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Central and Eastern Europe's Future Power of Attraction for Further Relocation of Production -a Study of the Automotive Industry

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Tutor: Lars Bengtsson

Authors: Hanna Bornmark
Åsa Göransson

Abstract

- Title:** Central and Eastern Europe's Future Power of Attraction for Further Relocation of Production- a Study of the Automotive Industry
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- Authors:** Hanna Bornmark and Åsa Göransson
- Advisor:** Lars Bengtsson
- Keywords:** Foreign direct investments (FDI), Relocation of production, Central and Eastern Europe (CEE), Country advantages, Automotive industry, The Trelleborg Group
- Purpose:** One purpose was to create a model of country advantages for automotive supplier companies when relocating further production to CEE in order to obtain cost efficiency. This dissertation was written in cooperation with the Trelleborg Group. Furthermore, the second purpose was to present the most favourable country for future relocation of production by means of the created model.
- Methodology:** The factors in the analytical model were selected through the use of theory. After interviews with the Swedish Trade Council and Fordonskomponentgruppen, the modified analytical model was created which included the most important factors to consider when relocating further production to CEE in order to obtain cost efficiency. Collected primary and secondary data were put in the modified analytical model which was used when analysing the country advantages of each country. The analysed countries might not be the most attractive ones today, but since this dissertation is focusing in a future perspective, future developments of the factors had to be considered when analysing.
- Theoretical Perspectives:** The Theoretical Framework gives a brief presentation of globalisation and FDI and continues with a more deep explanation of John H. Dunning's OLI advantages and Porter's competitive advantages.
- Empirical Foundation:** Interviews were conducted with Swedish automotive supplier companies, Fordonskomponentgruppen and the Swedish Trade Council in the selected countries, to answer the research questions.

Conclusions:

The conclusions of the dissertation were that labour cost was the most important factor to consider when relocating production to CEE in order to obtain cost efficiency. Additionally, infrastructure and the extent of automotive cluster in the country were important factors. Further, political and macroeconomic factors affect these three factors which in turn affect the country advantages. Finally, the most favourable countries for further relocation of production in 2011 in order to obtain cost efficiency were Romania, Slovakia and Turkey.

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Hanna Bornmark and Åsa Göransson

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1 Introduction

The first chapter starts by presenting the background and the problem discussion of the dissertation. Further, purpose, research questions, and definitions are defined. It ends by presenting the outline of the dissertation.

1.1 Background

At the first meeting with the representatives of the Trelleborg Group a number of potential research topics were presented. We thought the subject of relocating production in Central and Eastern Europe (CEE) was very interesting and the kinds of questions that arose when discussing the subject were: What will the future look like? Which country will be the most favourable for relocation of production in to order reduce costs in the future? Will the most favourable countries for relocation of production today be able to keep their power of attraction in the future?

Due to the globalisation and the European Union (EU), Foreign Direct Investment (FDI) has become much more frequent in the world. Earlier boundaries have been eliminated and companies meet more challenges (Landmann, Wolters, Bernhart & Karsten, 2001). At the first meeting with the Trelleborg Group the fact that many Swedish companies are moving their production to low-cost countries or emerging markets to gain cost advantages was discussed; the cost advantage is primary due to the low labour and material costs, but it may also be a way to move closer to the customers and suppliers. However, many countries are developing in a rapid pace, like Poland and the Czech Republic, and maybe soon they will reach the same level of production costs as the western European countries. Perhaps countries like Romania, Bulgaria and Turkey, that are not yet members of the European Union, will be the most favourable markets in a few years; or countries which are not even on the list of becoming members.

The automotive industry is a global industry with high competition. The past years have been characterised by many changes. The trend has been large numbers of acquisitions and a decreasing number of suppliers. Customer behaviour, technology and especially price pressure play a crucial role in shaping the automotive supplier industry. By shifting

production to low-cost countries, considerable savings may be achieved. Another aspect is the high growth rate in Eastern Europe; while Western Europe is characterised by increased competition, high local costs and market saturation, Eastern Europe promise high future growth potential for the automotive industry. For example, Europe achieved an annual growth rate of less than one percent between 1998 and 2003, and in Eastern Europe it is expected to grow at 7.9 percent the coming years (Landmann *et al.*, 2001).

1.2 Problem Discussion

International business has today become a regular part of the economic landscape in the CEE region. This has happened in a rapid pace since some of the countries did not have any FDI at the turn of the century. The problem now, for companies which have relocated production, is that some countries such as Poland, Hungary and the Czech Republic are developing in a rapid pace and may soon reach the level of the western European production costs (Landmann *et al.*, 2001). Many sources, for example Eckert and Rossmeissl (2005), are arguing that there will be an economic equalisation on the European market. What concerns companies that have relocated production to CEE are for how long the cost advantage will continue and which countries that will be most attractive for relocation of production in the future in order to achieve cost advantages. Moreover, one problem that we have seen by reading literature in the subject is that there are few theories illustrating the Multi National Company (MNC) perspective in relocation of business in regards to factors that create country advantages. Many of the theories describe the advantages of firms or industries in a country and how they could help the country to be competitive in its industry compared to other countries. Further, theories are also describing the MNC perspective in a wider viewpoint in that way that they also take the companies' competitive advantage in consideration and where it may be best internalised. Most of the companies that have relocated production and intend to relocate even more, already know that they may benefit from relocating production. Therefore, the focus in this dissertation is only on country advantages; in other words only on country level. Furthermore, no theories have been found describing future country advantages to companies relocating production out of cost efficiency (efficiency market seeking) as the main reason as is done in this dissertation.

1.3 Purpose

The purpose was to create and evaluate a model of country advantages; considering Swedish automotive suppliers relocating further production from Sweden to CEE in order to obtain cost efficiency. Further, the intention was to present the country with the most favourable location in regards to further relocation of production in the future by means of the created model.

1.4 Research Questions

- Swedish automotive supplier companies want to further relocate production to CEE in order to obtain cost efficiency. What are the factors that create an advantage for countries to consider?
- Which factors are the most important?
- Which country will have the most favourable location in regards to further relocation of production for Swedish automotive supplier companies in 2011?

1.5 Definitions

Central and Eastern Europe (CEE): Estonia, Latvia, Lithuania, Russia, Belarus, Moldavia, Ukraine, Poland, Czech Republic, Slovakia, Hungary, Romania, Slovenia, Croatia, Bosnia and Herzegovina, Serbia and Montenegro, Former Yugoslav Republic of Macedonia, Albania, Bulgaria, Turkey.

Cluster: When related and supporting industries and companies, such as suppliers and customers, are gathered in the same region.

1.6 Outline

Chapter 2: Data Collection, Selection of Theory, Creating the Analytical Model, Reliability and Validity



Chapter 3: Theories are presented: Globalisation in the automotive industry, FDI, theories by John H. Dunning and Michael Porter



Chapter 4: Analytical Model



Chapter 5: The studied countries (Hungary, Poland, Romania, Slovakia, The Czech Republic, Turkey and Ukraine) and the answers from the interviews with the Swedish Trade Councils in these countries are presented



Chapter 6: The studied companies (Autoliv, Haldex, Nolato, SSAB Tunnpåt and The Trelleborg Group) and the answers from the interviews with the companies are presented



Chapter 7: Modified Analytical Model and Analysis of the Countries



Chapter 8: Answering the Research Questions, Criticism to the Research, Research Contribution and Further Research

Figure 1.1 Outline of the Dissertation

2 Method

This chapter describes the research approach. It includes data collection, selection of interviewees as well as selection of the investigated countries and theory. Moreover, the creation of the research model is evaluated. Finally, reliability and validity are discussed.

2.1 Research Approach

As mentioned above, at the first meeting with the representatives of the Trelleborg Group, the research topic was decided. After the meeting we started reading theories to increase our knowledge of the subject. In discussion with Stéphane de Tavernier, Business Development, the present purpose was decided; to present the most favourable country in the future in regards to further relocation of production in order to achieve cost advantages. To make the study more academic and to be able to generalise it on other automotive supplier companies the purpose of developing a model of country advantages was added. The model of country advantages was aimed to Swedish automotive suppliers relocating further production from Sweden to CEE in order to obtain cost efficiency.

After reading theories the first analytical model was designed. It was based on theory and influenced by the opinions of the representatives of the Trelleborg Group. To evaluate and test the analytical model as well as answer the research questions a decision to conduct interviews with other automotive supplier companies as well as with Fordonskomponentgruppen (an industry organisation for suppliers in the automotive industry in Sweden) and the Swedish Trade Council was made. This would make the analytical model more reliable since we got the opinions from experts in the area, companies in this specific situation as well as from theory.

At the second meeting with the representatives of the Trelleborg Group we had the possibility of asking the representatives the questions we also wanted to ask the other companies in the research. In that way it could be concluded if the questions were relevant to the purpose and understandable to the counterpart; and by this the validity was increased. When being sure that the questions were suitable, date and time for interviews with the representatives of the other companies were scheduled. The companies were at first contacted by telephone to find

the most suitable persons for the interviews. In many cases, we talked to three or four persons before finding anyone adequate. When the right persons were found, e-mails were sent which included an introduction letter trying to create an interest in participating and explaining the purpose of the research. The e-mails also included the interview questions so that the respondents could be prepared and give well thought-out answers when interviewing them.

The interview questions were based on the research questions. The questions were also matched to the factors in the analytical model and the respondents were free to add other important factors that they thought were important country advantages when relocating production in order to receive cost efficiency. In addition, the respondents were free to add other countries in CEE that they thought would be interesting to study; therefore the questions were open.

Interviews were conducted since the response rate is high, compared to for example questionnaires, and managers are rather interviewed than answering questionnaires. Preferable would have been to conduct personal interviews since in that way it is easier to create a good relation and establish trust with the interviewee. Likewise, the interviewee is more willing to engage when meeting him or her in person (Saunders, Lewis & Thornhill, 2003). However, since all of the respondents were located in northern Sweden and some of them even abroad, it would have been very costly and time-consuming to carry out personal interviews; therefore telephone interview was the most convenient method.

The interviews were semi-structured interviews since we wanted to be able ask follow up questions when we thought it was needed. The questions could also be asked in a varied sequence depending on the respondent; this characterises semi-structured interviews (Bryman & Bell, 2003). The reason for not conducting standardised interviews was that we wanted to be able to ask the respondents to further expound interesting viewpoints; ask follow up questions like “what?”, “why?” and “how?”, to get a deeper understanding of the answers and thereby increase the reliability (Saunders *et al.*, 2003). The follow up questions also prevent misunderstandings since the respondent gets a chance to explain his or her answers. To easier interpret and analyse the answers a speakerphone was used; in that way, both of us could hear the respondent and make notes. However, only one of us asked the questions so it would not be confusing to the interviewee. After the interviews the answers were summarised at once so

nothing should be forgotten. The process of sending out the interview questions in advance, performing the interviews and then summarising the answers, is encouraged by Bryman and Bell (2003) since it reduces the specific issues of access and time limit when interviewing managers and other senior persons.

Further, after conducting the interviews, primary data was compared to secondary data and theory. At this stage we decided to modify the first analytical model since it had been discovered that three factors were more prominent than the others.

When the modified analytical model was created the first and second research questions were answered. Further, to also answer the third research question we applied the analytical model of country advantages to the countries. To apply the model on the countries and answer the question of the future, we analysed previous research as well as data from our interviews. When applying the model on the countries, three countries were selected. These three countries were further analysed and compared. The research strategy of this dissertation was qualitative although some elements of quantitative data were included. Accordingly we emphasised words rather than quantification in the collection and analysis of data and theory (Bryman & Bell, 2003).

The research strategy in this dissertation may be called a minor survey or an interview study. Sometimes it may be hard to discern what is a case study and not. However, it cannot be said that this research strategy is a multiple case study since a case study should be more specific investigated and many sources from the same company should be considered (Bryman & Bell, 2003). We have only conducted interviews with one representative from each company. On the other hand, we do not think that this research is in need of a deeper study of each company since the purpose was to find country advantages and finding the most favourable country regarding relocation of production in a future perspective, as well as trying to generalise it to all automotive supplier companies in Sweden which want to relocate further production in order to obtain cost efficiency. An alternative would have been to carry out a survey of many automotive suppliers in Sweden by sending them standardised questionnaires to estimate their visions concerning the future most attractive country for relocation of production; this means excluding the interviews with the experts. However, the purpose was to create a model of country advantages and also finding the most attractive country in five

years. In doing that we thought it was relevant to also consider the opinions of the experts of the different countries. Furthermore, in sending out questionnaires the response rate would have been much lower (Bryman & Bell, 2003). Likewise, it is also probable that the kind of questions we wanted to ask in the questionnaire could be considered as sensitive; many companies would probably not reveal their investment plans.

2.1.1 Data Collection

Qualitative data is primary used in the dissertation and it was found in published and electronic sources as well as through the conducted interviews. This has helped us to learn about the automotive industry and the CEE countries so we have been able to answer the research questions. Quantitative data is not major for this study, but some important figures are presented in the table of land indicators in appendix 2.

Secondary data has been collected through previous investigations made by the Swedish Trade Council, United Nations Conference on Trade and Development (UNCTAD), Skandinaviska Enskilda Banken (SEB), The World Bank, the Federation of International Trade Association, (FITA) etc. Primary data has been collected through the interviews and e-mails from the representatives of the companies and the experts.

2.1.2 Selection of Theory

A selection of the most suitable theories for the purpose of the research was made. The main selected theories were Michael Porter's diamond and John H. Dunning's eclectic theory. Parts of these two models form the base of the analytical model where the purpose was to define factors creating country advantages and by that the future power of attraction in the countries on the CEE market. For further discussion concerning choice of theory included in the analytical model, see chapter 3 and 4.

2.1.3 Selection of Interviewees and Countries

Except for the Trelleborg Group, a selection of Autoliv, Haldex, SKF and SSAB was made; this because these companies are Sweden's largest automotive suppliers (Fordons Komponent Gruppen, 14-04-06). Unfortunately SKF did not want to take part since they thought that

participation meant revealing their secret strategy. Therefore, we replaced SKF with Nolato. Nolato was chosen since it has relocated production to CEE and we found a suitable person, at Nolato Industrial Central Europe, who was willing to answer the questions. Further, we wanted to have a wider investigation to increase the generalisability and not only finding country advantages for companies in one specific segment, for example polymer-based components. That is why a selection of companies that deliver different components to the automotive industry was made.

Interviews were also conducted with Fordonskomponentgruppen and the Swedish Trade Council. At first, the intention was to only interview a representative of the Swedish Trade Council in Poland since they are able to answer questions about the other CEE markets as well (The Swedish Trade Council, 29-04-06). However, we wanted more neutral opinions about the advantages and disadvantages of the different countries and not only from the perspective of the Swedish Trade Council in Poland. Therefore, we also e-mailed the interview questions to the Swedish Trade Council offices in the other countries that were included in the study (Hungary, Romania, Slovakia, the Czech Republic, Turkey and Ukraine). The questions were easy formulated so the respondents would find it uncomplicated and not time-consuming to finish the survey. After conducting the interviews and evaluating the answers of the questions sent by e-mail, we realised that we needed more specific information about the different countries. Therefore, a decision to also conduct interviews with one representative from the Swedish Trade Council in each country was made. The interviews were semi-structured telephone interviews and complementing questions were asked.

The focus of the research was the countries, in CEE, where Trelleborg Automotive is active; Poland, the Czech Republic, Slovakia, Turkey and Romania. Hungary and Ukraine were also included in the research because the representatives of the Trelleborg Group considered them as interesting; Ukraine since it has very low labour cost and Hungary because it has a well developed automotive industry. However, during the research interviews with the companies we were open for suggestions of other interesting countries; but no further countries in regards to future attraction when relocating production were pointed out by the respondents.

2.1.4 Creating the Analytical Model

The decision to create an analytical model was made in order to simplify the problem. Models may be seen as instruments to handle problems. By using a model, the factors creating advantages to countries could more easily be discerned. In addition, the model could be used to facilitate when analysing the different countries. The intention of the analytical model was to predict the future country advantages of the selected countries regarding relocation of production in order to obtain cost efficiency as well as explain which factors that are creating country advantages (Hägg & Wiedersheim-Paul, 1994).

There are no special rules for creating a model but there are different kinds of models. *Symbol models* are most common in business literature and these models are formulated by symbols. The symbols could constitute of words, letters, diagrams, boxes, arrows, mathematical and logical signs as well as numbers etc. Symbol models may be divided into *verbal models*, *schematic models* and *mathematical models*. The analytical model in this dissertation is a schematic model. Schematic models symbolise studied factors in form of different figures. Arrows and lines between boxes and circles symbolise relations of different kind. Further, the model is qualitative even if some factors in the model may be compared in a quantitative manner (Hägg & Wiedersheim-Paul, 1994).

A starting point to building models is the frame of reference of the model creators. The model is characterised by the frame of reference of the creators as well as of the ones using the model. The frame of reference comprises concept of reality, apprehension of science, values, perspective within business and theories (Hägg & Wiedersheim-Paul, 1994). Since we are business students at the end of our education we have knowledge in the field and we have studied literature in the subject to intensify our knowledge. Moreover, we have conducted interviews to further extend our knowledge. The model cannot be seen as static though we believe that the selection of country when relocating production to a high extent depends on the situation.

2.1.4.1 The analytical model in relation to theory and empiricism

The analytical model was created through the use of theory. Dunning's location advantages (country specific advantages) were used as a foundation of the model. Further, factors from

theories that create country advantages in this specific situation were added to the model. The situation was: automotive supplier companies relocating production to CEE in order to obtain cost efficiency (efficiency market seeking). To make the model even more relevant for this specific situation and thus facilitate the analysis, the model was modified. The modified analytical model only contained the most important factors from theory that create country advantages. The most important factors were detected through the interviews with the automotive supplier companies. In the analysis of the different countries the modified analytical model was used. Primary data from the Swedish Trade Council, Fordonskomponentgruppen and the companies as well as secondary data from the different reports were put in the model. To be able to analyse the future, the future conditions of each factor in the model were considered.

2.2 Reliability and Validity

The difference between reliability and validity is that reliability concerns the degree to which different researchers in different occasions would find the same results while validity is the degree to which the findings really are what they appear to be about. In other words, there should be correspondence of what was aimed to investigate and what actually was investigated (Saunders *et al.*, 2003; Patel & Davidsson, 1994).

When conducting interviews one has to be aware of that there is a possibility of influencing the answers of the interviewee and consequently decrease the reliability (Christensen, Andersson, Carlsson & Haglund, 2000) Especially with semi-structured interviews where the questions may be asked in different order and follow up questions may be added. We have tried not to influence the respondents but it is impossible to say that we have not. Since we did not record the interviews, interpretation mistakes may have been done. In order to prevent this we used a speakerphone so that both of us could listen and make notes. In addition we summarised the answers at once after the interview. We also made sure that we could return to the respondents for further questions or explanations to their answers to prevent misinterpretations.

As mentioned above, by testing the interview questions on the representatives of the Trelleborg Group we could see if the questions were suitable for the purpose and thereby

increase the reliability and validity. To further increase the reliability concerning the information of the countries we decided to interview one representative of the Swedish Trade Council in each of the countries and not just from Poland.

Another threat to both reliability and validity is the fact that the interviewed companies may have withheld information. Some questions were rather sensitive if the companies have a secret investment strategy. For example, SKF did not want to participate at all in the research out of these reasons.

The analytical model may be used by automotive supplier companies that want to relocate production to CEE in order to obtain cost efficiency. The intention was to create a general model and we think that we have succeeded in that. The modified analytical model may not be as general as the original model since we have only investigated the most important factors of five automotive companies. However, we believe that these companies may represent other automotive supplier companies in Sweden and even in Western Europe pretty well and thus the generalisability of the model is rather high.

3 Theoretical Framework

The theoretical framework is presented and the purpose was to investigate what other researchers have written in the subject. Theories included in this dissertation are globalisation in the automotive industry, foreign direct investment, as well as theories by John H. Dunning and Michael Porter.

To answer the research questions and thus finding factors that create country advantages, the most relevant theories have been studied. The main theories are Porter's diamond and Dunning's eclectic model (OLI). The most important elements in these theories, that match the research purpose, have been selected and further investigated. Finally, a combination of the two theories has been used as a foundation of the analytical model.

3.1 Previous Research

When studying previous research we have found some location theories. These are for example the traditional location theory which is focused on supply oriented variables, especially those related to comparative advantages of immobile assets of a country; for example labour, land and infrastructure (Dunning, 2000). Further, there are theories related to special locations of transaction costs. For example Scott (1996) has written about this and declares that given production and transportation costs, location related transaction costs are supposed to lead to a clustering of related activities in order to reduce over all costs and maximise benefits of interrelated innovation activities. Porter (1990) has also written about supply related clusters and this will be presented further in this chapter. Loree and Guisinger have written about location theories which discuss the impact of the government on location advantage; for example tax advantages in one country or region (Dunning, 2000). There are also exchange rate theories which describe how the exchange rates affect location advantage (Rangan, 1998). Porter and Dunning have among others written about knowledge enhancing theories of location. This theory is directed at explaining location strategy in terms of sustaining and promoting location specific advantages in a world of uncertainty and continuous innovation. The need to exploit knowledge enhancing advantage is especially large in high-tech sectors (Dunning, 2000).

3.2 Globalisation in the Automotive Industry

It is possible to identify an industry according to the extent and mode of internationalisation. Internationalisation arises through direct investments or international trade. Grant (2005) groups industries in four parts: *Sheltered Industries*, *Trading Industries*, *Multi Domestic Industries* and *Global Industries*. In global industries both trade and direct investment are important. Most large scale manufacture industries are global; in the automotive industry trade and direct investments are high which means that it is a global industry.

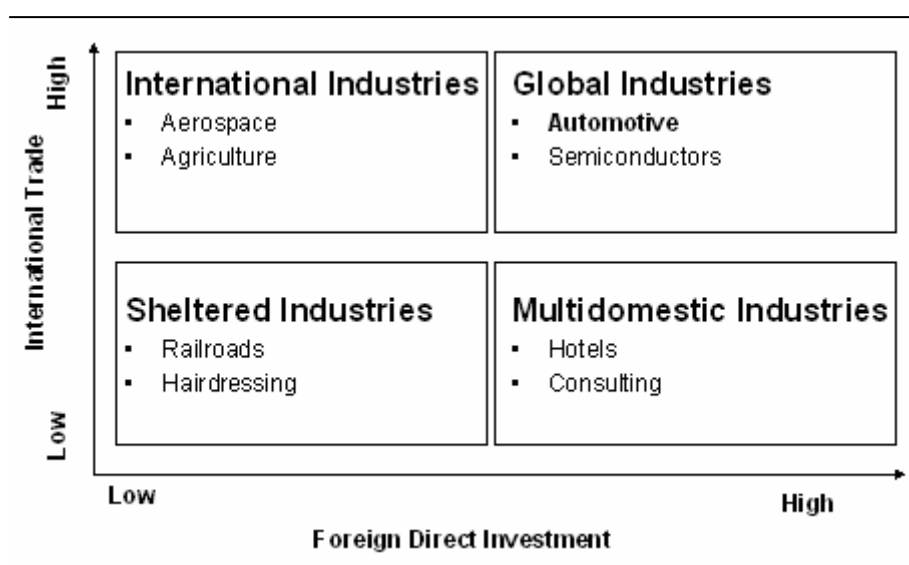


Figure 3.1 Patterns of Industry Internationalisation

Source: Grant, 2005, p.413

As a result of the globalisation, investments within the automotive industry have lately become very successful in the post-communistic countries in Europe. While Volkswagen is a main exporter in the Czech Republic, Slovakia and Hungary, Fiat and Daewoo are more concentrated in the Polish manufacturing industry market. A result of these investments is that companies can decrease their costs (The Economist, 2004).

3.3 Foreign Direct Investment

FDI is “*equity funds invested in other nations*” (Rugman & Hodgetts, 2000, p. 9). FDI usually involves the ownership, whole or partial, of a company in a foreign country. FDI may take variety of forms, from the purchase of an established firm to setting up a new operation as a joint venture or a totally owned company (Rugman & Hodgetts, 2000). FDI grew, between 1985 and 1990, globally at an average rate of 30 percent a year. This is three times the trade

growth and four times the world output growth (Gilpin, 2001). In 2001 a downturn of the world FDI began. However, in 2004 the trend changed and the world FDI was growing again; this, due to raising FDI flows to CEE and developing countries. Developing countries are today accounted for an estimated 42 percent of the world FDI inflows compared to 27 percent in 2002-2003 (UNCTAD.ORG, 22-05-06).

3.3.1 Typology of FDI

Which country a MNC decides to invest in depends on which type of FDI they are aiming to engage in. Dunning has divided FDI in *efficiency seeking FDI*, *resource seeking FDI*, *strategic asset seeking FDI* and *market seeking FDI* (Eckert & Rossmeyssl, 2005).

Efficiency seeking FDI involves the relocation of certain value chain activities to receive lower input costs to be able to maintain or create a competitive market position. This is often done by MNCs moving their production of some of their most price-sensitive products to low-cost countries or regions. Most of the goods are in turn exported back to the western market. However, this efficiency seeking activity will only continue as long as the inputs maintain their cost competitiveness. An example is the introduction of minimum salaries in Hungary 2002. Even though such event may increase the motivation of the workers it is also a threat to the survival of foreign operations in form of efficiency-enhancing local inputs. As a consequence of the present European integration, production costs are expected to rise and therefore efficiency seeking activities may be moving further east, also known as the “flying geese effect” (Eckert & Rossmeyssl, 2005).

Resource seeking FDI is done in order to secure or improve the company's access to certain resources acquired abroad. Moreover, it is done to reduce the uncertainty caused by the geographical spread of the value chain (Eckert & Rossmeyssl, 2005).

Another type of FDI is *strategic asset seeking FDI*. It is done to acquire strategic assets abroad in order to protect, sustain or improve the competitive position (Eckert & Rossmeyssl, 2005).

Finally, *market seeking FDI* is done to achieve foreign market proximity. In order to understand how market proximity is affected by FDI a difference between FDI seeking to attain physical market proximity and FDI seeking to reduce psychic market distance may be done. Due to the globalisation, EU preferences and cultures in Europe have become more homogenous. This may lead to a rapid increase in psychic market proximity. A consequence of this development may be that FDI for physical market proximity is no longer necessary. Therefore, a decrease in market seeking FDI may occur in CEE where the culture convergence is high (Eckert & Rossmeissl, 2005).

A review of recent research reveals that market seeking FDI is the most common form of FDI in the Central and Eastern European transition economies. In a study conducted by Manea and Pearce (2001) the highest motivation for FDI in CEE in the motor vehicle industry was market seeking FDI followed by efficiency seeking FDI (Eckert & Rossmeissl, 2005). This may be because the companies in the investigation were not only European companies. The focus of this research is efficiency seeking FDI; automotive supplier companies that want to further relocate production in order to achieve cost advantages and perhaps market seeking FDI as a secondary reason.

3.4 OLI advantages

For more than two decades the eclectic paradigm or OLI paradigm has been the dominant analytical framework for analysing the determinants of FDI and the foreign activities of MNCs (Dunning, 2000). Dunning's eclectic theory is a result of the economic success from the action of the MNCs and its nature; it presents why MNCs are emerging. He states that three factors give the MNCs significant advantages over domestic firms: *Ownership, Location and Internalisation* (OLI). These three factors are necessary to consider when realising FDI (Gilpin, 2001).

The ownership (O) advantages are also known as firm specific advantages and consist of the competitive advantage of firms seeking to engage in FDI. The O advantages could be for example a product or a production process that other firms cannot compete with. They may also be a brand or other goodwill that is associated with quality etc. These resources are mainly based on knowledge which may be found in the employees' competence, in patent or

other technical knowledge within the firm. The O advantages are presumed to be unique to firms of a particular nationality of ownership (Dunning, 1992; 2000). O advantages assert that the greater competitive advantage the firm has, compared to other firms (especially those domiciled in the country they are intending to make investments in) the more they are likely to engage in or increase their foreign production (Dunning, 2000).

The location (L) advantages may also be called country specific advantages. L advantages consist of the attraction of alternative countries for undertaking the value adding FDI (Dunning, 2000). According to Dunning (1993), L advantages contain intangible assets such as technology, information, marketing, entrepreneurial skills, management as well as organisational systems in the country. They also contain tangible assets like natural resources, work power and capital. Eckert and Rossmeissl (2005) give some examples of L advantages such as lower transportation and production costs, more favourable governmental regulation as well as better social and natural general conditions. Location specific assets are specific to a particular location in their origin and use but they are available to all firms (Dunning, 1992). L advantages declare that the more the immobile advantages favour a presence in the foreign country the more firms will choose to expand or exploit their O advantages by engaging in FDI. The firms must use their O advantages in combination with the L advantages which may be natural resources or recourses created in the country (Dunning, 2000).

Internalisation (I) advantages offer a framework for alternative ways in which companies may use and create their competitive advantages (O advantages), given that they have found an attractive country. I advantages may occur from previous market failure and by exploiting it in order to protect the firm and prevent future market failure (Dunning, 2000). Examples of market failure include: high search and negotiation costs, broken contracts, buyer uncertainty, negative government intervention etc. (Dunning, 1993). I advantages answer the question of how to enter the foreign market; if the company should continue to own its O advantages or if indigenous companies will buy the advantage or the right to its use etc (Dunning, 2000).

When finding the right location of production, a focus in L advantages is primary. Because this is where the company may ask “where be located?” and through studying the factors, characters of an attractive market will be distinguished. This is one reason why this research is only focusing on L advantages.

3.5 Competitive advantages

As mentioned above, experts have claimed that a nation's competitive advantage is determined by factors such as labour costs, interest rates, exchange rates and economies of scale. According to Porter, if one only thinks like that one fails to reveal the true sources of international competitiveness of nations. The best way for a firm to create competitive advantage is with continuous innovation. Therefore, in order for a country to be competitive it must have firms that innovate (Rugman & Hodgetts, 2000). According to Porter (1990), the answer to why some firms can innovate consistently and others cannot rests in four attributes. Porter conducted a study of ten countries to show what leads to competitive advantage. The four attributes are: *Factor Conditions*, *Demand Conditions*, *Related and Supported Industries*, and *Firm Strategy, Structure and Rivalry*. This model describes the conditions in the country which make its firms competitive in the international market but it may also be used to describe a nation's advantages for investments, which is the purpose of this dissertation.

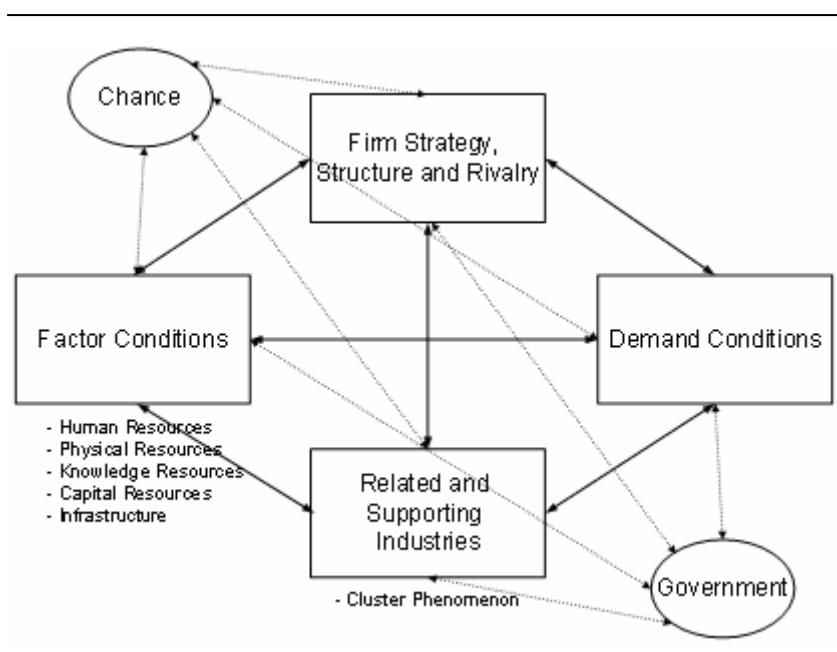


Figure 3.2 Porter's Diamond
Source: Porter 1990, p. 127

Factor conditions: These conditions are inputs used as factors of production such as labour, land, natural resources, capital and infrastructure. This may sound similar to basic international trade theory but Porter states that the most important factor conditions are not inherited but created within the country. He means that the specialisation of certain factors and how efficiently and effectively they are used means more than the amount of factors for creating competitive advantage. Sometimes lack of factor conditions in a country may actually enhance innovation in that country and create competitive advantage; sometimes abundance generates waste and lack generates an innovative mindset. One example is Japan which has a high price on land and therefore limited factory space. This has led to just-in-time inventory techniques (Porter, 1990).

Porter groups the factors into four categories. The first one is *Human Resources* which is the quantity, skills and cost of workforce and management. This also includes standard working hours and work ethics. The second one is *Physical Resources* which encompass the country's quality, accessibility and cost of land, water, minerals, timber deposits etc. A country's size, geographical location or climate may also be regarded as physical resources. The third one is the *Knowledge Resources* which is the country's stock of scientific, technical and market knowledge of goods and services. *Capital Resources* is the fourth category and consists of the amount of cost of capital available to finance industry such as unsecured debt, secured debt, bonds, equity and venture capital. However, the globalisation of capital markets and the large capital flow between countries are making capital markets more similar in the countries but significant differences still remain. The last category is *Infrastructure* which includes the type, quality and user cost of infrastructure. Infrastructure includes transportation system, communication systems, mail system and health care etc. It also includes factors that affect the quality of life which increases the attractiveness of living and working in the country. The mix of factors differs much between countries and industries. A country may have competitive advantages because it possesses low cost or uniquely high quality factors. Many industrialised countries have comparable factors in terms of infrastructure and education. Another note is that today factors are more mobile than before and can move among countries (Porter, 1990).

Furthermore, Porter also establishes a hierarchy among the factors included in factor conditions. The first is between *basic* and *advanced factors*. Basic factors are natural

resources, climate, geographical location, unskilled labour and debt capital. Advanced factors are modern digital data communications infrastructure, highly educated people and university research institutes. The other distinction between factors is their specificity. *Generalised factors* contain motorway systems, a supply of debt capital or a pool of well educated and motivated employees, while *specialised factors* contain narrowly skilled employed, infrastructure with specific properties, knowledge base in special fields. The most sustainable competitive advantage for a country occurs when it has both specialised and advanced factors (Porter, 1990).

Demand conditions: Porter claims that a sophisticated domestic market is an important element to produce competitiveness. Firms that face a sophisticated domestic market are likely to sell superior products because the market demands high quality and a close proximity to such consumers enables the firm to better understand the needs and desires of the customers (Porter, 1990). This factor is not considered in our research since it is from the perspective of how firms in a specific country may be competitive in the world market depending on their domestic market. This research tries to find country advantages for MNCs to invest in one country.

Related and supporting industries: Porter also argues that a set of supporting and related industries is important to the competitiveness of a country. The *Cluster* includes suppliers, subcontractors and other related firms. The phenomenon of competitors and complementary firms locating in the same area is known as clustering. This may have both positive and negative impacts. Clustering is common in local areas, one example is Silicon Valley in the USA and the Italian shoe leather industry is another. Through the presence of internationally competitive supplier industries, advantages may be created downstream in industries in several ways; for example by effective and fast access to the most cost effective inputs. The linkage between the value chains of the firms and the suppliers in the cluster is very important and may be a great advantage. The most important benefit of a cluster is the process of innovation and upgrading. Suppliers help firms with developing new methods of technology and ideas as well as innovations. Through this process the phase of innovation increases and this is very important for competitive advantage. Porter calls the cluster of suppliers "home base". The presence of international competitors and complementing companies may also

increase the information flow and technical interchange which creates advantages (Porter, 1990).

Firm strategy, structure and rivalry: These are the conditions in the nation concerning how companies are created, organised and managed. Firms gain competitive advantage if the goals of the owners, managers and employees enhance commitment and continuous investment. The factor also covers the domestic competition. The larger competition in the home country the more successful the firms become internationally (Porter, 1990). This factor is not useful in the research of this dissertation since it concerns the firms within a nation; how they may be competitive compared to firms in other nations. As mentioned, the viewpoint in this dissertation is studying countries' advantages from an MNC perspective.

Nations are more likely to succeed in industries where the diamond is most favourable. The determinants in the diamond are dependent of each other and give force to each other. They may be seen as a dynamic evolving system. The effect on one determinant also affects the others. Advantages in one determinant may enhance advantages in another one. An advantage in every determinant is not a requirement for competitive advantage but the relationship between the determinants with high advantage creates sustainable competitive advantage which is very hard for foreign competitors to imitate (Porter, 1990).

Two more variables are important to discuss in completing the diamond model. These are *Chance* and *Government* and both of them influence the national system. Chance is unpredictable changes in the environment such as radical inventions, breakthroughs in basic technologies, wars, external political development and major shifts in foreign market demand. These changes may affect the industry in a nation and make the competitive advantage shift to another nation. The government of a country may to a high extent both increase and decrease the competitive advantage of a nation. For example, antitrust policy affects domestic rivalry and if a country invests more in the education system for the people it may affect factor conditions. Further, the government purchases may stimulate the related and supporting industries. Porter also states that nations' economy contains a cluster of industries which are interrelated horizontally and vertically. A nation does not succeed in one isolated industry but in the industry cluster.

Criticism to Porter's model is that the model tends to apply only to countries with a developed economy. His study was conducted containing countries such as United Kingdom, Sweden, Germany and the USA. Further, the model does not take the perspective of the MNCs and does not say so much about that FDI in a country may be favourable for the country. It is mostly concentrated on outward FDI and how to make the firms in the nation competitive in the world market. However, in this study we may use the diamond even though we apply it on developing countries since we do not use the complete model, only parts of it and we modify it to match the purpose.

Grant (2005) has also written about how companies should decide where to locate production. According to him, determinants of geographical location of production are: *National resource availability*, *Firm-specific competitive advantage* and *Tradability*. *National resources* indicate that companies should manufacture in countries where resource supplies are favourable. This may include moving production in the automotive industry where labour costs are low. Natural Resource availability may be likened with Porter's factor conditions.

Firm-specific competitive advantage explains that the location should be where the competitive advantage and capabilities (internal resources) of the firm best can be deployed. This may be likened with Dunning's O and I. *Tradability* is transportability of the product. Production within the local market is favourable when transporting costs are high and many barriers to trade exist (Grant, 2005).

3.6 Summary of Theory

An industry may be characterised by the extent of FDI and international trade. The automotive industry has a high level of FDI as well as a high level of international trade; consequently it is a global industry. Much FDI is performed by automotive companies and which country a firm decides to invest in depends on what kind of FDI the firm strives to engage in. Dunning has divided FDI in efficiency seeking FDI, resource seeking FDI, strategic asset seeking FDI and market seeking FDI. This research is mainly based on efficiency seeking FDI but market seeking FDI may be a secondary reason because it may be wrong to say that FDI is realised out of just one purpose. Efficiency seeking FDI involves

relocation of certain value chain activities to receive lower input costs while market seeking FDI is done to achieve foreign market proximity.

In order to decide to which country relocation of production should be done, theories of Porter and Dunning may be utilised. Dunning's OLI advantages are from a MNC perspective and state that a firm must consider three factors when moving abroad; O, L and I advantages. However, in this research the focus is on L advantages which also may be called country specific advantages; this because the aim is to map out country advantages to automotive supplier companies that wish to relocate further production to CEE. Therefore, the O advantages (firm specific advantages) should already be known to the companies; they know that they will benefit from relocating production. The I advantages are the last step when a company has decided where to locate and it is not considered in this research either. This, because the I advantages are special to each company and this research tries to find a general model for country advantages which may be used by automotive supplier companies.

According to Dunning, L specific advantages involve intangible assets such as technology, information, entrepreneurial skills, management as well as organisational systems in the country. Furthermore, they comprise tangible assets such as natural resources, work power and capital. More specific location advantages may be low production costs and low transportation costs.

On the other hand, Porter's diamond is from a country perspective and explains how the companies in the country may be competitive compared to companies in other countries. The determinants in Porter's diamond are factor conditions, demand conditions, related and supporting industries as well as firm strategy, structure and rivalry. This research only includes factor conditions as well as related and supporting industries since these are the only factors that may be seen from a MNC perspective. In the analytical model we have included these two factors in location advantages. Factor conditions are factors of production such as labour, land and natural resources. This may sound similar to the traditional theory of comparative advantages but Porter means that the most important is not which factors a country posits, it is the specialisation of the factors and how efficiently and effectively they are used. Related and supporting industries include the industry cluster which comprises

suppliers, subcontractors and other related firms. The cluster may enhance technical interchange between the companies.

To sum up the use of theory, Dunning's L advantages have been used as a foundation and factors from Porter's diamond have been included in the location advantages to make it match the perspective of the research.

4 Analytical Model

This chapter explains how the theory is used in the analytical model. Further, the different factors in the analytical model are described.

When investigating countries and studying the advantages and disadvantages between the countries, many factors have to be considered. Dunning's location advantages have been used as a foundation in the middle of the model while parts of Porter's diamond are used to describe the location advantages; this in order to make the study more detailed and match the perspective of the dissertation.

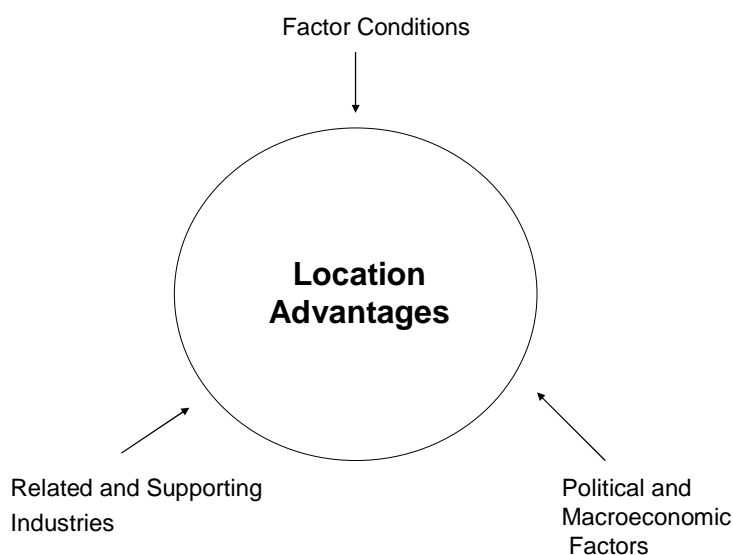


Figure 4.1 Analytical Model

As may be seen in the analytical model, only *Location Advantages* have been included from Dunning's eclectic model, while *Factor Conditions* as well as *Related and Supporting Industries* from Porter's diamond. This since we believe that these factors bring out the most essential elements that we need to investigate when answering the research questions. As a complement for the unpredictable macroeconomic environment, the research model also includes *Political and Macroeconomic Factors*.

O and I advantages have been eliminated because the research was about country advantages for further relocation of production from Sweden to CEE; consequently the companies were expected to know their competitive advantages and how they should be used as well as how to enter the market. In other words the research is only on country level and therefore, the focus is only on L advantages. *Location advantages* represent the advantages for a specific host country. In the analytical model location advantages comprise factor conditions as well as related and supporting industries. Unpredictable events as well as *political and macroeconomic* factors may also affect the country advantages and therefore they are also included. The unpredictable events and political decisions are taken from Porter's diamond. The macroeconomic factors, for example exchange rate, are included since researchers have claimed that they may affect the country advantage.

Factor conditions are included in the analytical model since they explain how the nations exploit their human resources, physical resources, knowledge resources, capital resources and infrastructure. In our research, this is shown as level of education, average wages, knowledge about the industry, language knowledge, as well as the infrastructure of the country. By infrastructure we mean quality of roads, railways and airway connections as well as quality of the communication systems such as Internet and telephony. A comparison of these factors may be made between the nations; how efficiently and effectively they are used.

Related and supporting industries include automotive clusters in the countries. The cluster comprises suppliers, subcontractors and related firms such as workshops. Moreover, where there is an automotive cluster there is great knowledge of the industry that the firms may benefit from. It is also easier to find competent and specified labour.

The factor of *firm strategy, structure and rivalry* is not useful in the analytical model since it concerns the firms within the nation; how they may be competitive compared to firms in other nations. The *demand conditions* factor also focuses on the competitiveness of the nation's firms in that way that a demanding home market makes the firms from this specific country successful in an international environment. The viewpoint of the analytical model is studying countries' specific advantages from a MNC perspective.

5 Central and Eastern Europe

In this chapter, a review of the Central and Eastern European region is presented. It is concluded by data from the interviews with the Swedish Trade Councils in the studied countries; Hungary, Poland, Romania, Slovakia, the Czech Republic, Turkey and Ukraine.

5.1 Introduction

The production costs in Western Europe are heavy because of the high costs of capital, wages as well as the high corporate tax rates. The corporations in the west benefit from relocating production to low-cost countries in CEE. The low-cost countries may for example offer employees that are highly qualified and motivated at a lower cost (Landmann *et al.*, 2001). The German car making industry is a good example of this. According to Wolters and Enders (2001), 23 percent of the total car manufacturing by German companies in the 1980s was produced in a foreign country, while it in 1998 already reached the level of 37 percent.

Many of the political changes that have created stability in the CEE are a result of the increasing memberships of the EU. According to Manfred Stamer, a Country Risk Analyst for Euler Hermes ACI in Germany, the advantage of the union membership is mainly political. He also stated that the goal is to create political stability which leads to economic advantage (Diana, 2005). As may be seen in the table below, there are now 25 members of the EU and five more countries are on the list of becoming members.

EU Member States: (year of entrence)		Candidate Countries: (expected)
* Austria (-95)	* Latvia (-04)	* Bulgaria (-07)
* Belgium (-51)	* Lithuania (-04)	* Croatia
* Cyprus (-04)	* Luxembourg (-51)	* Former Yugoslav Republic of Macedonia
* Czech Republic (-04)	* Malta (-04)	* Romania (-07)
* Denmark (-73)	* The Netherlands (-51)	* Turkey
* Estonia (-04)	* Poland (-04)	
* Finland (-95)	* Portugal (-86)	
* France (-51)	* Slovakia (-04)	
* Germany (-51)	* Slovenia (-04)	
* Greece (-81)	* Spain (-86)	
* Hungary (-04)	* Sweden (-95)	
* Ireland (-73)	* United Kingdom (-73)	
* Italy (-51)		

Table 5.1 EU Member States

Source: EUROPA- The EU at a glance- The History of the European Union, 04-13-06

Several of the CEE countries will also soon join the European Monetary Union (EMU).

€ Member States:	Candidate Countries: (expected)
* Austria	* Denmark (outside €)
* Belgium	* United Kingdom (outside €)
* Finland	* Poland (no target date)
* France	* Sweden (no target date)
* Germany	* Estonia (-07)
* Greece	* Lithuania (-07)
* Ireland	* Slovenia (-07)
* Italy	* Cyprus (-08)
* Luxembourg	* Latvia (-08)
* The Netherlands	* Malta (-08)
* Portugal	* Slovakia (-09)
* Spain	* Hungary (-10)
	* Czech Republic (-10)

Table 5.2 Euro Member States

Source: EUROPEAN UNION MEMBER STATE OFFICES IN THE UNITED STATES- EUROPEAN UNION MEMBER, 04-13-06

Two objectives with the European Union are the common market as well as the common currency, which in turn will benefit the common market. To gather the countries in the European Union with a common currency will benefit the macro economic stability and the common market. The goal is to create a genuine market where goods, services, capital and labour will flow free between borders within the union (Gustavsson, Oxelheim & Wahl, 2006).

The countries in CEE which have the largest production of vehicles are Poland, Hungary, Slovenia and Slovakia (Fordons Komponent Gruppen, 14-04-06). Much of this success may be a result of the geographical position of the countries. Henry Mellgren, at Fordonskomponentgruppen, believed that the labour cost is the most important factor to consider when relocating production to CEE since the automotive industry is labour intensive. However, if the companies have a more automated production this factor may not be so important. He also stated that in some cases the companies are moving to be closer the market

and sometimes they are moving because of the trend; if one company is relocating production, everyone wants to relocate.

The labour costs in CEE vary much, but still, it is cheaper than in Western Europe. As may be seen in the table Hungary has the highest labour cost per hour in CEE, whereas Ukraine has the lowest.

Country	Hourly labour costs, \$ (2003)
Sweden	24.89*
Hungary	3.80
The Czech Republic	3.39
Poland	3.14
Slovakia	2.15
Turkey	1.81
Romania	0.80
Ukraine	0.66

*For production workers. Includes pay for time worked, other direct pay (e.g. holiday pay, employer expenditures on legally required insurance programs and other labour taxes).

Table 5.3 Hourly Labour Costs

Source: <http://www.economist.com>

Not only the low labour costs but also the corporate taxes in the countries may be important when deciding where to locate production. The last few years the countries in CEE have pushed down their company taxes far below the Swedish to attract companies to relocate production in their countries. The three countries that have reduced their company tax the most since 1999 are Slovakia, Poland and Hungary. In 2005 Slovakia and Poland had a company tax of 19 percent whereas Hungary had 16 percent (Fordons Komponent Gruppen, 14-04-2006).

Country	Corporate tax (2005)
Turkey	30%
Sweden	28%
The Czech Republic	26%
Poland	19%
Slovakia	19% (flat tax)
Hungary	16%
Romania	16% (flat tax)
Ukraine	13%

Table 5.4 Corporate Tax

Source: www.fita.org

According to Mellgren at Fordonskomponentgruppen, it has been shown that some companies did not really have to relocate their production; due to all transaction costs and problems in moving it would have been more profitable to remain in Sweden. Further, he claimed that some companies have moved out because they were disappointed of the politicians in Sweden and as a consequence the decisions were not thoroughly thought out. Further, Mellgren had no straight answer to which country that will be the most attractive for relocation of production in five years. He could not see a trend for any of the countries in the future. He also mentioned that there will be an equalisation of the labour costs in Europe in the future. In spite of this he believed that there will not be any drastically changes in nearest future, at least not for vehicle producers since they are more investment intensive. Thus, he did not believe that vehicle producers will move further east. However, concerning component producers, he believed that there might be changes in five years regarding the most attractive country relocating production to.

The countries that were selected together with the Trelleborg Group were Hungary, Poland, Romania, Slovakia, the Czech Republic, Turkey and Ukraine. Business climate studies by the Swedish Trade Council, made in 2005, form a base of the country reviews. These studies describe the business climate in each one of the countries. The companies in the investigation were Swedish related, with business within trade, services and manufacturing

5.2 Hungary

The Hungarian economy is in good shape. The GDP growth was higher than expected; 4.1 percent in 2005. The inflation fell to historical low 2.5 percent in January 2006 and is expected to be 1.7 percent in 2007 (Eastern European Outlook 2006, 24-03-06). The population is now more than 10 million people (Swedish Trade Council, 29-04-06). The profitability in Hungary is good and the future growth within the country is bright. The Hungarian legislation is beneficial for the foreign investments. The internal as well as international transactions are working well, although, one cannot always trust the Hungarians when it comes to paying the bills. The inflation in the nation has affected some foreign companies negatively (Business Climate Studies, 29-04-06).

The Swedish related companies in Hungary are very well treated and it is not hard to set up a business in the country. It is easy to buy and lease land, plants, storage and offices in Hungary. Further, infrastructure, such as aviation, railways, mail, Internet and telephony (including mobile), is working well. Concerning the roads in the country there are split visions (Business Climate Studies, 29-04-06). However, according to Stefan Vincze at the Swedish Trade Council in Budapest the motorways are new and in good condition. The problem is the roads in Budapest which are planned to be improved but it takes time. Probably, they will be in better conditions within five years but there are no expressed visions from the government. However, there are visions concerning when certain motorway expansions will be finished and they will be completed in two to ten years time.

The declaring process in the customs is not completely satisfying, but there has been an improvement since the EU membership. The product certification process is still as bad as it was before the EU membership and many foreign companies are not satisfied with that. The corruption in the country affects almost all the firms and the country is bureaucratic, consequently it is hard to get information from the authorities. The limited knowledge in the English language may also be negative for investments in Hungary (Business Climate Studies, 29-04-06). There are possibilities to receive investment subsidy from EU but there are almost no money left. It depends on what kind of investments the company is aiming to perform; in some cases it still may be possible applying for subsidies (Stefan Vincze, Swedish Trade Council Budapest).

The supply of qualified labour and the geographical location are the two most important factors for the companies when relocating business to Hungary. Moreover, the economic growth and the labour cost play a major part when relocating production to Hungary (Business Climate Studies, 29-04-06). Further, Hungary is one of the most developed countries in CEE due to the maturity of its industry (Diana, 2005). The largest industry in the country is IT and telecom. This is mainly thanks to the establishment of Nokia and Ericsson with large research centres in the country. Even old traditional industries such as manufacturing and engineering industry are large but they have started to decrease due to the fact that companies move further east (Stefan Vincze, Swedish Trade Council Budapest).

In the area around Győr, close to the Austrian border, there is an automotive industry cluster (see appendix 1). Audi among others has its plant in the cluster; it is here the TT-model is manufactured. Other automotive companies situated in Hungary are for example Suzuki, Hyundai, Opel, Ford and Daewoo. The suppliers include companies such as Haldex, Autoliv, Valeo, Delphi and Semcon (Stefan Vincze, Swedish Trade Council Budapest).

5.3 Poland

Poland has a population of more than 38 million people (2005) (Swedish Trade Council, 29-04-06). According to the European outlook 2006 made by SEB, the political risk in Poland is reduced in the short run but the problem with a weak coalition government remains. Poland is a member of NATO, OECD and EU which makes it safer for foreign companies investing in the country. There is also a possibility of subsidy from the EU and there are 17 special economic zones with tax relieve (Swedish Trade Council, 29-04-06).

Large market potential, low wages, good economic growth, qualified labour and favourable location are arguments for relocation of production to Poland but the establishing process results in some difficulties (Business Climate Studies, 29-04-06). Diana (2005) states that the favourable economic position in Poland is thanks to the educational system in the country, which leads to that the country is producing a lot of engineering and technically oriented graduates so probably there will be more competent labour in the future.

Poland's favourable location is primarily due to that the automotive industry has a centre in southern of Poland (see appendix 1). Many original equipment manufacturers (OEMs) such as Fiat, GM Opel, Daewoo, Toyota, Peugeot, and the Volkswagen Group are situated in the country; Volvo and Scania also have production in the country. Some suppliers in the country are: Faurecia Investments, Valeo, Ispol-IMG Holdings B.V, Delphi, Autoliv and Trelleborg Automotive. More than 100 large companies are situated in the area and almost nothing that is produced in Poland stays in the country. It is a transit country. Also in Slovakia and the north of the Czech Republic automotive clusters are located and from Poland it is close to these clusters. Further, Poland is also situated near Sweden which is an advantage if the products are going back to Sweden (Daniel Larsson, Swedish Trade Council Warsaw). Larsson stated that the automotive cluster in Poland will keep its power of attraction during the next couple of years. He said that it is not realistic that the cluster should move further east since it is very costly to move. On the other hand, since 2002 the number of automotive enterprises operating in Poland has diminished by nine percent. The structure of the Polish automotive industry has also changed; the production of vehicles has decreased while the production of components, spare parts and accessories has increased (Paiz-invest in Poland, 22-04-06). Furthermore, according to Larsson the labour costs in Poland will probably not reach the level of the Western European countries in the next five years although they are increasing. As mentioned above, the automotive industry in Poland is large but in general Poland's largest industry is manufacturing of machinery but also the food processing industry is large (Daniel Larsson, Swedish Trade Council Warsaw).

Swedish businessmen are received very positively in Poland. Further, it is relatively easy to rent offices, industry domains, plants and warehouses but purchase of ditto may be problematic in some cases. The mail, telephone (including mobile) and Internet systems in Poland are pleasing. The infrastructure concerning transportation is satisfactory except for the road net (Business Climate Studies, 29-04-06). According to Larsson, much is done to improve the roads and the most important issue is to expand the modest motorway net. The responsible authority of building roads in Poland is Gddkia and one important part in the development of infrastructure is how it makes use of the aid from EU. The reason why it takes a long time to realise, for example motorways extensions, is among other things political oppositions; despite this, the politicians are arguing for a quick development of the infrastructure. However, the most important issues in Poland concerning development of the

road infrastructure are at first the security on the roads, second expansion of motorways, third constructing main arterial roads and fourth to build ring roads around the largest cities (Daniel Larsson, Swedish Trade Council Warsaw). Motorways to be completed in 2003-2013 are from Warsaw to Brest, from Krakow to Ukraine, from Łódź to Torun and from Czestochowa to the Czech Republic. Permits granted or projected are among others from Berlin to Warsaw, from Wrocław to Krakow. In total 1178 kilometres of highways will be completed before 2013 (Paiz-invest in Poland, 22-05-06).

It is easy to find competent personnel within sales, administration and manufacturing but it is challenging within management (Business Climate Studies, 29-04-06). Larsson also claimed that it may be hard to find competent labour in some areas. Another hard thing to complete in Poland is to receive information from other companies and it is even harder from authorities. The declaring process in the customs has improved considerably since the entrance in the EU and works relatively well today (Business Climate Studies, 29-04-06).

Concerning legislation, agreements are kept quite well. The legislation is relatively favourable for foreign investors and their business and frequent legislation changes seldom cause problems. Further, the profit tax is considered favourable in Poland and internal and international transactions work well (Business Climate Studies, 29-04-06).

Poland had a high unemployment rate in January 2006, 18.1 percent. The interest rates in Poland are very low and the inflation has remained low; the annual inflation rate was only 0.9 percent in January 2006. Poland is the only country of the new EU members that has not decided a date for transition to Euro; transition is expected in 2012 (Eastern European Outlook 2006, 24-03-06).

5.4 Romania

Romania with its 23 million inhabitants is one of the largest markets in CEE. The latest years have shown positive growth with approximately 5 percent a year. Thanks to economic and political stabilisation in the country, the trade climate has improved in recent years but it is still hard to establish business in the country. The uniform rate of income tax and company

tax introduced in 2005 is expected to stimulate growing investments in the future (Swedish Trade Council, 29-04-06).

Romania offers good profitability and very fine growth opportunities. Romanians have a positive attitude towards Swedish employers. The system of establishing companies is considered "normal" and the tax system is favourable to companies. The Romanian road net as well as the postal system is not very good but the flight traffic, Internet, mobile and fixed phone is working very well. Further, the declaring process in customs is complicated and unsatisfying. It is easy to find qualified labour but hard to find people within management (Business Climate Studies, 29-04-06). Concerning the roads in Romania, Bogdan Dacau consultant at the Swedish Trade Council in Bucharest, stated that the government wants to make many improvements; two motorway projects will start this year (2006). There will be noticeable improvements within five years and in ten years the improvements will be large. Further, there are also projects of improving the railways. According to Dacau, advantages of investing in Romania include the low labour cost as well as the qualified labour. There are also many subcontractors to the automotive industry in Romania and the tax is favourable.

The legislation in Romania does not offer any specific advantages to foreign investors. Constant changes in the legislation are causing problems for the majority of the Swedish companies in Romania. The ability of payment of Romanian firms is not satisfying and the interest rates are not attractive. Further, the inflation has a negative impact on the business. It is hard to get information about other companies and the authorities are not very willing to give information (Business Climate Studies, 29-04-06). Dacau added further disadvantages such as the high level of bureaucracy as well as the corruption, although it is declining. However, the agreements are kept relatively well and the profit tax is favourable (Business Climate Studies, 29-04-06). Additionally, in some regions in Romania it is possible to receive many investment advantages from the government; also investment subsidy from EU may be given (Bogdan Dacau, Swedish Trade Council Bucharest).

The automotive industry is Romania's largest industry. An automotive cluster is starting to grow in Transylvania, mostly around Pitesti (see appendix 1). Lisa Draxlmaier, Continental, Motupet, Ina Schäffler, Pirelli, Autoliv, Valeo Trelleborg and Delphi are some automotive companies in Romania. The most important development in the Romanian automotive

industry was the sale of the Romanian carmaker Dacia to Renault in 1999 (Bogdan Dacau, Swedish Trade Council Bucharest).

5.5 Slovakia

Slovakia is one of the fastest growing economies in Central Europe; the GDP growth rose to 7.6 percent at the end of 2005 (Eastern European Outlook 2006, 24-03-06). Slovakia is one of Europe's smallest countries; the population in 2005 was 5.4 million (Swedish Trade Council, 29-04-06). One advantage with Slovakia is the strong industrial base in the country. The automotive industry together with the pulp industry are the largest industries in the country. The new car plants PSA Peugeot Citroën and KIA Motors have been established and Volkswagen has upgraded its production. Other automotive companies established in Slovakia are Scania, SKF, Volvo, Valeo and Delphi. Slovakia is on its way to become one of the largest car producers per capita in the world and has a large automotive industry cluster (Eastern European Outlook Mars, 24-03-06). According to Emilia Bjerlestam, consultant at the Swedish Trade Council in Bratislava, Slovakia may be the world's largest car producer per capita already in year 2008. Much of this thanks to Slovakia's favourable geographical location; only 100 kilometres to Vienna, close to Prague and Budapest (see appendix 1). She also stated that the establishment of automotive companies in Slovakia will continue for at least another five years.

After some political arguments the political parties has agreed on an earlier parliament election in June 2006. A more populist government is expected to take over but the existing framework supporting the EU and EMU will remain (Eastern European Outlook Mars, 24-03-06).

The establishing process for companies in Slovakia is easy and Swedish employers think that they are received positively. Positive factors of investing in Slovakia include that it is uncomplicated to establish business in the country; leasing and purchasing property are easy. Moreover, infrastructures regarding flight communications, fixed and mobile telephone, postal system, Internet, roads and railways are in good conditions and they are even working with improvements of the infrastructure in the country. In addition, the supply of competent labour concerning product development, administration and manufacturing is good.

Furthermore, the process of declaring in customs is working satisfactorily and has improved since the EU- expansion and the product certification process is working well but there is a lack of experience (Business Climate Studies, 29-04-06).

Strong arguments for relocation of production to Slovakia are: the wage level, tax system, supply of qualified labour, the economic growth and the geographical location. This is also confirmed by Bjerlestam. Further, it is easy to find reliable business partners in Slovakia but the information from the authorities is insufficient. Corruption is no large problem for the business but the grey sector of the economy affects the profitability negatively. All of the companies in the investigation consider Slovakia as a profitable market and estimate the future growth opportunities as very good. Concerning legislation, the majority believes that reached agreements are kept. Slovakia is considered to have a favourable legislation for foreign investments; only one fifth thinks that frequent changes in the legislation have caused problems. It is hard to get information from other companies and it is hard to get information from the authorities (Business Climate Studies, 29-04-06). Bjerlestam also claimed that negative sides of investments in Slovakia are the deficient knowledge in English as well as the long time it takes to force through a decision. Although corruption exists it is no longer a major problem.

Regarding economy and financing the payment ability of Slovakian firms is satisfying. The function of the bank system is also satisfying. Moreover, the profits tax is very advantageous and the inflation/deflation does not affect the business (Business Climate Studies, 29-04-06).

5.6 The Czech Republic

The Czech Republic has a population of 10.2 million (2005) and is located with good access to established western and emerging eastern markets (fDi Magazine 07-05-06). The country has a strong industrial base and has received much FDI, especially in the automotive industry (Eastern European Outlook 2006, 24-03-06). The profitability is overall good in the Czech Republic and the market seems to have good possibilities in the future. The country has a favourable legislation for foreign investors and the ability for the Czech companies to pay their bills is good. The Czech Republic has favourable interest rates and the transactions, both internally and internationally, are working well (Business Climate Studies, 29-04-06).

The nation has a positive attitude towards Swedish companies and the infrastructure is satisfying but the railroads are not so pleasing. The motorway network is the largest in CEE and is planned to double in size by 2007 and several rail modernisations are in progress (fDi Magazine 07-05-06). Mail, aviation, Internet and telephony (including mobile) is working excellent. It is easy to buy and lease working space in the Czech Republic and it is rather easy to find competent labour (Business Climate Studies, 29-04-06). Jonas Granath, Trade Commissioner at the Swedish Trade Council in Prague agreed with the result of the business climate study and stated that the Czech Republic has a good infrastructure and favourable geographical location in the centre of Europe. Disadvantages of investing in the nation may be that the market is relatively small compared to for example Poland.

The market potential, geographical location, wage level and economic growth are major factors favouring the relocation of production to the Czech Republic (Business Climate Studies, 29-04-06). In addition, investors in the Czech Republic may benefit from a skilled productive workforce; a large number of students graduate in scientific and technical fields. Many MNCs such as Mercedes-Benz run R&D in the country. Companies established in the Czech Republic benefit from a range of incentives offered by the government (fDi Magazine 07-05-06). Further, the country has minimal corruption, which is an advantage compared to the other nations in the region (Business Climate Studies, 29-04-06). According to Granath an advantage for the Czech Republic is high quality due to its strong industrialisation. Further, the level of costs is low and there is a large amount of highly educated people. Many of the engineers have good knowledge in English and German. It is also possible to get investment incentives in some regions in terms of tax relieve, job creation grants as well as training and re-training grants (CzechInvest-Manufacturing, 22-05-06). However, according to the business climate study made by the Swedish Trade Council, the people in the Czech Republic has limited language skills which may cause problems when doing business, and it is rather difficult to get information from the Czech Republic authorities

The automotive industry is one of the largest industries in the country. The automotive clusters in the Czech Republic are situated in central Bohemia (Mlada, Boleslav and Kolin) and in North Moravia (Ostrava) (see appendix 1). Automotive companies in the country include, Volkswagen, Peugeot, Ford, Renault, Hyundai, Opel, Toyota, SKODA Auto AB,

Karosa AB, Daewoo Avia AB, Tatra AB and TPCA. The Swedish automotive companies are for example Scania CV AB, Volvo Car Corporation VCC, Volvo Global Trucks AB (Gabriela Krejci, Swedish Trade Council Prague)

Poland and the Czech Republic are ranked number one as top investment hot spot the next two years (2007 and 2008) in CEE. Russia and Romania share number three. This is based on a joint survey by UNCTAD in which 87 experts were asked.

5.7 Turkey

Turkey has a population of 70.7 million people (2005) and has a special location at the crossroads between east and west, spanning both Europe and Asia. The closeness to emerging markets in the Middle East and Central Asia creates unique business opportunities (fDi Magazine 07-05-06). The profitability in Turkey is relatively good compared to other markets and there are great possibilities for growth in the country. The legislation is advantageous for foreign companies, but the interest rate is considered as high. While the internal and the international transactions are working well, the Turkish companies' ability to pay the bills is low and the inflation may have a negative effect on the business (Business Climate Studies, 29-04-06).

It is relatively uncomplicated to establish business in Turkey and the Swedish firms are welcomed to do business in the country. It is also easy to buy and lease workplaces. However, the declaring process in the customs as well as the product certification process still needs to be improved. Moreover, the roads, railways and the postal system are in bad condition but the air, sea transport and the telephony (including mobile) as well as Internet are in good condition (Business Climate Studies, 29-04-06). According to Pinar Narter at the Swedish Trade Council in Turkey the country is adapting to EU regulations and there will be improvements every year in the infrastructure.

Arguments for relocating business to Turkey are, first of all, market potential, labour cost, access to qualified labour, economic growth and the geographical location. The supply of competent personnel is high and the language skills are good. Negative sides of investing in

Turkey may be the difficulties in contact with authorities and the high level of corruption which in turn may influence the business (Business Climate Studies, 29-04-06).

The automotive cluster in Turkey is located in the western part of the country (see appendix 1). It includes companies such as Ford, Honda, Hyundai, Mercedes Benz Truck, Toyota, Autoliv, Scania, SKF, Valeo, Volvo and Trelleborg (OSD, 22-05-06).

5.8 Ukraine

Ukraine has Europe's largest surface area (except for Russia) and had a population of more than 47 million people in 2005. (Swedish Trade Council, 29-04-06). The country is recovering slowly after the reversals in 2005. Growing consumption and more investments will be the key driving forces. The inflation however remains high (Eastern European Outlook 2006, 24-03-06). The profitability in Ukraine is good and a majority of the Swedish companies established in Ukraine believe that their business will grow in the future. The labour cost is an argument of why relocating production to Ukraine but it is hard to find competent management labour. Other arguments for relocating production to Ukraine are the economic growth, access to competent labour and geographical location; close to the Russian market. However, the most important factor is the market potential. Even if the majority thinks that the law in the country is not favourable for foreign investors, some firms do believe that the legislation is favourable for their activity (Business Climate Studies, 29-04-06).

The ability to pay debts in Ukraine is relatively good and the internal transactions are satisfying, but the international transactions are not working well. Most of the Swedish companies are not affected by the inflation, but some of the firms are affected negatively. Additionally, the interest rates are considered as bad, and the declaring process in customs as well as product certification process are difficult and create problem (Business Climate Studies, 29-04-06).

Even if the establishing process is almost non problematic and it is relatively easy to lease properties, is it difficult to buy properties. Also, it is hard to find reliable business partners and the language skills are not pleasing. Internet, mobile telephone, flight and railroad transports

are working satisfactorily while roads are pretty bad. Also, the mail and fixed telephone have to be improved (Business Climate Studies, 29-04-06). According to Tatiana Byrka at the Swedish Trade Council in Kiev, the telephony is working very well in the cities and there are large plans to build new roads because of the increasing FDI in the country. So far, the plans are only at negotiation level and as a consequence they will take more than five years to complete. Since Ukraine is a bureaucratic country, it may be hard to find information about other companies and from authorities. Also the corruption has a bad influence on the foreign investments (Business Climate Studies, 29-04-06).

The automotive industry is growing primary in the western Ukraine (see appendix 1). There are also many metal working companies in this region. Automotive companies in the country include Daewoo, Mercedes, Audi, Volkswagen, Volvo and SKF etc (Tatiana Byrka, Swedish Trade Council Kiev).

5.9 Summary of the CEE countries

Hungary

- + * Corporate tax is 16 percent (2005)
- * Infrastructures such as aviation, railways, postal system, Internet as well as fixed and mobile telephone are working well
- * The motorway system is new and of very good quality and further motorway improvements are planned in the country
- * It is easy to buy and lease properties; easy to establish business in the country
- * Access to qualified labour
- * The declaring process in customs has been improved due to the EU membership, but completely satisfying
- * There is a large automotive cluster in Győr (close to the Austrian border)
- * Large production of vehicles

- * The hourly labour cost is US\$ 3.80 (2003)
- * The roads are not completely satisfactory
- * Corruption and bureaucracy exist
- * Traditional industries are decreasing → further east

Poland

- + * The corporate tax is 19 percent (2005)
- * Favourable location and close to Sweden
- * The mail, telephone, Internet and transportations are working well
- * Several road improvements are in progress or planned
- * The declaring process in the customs has been improved since the entrance in EU

- * It is easy to rent properties
- * Large automotive cluster
- * Large production of vehicles

- * The hourly labour cost is US\$ 3.14 (2003)
- * The roads are not in the best condition
- * Problematic to purchase properties
- * It may be hard to find employees within management
- * The number of automotive companies have diminished since 2002

Romania

- + * The hourly labour cost is US\$ 0.80 (2003)
- * Corporate tax is 16 percent (2005)
- * Flat tax
- * Aviation, Internet, mobile are working well
- * The government wants to make many improvements of the roads and railways
- * Relatively easy to rent properties
- * Many subcontractors in the automotive industry are established in Romania and the automotive cluster in Transylvania is growing

- * The road net and the railways need to be improved
- * High level of bureaucracy and corruption
- * Problematic declaring process in the customs

Slovakia

- + * Hourly labour cost is US\$ 2.15 (2003)
- * The corporate tax is 19 percent
- * Flat tax
- * Strong industrial base
- * The automotive industry is one of the largest in the country
- * All kind of infrastructures are considered to be satisfactory
- * Future improvements of the infrastructures are planned
- * It is easy to rent and buy property
- * There is a large automotive cluster in northern Slovakia
- * Large production of vehicles

- * Corruption exists

The Czech Republic

- + * Mail, Internet and telephony working well and the motorway network is one of the largest in CEE
- * The road net is planned to double in size before 2007
- * Railway improvements are planned
- * Very easy to rent and purchase land and properties
- * There are automotive clusters in the country are located in central Bohemia as well as in North Moravia

- * Skilled production work force
- * The hourly labour cost is US\$ 3.39 (2003)
- * Railways are not satisfying

Turkey

- + * The hourly labour cost is US\$ 1.81 (2003)
- * Air, sea transport, fixed and mobile telephone as well as Internet are working well
- * In general, there will be improvements of the infrastructures since Turkey is adapting to the standard regulations in the EU
- * It is easy to rent and purchase properties
- * Automotive cluster in the northwest
- * The corporate tax is 30 percent (2005)
- * The roads, railways and postal systems are not satisfying
- * The declaring process in customs is problematic
- * High level of corruption

Ukraine

- + * Hourly labour cost is US\$ 0.66 (2003)
- * The corporate tax is 13 percent (2005)
- * Aviation, railways, Internet and mobile phone work satisfactorily and according to the Swedish Trade Council in Ukraine the fixed phone in the cities is working very well
- * It is easy to rent properties and land
- * Even if it is still at negotiation level, there are big plans to build new roads, because of the increasing FDI
- * The investments in the automotive industry are growing in western Ukraine
- * The road net is bad and postal service as well as fixed phone need to be improved
- * It is hard to buy properties and land
- * The declaring process in customs causes problems
- * High level of corruption and bureaucracy

For additional land indicators see appendix.

6 Automotive Industry

In this chapter, the companies as well as the answers of the interviews with the companies are presented. The studied companies in the dissertation include: Autoliv, Haldex, Nolato, SSAB Tunnpå and The Trelleborg Group.

6.1 Introduction

The automotive supplier industry is one of the largest industries in Sweden. There are about 1200 individual companies. About 50 percent of the companies are small business with a turnover of less than 2.1 million Euro. Autoliv, Nolato, Haldex, Trelleborg and SSAB are some of the largest and all of them have their headquarters in Sweden (Fordons Komponent Gruppen, 14-04-06).

The choice of moving to another country depends greatly on what kind of supplier the company is. For example, systems suppliers that deliver complete modules will enter foreign markets before component suppliers that may face stronger local competition and have fewer opportunities to differentiate themselves (Landmann *et al*, 2001). Suppliers in the automotive industry are interesting to investigate since most research has been concentrated at the producers. Further, many Swedish companies may be found among automotive suppliers. Several Tier 2 suppliers have changed from being suppliers directly to the producers, to deliver to system suppliers. The model below is a simplification; in the reality the same company may for example be both Tier 1 and 2. (Fahlström & Sanell, 2004)

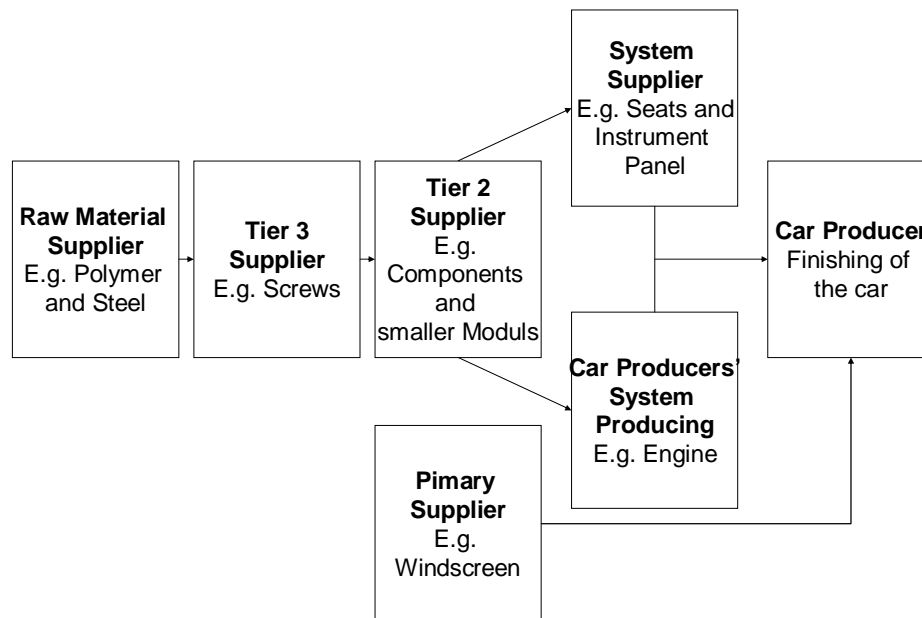


Figure 6.1 Automotive Suppliers

Source: Fahlström & Sanell, 2004, p. 9, modified

Autoliv, Haldex, Nolato, SSAB (SSAB Tunnlåt) and the Trelleborg Group (Trelleborg Automotive) are five of Sweden's largest automotive companies and these are the companies that were selected for the interviews.

6.2 Autoliv

Autoliv Inc was founded in 1997 as a merger of Autoliv AB of Sweden and Morton ASP (Automotive Safety Products). Already in 1947 Autoliv AB pioneered seatbelt technique while Morton ASP had been a leader in airbag development for a long time and 1980 launched the first airbag system (Autoliv, 03-05-06). Autoliv is the world's largest automotive safety supplier with sales to all the leading car manufactures in the world (Autoliv Annual Report, 2005). Autoliv is a Tier 1 supplier (Mattias Stenberg, Autoliv) and develops, markets and manufactures airbags, seatbelts, safety electronics, steering wheels, anti-whiplash systems seat components and child seats as well as night vision systems and other safety systems (Autoliv Annual Report, 2005).

Autoliv's manufacturing is highly automatic which leads to that it may have low-cost production in high-wage countries where the largest customers are located. In spite of this, Autoliv has during recent years moved and allocated production to low-wage countries due to its cost containment programme. Autoliv's strategy contains having production units where the major vehicle manufacturers have or are likely to set up production facilities. As a consequence, Autoliv has around 80 production facilities in 30 vehicle producing countries (Autoliv, 03-05-06). In Eastern Europe it has production units in Poland, Hungary, Romania, Estonia (for the Russian market) and Turkey. It also has sales office in the Czech Republic.

6.2.1 Answers from Autoliv

The main reason for relocating production to CEE is to decrease costs. Autoliv also wants to be a global company and be located near the customers. When relocating production to CEE, 90 percent of the establishments are green field.

The most important factors for Autoliv to consider when relocating production are the labour costs in the country as well as that the customers are located in the country. Infrastructure is also important. Finding competent labour is not a problem for Autoliv in CEE since it does not need so specific knowledge in the production process. Most people in CEE have upper secondary school education and more is not needed for the production. Therefore, the level of education in the country is not of crucial importance. Suppliers are not as important as customers when selecting country. Suppliers come as number two in the decision process; before moving production it is not common to have suppliers. Autoliv tries to find suppliers before moving but most suppliers are found when the company already is established in the country (Mattias Stenberg, Autoliv).

Autoliv will probably relocate even more production to CEE since it has a cost efficiency program. Mattias Stenberg, Corporate Communications/Investor Relations at Autoliv, could not tell us where Autoliv will relocate production in the future but at the moment it is moving production from Sweden and France to Romania as well as from England to Poland.

Concerning the different countries, Stenberg stated that in Poland Autoliv has 2000 employees and it is close to Germany (which is its second largest market) and the rest of Europe where the customers are located. The transportation costs in Poland are low due to the proximity but labour costs are rising. Autoliv has no market in Poland; it is mostly exporting to other countries. Romania has lower labour costs than Poland but on the other hand the transportation costs are higher since it is a larger distance from the customers, also it is more political instable. Hungary also becomes more expensive but Autoliv has customers located in Hungary. Turkey is growing fast and Autoliv has a large market in the country which is an advantage. Turkey is also striving to join the EU and it has a high level of education. However, it is far from the main market and therefore transportation costs are higher. Turkey is also becoming more like Europe and therefore the costs are also rising. Ukraine may be an alternative since the costs are lower than in the other CEE countries but it is much more complicated to establish business in Ukraine. Nevertheless, to Autoliv it is not so urgent since they serve the Russian market through Estonia (Mattias Stenberg, Autoliv).

Stenberg thought that the countries which are situated further east with the lowest costs are the countries that will be most attractive in five years. Rumania and Turkey are two hot candidates where costs still are low. Poland and the Czech Republic will probably soon reach the production costs in Western Europe and it will take more time for Ukraine to get attractive. Moving from CEE further east will also take longer time; the priority in the following years is to move from Western Europe to CEE.

6.3 Haldex

Haldex was established in 1985 by a consolidation of three Swedish suppliers in the automotive industry: Garphyttan, Haldex and Hessselman. Haldex is a Tier 1 and 2 supplier (Jan-Erik Dantoft, Haldex) and the company's core business today is the brake operations (Haldex Annual Report, 2005) "*Haldex is focusing on proprietary systems and components for on-road and off-road vehicles, aiming to improve safety, environment and driving characteristics (vehicle dynamics)*" (Haldex, 03-05-06). For example, it is delivering break systems to lorries and trailers, four-wheel drive to cars as well as hydraulics aggregates in general to the automotive industry (Jan-Erik Dantoft, Haldex). The Group is organised in four

divisions: Commercial Vehicle System, Hydraulic Systems, Garphyttan Wire and Traction Systems (Haldex Annual Report, 2005).

At the moment, the Group has 21 production units in Sweden, Germany, Great Britain, Hungary, USA; Mexico, Brazil, India and China. One part of its strategy is to improve the cost structure by increase production in low cost countries such as Hungary. Also lower the purchase costs by increase purchases from low cost countries (Haldex Annual Report, 2005).

Haldex has relocated production to CEE due to the increasing cost pressure in the automotive industry. Its major work is assembly, so it may decrease labour costs by relocating production to low-cost countries. Haldex has its own plant in Hungary and “preferred suppliers” in Slovenia and Poland. The production in Slovenia consists of an old relation so it was not a strategic decision to establish in Slovenia (Jan-Erik Dantoft, Haldex).

6.3.1 Answers from Haldex

When relocating production, Haldex is first of all searching for low labour costs; as number two, infrastructure such as roads and railways and quality of labour as number three. The contact person at Haldex, Jan-Erik Dantoft, Senior Vice President Operations, stated that when relocating production to CEE, the location of customers do not play a big part in the decision process. He also said that where the cluster is, there is also competent labour which has knowledge in the English language as well as in the automotive industry. He mentioned that even if its plant is in Hungary, it is as close to the customers as if it would have remained in Sweden. The customers are not in Eastern Europe, they are in the rest of Europe. This means that even if the transportation time is the same, it is more profitable to relocate production to Hungary.

After several years of experience of production in Hungary, Haldex has not experienced any political problem. Further, Dantoft claimed that while it is still cheap to have production in Hungary and Poland, the labour costs are rising in Slovenia; because it borders on Austria. So far, the increasing labour costs in Hungary have not affected Haldex's calculation, but the more the Hungarian employees have worked in the industry and the better they know English, the more the labour costs will increase. The competition is hard and foreign companies are

entering the country and take all competent and cheap labour. Dantoft said that international companies are pushing up the wage levels in Hungary. Further, he added that white collar is relatively expensive in these countries.

Haldex has no plans of further relocation of production to new destinations. It is more possible that it will expand the existing business in Poland, Hungary and Slovenia. As attractive markets in the future, Dantoft mentioned Poland and Hungary. These countries already have established industries, which is an advantage. Although, there is a risk that these countries will develop in a rapid pace and the labour costs will end up at the same level as in Western Europe. Dantoft said that he has no special opinion about the Czech Republic and Slovakia, but he assumed that they are like Poland and Hungary ten years ago. The Czech Republic and Slovakia have developed industries and Dantoft thought that these countries will grow stronger in the future. As the most attractive countries, he mentioned Romania, Ukraine and Turkey since they are located further away from the Western Europe and the labour costs will be even lower. According to Dantoft, Ukraine is seen as the “new country” and it is possible that it will be a major target in five years. Ukraine has a large market and several companies have already started moving to the country. Further, it is close to Russia which has a large market.

6.4 Nolato

Nolato was founded in 1938 when Nordiska Latex-fabriken in Torekov in Sweden was started. In 1982 the group changed its name to Nolato; a shortening of the previous name (Nolato, 09-05-06). The group has four business areas: Nolato Telecom, Nolato Industrial Sweden, Nolato Industrial Central Europe and Nolato Medical. The automotive business is included in Nolato Industrial Sweden and Central Europe. *“Nolato is a high-tech developer and manufacturer of polymer components and product system for leading customers in telecommunications, automotive products, white goods, medical technology and other selected industrial segments”* (Nolato, 09-05-06). Nolato is a Tier 2 supplier and produces mostly engine details and interior details to the automotive industry (Gert Larsson, Nolato). The customers of Nolato Industrial Sweden and Nolato Industrial Central Europe include companies such as Haldex, Saab Automobile, TI Automotive, Volvo Car, Volvo Truck and

Solectron. The automotive part of Nolato has flexible resources of producing where it is best for the customers and it has customer-tailored project teams (Nolato, 09-05-06).

In CEE, Nolato has production in western Hungary. Nolato bought the plant in Hungary in 2000 and has taken over the orders from the purchased company. By then the plant was directed at home electronics but Nolato has totally changed the strategy and the plant is now focusing the production on industry; mainly automotive and medical (Gert Larsson, Nolato).

6.4.1 Answers from Nolato

Gert Larsson, Director of Sales and Projects at Nolato Central Europe, claimed that having production in Hungary is working well and he has not experienced any corruption. The automotive industry in Hungary is growing and has a favourable location since Nolato has its plant in the western part of the country; close to Germany and Austria as well as the cluster in Slovakia/the Czech Republic. To be located in eastern Hungary is not very advantageous since it is far from the customers. According to Larsson, the problem of having production in Hungary is that the resources of specialisation on technology competence are limited. The consequence of that is that it may be hard to recruit.

According to Larsson, important factors when relocating production are the labour costs and the costs in general. Being close to the customers is also important for Nolato. Additionally, cluster is an important factor when dealing with qualified labour. The competition is hard and people are moving between the industries. However, being close to suppliers is not so important since they are global and have distribution centres in different locations in the region.

Larsson said that there are discussions within the company of where it is most optional to serve the customers; the customers are in major position to decide where to locate. Further on, he added that Nolato will not relocate any further production, only expand the activity in Hungary. If the customers would demand that Nolato has to move closer to them, it will follow their directions. Larsson explained that Nolato will always have some production in Sweden but it could relocate production of parts of the units to the customers.

Concerning advantages and disadvantages of relocating production to the different countries Larsson expressed that Poland, the Czech Republic and Hungary are developed countries and far ahead. These countries were interesting countries for investments already in the late 80s/early 90s. The level of education and the access to engineers are high but these countries also have higher costs and labour costs and there are not many new investors in the countries. He stated that today's "winners" are Slovakia and Romania; more incentives from the government like investment subsidies and tax relieves have been implemented in these countries. Larsson clarified that it is possible to get up to 50 percent subsidy to building plants and the company tax is low. They have flat tax which is the same no matter what is earned. Larsson had no opinion about Turkey, but he said that Ukraine is very far behind and insecure. Some companies have relocated business in the country but it is still risky and unstable. However, he stated that the level of labour costs in the countryside in Ukraine is the same as in China. Larsson believed that Romania will be the first country in the region that will grow to the same level as Poland and Czech Republic, but some production in the automotive industry will remain in these countries because of the logistics. He explained that it is not easy to relocate something you have built up. Larsson also believed that Ukraine will be an attractive country for relocating production in the future, but that it will take more than five years.

Larsson also presented Nolato's viewpoint concerning the Czech Republic, Slovakia, Poland and Hungary. Of those who are 25 to 64 years old and have at least studied upper secondary school, the Czech Republic is in top. 88 percent of the Czech population, 86 percent of the Slovakian and 72 percent of the Hungarian have upper secondary school education; to compare with, only 83 percent in Germany and 64 percent in France. The development of the wages in the countries between 1996 and 2005 show that the wages in the Czech Republic and Hungary have increased much more than the other countries. The Czech Republic has gone from the second lowest wages to the highest. Poland has the third highest wages and Slovakia the lowest. Poland also has the highest level of corruption and Hungary the lowest. Since 2002 the level of corruption has decreased in all the countries, but in Poland it has increased. The standard of living is the highest in the Czech Republic followed by Hungary and Slovakia. Poland has the lowest standard of living.

6.5 SSAB Tunnpåt

SSAB Tunnpåt was founded in 1978 by a consolidation of Domnarvets Järnverk in Borlänge, Oxelösunds Järnverk and Norrbottens Järnverk in Luleå (SSAB Annual Report, 2005). SSAB Tunnpåt is a raw material supplier of sheet steel through subcontractors (Torsten Wångmar, SSAB Tunnpåt). SSAB Tunnpåt is a subsidiary of the SSAB Group which is the largest steel sheet manufacturer in Scandinavia as well as one of Europe's leaders in development and manufacturing of high-strength steel grades. High strength steels are used by leading automotive manufactures such as Volvo, Saab, Ford, Fiat, Jaguar and the Volkswagen Group. Production takes place in Sweden; in Luleå and Borlänge. It also has sales offices in Poland and the Czech Republic which also include Slovakia Austria and Hungary (SSAB Annual Report, 2005).

6.5.1 Answers from SSAB Tunnpåt

The company's representative, Torsten Wångmar, Geographical Sales Manager- Heavy Transport, said that the company has not relocated production to CEE because huge amount of capital that is needed in order to move its production facilities; instead it is delivering to its subcontractors in Europe, wherever they are located. As mentioned above, SSAB Tunnpåt has sales offices in Poland and the Czech Republic (office for Slovakia, Austria and Hungary). According to Wångmar, the business is working very well in these countries; the people are skilled. SSAB Tunnpåt has no existing plans of relocating its production to CEE and Wångmar said that they leave the production to the customers and they are the ones that are moving eastwards

When moving business to CEE, the most important factor to consider is the closeness to the customers. Wångmar said that SSAB Tunnpåt is following the customers because of the market. He continued saying that there are no larger risks in those countries where SSAB Tunnpåt is located; it is more risky further east. SSAB Tunnpåt decided to move to these countries since this is where its customers are located and it shall be practical to relocate the business. Wångmar stated that the company is like "herd animals"; if a new market pops up, the company moves there. Important criteria include that there must be an existing market in the country.

When Wångmar discussed the advantages and disadvantages of the countries, he mentioned that the Czech Republic and Poland have advantages since they are close to the market. However, every country has its own disadvantages since the culture is different in the countries. He has not experienced any corruption, and he said that it was more obvious ten years ago. He added that corruption is affecting the customers more. Further, Wångmar said that he does not see any problems in having business in these countries and sometimes the media is responsible for the negative biases of these countries. He said that the people in CEE have a more positive approach towards working; they are well educated and have a straight approach.

Wångmar thought it was hard to predict the most attractive country regarding relocation of production in five years but he thought that the Czech Republic, Slovakia and Hungary are possible frontrunners. There is also an increasing interest in Romania, Turkey and Russia. He thought that Romania is getting stronger as an attractive market while Turkey is interesting due to its high active economy and that many new foreign investors are entering the market. There is great competitiveness between the countries, for example between the Czech Republic and Slovakia which share a big automotive cluster (eastern Czech Republic/western Slovakia). However, Wångmar continued arguing that one has to be aware of the infrastructure and the favourable tax system between the countries.

6.6 Trelleborg Automotive

Trelleborg was founded in 1905 and is now a global industrial group. Trelleborg Automotive is the largest of five business areas of the Trelleborg Group. *“Trelleborg Automotive is a world leader in the development and manufacture of polymer-based components and systems used for noise and vibrations damping for passenger car, light and heavy truck, rail, marine and industrial applications”* (The Trelleborg Group Annual report 2005, p. 14).

Trelleborg automotive is divided in two segments: Antivibration Systems and Fluid and Acoustic Solutions. Key customers are DaimlerChrysler, Ford, General Motors, Renault, Nissan, the Volkswagen Group and also Tier 1 manufactures such as GKN. Among its strategic priorities lies a global cost-management program and continued efforts to increase presence in emerging markets. Production units in CEE are located in the Czech Republic,

Poland, Slovakia and Turkey. In 2005 a decision was made to also establish production in Romania with production scheduled to start at the end of 2006 (The Trelleborg Group Annual Report, 2005).

6.6.1 Answers from the Trelleborg Group

The primary reason for relocating production to CEE is to decrease the costs. There is also an interest to be close to the customers, which in turn leads to lower costs. Dan Eisengarten, Business Development, said that the interest in being close to the customers might decrease since the EU becomes a more homogenous market; consequently, the customers care less of where the product is produced and more of the costs. In addition, to have a good cooperation with the customers it is not necessary to move the production to where the customers are located. Technical centres may be used for this reason. de Tavernier and Eisengarten stated that even if a company moves to a country where it does not have customers, new customers may be found. Although, it is advantageous to move where the customers are located since then the company already has a network for further business. The Trelleborg Group has technical centres in France and Germany where it cooperates with the customers. Eisengarten and Stéphane de Tavernier, Business Development, explained that when relocating production, important factors to consider are the labour costs, infrastructure (roads, railroads, customs etc) and level of education as well as qualified people in the country.

Trelleborg Automotive has mostly built its own plants (green field), but in Slovakia it purchased a plant it already was joint owner in. Trelleborg Automotive purchases metal components from different suppliers as well as natural rubber and synthetic rubber, which is transported to its plants. Concerning advantages and disadvantages of the countries, they claimed that an advantage of Romania is the very low labour cost. The disadvantages are that the process of starting up business in the country takes a long time and it may be hard to make it all work; the structure in the country is not very organised. Another problem in moving production to Romania may be the corruption and they said that they have also experienced cartels. Regarding Poland they stated, that it has a high level of education and is a large and developed country, but there are some underdeveloped sectors in the country. One disadvantage of investing in Poland is that lately the exchange rate in the nation has increased which has led to higher expenses. Advantages of Slovakia are that the wages are low and that

the country has flat tax. Further, it is easy to find ambitious people, but the structure in Slovakia is undeveloped. They said that the Czech Republic is something in between Poland and Slovakia. Turkey has an automotive cluster in the western part of the country and in this part, it is possible to find many business relations as well as good competence. However, Turkey has a disadvantageous geographic location; far away from the European market. Furthermore, some parts of Turkey are underdeveloped.

Eisengarten and de Tavernier believed that attractive countries for future relocation of production are Poland and the Czech Republic, while Slovakia is a “wild card”. Other interesting nations are Romania and Ukraine. Further, they said that Turkey is a strong country since it has a large automotive cluster and has a background of industry and production as well as the NATO membership and the fact that it is striving to become an EU member. They believed that Poland and Turkey will be the most attractive nations in five years concerning relocation of production. This because Poland has a good structure and is more westernised than the other countries in the region as well as it could be a “bridge” to the market in Belarus and that Turkey has a good economy.

6.7 Summary of the Interviews

6.7.1 Most important factors

The most important factor to consider in regards to further relocation of production to CEE was labour cost for all of the interviewed companies except for SSAB Tunplåt. This may be because SSAB has not relocated any production to CEE. It only has offices in CEE to serve the customers. Therefore, the most important factor for SSAB is where the customers are located. Infrastructure was also important to all companies. With high quality infrastructure, costs may be saved since time is money. The cluster of related and supporting industries including customers and suppliers was also important to all of the companies. If the country has a well developed automotive cluster it is also easy to find competent labour which is important to the majority of the companies. Nevertheless, it is not so important to Autoliv since it is not a problem in CEE to find competent labour according to the interviewee.

6.7.2 Opinions about the countries

Hungary

- +
 - * Business is working well
 - * Automotive is a major industry and it is growing
 - * Western Hungary has a favourable geographical location
 - * Corruption is not affecting
 - * Developed country and were an attractive investment country already in late 80's
 - * High level of education
 - * No political risks
 - * Still cheap to produce in the country and so far, the increasing wages have not affected calculations

- - * The costs are increasing
 - * It may be hard to recruit due to the lack of technical knowledge
 - * Not many new investors
 - * Competition is hard regarding competent labour

Poland

- +
 - * Developed country and were an attractive investment country already in late 80's
 - * High level of education
 - * Favourable geographical location which in turn decrease the transportation costs
 - * It is still cheap to produce in Poland
 - * No political risks

- - * Higher costs
 - * Wages are rising
 - * Not many new investors

Romania

- +
 - * A very cheap country to produce in
 - * Low labour costs
 - * Cheap land
 - * Changed procedures in customs
 - * Industrial tradition
 - * Tax relieves
 - * Investment subsidy

- - * Politically instable
 - * Lack of structure in the country
 - * Procedure of starting a business takes long time

Slovakia

- +
 - * Tax relieves
 - * Investment subsidy
 - * Low labour cost

- * Ambitious people
 - * High competition between Slovakia and the Czech Republic
 - * Strong automotive cluster in western Slovakia
-
- * “Wild card” in the future

The Czech Republic

- +
 - * Developed country and were an attractive investment country already in late 80's
 - * High level of education
 - * High competition between the Czech Republic and Slovakia
 - * Favourable location
 - * Large automotive cluster
 - * Traditional industry
-
- * Higher costs
 - * Not many new investors

Turkey

- +
 - * Has a market and a growing cluster in the west
 - * High level of education
 - * Good competence and business relations in the automotive cluster
-
- * Costs are rising
 - * Higher transportation costs because of its larger distance to Western Europe

Ukraine

- +
 - * Very low labour cost
-
- * Very risky country
 - * Hard to establish business in Ukraine

Company	Most attractive country in five years
Autoliv	Romania and Turkey. Ukraine, but in a more distant future
Hallex	Romania, Turkey, Ukraine
Nolato	Romania. Ukraine, but in a more distant future
SSAB	Czech Republic, Slovakia , Hungary, Romania, Turkey
Trelleborg	Poland and Turkey

Table 6.1 Most attractive country in five years

7 Analysis

The analysis starts with describing the modified analytical model; how and why it was created. The model was used when analysing the seven countries represented in the study. Finally, the most attractive countries for further relocation of production in 2011 are presented.

7.1 Modified Analytical Model

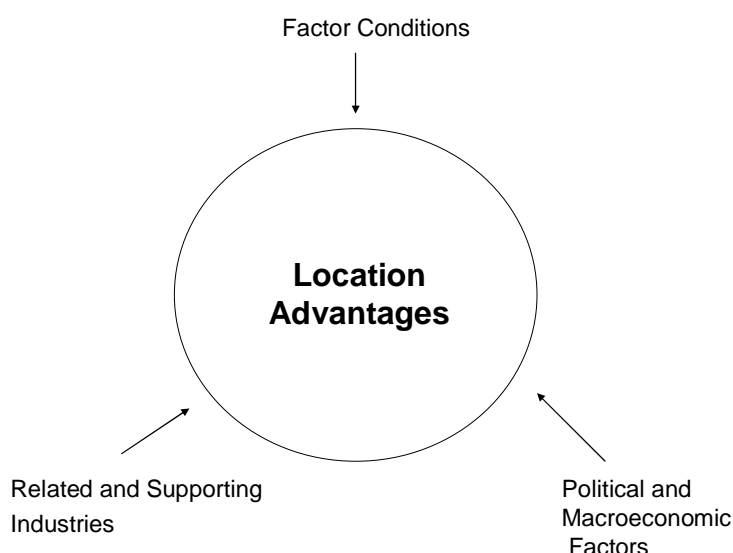


Figure 7.1 Analytical Model

After reading the literature, talking to experts at the Swedish Trade Council in the different countries and Fordonskomponentgruppen as well as representatives from the automotive companies we could conclude that the factors in the analytical model were relevant. However, we could discern some factors of more importance to companies in regards to further relocation of production to CEE in order to obtain cost efficiency. These were labour costs, infrastructure and the extent of automotive cluster in the country. Labour costs and costs in general were the most important factors to all companies except for SSAB. All companies stated that it is important to consider the infrastructure in the country before moving.

Concerning automotive cluster, all companies stated that it is important; if there is an automotive cluster there is greater knowledge of the industry and competent labour as well as many important related and supporting firms are established. To some of the companies the customers were very important when deciding where to locate while to others the suppliers were more important. We have decided to include both customers and suppliers in the automotive cluster factor since they are related to the company. In that way, the companies which are using our model may concentrate on the most important element (included in the automotive cluster factor) to them; for example if the customers are very important to them when relocating production they should focus on mapping out the automotive cluster in each country concentrating on where the customers are established.

Since the three factors (labour costs, infrastructure and automotive cluster) were prominent, a decision to modify the first analytical model was made. Out of factor conditions, labour costs and infrastructure were selected and the factor of related and supporting industries was renamed to automotive cluster and included customers as well. Political and macroeconomic factors are also included in the model since they affect the three factors. For example, tax affects the labour costs and decisions by the government of building roads affect the infrastructure. Further, location advantages were renamed to country advantages since the advantages in the different countries and not specific locations were analysed. As illustrated in the first analytical model there are more factors than these three that affect country advantages but these are the most important. Therefore, in the further analysis we will look at these three factors at first and then also the political and macroeconomic factors. It should also be mentioned that Dunning's location advantages are just a base of our definition of country advantages. We have included the most important factors that constitute country advantages in this specific situation which are: labour cost, infrastructure and automotive cluster.

To be able to use the model in a future perspective, the future conditions of the three factors have to be considered. This means that when analysing the different countries, the future development of infrastructure and labour cost was considered. Likewise, the future development of the automotive cluster in each country was taken in consideration; for example if it would remain attractive, if there was a trend towards firms leaving the cluster or if more investors were expected.

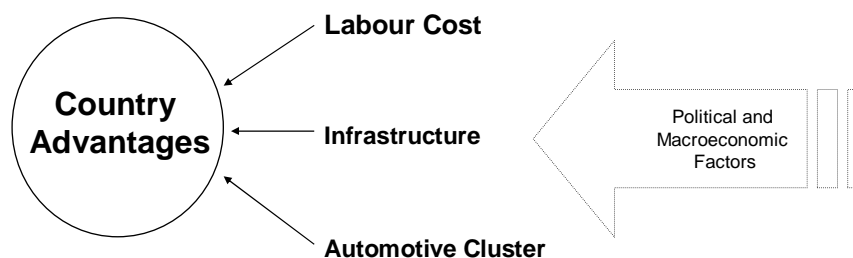


Figure 7.2 Modified Analytical Model

Labour Cost consists of the average hourly labour cost for each country which may be found in the table in chapter 5. Since the labour cost is the most important factor according to the companies, this factor is a bit larger than the other in the model. This leads to that when analysing the countries, there will be more focus on the labour cost.

Labour cost in 2011: To be able to estimate the labour costs in 2011 we have compared the opinions of the experts and the companies as well as from secondary data of the countries. Factors that have played a crucial part in our judgement are EU membership and the level of development of the country.

Infrastructure contains everything from roads, railways and flights to access to Internet, fixed telephone, mobile phone and postal service. In addition, factors such as geographical location and declaring process in customs are included. The time it takes to realise business is also included in infrastructure. It may be affected by political factors such as bureaucracy and corruption. If the country has high bureaucracy and a more complicated system it takes longer time to start up and run the business.

Infrastructure in 2011: In evaluating the infrastructure in 2011 we have collected facts concerning infrastructure improvements and to what extent they will be fulfilled within five years. We have concentrated on the parts of infrastructure that are not satisfying in the country today and if improvements will be shown within five years.

The *Automotive Cluster* includes the related and supporting industries as well as suppliers, subcontractors and customers; this is the network of the company which forms the cluster. However, not all the related and supporting industries in each country are considered in the research because of the time limit. A large automotive cluster also indicates that there are many qualified people in the area that know the business, this is why level of education is included in the cluster factor in the model.

Automotive Cluster in 2011: To be able to estimate the automotive clusters in 2011 in the countries we have looked at if there are tendencies of the automotive cluster to grow stronger in the next five years or if there are tendencies of companies leaving the cluster.

7.2 Analysis of the Countries

To compare the advantages and disadvantages of the countries in the research, the modified analytical model has been used. The model has helped out in structuring the analysis of country advantages.

Hungary

- **Labour Cost:** US\$ 3.80 (the highest of all the countries in the research)
Labour Cost in 2011: The labour cost in Hungary is already high and will increase even more in 2011. Many international companies are pushing up the wage levels in the country. It is one of the first countries in CEE that will reach the labour costs of Western Europe.
- **Infrastructure:** All factors included in infrastructure are satisfying, except for the road net and the declaring process in customs. The declaring process in customs is improving, but it is still not pleasing. Bureaucracy is affecting many companies in the

country according to the survey made by the Swedish Trade Council. However, none of the interviewed companies have mentioned that bureaucracy is a problem.

Infrastructure in 2011: Improvements are planned concerning the roads and many of them within five years. The declaring process in customs will probably also improve as the country adapt to the EU membership.

- **Automotive Cluster:** There is a large cluster in western Hungary. It is one of the countries which have the largest production of vehicles in CEE and it has a mature industry. Further, it has a high level of tertiary education according to the table in appendix. However, it may be hard to find labour with technology competence due to the fact that it is hard competition between the foreign companies established in Hungary.

Automotive cluster in 2011: There is a tendency towards traditional industries such as automotive industry moving further east and IT and telecom have become larger industries in the country.

There is a large automotive cluster in Hungary but as mentioned above, traditional industries are moving further east and are in turn replaced by high tech industries and telecom. This might be because of the high labour cost compared to the rest of the region. We see this as a disadvantage for future investments in the automotive industry since one of the factors in the analytical model is the automotive cluster; if an increasing number automotive companies are leaving the country, the cluster will decrease. The high labour cost is also a disadvantage. Autoliv and Haldex emphasised the raising labour cost in Hungary, but so far it have not affected Haldex's calculation, nevertheless it might do so in the future.

Because of the high labour cost and decreasing automotive cluster, we do not believe that Hungary will be one of the most attractive countries in CEE regarding future investments in the automotive industry. The labour costs in Hungary will probably increase even more and since one have to look more than five years ahead when investing, we believe that there are other countries in the region that will be more attractive. Therefore, we have not chosen Hungary to be included in the further analysis.

Poland

- **Labour Cost:** US\$ 3.14

Labour cost in 2011: The labour cost in Poland is already high compared to many other countries in CEE and will increase even more. It is one of the first countries in CEE that will reach the labour costs of Western Europe.

- **Infrastructure:** Close to the Western European market. All kind of infrastructure except for the road net is satisfying. The declaring process in customs works relatively well. According to the survey made by the Swedish Trade Council the corruption may affect the business and according to Gert Larsson, the corruption has increased since year 2002.

Infrastructure in 2011: Many improvements concerning motorways will be made before 2013. The corruption will probably decrease as the country becomes more westernised.

- **Automotive Cluster:** There is a large automotive cluster in southern Poland with many automotive companies. Therefore, much labour with knowledge in the industry may be found. The level of education is high according to the table in appendix; Poland has the highest percentage of secondary level and the next highest percentage of tertiary level.

Automotive Cluster in 2011: The number of automotive companies operating in the country has diminished by nine percent since 2002. This indicates that the cluster will not increase. Because of the high level of education there will be even more competent labour within five years.

Poland has one of the largest automotive clusters in CEE but we might see a future equalisation in labour costs between Poland and Western Europe. This is a disadvantage since one purpose of this research was to answer the question of which country that would be most attractive in five years time. One has to consider the investment in a long-term perspective and not just five years. Experts disagree on when this equalisation will occur, but they all agree that Poland is one of the first countries in CEE to reach the same level of labour cost as in Western Europe. Since 2002, the number of automotive companies has decreased by nine

percent in the country, but at the same time, companies that are established in the country have plans of further large investments in Poland. As mentioned above, the country will probably keep its power of attraction in five years and it will take more than five years before the labour cost are equal to the Western Europe. Even if the labour costs are rising in the country, the transportation costs are relatively low since Poland has a favourable geographical location; close to the market in Western Europe and Sweden. All kind of infrastructure is satisfying except for the road net. Many improvements of the motorways are planned and 1178 kilometres of motorways will be completed before 2013. However, improving the roads is a slow process due to the political oppositions in the country.

Poland's economical development is moving in rapid pace and the infrastructure is improving and in comparison with Hungary, we believe that Poland will be more attractive thanks to its lower labour costs and larger cluster as well as geographical location. In spite of this, we believe that Poland might become too expensive for future investments. This because one has to look more than five years ahead for an investment and we believe that there are other countries in the region that will be more attractive in terms of cost saving in 2011.

Romania

- **Labour Cost:** US\$ 0.80 (second lowest labour cost in the region and it differs as much as a dollar to the third lowest; Turkey)

Labour Cost in 2011: Due to the fact that Romania will enter the EU in 2007 the labour cost will probably rise a bit but it will still be low compared to other countries in CEE.

- **Infrastructure:** The roads, railways and postal system need to be more developed and improvements are under progress. Declaring process in customs is causing problems. The bureaucracy is high and the corruption is declining.

Infrastructure in 2011: Many projects of improving the motorways are planned; two of them will start this year. There will be noticeable improvements within five years and in ten years the improvements will be large. There are also projects of improving the railways. The declaring process in customs will probably improve when the country joins the EU; likewise the level of corruption.

- **Automotive Cluster:** There is an automotive cluster in Transylvania which is not the best location when serving the European market. Many subcontractors to the automotive industry are located in Romania. According to the table in appendix, the level of education is rather low compared to the rest of the investigated countries.

Automotive cluster in 2011: There is a trend of automotive companies entering the Romanian market so the cluster will increase in five years.

Romania has the lowest labour cost per hour (US\$ 0.80) except for Ukraine, but the transportation costs may be higher because of the longer distance to the market. Romania has a high level of bureaucracy as well as corruption in the country; although, the corruption is declining. Trelleborg Automotive has even experienced some cartels in the country. This might be due to the fact that Romania is not an EU member. Romania will become a member in 2007 and this might result in that the nation has to improve infrastructure and related factors to keep up with the EU standardisation. When talking to the Swedish Trade Council in the countries that joined the EU in 2004, they stated that many improvements in bureaucracy, corruption as well as declaring process in the customs have been made. We believe that this will happen to Romania as well since the Romanians might feel pressured by the union to make improvements. According to a survey by UNCTAD, Romania is ranked number three in the table of top investment hot spots the next two years (2007 and 2008) in CEE. This survey was not done specifically for the automotive industry and not only for efficiency seeking FDI. However, it is a good sign for Romania since it is ranked high although it is not just out of efficiency seeking FDI. The roads are the only infrastructure that really needs improvement, but as mentioned above, there are governmental projects to improve the roads and the railways in the country, some of them are already in progress. Improvements may be seen within five years, but even more improvements will be seen within ten years.

Romania is getting stronger as an attractive market and it is one of the countries that the interviewed companies believed would be the most attractive nation in five years. We also believe that Romania has potential to become an attractive market in the nearest future, and even if it might not look like one today it has the strength and wish to become the new hot spot for investors; just as the UNCTAD survey declares. The labour cost is the most important factor in the modified research model and since Romania has such low labour costs we have

chosen to further analyse this country. However, we are aware of that the labour cost may increase when joining the EU, but since it is so much lower than the other countries in the research we do not believe that Romania's labour cost will increase that much and consequently the country will still be an attractive market compared to the other countries.

Slovakia

- **Labour Cost:** US\$ 2.15

Labour cost in 2011: Like in all the other countries, the labour costs in Slovakia will increase in five years. Due to that it is closer to the Western Europe than for example Romania and Ukraine the labour cost will probably reach the western level before these countries.

- **Infrastructure:** All infrastructure is pleasing and there are further improvements in progress. The geographical location is favourable since it is close to the major clusters in the Czech Republic and Poland. Additionally, it is close to the market in southern Germany and Austria. The corruption is low but it may take long time to force through decisions.
- **Infrastructure in 2011:** All infrastructure is pleasing and there are further improvements in progress.
- **Automotive Cluster:** There is a large automotive cluster in northern Slovakia. The level of education is rather low compared to the rest of the region when looking at the table in appendix.

Automotive Cluster in 2011: In 2008, Slovakia will be the world's largest car producer per capita. This indicates that the cluster will remain and even expand in five years. Many automotive companies are establishing production units in the country and Bjerlestam stated that this development will continue for five years.

Slovakia's labour cost per hour is US\$ 2.15, which may be seen as an advantage compared to those countries that have the same quality of infrastructure and cluster as Slovakia. The corruption is not a large problem for making business in the country, but the grey sector may cause problems. Slovakia has one of the regions fastest growing economies and the

automotive industry is developed; the nation is expected to be the world's largest car producer in per capita in 2008. This may be seen as a huge advantage since Slovakia will have even more experience of the automotive industry at the same time as the cluster may grow. Many automotive companies have relocated their production to the country and according to Bjerlestam this development will continue for at least another five years.

We believe that Slovakia has a great opportunity to become an attractive market in the nearest future. The labour cost is lower than in Hungary, Poland and Czech Republic. It already has an automotive cluster and it may be the largest car producer in the world within a few years. Also, Slovakia has a favourable geographical location and the infrastructure in good. Out of these reasons we chose Slovakia to be a part of the further analysis.

The Czech Republic

- **Labour Cost:** US\$ 3.39 (the next highest of the countries in the research)
Labour Cost in 2011: The labour costs will probably increase even more and the Czech Republic is one of the countries that will be first to reach the Western European level of labour costs.
- **Infrastructure:** The Czech Republic is a more developed country than many other nations in CEE. Infrastructure is excellent but the railroads need improvements. The motorway network is the largest in CEE. The country has a favourable location in the centre of Europe. Moreover, the country has minimal corruption.
Infrastructure in 2011: The motorway network is the largest in CEE and is planned to double in size in 2007 and several rail modernisations are in progress.
- **Automotive Cluster:** There is a large amount of educated people in the country and there are many students that have graduated in scientific and technical fields. According to the table in appendix, the education level is rather high but not as high as in Poland and Hungary. The country has a strong and developed industry and the automotive industry is the largest industry in the country. Clusters may be found in central Bohemia and North Moravia.

Automotive Cluster in 2011: We have not seen any indications of that the Czech automotive cluster will increase or decrease in five years.

The Czech Republic has one of the highest labour costs in the region, but like Poland, the Czech Republic has a large automotive cluster and a tradition in the industry. Also, the Czech Republic has one of the largest motorway networks in CEE and it is planned to double in size before 2007. The railway system is not satisfying, but the government has plans for improvements. Its geographical location is a huge advantage to reach customers in Germany and in the rest of Western Europe and it is together with Poland ranked as number one as top investment hot spot (not only automotive industry and efficiency seeking FDI) the next two years (2007 and 2008) in the CEE.

The reason for not choosing the Czech Republic in the further analysis is the high labour cost, even if the infrastructure is very good and the cluster is large as well as well developed. Since it is a well developed country compared to the other countries in CEE we believe it will be one of the first countries in CEE to reach the production costs of Western Europe. In five years it will probably still be attractive but the question is for how long; additionally we believe that other countries will be more attractive in five years.

Turkey

- **Labour Cost:** US\$ 1.81

Labour Cost in 2011: The labour costs will increase due to that the company is becoming more like Western Europe and if it joins the EU the labour cost will probably increase even more.

- **Infrastructure:** Turkey has a good geographical location spanning both Europe and Asia, but not so favourable location to serve the European market. The infrastructure is in good condition, but the roads and the postal system have to be improved. The declaring process in customs also needs to be improved. There is a high level of corruption in the country and it may be hard to get information from the authorities.

Infrastructure in 2011: Since the country wants to become a member of the EU, there will be improvements every year in the infrastructure.

- **Automotive Cluster:** Turkey has its own market in the automotive industry and there is a cluster in the western part of the country. Many foreign companies are entering the market and the nation has a good background of industry and production. However, there is a low level of education which may be seen in the table in appendix. On the other hand, companies that have production in the country emphasise the good English knowledge and the industry tradition in the country.

Automotive Cluster in 2011: Since most of the companies in our research thought that Turkey will be attractive for relocation of production in five years we believe that more automotive companies will establish in the country and make the cluster grow.

Turkey has a large automotive market in the country. On the other hand, the transportation costs may be higher to the customers in Western Europe; but Turkey may serve the Middle East and Central Asia instead. Since Turkey has low labour costs, a strong industrial history and people have good knowledge of the business as well as good language knowledge we believe that Turkey may be one of the most attractive countries for relocation of production in five years. Further, Turkey is striving to become a member of the EU and due to that it will probably improve the investment climate in the country. In addition, Turkey was considered to be one of the most favourable countries for relocation of production in five years. This is why we have chosen Turkey for further analysis.

Ukraine

- **Labour Cost:** US\$0.66 (lowest of the countries in the research)
Labour Costs in 2011: The labour cost will rise but we do not believe it will be a major rising since the country is developing more slowly than the rest of the countries.
- **Infrastructure:** Internet, mobile telephone, aviation and railways are working satisfying while roads are pretty bad. Mail and fixed telephone have to improve, but Tatiana Byrka at the Swedish Trade Council in Kiev claimed that the fixed telephone in the cities is working very well. The declaring process in customs is creating problems. Ukraine has a favourable geographical location to serve the Russian market,

but not to serve the European market. Ukraine has a high level of corruption and bureaucracy and it is insecure to invest in the country.

Infrastructure in 2011: There are big plans of improving the infrastructures because of the increasing FDI in the country; but the plans are only at negotiation level and it is supposed to take more than five years before any major improvements will be shown. We could not find any sign of decreasing corruption and bureaucracy in five years.

- **Automotive Cluster:** The automotive industry is growing in the western Ukraine. The level of education is high in Ukraine according to the table in appendix but the language skills are not pleasing.

Automotive Cluster in five years: There has been an increasing number of FDI in Ukraine in the automotive industry and the cluster will probably increase to some extent in five years.

Ukraine has the lowest hourly labour cost of all the nations in the research. According to Gert Larsson at Nolato, the labour cost in the Ukrainian countryside is the same as in China, which is a great advantage since according to our study labour cost is the most important factor when relocating production. Moreover, Ukraine has a high level of education. A majority of the interviewed companies believe that the automotive industry in Ukraine will grow in the future, but that it may take more than five years before it becomes really attractive. So far, it is still very insecure to invest in Ukraine; it still is a very bureaucratic and corrupt country and it is hard to receive information from the authorities. Additionally, the infrastructure needs to be improved. We believe that Ukraine has difficulties to reach the same level of quality of infrastructure and business climate within five years as the other investigated countries. Ukraine has too many drawbacks when studying the bureaucracy, infrastructure and social development as well as that it is not even on the list to become an EU member. Therefore, we do not believe that Ukraine will be one of the most attractive countries in five years. However, since there are automotive companies investing in the country today, we believe that it has potential to become very attractive in the future but not in five years.

Motivation of selection of Slovakia, Romania and Turkey

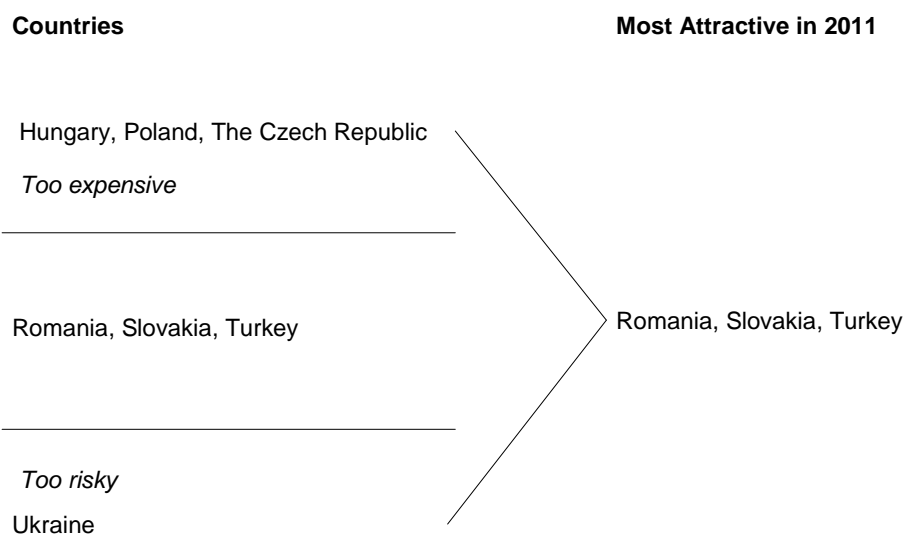


Figure 7.3 Motivation of selection of Romania, Slovakia and Turkey

The reason for choosing Romania, Slovakia and Turkey is that we believe that these countries will be the most attractive in 2011. In Hungary, Poland and the Czech Republic we see a trend towards high labour costs. The countries have become much more developed and at the same time the costs are rising. These are also the three countries that experts think will be the first in CEE to reach the production costs in Western Europe. Therefore, we think that when a company will relocate production in 2011, it will be better to go for a country which does not have such high labour costs. However, these three countries will still have lower labour costs than Sweden in five years but we believe that there are other countries in CEE that will be more attractive in 2011. Ukraine has very low labour costs but on the other hand we consider it to be too risky in five years. In ten or fifteen years it will certainly be more attractive but not in 2011. Consequently, three countries remain in our analysis; Romania, Slovakia and Turkey.

To further analyse the advantages and disadvantages of the selected countries, political and macroeconomic factors will be included. This implies that economic growth, corporate tax rate and inflation also will be considered. Also the political and commercial country risk,

which may be found in the appendix, will be included, as well as the membership in the EU that may strengthen the countries' advantages.

According to the table in the appendix, Romania and Turkey have almost the same level of education; Romania has a slightly higher level since the tertiary education percentage is higher. However, when talking to companies concerning Turkey, they stated that language skills as well as special knowledge in the industry are fine. Further, they have stated that it is easier to start up a business in Turkey. On the other hand, Romania will join the EU in less than a year (2007) which will certainly lead to improvements on investment conditions. Even though Turkey has not set a date for future EU membership, it has higher labour costs than Romania and if it joins the EU the labour cost will probably raise even more. Moreover, Romania has a flat tax of 16 percent whereas Turkey has a corporate tax rate of 30 percent (not flat). Romania is also expected to have a higher GDP growth than Turkey in 2006 (6.2 % compared to 5.5 %) and has a lower political country risk than Turkey. The advantages of Slovakia are excellent infrastructure, good geographical location, large cluster of automotive companies as well as the labour costs are low compared to other countries with large automotive clusters. Moreover, the country is an EU member. It has the same estimated growth rate as Turkey in 2006, but the inflation rate is much lower (2.7 %) compared to both Romania and Turkey (6.9 and 6.9 %). Like Romania, Slovakia has flat tax, but it is higher in Slovakia; 19 percent. Concerning the country risk, it is much safer to invest in Slovakia than in the other two countries.

When analysing Romania, Turkey and Slovakia, we came to the conclusion that it is impossible to select one country as the most attractive in 2011. Slovakia is a more safe country to invest in and has the best infrastructure as well as automotive cluster. On the other hand, Romania and Turkey are cheaper. Romania is the cheapest and will enter the EU in 2007 but Turkey has a more favourable cluster and language skills. Consequently, we believe that all three countries will be attractive in 2011. When comparing our result to the opinions of the companies we could see that the companies also believed that Romania and Turkey will be the most attractive in 2011. However, only SSAB believed that Slovakia would be the most attractive country in five years.

8 Conclusions

The conclusions are presented. First the research questions are answered, then criticism to the research and the research contribution are presented. Finally, suggestions for further research are made.

8.1 Answering the Research Questions

The first research question, “*Swedish automotive supplier companies want to further relocate production to CEE in order to obtain cost efficiency. What are the factors that create an advantage for the countries to consider?*” was answered after reading the theory and discussing with the representatives of the Trelleborg Group. These factors include factor conditions, related and supporting industries as well as political and macroeconomic factors.

The second research question, “*Which factors are the most important?*” was answered in the modified analytical model, which was created after the interviews with the companies. The most important factor was first of all labour cost, and then infrastructure as well as the extent of automotive cluster in the country. These three factors are in turn influenced by political and macroeconomic factors.

The third research question, “*Which country will have the most favourable location in regards to further relocation of production for Swedish automotive supplier companies in 2011?*” was answered in the analysis. Since it was impossible to conclude one country as the most attractive in 2011 we came to the conclusion that Romania, Slovakia and Turkey will have the most favourable positions in 2011. The companies also believed that Romania and Turkey would be the most attractive countries in 2011 but only one company believed that Slovakia would be one of the most attractive countries. One company even thought that Ukraine would be one of the most attractive countries in 2011. It could be that the companies were just speculating and when it comes to a decision regarding the own company they would be more careful.

An interesting finding to highlight is the different aspects we got from Fordonskomponentgruppen and the automotive supplier companies. According to Henry Mellgren at Fordonskomponentgruppen, many companies that have relocated production to CEE have not truly thought through the decision and as a consequence they are having problems in the new country; it is not as favourable as expected. However, the interviewed companies did not mention that they had experienced any larger problems when relocating production to CEE. We find it hard to believe that relocation of production does not create any problems. Perhaps the companies did not want to admit the problems or it is just as simple as the companies in our research have considered the decisions of relocation carefully and therefore they have calculated that problems may occur. The latter is most probable since the companies are large and already are located in CEE. We believe that before moving, the company needs to have a clear strategy of how to enter the market and how to run the business in the new country. However, this research was only on country level therefore it was only focusing on factors that create country advantages.

8.2 Criticism to the Research

The largest criticism to this study is that it is relatively cursory. Due to the fact that many countries have been investigated and also many companies we have not been able to analyse the factors in the modified analytical model as detailed as would have been preferable.

By means of the modified analytical model the future conditions concerning labour costs, infrastructure and automotive cluster have been analysed for each country. It is always hard to analyse the future since unexpected events may happen. Therefore, we want to make a reservation against such events. Additionally, it may be hard to analyse country advantages in a general point of view as have been done in the research; we have analysed the most attractive country for further relocation of production in five years for Swedish suppliers in the automotive industry. For example, the advantages may be different concerning what kind of supplier the company is as well as what kind of components it is delivering. Also, internal conditions within the company may be decisive in selecting country such as contacts and other resources that may be used more favourable in certain countries.

Further criticism is that the same information may not have been found from all countries. It was much easier to get hold of information from some countries. However, even if more time was given it is not sure that more information would have been found since for example countries like Ukraine does not have such specific information of the automotive industry. This may be the case since it does not have such an extended automotive industry.

The data of the labour costs we used in the analysis are from 2003; a year earlier than many of the countries entered the EU. This may be considered as a weak source because the labour costs may have increased since then. The reason for having the data from 2003 is that we have not been able to find more recent data from Turkey and Ukraine. However, when looking at the labour costs from 2005 we could see that Hungary and the Czech Republic still were the countries with the highest labour costs, followed by Poland and Slovakia. Romania still had the lowest labour cost of the countries in our research and it was far behind Slovakia which had the second lowest labour cost (Eurostat, 20-05-06).

Criticism concerning the selection of companies to be interviewed is that SSAB has not relocated production to CEE and this may affect its answers. However, SSAB is one of the largest automotive supplier companies in Sweden and have sales offices in CEE, therefore we thought it was relevant to also include it.

8.3 Research Contribution

The analytical model we have created focus on efficiency seeking FDI and may be used by automotive supplier companies. It is more specific compared to Dunning's OLI advantages since it is only focusing on country advantages and only on efficiency seeking FDI. Moreover, it describes country advantages from the company perspective and not from the country perspective as in Porter's diamond. However, the most important discovery is that labour cost, infrastructure and the extent of automotive cluster matter most when relocating production in order to obtain cost efficiency. Of these factors, labour cost is the most important since companies may relocate production to low-cost countries even if the infrastructure is not completely satisfactory and the automotive cluster is relatively small; it is a balance between how underdeveloped the other factors can be and how high the labour cost can be. Further, it should also be mentioned that this model may be used for analysing the

future country advantages of a country as have been done in this dissertation. Then, the future conditions of labour costs, infrastructure as well as the automotive cluster need to be taken in consideration.

To sum up we have created a model of country advantages that may be used for analysing the future. It is specific to automotive supplier companies engaging in efficiency seeking FDI in terms of relocation of production to CEE.

8.4 Further Research

Suggestions for further research may be to analyse only one or two countries by means of the modified analytical model. In that way it is possible to make a deeper analysis of each factor and not just scratching at the surface. A suggestion would be to make a deeper analysis of Romania, Slovakia and Turkey from the perspective of Trelleborg Automotive.

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Appendix 1, Map of Automotive Cluster



NB The clusters are not according to scale; they are just showing the locations of the clusters.

Appendix 2, Land Indicators

	Sweden	Hungary	Poland
GDP US\$ billion (2006, estimated)	352.733	115.846	302.916
GDP/capita, \$ (2005)	29600	15900	12700
GDPgrowth, % (2006, estimated)	3.2	4.0	4.2
Inflation rate, % (2006, forecast)	1.8	3.6	2.5
FDI inflow, US\$ million (2004), (world rank of total 197 countries)	-371 (194)	4167 (31)	6159 (20)
FDI inflow, US\$ million (2002), (world rank of total 196 countries)	3296 (27)	2470 (35)	4225 (24)
Corporate tax (2005)	28	16	19
Employment, thousands (2004)	4213	3900.4	13795
Unemployment, % (2005)	6	7.1	18.3
Hourly labour costs, US\$ (2003)	24.89*	3.80	3.14
Hourly labour costs, US\$ (2000)	20.18*	1.91	2.42

*For production workers. Includes pay for time worked, other direct pay (e.g. holiday pay), employer expenditures on legally required insurance programmes and other labour taxes.

School enrolment, secondary (% gross) 2003	137.03	103.41	104.51
School enrolment, tertiary (% gross) 2003	81.78	51.89	59.47

Gross enrolment ratio is the ratio of total enrolment, regardless of age, to the population of the age group that officially corresponds to the level of education shown. Secondary education completes the provision of basic education that began at the primary level, and aims at laying the foundations for lifelong learning and human development, by offering more subject- or skill-oriented instruction using more specialized teachers.

Political country risk, (export transaction) 1=low, 7=high	1	1	1
Commercial country risk, (export transaction) A=low, C=high	A	B	B

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Central and Eastern Europe's Future Power of Attraction for Further Relocation of Production
-a Study of the Automotive Industry

Romania	Slovakia	The Czech Republic	Turkey	Ukraine	
89.657	50.064	126.872	372.719	102.051	www.fita.org
8300	15700	18100	7900	6800	www.swedishtrade.com
6.2	5.5	5.0	5.5	5.5	
6.9	2.7	2.5	6.9	12.1	www.fita.org
5174 (22)	1122 (55)	4463 (28)	733 (35)	1715 (44)	
1566 (44)	571 (70)	2583 (32)	575 (69)	1424 (48)	
16 (flat tax)	19 (flat tax)	26	30	13	www.worldwide-tax.org
9157.6	2170.4	4707	21791	21449 (2003)	http://laborsta.ilo.org
6.5	11.5	9.1	10	3.8 officially	www.economist.com
0.80	2.15	3.39	1.81	0.66	
0.56	1.41	1.99	1.55	0.32	
85.29	91.73	96.89	85.30	92.88 (2004)	http://devdata.worldbank.org
36.29	33.99	36.88	28.01	65.51 (2004)	
2	1	1	3	3	www.fita.org
C	A	B	C	C	

Appendix 3, Interview Questions to the Companies (English version)

1. What kind of products are you in major supplying to the automotive industry?
2. What are the most important factors to consider when relocating production? Below you may find alternatives of relevant factors. Discuss these and feel free to add your own suggestions of important factors.

Labour cost

Competent labour, e.g. level of education

Infrastructure, e.g. roads, rail ways, logistics

The customers are located here

The suppliers are located here

Political safe, EU member

Already established in the country

Automotive cluster

3. Why have you relocated production to Central and Eastern Europe?
4. What mode of entry did you use when relocating production to Central and Eastern Europe? (E.g. green field, joint venture, acquisitions) Why?
5. In what country/countries in Central and Eastern Europe do you have production today? How does it work? Have you experienced any unexpected problems? What are the major risks to have production in the country/countries that you have mentioned?
6. Do you plan any further relocating of production to Central and Eastern Europe? Where in the region?
7. Discuss advantages and disadvantages, with each country from your company's perspective when relocating production. Please add further country/countries that you have special knowledge about. Think in a future perspective!

Hungary

Poland

Romania

Slovakia

The Czech Republic

Turkey

Ukraine

9. Which country/countries in Central and Eastern Europe do you think is the most attractive as regard to relocation of production in the automotive industry in five years? Think in a future perspective. Why this trend?

Appendix 4, Interview Questions to the Companies (Swedish version)

1. Vad levererar ni främst för produkter till fordonsindustrin? Vilka leverantörer är ni till fordonsindustrin?
2. Vilka faktorer är viktigast att ta hänsyn till vid utflyttning av produktion? Nedan följer alternativ på relevanta faktorer. Resonera kring dessa och lägg gärna till egna.

Lönekostnader

Kvalité på arbetskraft ex. utbildningsnivå i landet

Infrastruktur så som vägar, järnvägar logistik

Våra kunder finns här

Våra leverantörer finns här

Politisk stabilitet, medlemskap i EU

Redan etablerade i landet

Fordonsindustrikluster

3. Varför har ni flyttat ut produktion till Central- och Östeuropa?
4. Vilken form av företagsetablering har ni främst använt vid utflyttning av produktion till Central- och Östeuropa? (Ex. uppköp, green field, joint venture) Varför?
5. Vilka länder i Central- och Östeuropa har ni produktion i för närvarande? Fungerar det bra? Har ni stött på några oväntade problem? Vilka är de största riskerna med att ha produktion i de länder ni har nämnt?
6. Planerar ni att flytta ytterligare produktion till Central- och Östeuropa? Vart i regionen?
7. Nämn för och nackdelar med respektive land för utflyttning av produktion utifrån ert företags perspektiv. Lägg gärna till något land som ni har kunskap om. Ha även framtiden i åtanke!

Polen

Rumänien

Slovakien

Tjeckien

Turkiet

Ukraina

Ungern

8. Vilket land/länder tror ni är mest attraktivt vid utflyttning av produktion i ett framtidsperspektiv om fem år? Varför?

Appendix 5, Interview Questions to the Experts (English version)

1. Why are Swedish automotive supplier companies relocating production to Central and Eastern Europe?
2. What countries, in Central and Eastern Europe, have the largest production of vehicles today as well as automotive related and supporting industries (automotive cluster)? Do you believe that these countries will keep its power of attraction in the future (in five years) or will it change?
3. Discuss advantages and disadvantages, concerning relocation of production, in the country where you are situated. If you may, please, add further information about the other countries that are mentioned below. Think in a future perspective!

Hungary

Poland

Romania

Slovakia

The Czech Republic

Turkey

Ukraine

4. Which country/countries in Central and Eastern Europe do you believe is the most attractive as regard to relocation of production in the automotive industry? Think in a future perspective of five years. Why this trend?
5. Do you believe it will be an equalisation of labour costs in CEE, in comparison with Western Europe, in five years? What will happen then?
6. In some countries it is possible to apply for EU investment subsidies. Is it possible in the country where you are situated?
7. Is there an automotive cluster in the country where you are situated? Where in the country?
8. Do you have any statistics of FDI inflows in the automotive industry in the country where you are situated?
8. What is the largest industry in the country where you are situated?
9. Has the government expressed any visions of improving the how infrastructure, expansions etc?

Appendix 6, Interview Questions to the Experts (Swedish version)

1. Vilka är orsakerna till att svenska underleverantörer inom fordonsindustrin flyttar sin produktion till Öst och Central Europa?
2. Vilka länder, i Öst och Central Europa, har i dag mest produktion av fordon, fordonsrelaterade verksamheter och komplementverksamheter ("fordonsindustrikluster")? Tror Ni att dessa länder kommer att behålla sin attraktionskraft i framtiden (om ca fem år) eller kommer det att ändras?
3. Nämn fördelar och nackdelar, med hänsyn till utflyttning av produktion, i det land där Ni är stationerad. Lägg gärna till något om de länder som nämns nedan. Ha även framtiden i åtanke!

Polen
Rumänien
Slovakien
Tjeckien
Turkiet
Ukraina
Ungern

4. Vilket land/länder i Öst och Central Europa tror Ni är mest attraktivt vid utflyttning av produktion i fordonsindustrin? Tänk i ett framtidsperspektiv om fem år. Varför denna trend?
5. Tror Ni att det kommer att ske en utjämning av produktionskostnader i länder som Polen, i jämförelse med Väst Europa, inom fem år? Vad händer då?
6. I vissa länder finns det möjlighet till investeringsstöd från EU- de har vissa regioner med skattelättnader etc. Finns det något liknande i det land Ni är stationerad?
7. Kan man säga att det finns ett fordonsindustri kluster i det land Ni är stationerad? Vart? Vilka stora fordonsindustriföretag finns etablerade i landet? Vilka svenska fordonsindustriföretag finns etablerade i landet (OEM och leverantörer)? Tror du att det kommer komma fler inom en snar framtid?
8. Har Ni någon statistik på FDI inflows i fordonsindustrin i det land Ni är stationerad?
9. Vilken är den största industri i det land Ni är stationerad?
10. Finns det någon uttalad vision om att förbättra infrastrukturen i det land där Ni är stationerat i? Kommer det att ske inom 5 år i sådana fall?