percent of a strategic orientation is engaged in the existing technology and know-how transfers of certain products of their company to the Turkish joint venture partners. This is done with the intention to manufacture and market these products independently. Three of the companies concerned have given no answer to this question.

## 5. DECISION DETERMINANTS FOR ENTRY INTO THE TURKISH MARKET

### 5.1. Ownership Advantages ("O-Factor")

To gather insight about the entry into the Turkish market, and in order to assess relative importance of the listed firm-specific advantages (ownership) in Turkey, the participants were questioned about decision determinants.

Table 5.1. Firm-specific advantages of German MNEs

Firm-specific advantages		Not important at all	Less important	Important a bit	Important	Very important
		%	%	%	%	%
A1	Management-potential	3.6	10.9	23.6	34.5	27.3
A2	Reputation	7.3	7.3	30.9	25.5	29.1
A3	Technology potential	5.5	16.4	32.7	21.8	23.6
A4	Efficiency potential	3.6	1.8	27.3	40.0	27.3
A5	Exclusive use of distribution system	18.2	12.7	25.5	25.5	18.2
A6	Product differentiation	7.3	3.6	32.7	21.8	34.5
A7	Better access to certain information	10.9	1.8	34.5	27.3	25.5

In terms of market policy considerations, there are numbers of investment motives that are critical for German companies. 34.5 percent of entrepreneurs kept their management potential as very important, 29.1 percent of their popularity as very important, 23.6 percent of their technological potential as very important, 27.3 percent of their potential efficiency as important, 34.5 percent of their product differentiation opportunity as very important and 25.5 percent better market access in the Turks are as very important.

### 5.2. Location Specific Advantages ("L-Factors")

The presence of multinational companies in Turkey has greatly increased. Additional motive for foreign investors is fact that Turkey is bridge between Europe, Eastern Europe and the emerging markets of the Caucasus and Central Asia. Not only large corporations are drawn to the opportunities and the dynamics of the Turkish markets, but also medium-sized companies that are investing in Turkey.

### 5.2.1. Market and sales-oriented ("L-Factors")

When considering market-oriented direct investments, the most important ones are of the large and growing domestic markets, as can be seen in the following table. For 67.3 percent of all responding companies, it is very important to feel the characteristics of "market potential, dynamics, growth" or "market expansion" when they enter the Turkish markets.

Table 5.2. Meaning of the market and sales-oriented "L" factors for German corporations in Turkey

5. Market and Sales oriented „L-factors“		Not at all important	Less important	Important a bit	Important	Very important
		%	%	%	%	%
C1	Market potential, dynamics, growth	3.6	3.6	18.2	7.3	67.3
C2	Customer proximity	1.8	1.8	20.0	30.9	45.5
C3	Market expansion	1.8	5.5	21.8	21.8	49.1
C4	Cost of input factors	20.0	5.5	45.5	14.5	14.5
C5	Availability of skilled and non-skilled workers	14.5	12.7	30.9	12.7	29.1
C6	Export base of neighboring market	18.2	12.7	50.9	10.9	7.3
C7	Relations with neighboring countries	29.1	16.4	30.9	12.7	10.9

When it comes to statement "market potential, dynamics, growth" as "location-specific factors" on a scale from 1 (not important at all) to 5 (very important), companies within sample agreed on average, with a scale value of 4.31.

### 5.2.2. Procurement, cost-and profit-oriented "L-Factors"

By international comparison, German companies have to pay high wages and costs that require a foreign engagement particularly in labor-intensive production. Another cost factor for MNCs is the freight costs. Since the timely motivation can be ensured to reduce,

the inventory and costs can be minimized, the improvement of the infrastructure leads to increased efficiency of the German capital firms. Given the strong expansion of High German subsidiaries in Turkey, this was a typical location for wage-related relocations. Hadjit and Browne (2005) argued that Turkey has a good location for FDI in the form of "efficiency seeking".

Table 5.3. Relevance of input factors in Turkey (Shares in %)

6. Input factors		Not at all important	Less important	Important a bit	Important	Very important
		%	%	%	%	%
D1	High and low skilled workforce	10.9	5.5	40.0	21.8	21.8
D2	Securing raw material supply	21.8	18.2	32.7	16.4	10.9
D3	Availability v. Precursors	20.0	16.4	34.5	18.2	10.9
D4	Cost of input factors	12.7	7.3	38.2	20.0	21.8
D5	Transport cost	9.1	14.5	34.5	20.0	21.8
D6	Energy cost	23.6	16.4	36.4	12.7	10.9

In the present sample the respondents with the statement "High-and low-skilled" workers as "Location-specific factors" were observed on a scale from 1 (not important) to 5 (very important) and they agreed on average, with a scale value of 3.38, while energy costs showed scale value of only 2.71.

### 5.2.3 Political and economic "L-Factors"

For Turkey, factors such as political stability, economic growth, the progress of reforms in the accession negotiations with the EU are increasingly in focus because of the financial crisis of the year 2001. Advantageous conditions for the chosen site for the German investors are listed in following table. In this context, political and economic stability are a prerequisite for FDI in the host country. Over 50 percent rated the criterion "political and economic stability" as important or very important in choosing Turkey as location. Turkey has one of the most flexible and

adequate regulations for foreign investments since the foundation of the republic. There are no discriminatory incidents against the foreign investors. Administrative procedures have been simplified in the courses. In assessing the fiscal and monetary stability of policy, there was about 40 percent, of which attached an important meaning to these factors.

Table 5.4. Political and economic location factors (Shares in %)

7. Political and economic location L factors		Not at all important	Less important	Important a bit	Important	Very important
		%	%	%	%	%
E1	Political and economic stability	1.8	9.1	34.5	34.5	20.0
E2	Government regulation density	7.3	23.6	40.0	18.2	10.9
E3	Relation with neighbor country	10.9	20.0	38.2	16.4	14.5
E4	Tax relief	21.8	16.4	36.4	14.5	10.9
E5	Stability of fiscal and monetary policy	7.3	10.9	41.8	18.2	21.8
E6	Subsidies	34.5	20.0	29.1	7.3	9.1

In terms of statement "Political and economic stability" as "Location-specific factors" on a scale from 1 (not important) to 5 (very important), respondents agreed on average, with a scale value of 3.62 functions, while in terms of the "subsidies" scale value was 2.36.

### 5.3. Internalization ("I-Factors")

According to answers, 41.8 percent of the subjects already had some experience with the foreign markets prior to their entry into Turkey. The answers revealed that 23.6 percent inquires the relocation of production in the wake of competitors, and that high transports and logistics costs are perceived as important. Also, 34.5 percent indicated that the shift of the production of key customers is in the wake of large importance.

Table 5.5. Internalization advantages

Internalization advantages		Not important at all	Less important	Important a bit	Important	Very important
		%	%	%	%	%
B1	Prior experience with foreign market	7.3	3.6	23.6	23.6	41.8
B2	Relocation of production in the wake of competitors ("Following Competitor")	16.4	14.5	32.7	23.6	12.7
B3	High transport and logistics cost	16.4	16.4	32.7	23.6	10.9
B4	Relocation of production in the wake of key customers ("Following Customer")	14.5	7.3	30.9	12.7	34.5
B5	Strategic control of internal forces (image, know-how, technology)	9.1	10.9	30.9	25.5	23.6
B6	Avoidance of currency risks	21.8	20.3	34.5	16.4	7.3
B7	Avoidance of import barriers	25.5	16.4	36.4	7.3	14.5
B8	Prevention of negotiation and consultation costs through export and licensing agreements ("negotiations and consultancy costs")	25.5	12.7	34.5	12.7	14.5
B9	Avoidance of search and selection costs of foreign partners	30.9	10.9	27.3	10.9	20.0
B10	Avoidance of import barriers	29.1	12.7	25.5	10.9	21.8

The respondents with the statements "Previous experience with foreign markets" and "Following Competitor" as "Location-specific factors" on a scale from 1 (not important) to 5 (very important), agreed on average with a scale value of 3.89, while about statement "avoid currency risks" they agreed on scale value of 2.67.

### 5.4. Trade barriers in the market entry.

Market entry barriers increase the costs of access and limit the alternatives available for the entry, because the amount and nature of market access barriers that were chosen by an MNE directly influence the market entry strategy. (Johansson 1997, p.157-165)

### 5.4.1. Tariff and non-tariff barriers in Turkey

The closing of the Customs Union in 1995 calls on the alignment of Turkey in the areas of trade policy, customs policy, and competition policy to the community. As a result, the Turkish Parliament adopted a series of new laws, on one hand, in connection with the Customs Union between Turkey and the European Union and, on the other hand, the agreements between Turkey and the WTO. Thus, the country adopted a new import regime, which corresponds to the general external tariff of the European Union, where the industrial goods from the Community can freely move without customs or any quantitative restrictions and measures between the EU and Turkey. The State Institute of Standardization (Turkish Standards Institution, Türkiye Standartlar Enstitüsü), founded in 1954, sets standards in Turkey that are associated with the quality requirements compatible with other countries. This public authority performs various functions such as regulation, standardization, accreditation and certification.

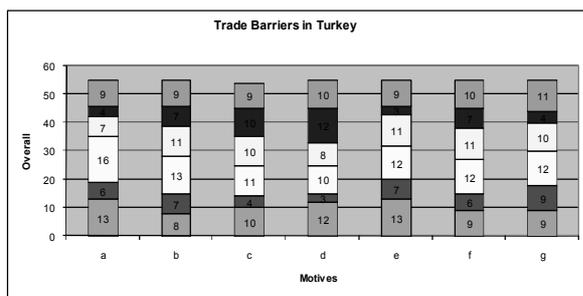


Figure 5.1. Trade barriers within the framework of market entry

Where:

a = customs tariff and quantitative restrictions as / b = Import/Export minimum price as tariff and quantitative restrictions / c = Local Contents requirements as tariff and quantitative restrictions / d = Import tariff quotas and quantitative restrictions as / e = lack of general Property rights as barriers to trade / f = Technical Barriers to Trade (e.g.

quality standards, safety and industrial standards) / g = missing value.

Table 5.6. Obstacle to direct investment

Obstacle to direct investment	Very potent inhibitor	Potent inhibitor	Somewhat as a barrier	Less obstruction	Absolutely no obstacle
	%	%	%	%	%
H1 Anti-competitive practices (i.e.: Corruption)	7.3	21.8	30.9	18.2	21.8
H2 High tax rates	1.8	14.5	40.0	20.0	23.6
H3 Administrative barriers in the foundation stage	10.9	9.1	38.2	10.9	30.9
H4 Macroeconomic and political uncertainty	5.5	9.1	43.6	12.7	29.1
H5 Restrictions on market entry	25.5	14.5	38.2	10.9	10.9
H6 Ownership and control restrictions	27.3	20.0	32.7	9.1	10.9

### 5.5. Technology transfer of German entrepreneurs in Turkey

Turkey is active in science and technology in parts with many international organizations such as the United Nations, NATO, OECD and others. Turkey's capacity to acquire and to implement foreign technology became a key factor in determining the ability of the countries to hold on their own regional and global competitive pressure and to ensure high-quality jobs for a rapidly growing young population.

The main instruments of international technology that Turkey imports are the acquisition of foreign technology by importing Western machinery, equipment, and ADI licenses. 50.9 percent of the German capital surveyed indicated that there was a transfer of technology, while 34.5 percent of the companies were not involved in the case and the rest of 14.5 percent did not know. In terms of technology, a dominant activity of German companies is generally in those areas of technology, in which the companies are very active in Germany.

In the comparison of the German technologies to the Turkish technologies 27.3 percent of the responding companies have a technological edge. They stated that the transferred technology is much better than what is seen in Turkey at present. 12.7 percent have a technology that is slightly better than the one that is used in Turkey. The number of companies using technology that is about as good as in Turkey is 3.6 percent. In majority of cases, which can be concluded from the survey results, the most advanced technology transfers take place in Turkey.

#### 5.5.1. Transfer of Human Resources in Turkey

Since human capital represents a bottleneck factor for the surveyed German capital firm, 34.5 percent of companies said to have positions which they allocated to highly-skilled workers who are not from the host country (expatriates) entries. Due to their size and economic strength, German companies have invested in education and training of their employees and they offer a systematic and comprehensive staff training. The existing company-specific advantages are based on relatively modern technical and organizational know-how. This can improve the know-how of the engineers and managers in the foreign office as well as in the host country and the employees can meet with the higher requirements in the office. 30.9 percent of companies surveyed provide training services to their employees in Turkey. Other 29.1 percent train employees their company premises in Germany.

#### 5.5.2. Personal opinions

Finally, the survey provided an opportunity for the respondents to express their own opinion about question asked: "Which untapped potential do you recognize in terms of development of the German-Turkish (economic) relations?" Requests, comments and criticisms can be presented as following:

- Flexibility in production in Turkey
- To recognize unexploited potential in all sectors of the Turkish economy. Because of the openness, there is a will to learn new things and to establish itself as an economic power.
- German approach is based on a systematic and planned way of thinking. In contrast, the Turkish businessmen like to improvise depending on the situation. With this disadvantage they cannot develop further.

### 6. NON-PARAMETRIC TEST; MANN WHITNEY

An attempt was made to check whether two samples differ in their central tendency of each other. Here, the variable "entry" was divided into two groups: Joint-Venture and 100 percent owned subsidiaries. Due to the lack of normal distribution, the t-test for independent samples could not be performed. In this approach it was about the application of the non-parametric Mann-Whitney test (U test). The equality of the medians or the frequency centers is tested with U-test. The hypothesis for comparing two independent groups is:

- $H_0$ : The two samples are from the same population
- $H_A$ : the two samples are from different population

If the U-value exceeds the critical value, the null hypothesis is rejected in favor of alternative hypotheses. Each of the first half of the table provides an overview of the statistics of the ranks within the two groups, such as sample size, mean rank and rank sum. The second half of the table shows the test result of U-value according to Mann-Whitney and Z-value for some another test. This referred to as "asymptotic" significance (P value).

Table 6.1. Mann-Whitney test for O-factors

	Ranks				Statistic for Test		
	Market entry	N	Mean range	Range sum	Mann-Whitney-U	Z	Asymptotic significance (two-sided)
Management Potential ("O-advantages")	WHO	25	25.64	641.00			
	JV	24	24.33	584.00			
	Total	49			284.000	-0.336	0.737
Knowledge ("O-advantages")	WHO	25	24.10	602.50			
	JV	24	25.94	622.50			
	Total	49			277.500	-0.467	0.640
Technology potential ("O-advantages")	WHO	24	22.00	528.00			
	JV	23	26.09	600.00			
	Total	47			228.000	-1.050	0.294
efficiency potential ("O-advantages")	WHO	25	23.00	575.00			
	JV	23	26.13	601.00			
	Total	48			250.000	-0.831	0.406
Exclusive use of a distribution system ("O-advantages")	WHO	24	25.96	623.00			
	JV	24	23.04	553.00			
	Total	48			253.000	-0.741	0.459
Product differentiation possibilities ("O-advantages")	WHO	25	27.48	687.00			
	JV	24	22.42	538.00			
	Total	49			238.000	-1.298	0.194
Better access to better information ("O-advantages")	WHO	24	23.00	552.00			
	JV	24	26.00	624.00			
	Total	48			252.000	-0.773	0.440

a. Group variable: Market entry

The average ranks for 100 percent owned subsidiaries are quite on a level with those that have arisen for that, and joint ventures (JV). The mean rank values are very similar. It could be concluded that the samples are from the same population. It is important to check the following hypothesis on the significance level of 0.05.

H0: In the population "German direct investment", disclosures were made to the O-factor; and there is no form of investment-specific difference in the average position of the O-factor distributions. For this example, the significance values are greater than 0.05. With such a large error probability, the null hypothesis, the O-factors of WHO and JV would come from the same population, and

cannot be rejected. Therefore it is assumed that in direct German investment there is no difference in investment-specific of the average O-factors.

Table 6.2. Mann-Whitney test for selected L-factors

	Range				Statistics for Test		
	Market entry	N	Mean range	Range sum	Mann-Whitney-U	Z	Asymptotic significance (two-sided)
Market potential, dynamics, growth ("L-advantages")	WHO	24	24.17	580.00			
	JV	24	24.83	596.00			
	Total	48			280.000	-0.224	0.822
Customer proximity ("L-advantages")	WHO	24	23.54	565.00			
	JV	24	25.46	611.00			
	Total	48			265.000	-0.526	0.599
Market expansion ("L-advantages")	WHO	24	23.81	571.50			
	JV	24	25.19	604.50			
	Total	48			271.500	-0.380	0.704
Availability of high-and low-skilled workers ("L-advantages")	WHO	24	23.63	567.00			
	JV	24	25.38	609.00			
	Total	48			267.000	-0.447	0.655
Costs of input factors ("L-advantages")	WHO	24	21.54	517.00			
	JV	24	27.46	659.00			
	Total	48			217.000	-1.509	0.131
Transport cost ("L-advantages")	WHO	23	22.43	516.00			
	JV	23	24.57	565.00			
	Total	46			240.000	-0.552	0.581
Political and economic stability ("L-advantages")	WHO	25	21.84	546.00			
	JV	23	27.39	630.00			
	Total	48			221.000	-1.439	0.150
Government regulation density ("L-advantages")	WHO	25	23.20	580.00			
	JV	23	25.91	596.00			
	Total	48			255.000	-0.694	0.487

At a significance level of 0.05, the following hypothesis was tested:

H0: In the universe "German direct investment", making the information on the L-factors, there is no form of investment-specific difference in the average position of the L-factor distributions.

The null hypothesis, the L-factors of WHOM and JV come from the same population and H0 cannot be rejected. Therefore it is assumed that in German direct investment there is no difference in any investment-specific by the mean of L-factors.

Table 6.3. Mann-Whitney test for I-factors

	Range				a. Statistics for Test		
	Market entry	N	Mean range	Range sum	Mann-Whitney-U	Z	Asymptotic significance (two-sided)
Previous experience with foreign markets ("I-benefits")	WHO	24	24.81	595.50			
	JV	24	24.19	580.50			
	Total	48			280.5	-0.166	0.868
Relocation of production in the wake of competitors ("I-benefits")	WHO	24	20.79	499.00			
	JV	22	26.45	582.00			
	Total	46			199.000	-1.463	0.143
High transport and logistics costs ("I-benefits")	WHO	24	23.96	575.00			
	JV	23	24.04	553.00			
	Total	47			275.000	-0.022	0.983
Relocation of production in the wake of key customers ("I-benefits")	WHO	24	24.46	587.00			
	JV	23	23.52	541.00			
	Total	47			265.000	-0.244	0.807
Strategic corporate control of internal resources ("I-benefits")	WHO	25	22.48	562.00			
	JV	24	27.63	663.00			
	Total	49			237.000	-1.298	0.194

At a significance level of 0.05, the following hypothesis was tested:

H0: The population of German direct investment, making the information on the I-factors, there is no form of investment-specific

difference in the average position of the I-factor distributions.

Based on the values, the significance is calculated for the null hypothesis. For this subgroup, the significance values are greater than 0.05. With such a large error probability, the null hypothesis, the I-factors of WHO and JV would come from the same population and cannot be rejected. Differences in central tendency of both groups cannot be proven. Therefore it is assumed that in German direct investment there is no difference in any investment-specific by the mean of I-factors.

## 7. CONCLUSION

Due to comparatively low wages in Turkey, well-developed infrastructure and a large skilled labor pool, the German entrepreneurs want more and more to open up the Turkish markets. Istanbul, because of its unique geographical position, is an attractive place for German investors. This city has an important place in the economy not only because of its proximity to regional markets, but also because it offers a variety of economic attractiveness. FDI is in connection with the site quality of the national economy or region in which the investment will take place.

The intensity of FDI in the economy depends on economic, political and socio-economic conditions. In particular, it includes features such as the physical and social infrastructure. Skills of workforce or of the political and economic stability in a country are just few examples of the factors that influence the competitiveness of the regional and the national economy where the company was established. It requires a minimum standards since these determinants affect the long term of respective company's success.

Like in other developing countries, shortage of sources channelized to investment is one of the most important bottlenecks in Turkey, too. In this framework, the Turkish economy

needs foreign capital to a large extent. Although FDI in Turkey has grown significantly since 1980, especially after 1990s, it is clear that Turkey has underperformed in drawing FDI despite efforts to attract FDI.

German FDI inflows into Turkey can be expected to increase more in future. Regarding this, it is important to consider possibilities to form appropriate policies for FDI, increase the trade between the two countries, bring down inflation, have relatively cheap and educated workforce, have an adequate infrastructure and achieve macroeconomic stability by strictly adhering to its structural transformation.

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