Carrier selection criteria for Scandinavian domestic road transport

A study of the competition between Scandinavian and Eastern European hauliers in a scenario without restrictions on cabotage

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Author: Peter Tillman
Tutor: Leif-Magnus Jensen
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ABSTRACT

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Author: Peter Tillman, 850503-4010

Tutor: Leif Magnus Jensen

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Subtitle: A study of the competition between Scandinavian and Eastern European hauliers in a scenario without restrictions on cabotage.

Introduction: The European Commission has for some time indicated a desire to remove the remaining restrictions on cabotage. Such liberalization is expected to result in significant changes on some domestic road transport markets. The Scandinavian markets are among these and the local hauliers fear that the lower wages of Easter European hauliers will leave them out of business. In this thesis a scenario of full cabotage liberalization is assumed.

Method: Representatives from associations with interest within the Scandinavian road transport markets has been approached with a qualitative survey on carrier selection criteria. Respondents are asked to determine the importance of the criteria, as well as the relevance to the competition between Scandinavian and Eastern European hauliers. Finally they are asked to assess whether the advantage of each criterion lies with Scandinavian or Eastern European hauliers. The qualitative orientation of the survey is achieved though justification and follow up questions.

Conclusions: Reliability of pickups and deliveries is still regarded the most important criteria. Also competitive prices received a high rating. It is concluded that the significant price difference between Scandinavian and Eastern European hauliers will benefit Eastern European hauliers considerably in the competition for the simple “from A to B” shipments. For more complicated shipments, entailing a higher level of service, communication and supply chain integration, the local hauliers are expected to stand their ground.
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1. **Introduction**

1.1. **Background**

With its core of four freedoms the internal market is in many regards the backbone of the modern European Union. The ambition of the internal market is to achieve the same freedom of movement for goods, services, people and capital as within one single country (European Union, 2011a). Although a lot of progress has been made in the area, some markets have remaining restrictions. One of these markets is the transport of goods by road.

The above mentioned restriction refers to limitations in performing cabotage within the EU. Cabotage is basically the exercise of domestic hauling services in another EU country than your origin. To exemplify: there are restrictions on how a Danish truck can transport goods on the Swedish domestic market.

As of 14 May 2010 Regulation (EC) No 1072/2009 limits the number of domestic transports performed by a foreign registered company to three transports in a seven day period, starting the day the international transport is delivered. In case a truck enters the foreign state without any load to deliver, only one cabotage operation is allowed, and within three days of the border crossing.

Representatives from the European Commission have often spoken warmly about an elimination of remaining restrictions on cabotage. In its White paper on transport (COM(2011) 144 final) from March 2011 the European Commission included the liberalization of cabotage among its future targets. A few months later on the 27 of June the Commission launched a High Level Group to review the internal market for road freight transport. The press release followed by comments from the Commissioner for Transport Siim Kallas, revealed that the main purpose was to provide a base for an evaluation of the possibility to further open the market (European Commission, 2011a). According to the Commissions Work Program for 2012 (COM(2011) 777 final) actions on the internal market for road transport is planned to be proposed during 2013.

Cabotage has for some time been a sensitive subject in the EU. Member states as well as stakeholders from the industry have been diversified in their opinions. Examples of concerned stakeholders are the Scandinavian road haulage sectors. They basically fear that lower salaries and lighter social legislation of new member states would give them an unmatched advantage in competition, as well as lower the quality and social standards of the business. Their fear may be justified. According to statistics from Eurostat (2011) Denmark, followed by Sweden, have the highest average of hourly labor costs among the 23 member states featured in the statistics for the year 2007. Historical values indicate that they are the top two as well among all 27 member states, slightly higher than close neighbors like Germany and Finland, but way higher than member states across the Baltic Sea.

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1 Data from Greece, Ireland, Italy and the Netherlands are missing in the statistics.
1.2. Discussion of Problem

As described in the previous section, there is a clear ambition by the European Commission to propose a complete liberalization of cabotage. In the current directive (1072/2009/EC) there is a clause that compels the Commission to review the effects of the proposal and present it in a report before 2013. It may dwell several years before a revision proposal follows the report, if it even does. When, and if it does, Parliament and Council have to adopt it before it could affect the member states. However, the proposal is planned for 2013 and the present Commission’s position is clear.

It may not be certain when, how or even if cabotage will be liberalized but historical actions concerning the internal market indicates that it is likely to happened at some point. In this study we assume that it actually does happen. We assume that all current restrictions on cabotage are eliminated and all road transport work is open for all haulers within the European Union.

One may also consider if the effects will be similar to the deregulation of international transport within the EU that gradually took place in the late 1980s. The same anxiety took place then, as member states feared that their haulage industries would lose business to companies from member states with lower salaries. According to studies by Lafontaine and Malaguzzi Valeri (2005) the effects of the liberalization on the allocation of business were insignificant. The authors concluded that member states did not take a larger share of the international freight market than proportional to their level of economic activity. Results indicating that lower wage countries did not benefit more from the liberalization than higher wage countries.

Other studies indicate a different outcome. In a study by Hilal (2008) several incidents of illegal cabotage and social dumping is noted as an effect of previous steps in liberalization of the transport market of the EU. The actions of opportunism indicate that there profit to be made in the foreign markets after the liberalization. A study by Dieplinger, Fürst and Lenzbauer (2010) shows the increased number of Austrian trucks flagged out after changes in the cabotage rules. By flagging out the vehicle companies could lower their labor costs and even the motor vehicle tax. Most trucks were flagged out to eastern European countries.

Although there are similarities to previous liberalizations there are several factor indicating a unique scenario.

- The European Union is enlarged to 27 member states and expecting more to come.
- The EU Single Market objective has been active since 1993 and a lot have been achieved.
- Domestic transport and international transport within the EU have throughout history been separated by regulations, borders, statistics and business sectors.

2 The definition of "flagged out" is the licencing of national trucks abroad. Meaning that a company from country A moves the licence of a truck to country B but keep performing domestic haulage operations in country A.
Outsourcing of transport services differ from many other examples of outsourcing, in that the service is still performed to the same buyer and in the same geographical location as before, but by a foreign supplier.

Liberalization of cabotage would enable foreign haulage companies to drive into a country, stay there for a long period of time and perform transport services. Without establishing an office/facility or providing a place to live for the driver, since it all can be done in and from the truck. This unique attribute of road transport enables foreign haulage companies to perform transport operations abroad at a cost not much higher than the cost to perform domestic operations in their own country. According to statistics from Eurostat (2011) the average hourly labor costs 2007 in Sweden were five times as high as in Poland and the average in Denmark was almost seven times the cost in Lithuania.

Would all this mean an end for Scandinavian Road Haulers? Not necessarily. Price is obviously not the only factor in competition. Hence, Scandinavian Road Haulers might possess competitive advantages that prevails price in competition with the lower labor costs of the eastern European countries. The traditional concept of competitive advantage origins from a definition of Porter (1985) a competitive advantage may be a lower price than competitors offer for equivalent benefits, or benefits that compensate a higher price. Meaning that Scandinavian Haulers may offer value, based upon unique benefits exceeding the value of the lower price provided by eastern European haulers.

In his later article on *The Competitive Advantage of Nations* (1990) Porter promotes the advantages of innovation as stronger than the advantages of labor costs, interest rates, exchange rates and economics of scale. As an example Porter mentions Japanese auto manufacturers that changed competitive advantage from low prices to high product quality, repair service and customer service when the Japanese salaries reached levels of western.

Cost for labor is obviously not the only competitive advantage. Buyers of transport take a number of criteria into consideration in their process of selecting a provider of haulage services. Some attribute are the same for both Scandinavian and eastern European hauliers because of harmonized EU-legislation, but in many areas the EU internal market is far from a level playing field. Apart from legislation and tax issues there are several other attribute that may differ between the two regions. The questions are if the attributes are relevant to the procurement of domestic haulage services in Scandinavia, if any region have a significant advantage in the area and finally, is the advantage competitive?

1.3. Purpose
The purpose of this study is to identify and evaluate carrier selection criteria relevant to the competition between Scandinavian and Eastern European road haulers on the Scandinavian markets for domestic transport. This in a scenario of a complete liberalization of cabotage in the European Union

1.4. Perspective
The thesis will take the perspective of Scandinavian road haulage operators.
1.5. Delimitation
Eastern European haulage companies will not be included in the list of respondents. This because of the limited scope of time and the language barriers that make communication with them difficult.

1.6. Definitions

Haulier
A company whose business is to transport goods by truck.

Carrier
A company whose business is to transport goods or passengers.

Shipper
The person, company or organization that owns the goods transported.

Cabotage
National transport performed by a foreign carrier.

EU15
Member states of the European Union are often divided into different groups in order of when they became members. EU15 refers to states that became members 1995 or prior. That is: Austria, Belgium, Finland, Greece, Luxembourg, Denmark, Spain, Netherlands, Germany, France, Portugal, Ireland, Italy, Sweden and United Kingdom.

EU12/New member states
Refers to the states that became members of the European Union 2004 and 2007. That is Bulgaria, Czech Republic, Cyprus, Latvia, Lithuania, Slovenia, Estonia, Slovakia, Hungary, Malta, Poland and Romania.

Ton km
The weight of the cargo multiplied with the distance it has been transported.
2. Methodology

2.1. Scientific perspective
Considering that the study to some extent takes a macro-perspective and involves hard data as taxes and statistics, the positivist philosophy is definitely present. Elements of both induction and deduction fit in positivism (Bryman and Bell, 2003), as element of both induction and deduction fit in this study. According to Bryman and Bell one should not perceive the “induction versus deduction” scenario as an unambiguous distinction of what is what. Rather one should identify tendencies of the both strategies.

There is somewhat of a deductive approach to this study in terms of the comparison with previous studies on the shippers’ rating of carrier selection criteria. In the deductive approach hypotheses are derived, based on theoretical considerations or what you know about an area. These hypotheses are then subjected to an empirical examination and based upon the results, confirmed or declined, followed by a potential revision of theory (Bryman and Bell, 2003). One could say that, although, there are no formal hypotheses, the empirical study in this paper could be seen as an evaluation of arguments from previous studies on carrier selection criteria on a specific market. The closest thing to hypotheses is the “new” carrier selection criteria included in the survey.

There are also some attributes of the study that fits in with inductive reasoning. According to Bryman and Bell (2003), in induction, theory is a result of research, which means that the connection between theory and empirical is reversed compared to deduction. The competition between carriers from different countries and the complexity of the cabotage situation are unique elements of this study. Hence, the inductive approach of drawing conclusions from observations is, in some regard, a more suitable description of this study. Although the basis of induction is that new theory is developed, Bryman and Bell (2003) points out that typically these studies result in empirical generalizations, rather than theory.

2.2. A qualitative approach
In some regards a quantitative study would have been the natural choice in a study on this topic. A survey sent out to a vast number of shippers has been the preferred choice of most previous studies. According to the Review of the transportation mode choice and carrier selection literature by Meixell and Norbis (2008) the majority of research on the topic has been conducted by either a quantitative survey sent out to shippers, or a mathematical model based on quantitative data on carrier selection.

Näslund (2002) highlights the issue of an unreasonable dominance of quantitative method. A complex research field as logistics should, according to the author, not be confined to a single type of studies. The author sees several deficiencies with the use of quantitative method in logistics research. General problem such as the difficulty of achieving the large sample sizes are combined with discussions of paradigm and tradition effects. Despite his critique, Näslund stresses that his paper should not be seen as an attack on quantitative research but rather a call for more qualitative studies, preferably action case studies.
If the purpose alone was to identify important criteria for carrier selection then a quantitative study would have been an obvious choice. However, the element of comparing hauliers from different regions and doing this in a scenario where the regulation is different than today, entails a greater complexity. A qualitative approach allows a deeper study that will take a new approach to the well studied area of carrier selection criteria compared to the previously quantitative studies.

2.3. CHOICE OF RESEARCH AREA AND QUESTIONS
It took a while before the exact phrasing of the research question was done but its orientation was clear from the beginning. During an internship at a Brussels based association with interest within the European road transport sector the author came in contact with the controversial legislation and policy on cabotage.

The European Commission was performing studies on whether to liberalize it or not, and the road transport sector was divided into opposite positions. The different sides campaigned for their interests and it provoked great emotions at the stakeholders. Despite the intense discussions on whether to liberalize it or not, everyone seemed to agree on one point: it will be liberalized sooner or later.

Hauliers from some regions, hereunder Scandinavia, were hesitant for a possible liberalization. In broad terms they feared that their businesses would stand defenseless before the lower wages and that social standard of the sector would suffer. Statistics and taxes were compared over and over but no one seemed to take a closer look at the conditions for competition on the actual market. A lot of focus was on price but would the price different actually be that significant and would the price mean everything for shippers?

The reason behind the research area was to investigate whether the competition between Scandinavian and eastern European haulier would actually be such an uneven race that many seemed to believe and fear.

Initially the direction was towards the area of competitive advantage through the classic perspectives of Michael Porter. However, some time into the process it changed direction. One purpose of the study was to get some of the same people that usually had the complex political and theoretical perspective to evaluate the competition from a more practical perspective. With the competitive advantage/Porter based perspective this would not happen. Focus would be more on socio-economic differences then the logistic and procurement processes.

The carrier selection process and the criteria used in it have a solid research history. However, most studies are performed in the nineties and in the US. Nor has hauliers from different regions been compared in a significant matter. The lack of recent studies and the narrow focus on the Scandinavian market enable a fresh study but in a research field with a significant theoretical base and many similar studies to compare with.
2.4. Research Method

In a way the desired research process was similar to Heron and Reason’s (2006) version of Action Research. The authors believe that good research is conducted with people rather than on them. In their paper they describe the practice of co-operative inquiry, a process that builds upon cooperation between the researchers and the subjects.

Action research is not a common practice in the field of logistic research, something Näslund (2002) highlights in his paper on the needs of qualitative research in logistics. The author believes that the characteristics of action research would suit the “real world”, practical problems that logistic managers face.

Sadly the scope of time available became too short for such study method to be carried out thoroughly and completely. The survey that was initially planned to be the base of discussions became the main and almost sole source of empirical material. The open discussions that should have followed the survey had to be included in the survey instead, in the shape of “justification”-questions. Follow up questions was distributed as a last effort to add an element of past-survey discussion, but they were as comprehensive as desired and not more than half of the survey respondents answered.

2.5. The Choice of Survey

According to the literature study by Meixell and Norbis (2008) surveys, along with math models, is the most common research method in the field of carrier selection. Although surveys are primarily associated with quantitative research it was the preferred choice in this qualitative study. There are two main reasons behind the choice of survey as research method:

- **Compatibility with previous studies** - More or less all previous studies on the area of carrier selection criteria has been based on surveys sent to either carriers, shippers or both. The question type that concerns criteria importance featured in the study is designed to match the structure of the surveys used in other studies. This enables partly comparisons with older studies and partly comparisons with other geographical markets.

- **Accessibility to respondents** – The range of preferred respondents is not very large in number but geographically scattered. The associations approached with the survey are based in multiple cities in multiple European countries. By using a mail survey the geographical location of a respondent did no longer matter. It also facilitated issues connected to language. The respondents were of several nationalities and many had a different mother tongue than the author of the thesis. A mail survey allowed time for translation and consideration of the expressions used in questions and answers.

Bryman and Bell (2003) argues that surveys and structured interviews are very similar in many respects. They do, however, point out some differences as well as advantages and disadvantages:
- **Surveys are cheaper and easier to manage** - Considering the geographical spread of the respondents, face-to-face interviews were more or less not an option.

- **There is no risk of an effect caused by the interviewer when using surveys** – The presence of an interviewer may cause the respondent to answer differently. Respondents tend to communicate a more positive picture and avoid sensitive subjects when an interviewer is present. This would probably never have been an issue in this study since the questions asked in the survey are far from personal.

- **There is no risk of question variation in surveys** – When performing interviews there is always a risk of asking the same question and type of question differently. This is certainly an issue for this study since there is a system where a number of criteria should be evaluated and rated on the same principles. The structure of written survey lets the respondent know from the beginning how the system works.

- **Surveys do not offer instant follow-up questions or help with interpretation of the questions** – If a respondent do not understand a question in an interview the interviewer can always explain. This is not possible in a survey. Neither can the interviewer get immediate explanations or ask follow up questions if a response is unclear.

- **One never knows who is actually answering the survey** – There is always a risk that the survey is answered by the correct person. When sending the survey to associations as done in this study, there is a risk of passing the survey down the hierarchy to an employee lacking in the desired specialist knowledge.

### 2.5.1. Survey design

The purpose of the survey is to evaluate different criteria used when selecting a haulier to perform domestic road transport services in Scandinavia. Four types of questions are repeated for each criterion:

- **Importance** – Respondents are asked to rate the criterion based upon how important it is in the selection process. Possible answers are: 0=Not important, 1=possibly important, 2=important, 3=Very important.

- **Relevance** - Respondents are asked to rate the criterion based upon how relevant it is to the competition between Scandinavian and Eastern European hauliers. Possible answers are: 0=Not relevant, 1=possibly relevant, 2=Relevant, 3=Very relevant.

- **Advantage** – Respondents are asked to determine if either Scandinavian or Eastern European hauliers have a competitive advantage connected to the specific criterion and how big the advantage is. Possible answers are: 0=No advantage, +S= Scandinavian advantage, +E= Easter European advantage, ++S= Significant Scandinavian advantage, ++S= Significant Eastern European advantage

- **Justification** – Respondents are asked to justify their answers in an open question. The question is asked after each group of criteria instead of after each criterion that is the case of the other question types.
2.5.2. Selection of Respondents
Considering the complexity of the study there was a need for high level respondents with deep knowledge in the road transport sector. Due to the authors existing relations with a number of associations within the Scandinavian haulage sector a choice was made to primarily contact associations that are stakeholders in the Scandinavian domestic road transport sector.

Although focus was on national associations a few European associations were contacted as well. Associations within the following sectors were contacted:

- Associations representing Scandinavian road haulage companies.
- Associations representing shippers (industry, retailers)
- Associations representing freight forwarders and 3PL/4PL providers.

Due to language barriers and the fact that it is only a small share of eastern European hauliers that are active on the Scandinavian market and an insignificant number of Scandinavian hauliers active in east Europe a decision was made to not include eastern European hauliers associations in the study.

The response rate was decent. Out of the 13 associations that were contacted, six completed the survey, three referred to their member organizations, three did not respond and one declined out of political reasons.

The seven associations that did answer is Danish Transport and Logistics, Swedish Hauliers Association, International Transport Denmark, Danish Chamber of Commerce, Eurocommerce and European Shippers Council

One of the three organizations that referred to their members forwarded the survey to some of its key members. Out of these key members two responded the survey: Uddevalla Lastbilscentral (ULBC) and DHL. Although the initial purpose was to focus on associations and not on companies the nature of these two respondents lead to an exception. ULBC is a corporation but it consists of over 130 vehicles, whose owners are contracted to the corporation. Basically it is a pool of self employed drivers. The size, structure and function of ULBC reached out to a segment of hauliers that were interesting for the study. The response from DHL was also included, due to their size and unique position on the market.

2.5.3. Follow-up Questions
The respondents all received the same four follow-up questions. Two of the questions were based upon legislative differences or practices identified among the respondents’ comments on the competition and who has the advantage. The other two questions were pure follow up questions to rating results of the first survey that needed a deeper understanding.

2.6. Collection of Secondary Data
Initial focus was put on the cabotage situation and the road transport market. Legislations from the EU and the Scandinavian countries were reviewed as well as previous studies on cabotage and deregulation of the EU:s internal market on transport. Due to the authors
existing knowledge of the road transport sector and the relevant legislation this part of the study was performed quite rapidly.

As a second step the area of competitive advantage was studied. However, due to the slight change in research area the direction of the literature review also changed after a while. Instead the carrier selection process was studied. A literature review performed by Meixell and Norbis (2008) was discovered in an early stage. This study was used as a map over the existing research in the area. Even though studies that were not featured in the review were used as well, terms and authors included in the review showed the way to others.

In addition to the literature review by Meixell and Norbis (2008) Google Scholar was the primary source of previous studies. Common search words used were: Carrier selection criteria, shipper, carrier, haulier selection, haulier, cabotage, EU road transport.

2.7. DATA ANALYSIS

Alvesson and Skölderberg (2008) describes Glaser and Straus introduction of grounded theory 1967 as close to a revolt against the established positivism. Decades later it has become the most common approach for analyzing qualitative data (Bryman and Bell, 2003).

The approach is characterized by an inductive method of theory generation, compared to the traditional approaches of theory verification (Alvesson and Skölderberg, 2008). This enables a new dimension to the research area of carrier selection criteria. Where the previous studies have been recurring, verifying studies of criteria used in the carrier selection process, this study expands the scope and includes the dimensions of Porters classical competitive advantage theories. The need for theory generation is even larger due to the assumed scenario of cabotage liberalization.

The combination of using a survey and a qualitative approach to the study is an unusual occurrence. In the process of analyzing data, it is actually quite practical. As Bryman and Bell (2003) describe, in grounded theory, compared to quantitative methods, researchers codify and categorize data when it is collected. In quantitative studies the framework is already there when collection of data starts, and the data is, according to the authors, more or less forced into the framework. The survey base of this study structured the data from the beginning, without the requirement to keep the structure intact throughout the analysis. To exemplify: a respondent could provide an observation or opinion in the justification question following the surveys section on price differences, even though the contribution rather focused on social standard differences. Although the majority of the input was automatically categorized, incidents like the one mentioned above created the need for a gradual, post collection codification and categorization.
2.8. Quality of research

As mentioned earlier in this chapter, quantitative studies have dominated the field of logistic research. Hence, it is no surprise that Halldórsson and Aastrup (2003) conclude that the quality of logistic studies usually is judged by quantitative/positivistic inspired criteria. In their paper, the authors discuss the conventional positivistic approach to quality (based on internal validity, external validity, reliability and objectivity) with naturalistic approaches (such as Guba and Lincoln, 1989) and finally introduce a new set of criteria.

Considering the qualitative and naturalistic characteristics of this study, the conventional approach to quality seems less compatible. Nor, is the naturalistic criteria introduced by Guba and Lincoln (1989) perfect, since the study has some positivistic features as well. An approach including criteria from both “sides” is considered most suitable from this particular study.

2.8.1. Internal validity/credibility

Since the scenario of liberalized cabotage is a mere scenario and not the reality, yet, the pure positivistic method of attempting to measure conformity to reality would be impractical. Where internal validity measures the degree of isomorphism between reality and the findings of a study, credibility compares the constructed realities of the respondents with the evaluator (Guba and Lincoln, 1989). Meaning that there is no other reality but a constructed one, existing only in the respondents’ minds, and it is the degree of match between the respondents and researchers’ versions of reality that determines the credibility of the study (Halldórsson and Aastrup, 2003).

The topic of this thesis has its origin in the experiences from the author’s internship at a Brussels based association with interests in the European road transport sector. Given that the majority of the respondents are members of structurally similar associations with interests within the same sector, the conformity of their “constructed reality” with the authors should be high. Hence, the credibility should be considered as high.

The fact that associations are the targeted survey respondents is also the greatest threat against the quality of the thesis. There are obvious political interests at stake and this may of course affect the validity of the responses. The listing of the respondents’ names and their employers does, however, provide a transparency and the tools for readers to use their own judgments.

2.8.2. External validity/transferability

According to Guba and Lincoln (1989) the conventional criterion, that is External validity, measures the generalizability of a study. Halldórsson and Aastrup, (2003) describe the naturalistic approach as an attempt to contextualize rather than generalize.

Although the scenario of liberalization of cabotage could be applicable to other states, outside, but preferably within the European Union, the unique attributes of current socio-economic differences between Scandinavia and Eastern Europe limits the external validity/transferability to the Scandinavian market for road transport. Considering that most respondents are representatives of associations, that in their turn represent thousands of member companies within a specific sector, each respondent could be considered the sum of a
generalization already implemented within each association and sector. Although the respondents are individuals with their own opinions and experiences, they are surely colored by their employer. This actually benefits the transferability, since their employer is a fair amount of companies within a specific sector.

2.8.3. RELIABILITY/DEPENDABILITY
While reliability measures the stability of the data and whether it can be obtained again under the same circumstances, the dependability criteria accept changes in method and construction as expected products of time (Guba and Lincoln, 1989). The authors argue that dependability is, rather, achieved by enabling traceable changes through documentation.

This study covers a future potential scenario that currently may be likely to happen and in addition happen quite soon. However, it is a political decision that initially has to be suggested by the European Commission and later adopted by both the European Council and the European Parliament. As opinions, governments, parliament socio-economic attributes often change faster than legislation is passed in the EU, the direction of this study may be obsolete and misdirected in a couple of years. Meaning that the degree of reliability should be considered as quite low. If one use the naturalistic criteria it is another story. If one accepts evolution in legislation and politics that may change the relevance or shape of the cabotage-scenario, the essentials of the study would still be intact. That is the identifications of important carrier selection criteria and competitive advantages of Scandinavian and Eastern European hauliers. The rules may change but the competition for shipments will remain.

2.8.4. OBJECTIVITY/CONFIRMABILITY
Once again the naturalistic approach rejects the existence of the criteria measured in the positivist approach. To achieve objectivity is, according to Guba and Lincoln (1989), to achieve neutrality and absence of bias, values and prejudice. It is, according to Halldórsson and Aastrup, (2003), also an illusion. Guba and Lincoln argue that confirmability is achieved by assuring the integrity of findings. If sources to data are traceable confirmability is achieved.

The content of both the theoretical and the empirical framework of this thesis can be traced to its source. With regard to the transparency of both respondents identity and the associations they represents there are to obstacles threatening the confirmability of the thesis.
3. Theoretical Framework

3.1. Carrier Selection

Globalization, deregulation and the Just-In-Time concept have all increased the amount of transport as well as the importance of high quality transport. During the last decades, transport has evolved into an activity that could bring value to products, if used correctly. Transport can provide new markets, enable increased production efficiency and most of all lower costs.

Despite its potential and importance, transport of goods is usually a service companies chose to outsource. Naturally there are still companies out there that have their own trucks and driver but most companies either hire a haulier, a freight forwarder or a 3PL/4PL to transport their goods. In the end of the chain you will usually find an independent haulier and depending on how many links in the chain, either the shipper, freight forwarder or 3PL/4PL will go through a process and select the haulage provider. The research field of carrier selection has historically focused on shippers perceptions of important selection criteria.

3.1.1. Carrier Selection Criteria

**Reliability Factors**

Studies performed by Abshire and Premeaux (1991), Lambert, Lewis and Stock (1993), Murphy, Daley and Hall (1997) Kent, Parker and Luke (2001), Premeaux (2002) and Voss, Page, Keller and Ozment (2006) all point to the same conclusion. Reliability in on-time pick-ups and deliveries is the single most important criteria in the process of selecting a carrier. Holcomb and Manrodt (2000) argue that the importance of reliable pickups and deliveries is high and increasing. The average time window for pickups and deliveries has, according to the authors, been significantly reduced, compared to a decade earlier.

According to Pedersen and Gray (1998) the length of the transit time and the directness of the transport are, although considered important, not the top criteria among Norwegian shippers. A high transport frequency is identified as more important than the total transit time. Results from Premeaux longitude studies (2002) do however indicate that total transit time does matter and that it is among the top criteria. In Evans, Feldman and Foster's (1990) study of the selection criteria used by small manufacturing firms, respondents were asked to identify important carrier selection criteria without having an existing list. In this study total transit time was the second most mentioned criteria, which according to the author differed from studies performed on larger businesses.

Murphy and Farris (1993) explored the area of timeliness in carrier selection process. The authors concluded that, although, time-based criteria in the shape of delivery and pickup reliability are confirmed by research to be the most important criteria it is not always included in carrier selection models. These models are often cost based, which makes it hard to include other time-based factors than transit time.

The costs related to delivery and pickup reliability are identified by Murphy and Farris as early and tardy costs. Tardy costs primarily consist of backorder costs, costs of lost sales and
costs of production shutdown. Early costs are the cost of early deliveries, which basically are the cost of storage.

Service factors

The range of services provided by hauliers does not appear to be an important factor. Availability of extended logistic or transportation services such as 3PL, warehousing or intermodal transports were not regarded important by the shippers surveyed in the study by Kent et al (2001). Nor did availability of specialization services such as short-haul and line-haul services matter for shippers when selection a haulier (Murphy et al, 1997). The only services, found outside of the scope of the fundamental transportation service, that shippers found important were IT services.

More important is the quality of the very performance of the basic transport service. Reliability and speed, as mentioned in the previous section, are together with cooperation and communication concluded important by several studies.

Price factors

Although there is no doubt price is an important criterion, studies have reached different results regarding exactly how important it is. In their study of Norwegian exporters’ evaluation of carrier selection criteria, Pedersen and Gray (1998) determine that price factors are considered more important than all other criteria. This is not seen in some similar studies. In the study by Murphy et al (1997) competitive price is only the eighth most important criteria for shippers in their selection process. Neither the results of the study by Abshire and Premeaux (1991) or the repeated version of the same study ten years later (Premeaux, 2002) indicate that price is among the top criteria.

Results in other studies actually do indicate that competitive price is one of the most important criteria. Shippers included in the study by Kent et al (2001) as well as the study by Lambert et al (1993) value competitive rates as one of the most important criteria. However, neither study suggests that price factors are as overriding as the study on Norwegian exporters did. Pedersen and Gray (1998) also noticed their deviant result. They concluded that the significantly higher transport costs of Norway compared to most other countries was the most likely explanation.

The price criterion is treated differently in the previous research. Some studies have one or two criteria connected to transport rates, while others have multiple. Lambert et al’s (1993) study on how shippers select and evaluate motor carriers is of the later kind. The authors make a distinction between the criteria lowest rates and competitive rates and the result are interesting. Competitive rates is ranked in the absolute top, while lowest rates is ranked as low as the 40th most important criteria. Based on those results the authors conclude that as long as the rates are within an acceptable range, price does not matter much in the competition. A similar argument is made by Gibson, Sink and Mundy (1993) as they claim that a competitive rate is more or less expected by shippers.

There are other criteria relevant to price that are considered important by shippers. Their rating of the carriers ability to offer flexible rates were important when Abshire and Premeaux
(1991) did their first study in 1991, the shippers’ rating had increased slightly in the follow-up study a decade later (Premeaux, 2002), where it is considered a “very important” criterion. Evans et al (1990) devoted an entire category and the different criteria connected to flexible rates in their study of motor carrier selection criteria used by small manufacturing firm. Respondents of the survey considered all criteria on flexible rates to be of average importance.

Discount programs for recurring shipments could also be seen as a kind of rate flexibility. The criterion is rated as of average importance, a rating that did not change significantly during the repeated studies by Abshire and Premeaux (1991) and Premeaux (2002).

Proximity between the offer and the price charged is also regarded important by shippers. Billing accuracy scored high in all truckload segments in the study by Kent et al (2001). The older study by Lambert et al (1993) also confirms Billing accuracy as a top criterion.

Scores for formal quality programs and ISO certifications were bellow scale midpoint in the only study they were included in (Crum and Allen, 1997).

**IT factors**

A significant share of previous studies is executed in the nineties, certainly in a period where IT tools and services existed, but perhaps before the major breakthrough of IT services in logistics and transport. One can easily identify the time period of the study based upon shippers rating of the importance of EDI and IT tools. In some studies these criteria is not even included, in others they are considered not important by shippers.

In longitudinal studies’ one can spot the increasing importance of IT and EDI services as time goes by. In the longitudinal study of motor carrier-shipper relationship trends authors Crum and Allen (1997) identify EDI and computerized billing availability as the criteria that had the largest increase in importance rating between the years 1990 and 1996. The authors did, however, not consider shippers’ rating of the importance of these as more than moderate. Time and innovation do affect shippers’ preferences, which it once again noted in a study by Premeaux (2002) five years later.

In a study by Gibson et al (1993), shippers named implementation of EDI services as one of their primary strategies for improving the performance of transports. Also Holcomb and Manrodt (2000) noticed an increasing importance of IT, as shippers more and more set out targets for carriers to increase their real-time tracking capabilities, as well as their general technological sophistication level.

**Security and safety factors**

In the study by Voss et al (2006) security is included as a criterion. According to Meixell and Norbis (2008), this is the only mentioning of security among the articles included in their literature study. This may be the case depending on how you interpret security. Voss et al mentions the issues of stolen goods but put their main focus on terror and the 9/11 and if the incident had increased the importance of security in carrier selection. In the end, the authors

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3 Electronic Data Interface - info
concluded it had not. If you look past the focus on terror the traditional focus on security has been connected to the cargo and incidents of theft. Criteria on freight loss experience with carrier was included in the study by Abshire and Premeaux (1991), Murphy et al (1997) and Premeaux (2002) and received average ratings. The longitude studies performed by Abshire and Premeaux, and later by Premeaux alone, also included a criterion more similar to the interpretation Voss et al had on security. Carrier response in emergency situation received a clearly higher rating 2001 than 1991. Possibly because of the 9/11 attacks, the theory Voss et al tested in their study. This theory might fall if the study Premeaux performed 2001 was executed before September 11, something that cannot be confirmed in his article.

**VEHICLE AND EQUIPMENT FACTORS**

The importance of equipment availability is particularly evident in the studies by Murphy et al (1997) and Kent et al (2001) where the criterion was ranked among the top criteria. Criteria specific to a certain piece of equipment or type of vehicle did not receive a high rating in any studies. The condition of the equipment was included in the studies by Abshire and Premeaux (1991) and Premeaux (2002), where it received high ratings.

**DIFFERENCES BETWEEN CARRIER AND SHIPPERS PERCEPTION OF IMPORTANT CRITERIA**

In a couple of study’s authors has focused on the differences between carriers and shippers perception of important criteria. The studies basically all have the same approach. A number of carriers and shippers has been asked to rate a number of criteria based on how important they estimate them to be in the shippers selection of carrier. The results of the studies do not only determine which criteria that are regarded most important, it also highlight the gap between what shippers and carriers perceive.

Abshire and Premeaux (1991) conclude that carriers actually have a fairly good understanding of what criteria shippers value. Although the carriers overrated the importance of several criteria, most of them were also highly valued by the shippers. More worrying for carriers is their undervaluation of some criteria. Carrier’s response in emergency situations, Carrier’s attitude towards small shipments, Carrier’s leadership in offering more flexible rates and Carrier transportation equipment designed to facilitate easy and fast loading and unloading were all rated higher by shippers than carriers.

One decade later Premeaux (2002) repeated the same study. The author kept the variables from the first study but added a few new, most of them connected to technological development. Overall the carriers understanding of what shippers value had improved. However, carriers still underestimated five criteria that were highly valued by shippers. They still undervalued the importance of flexible rates and response in emergency situations. Out of the other three criteria two were new and the third also closely connected to technological progress. Shippers valued EDI and other computerized services, as well as information availability high. Carriers did, however, not follow.

While other studies only compared the mean of carriers and shippers respective rating of each criterion, Murphy et al (1997) included an additional aspect. Similar to the other authors the
authors compared mean scores, but they also compared the internal ranking of each criterion within the group. When comparing the two different measurements the authors discovered a paradox. Although, they discovered some significant differences between shippers and carriers mean scores the internal group rankings were very similar.

When comparing the internal group ranking of criteria in the study by Murphy et al (1997) thee criteria are separated by five or more positions: rates, special equipment and service changes. Of these three it is actually only rates that is undervalued by the carrier, the other two is overvalued. Comparing means, rates is still the criterion that is undervalued the most by carriers. Moreover, tracing services and willingness to negotiate rate changes were also undervalued by the carriers.

3.1.2. The effect of shipper and carrier relationships
The selection process is of course unique at each shipper and in many cases at each procurement officer. As previously mentioned there are some shippers that have formal selection programs and models, whilst others have a from day to day based approach. The differences can be based on a number of factors, from to size of the company to the size of the transport cost in the cost structure of a company or a product.

Previous research has indicated that the relationship between the shipper and the carrier play a significant role in what criteria is most important. In their longitudinal study between 1990 and 1996 Crum and Allen (1997) noticed a difference in shippers and carriers relationships. The parties took a step from a transactional towards a contractual based orientation. With the transition followed some changes in the criteria shippers regarded important when selecting a carrier. Criteria related to the carriers operational efficiency and profitability received increased attention.

The relationship between parties can appear randomly or be a well thought out strategy. In their study of the relationship between shippers and carriers and its effect on the carrier selection criteria Gibson et al (1993) present a model (figure 3.1) of transportation purchasing strategy that is based on the different stages of a relationship between the parties. The stages reach from a Transaction Based Philosophy to a Relationship Based Philosophy. The two main philosophies are equivalent to the transactional and contractual based orientations that Crum and Allen (1997) referred to.
The initial stage in the model is *Exclusive Price Focus*, which is as close to the Transaction Based Philosophy as it gets. In this stage contracts are short, everything above standard service insufficient and a low price key.

In stage two there is a focus on reducing the number of carriers. By concentrating on a smaller number of carriers, shippers hope to reduce problems with damages and claims, reduce red tape as well as open up for discount programs.

In stage three, Transitional Focus, carriers fluctuates between subjective and objective selection processes. Pickup and delivery reliability as well as billing accuracy becomes more important. There is still not a frequent collection and evaluation of performance data.

When reaching the Measurement Focus shippers fully use an objective selection process. Further reduction of the number of carriers and a greater focus on quality follow and carrier certifications may occur.

In the final phase the carrier is considered an extension of the organization and the purpose is long time partnerships. Focus is on cross firm added value and increased optimization.

3.1.3. The role of public procurement
The fact that public procurement represent over 16% of EU GDP (European Union (2011b) is reason enough to take into consideration EU and member states legislation that affects public procurement.

Unfortunately the statistics are not specific all the way down to the road freight sector. *Construction*, followed by *Healthcare* and *Transport services* are the largest sectors in terms of share of public procurement in Sweden (Bergman, 2008). Considering that road freight transport is included in the transport services sector and probably a significant part of the construction sector as well, public procurement behavior certainly affects the road freight market.


National legislation among the member states is primarily based upon the two EU directives. To prevent nationalistic and corrupt behavior the directives focus on transparency. It attempts to steer public bodies towards products and services that bring the highest value no matter what member state the supplier originates from.

According to the European Commission’s (2010) Work Program for 2011 a revision of the two objectives is planned for 2011. When writing this the revision has not yet been released. However, the theme of the European Commission’s Green Paper on Public Procurement (COM(2011) 15 final) indicate that one of the major themes of the revision of Directive 2004/17/EC and Directive 2004/18/EC will be social and environmental aspects.

Environmental and social aspects are included in the current legislation but the language is vague and does not bring much more than the option for public bodies to take environmental and social aspects into account in the procurement process. Although it does not force member states to buy green and social friendly transport it does promote it. An example of this is the quote from the Swedish version of the legislation:

9 a § Contracting authorities should take into account environmental and social aspects in public procurement if nature of the procurement justify it. (2010:571)

Public procurement is also mentioned as a market-based instrument in the EU 2020 strategy. The shift towards a low carbon economy is one of three main objectives the 2020 strategy (European Union, 2012) sets out for public procurement to contribute to.

Road transport is specifically addressed in the European Commission’s (2009) Directive 2009/33 on the promotion of clean and energy-efficient road transport vehicles. However, the directive applies only to the public’s procurement of road transport vehicles and not to procurement of transport services by suppliers that operate these vehicles. Neither Directive 2009/28 on the Promotion of the use of renewable energy really affects the procurement of freight transport services. The directives focus on transport services performed by, or with a closer relationship to the public sector, that is primarily public passenger transport.

Freight transport is often connected to the procurement of other products and in a way neglected by the green public procurement legislation. Instead it is included in none mandatory guidelines and communications. CSR related public procurement is also treated by the EU but, as with the environmental issues, it is by non mandatory guidelines and other awareness material. The revision of the directives may strengthen and change this.

3.2. RELEVANT LEGISLATION
3.2.1. CABOTAGE
The European Commission (ec.europa.eu, 2011) defines cabotage as
“The national carriage of goods for hire or reward carried out by nonresident hauliers on a temporary basis in a host Member State”

Transport operations that fit these circumstances are currently regulated by Regulation (EC) No 1072/2009 titled: Common rules for access to the international road haulage market.

The rules allow a haulier to perform three transport operations, in a foreign member state, within a seven day period, starting the after the haulier unloaded its international transport. If the haulier did not have an international transport and arrived to the member state empty, it is only allowed to carry out one domestic transport within three days.

**Extent of cabotage operation in the EU**

The extent legal cabotage operations are performed in the EU is still very small. According to data from 2010 provided by the European Commission (2011b) in their Road Freight Vademecum report, cabotage accounts for 1.2% of road freight activities in the EU. This will, however, certainly not always be the case.

Between 2009 and 2010 cabotage activity in the EU increased with 17%. For hauliers originating in one of the new member states the increase were 51%, following a 94% increase the previous year. It is obvious that the new member states takes more market shares outside their domestics market for each year that passes by.

According the Commission’s (2011b), report most cabotage journeys take place in Germany (31%) and France (30%). This is explained by the significantly larger markets of the two countries compared to other member states. If you instead look at the market penetration, meaning the share cabotage represents in all domestic transports in a member state, Belgium is in the top with 6.4% cabotage operations. Denmark and France shares second place (3,7% each), followed by Luxembourg, Sweden and Germany (ca 2,7% each). The new member states are barely affected as 97.7% of all cabo tage operations took place within the EU15.

3.2.2. **Posting of workers directive**

To some degree in the shadow of Regulation (EC) No 1072/2009 on Access to market there is another directive that may be relevant to the topic. The purpose of Directive 96/71/EC directive on Posting of workers was to create a balance between free provision of services and equal treatment of workers providing services in the same state.

In the area of transport the cabotage legislation usually “kick in” before the posting of workers directive does. One week after the day after the unloading of their international shipment, hauliers are no longer allowed to perform domestic transport operations within a foreign country, according to Regulation (EC) No 1072/2009. However, should cabotage be liberalized, as in the thesis scenario, the posting of workers directive becomes relevant.

3.3 **Eastern European vs Scandinavian hauliers**

Critics of cabotage liberalization often separate legal and illegal cabotage, with the argument that illegal cabotage is significant. Since there are no reliable statistics on “illegal” cabotage, conclusions will be based upon statistics over legal operations.
Data indicating advantages or lack of advantages connected to criteria relevant to shippers’ selection of road haulage provider.

3.3.1. COST DIFFERENCES

FUEL COSTS

According to statistics from the International Road Transport Union (2011a) the commonly referred three-way-split of haulage operator costs (fuel cost, labor cost and other costs) is slightly exaggerated, at least when it comes to fuel costs. They estimate the fuel costs to ca 26% of the total costs, still a significant share.

### Diesel taxation and prices for Scandinavian and Eastern European countries

<table>
<thead>
<tr>
<th>Country</th>
<th>Energy + CO2 Taxation</th>
<th>Fuel price</th>
<th>Compared to EU average</th>
</tr>
</thead>
<tbody>
<tr>
<td>DK</td>
<td>392 EUR -0.73%</td>
<td>1 545 EUR</td>
<td>13.47%</td>
</tr>
<tr>
<td>ES</td>
<td>331 EUR -18.08%</td>
<td>1 240 EUR</td>
<td>-8.97%</td>
</tr>
<tr>
<td>LV</td>
<td>329 EUR -16.61%</td>
<td>1 271 EUR</td>
<td>-6.63%</td>
</tr>
<tr>
<td>LT</td>
<td>302 EUR -23.65%</td>
<td>1 265 EUR</td>
<td>-7.08%</td>
</tr>
<tr>
<td>NO</td>
<td>703 EUR 77.97%</td>
<td>1 734 EUR</td>
<td>27.31%</td>
</tr>
<tr>
<td>PL</td>
<td>327 EUR -17.33%</td>
<td>1 239 EUR</td>
<td>-9.00%</td>
</tr>
<tr>
<td>SE</td>
<td>492 EUR 24.50%</td>
<td>1 605 EUR</td>
<td>17.87%</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>EU minimum</th>
<th>EU average</th>
</tr>
</thead>
<tbody>
<tr>
<td>330.00</td>
<td>395</td>
</tr>
</tbody>
</table>

Figure 3.2 – EU taxes and prices of diesel (International Road Transport Union, 2011b)

As seen in Figure 3.2 the taxes and prices differ a lot between the relevant countries. The Scandinavian countries have significantly higher taxes and prices on diesel compared to the eastern European countries.

The price and taxes on diesel should, however, not matter in the competition on the Scandinavian domestic market since haulier, whether Scandinavian or eastern European, would need to purchase he larger part of the fuel needed geographical close to the market. Hence, the will to a great extend buy the same fuel for the same cost.

### LABOR COSTS

According to Saurento and Pekkarinen (2004), the cost of labor is the largest cost item in the cost structure of an operating HGV. Despite the geographical closeness and the actions on the EU internal market the
differences between labor costs between the EU member states are significant.

The latest data, provided by Eurostat (2012), that include all the relevant EU member states is from the year 2007. As seen in figure 3.3 and 3.4 Denmark and Sweden have significantly higher labor costs than the eastern European countries featured. The Scandinavian costs were around six times higher than the Polish and over seven times higher than some of the Baltic countries costs.

![Average hourly labor costs 2007](image)

**Figure 3.4**

**Other Costs**

In their study of the differences in the taxation of heavy goods vehicles (HGV) in Europe, Saurento and Pekkarinen (2004) identify the numerous taxes and charges that affect heavy goods vehicles in Europe and compare the levels of taxation in the various European countries.

The comparisons in the study are performed on three types of HGV:s basted on total weight and the number of axels. In this study the focus will be on the 2+3 axels, 40 ton truck, the largest vehicle featured in the study by Saurento and Pekkarinen (2004).

To identify and structure the different costs the authors used a model (figure 3.5) provided by the European Conference of Ministers of Transport, nowadays called the International Transport Forum. The study by Saurento and Pekkarinen focus on the direct taxes.
If we look at Saurento and Pekkarinen’s (2003) study backwards and start with their final summary of the total amount of taxes and charges, it is very clear that fuel taxes represent the major part. Fuel costs and taxes are treated in an earlier stage in this study and with more recent data. Hence, the part on fuel taxes in the Saurento and Pekkarinen study is ignored.

Fuel taxes excluded, the total taxes and charges for a 2+3 axels 40 t vehicle in Sweden and Denmark 2003 it was around 2,000 euro per year in both countries. To a corresponding truck in the Baltic countries a cost of ca 500-750 euro per year would follow. Poland is, tax wise, the cheapest country to register your truck in 2003, with taxes and charges around 250 euro per year.
6.3.2. Efficiency differences

**Empty runs**

In their 2010 Road Freight Vademecum report the European Commission (2011b) present statistics on the share of empty runs executed by EU hauliers. The statistics is specified for each member state and divided into international and national transport.

The EU average on empty runs for international transports is 13.6, for national transports 27.3% and in total 23.9%. The differences between member states are significant, especially if you compare the Scandinavian and Eastern European countries. Most member states have a quite low share of empty runs in international transport but when it comes to the national transport there are some real highs and lows. With both international and national empty run shares beneath 15%, the Danish hauliers are the best. In national transport Sweden is the second best with less than 20% empty runs. If you compare with the eastern European member states they have a significant larger share of empty runs. Estonia had a share over 30%, Latvia and Poland over 35% and Lithuania over 45%.

**Load factor**

The European Commission’s (2011b) 2010 Road Freight Vademecum report compares the average load factor of transport operations performed by EU hauliers. The EU average load factor for international transport operations is 16 t, for national transports 12.7 t and in total 13.6 t. The differences between member states are not as significant and the counties in top and bottom are not exactly the same as with the empty runs.

Sweden had the highest average load factor for national transport with over 15 t, Estonia’s and Latvia’s average were also in the area of 15 t. Poland and Lithuania were a bit lighter at ca 12 t and Denmark had the lowest average load factor with slightly under 10 t.

It can be argued if ton is an appropriate and reliable measurement for load factor since a truck that weighs 5 t can be full in terms of volume. However, the interesting perspective of the stats is essentially the comparison between the member states and not whether there are better methods to use.

3.3.3. Vehicle and equipment differences

**Vehicle age**

The younger the vehicle the cleaner the vehicle. At least the European Emission Standards makes sure that this is the case in the EU. According to the European Commission (2011b) the European heavy goods vehicle fleet is relatively modern. 43 % of the transport work (ton km) is performed by vehicles that are four years old or younger. 13 % is performed by vehicles older than 10 years.

There are no specified statistics for each country in the report. Instead it is divided into EU12 and EU15 where EU12 is the new member states that joined EU 2009. Denmark and Sweden are a part of EU15 while the eastern European states are included in EU12.
According to the statistics EU15 hauliers use a greater amount of new vehicles than EU12. 46% of the transport work performed by EU15 hauliers is executed with vehicles up to four years of age, compared to EU12 where the share is 32%. There is also a larger share of the oldest vehicles (+10 years) being used by EU12 haulers. They represent 24% of the transport work, compared to 10% for the EU15 hauliers.

**Vehicle load capacity**

Regarding the load capacity of HGV in the EU there are national differences in both legislation and in the type of vehicles and trailers used. According to statistics from the European Commission (2011b) EU15 perform a larger amount of transport work on trucks with a high maximum permissible laden weight (mplw).

The mplw include both the maximum weight of the vehicle and its cargo.

Almost half of the transport work in the EU is performed on trucks with a mplw between 20-40 t, 30% is performed by trucks with a mplw above 40 t and the rest by vehicles with a mplw beneath 20 t. EU15 trucks above 40 t perform 33% of the transport work, compared with 20% for EU12 trucks. The lightest vehicles (<20 t) had an equal share of the EU12 and EU15 transport work.

**Legislations on vehicle and trailer dimensions**

Council Directive 96/53/EC sets out the allowed weights and dimensions of road transport vehicles in national and international traffic in the EU. What makes the topic interesting is not the directive itself, but the exemptions certain member states have from it. Annex one of the directive limit the length of vehicle and trailer combinations of HGV road trains in the EU to 18.75 m, the width to 2.55 m⁵ and the total weight to 40 tons. This regulation does not fully apply the some member states since article 4 § 4 b of the 96/53/EC make room for exemptions from the weight and dimensions stated in annex one. Finland and Sweden have exemptions on both dimensions and weight due to the fact that both states, before entering the EU, had a fleet of larger and heavier vehicles.

What the exemptions provide for Sweden and Finland is in broad terms road trains up to the length of 25.25 meters and a weight of 60 tons. There are conditions of the size of each unit of the road train and the allowed weight per axel. Furthermore, the vehicles are only allowed in national transport, which means that you are not allowed to perform international transport with the larger vehicles, not even if you are driving from Sweden to Finland. The road trains goes under the name European Modular System (EMS).

Although the exemptions only apply to Sweden and Finland some countries have introduced field trials of the EMS. Currently Denmark, Germany and the Netherlands are performing the trials.

What makes the EMS interesting is that since Sweden and Finland are the only countries that have the exemption they have a competitive advantage over eastern European hauliers. The

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⁵ Except for thermo vehicles that are allowed to be 2,60 m
eastern European hauliers are neither allowed to cross borders or drive in their own country with the EMS trucks. Although rumors say that the EC is planning to present a proposal allowing EMS cross border traffic between member states that allow the concept it is still only allowed on a test basis in member states other than Sweden and Finland.

In a case of cabotage liberalization the eastern European hauliers could of course add the extra trailer when arriving in Sweden or Finland and leave it before exiting. Under the current cabotage legislation it is uncertain if it would be legal to execute such a maneuver.

Apart from the EMS Sweden is one of a few member states that have a higher limit on trailer heights for domestic transport than the EU limit for international transport. The maximum trailer height in Sweden is 4.5 meters, compared to the EU limit for international transport on 4 meters. This implicates a similar scenario as with the EMS since it will be complicated for eastern European hauliers to use the same size of trailers as national hauliers. This could be an advantage for the national hauliers since they can load a higher volume per truck. A similar situation applies to Norway who also has a higher height limit.

3.4. Most important criteria based on previous studies and other findings

The criteria used in the survey are primarily based upon the results of the longitudinal studies by Abshire and Premeaux (1991) and Premeaux (2001). The top twenty criteria of these studies were complemented with some criteria highly rated in studies by Murphy et al (1997) and Kent et al 2001. Two other groups of criteria was added by the author in a attempt to keep it updated to trends as well as customize it to the specific scenario of cabotage liberalization. These groups are described below:

**Brand and reputation factors**

A haulier’s brand, reputation or the shippers past experience with the haulier is probably sometimes used to determine whether it is qualified in each set of criteria. In other cases a familiar brand or a previous use of the haulier may be criteria itself. Although these criteria is either not mentioned or poorly rated in previous studies they will be included in the survey. The reason is the unique case of cabotage liberalization. When the gates are open for other EU hauliers to operate freely on the Scandinavian domestic markets, there is a possibility that the number of hauliers present on the market will explode. When having too many options it is not impossible that shippers will stick to familiar brands or hauliers they have experience with.

**Social and environmental factors**

In their review of carrier selection literature, Meixell and Norbis (2008) conclude that environmental factors have been neglected in the previous research. The authors discovered that none of the 48 articles addressed in their study included the environmental aspect. Concerned about the gap the authors encourage future researchers explore how environmental factors relate to transportation choice. Meixwells and Norbis encouragement together with the European Commission’s (2011) focus on environmental issues in their White Paper on Transport was reason enough for these criteria to be included in the survey.
The aspect of social standards has been widely debated in Brussels in relevance to the cabotage issue. It is often brought up by unions and other associations that oppose the liberalization and also included in the White paper (European Commission, 2011). Considering the political attention social standards have been given it is a natural choice to include it in the thesis.

3.4.1. List of criteria included in the survey

1. **Time and reliability**
   a. Reliability of on-time pickup
   b. Reliability of on-time delivery
   c. Total transit time for the shipment
   d. Handling expedited shipments

2. **Price**
   a. Competitive prices
   b. Billing accuracy
   c. Discount programs and flexible rates

3. **Safety and Security**
   a. Freight loss experience with the haulier
   b. Freight damage experience with the haulier
   c. Driver skills
   d. Emergency situations and crises

4. **Vehicle and equipment**
   a. Condition of truck, trailer and equipment
   b. Vehicle and equipment availability

5. **IT**
   a. EDI Services
   b. Tracing services

6. **Service**
   a. Scheduling and planning flexibility
   b. Ease of claim settlement (loss or damage)
   c. Geographic coverage of haulier
   d. Communication quality with haulier
   e. Driver language skills
   f. Haulier cooperation with shipper's personnel

7. **Reputation and past experience**
   a. Personal relations with the haulier
   b. Haulier's reputation
   c. Brand awareness
   d. Past performance of the haulier
   e. Financial stability of haulier

8. **CSR - Social and environmental aspects**
   a. Eco driving
   b. Use of alternative fuel
   c. Drivers social situation
4. Results and Analysis

4.1. List of Respondents

Ove Holm (OH), Industry Policy Director at the Danish Transport and Logistics Association (Dansk Transport og Logistik).  

Morten Pernø (MP), Economist at the Danish Transport and Logistics Association (Dansk Transport og Logistik).

http://www.dtl.eu

John Woxström (JW), Lawyer and designated expert on social and cabotage issues at the Swedish Road Hauliers Association (Sveriges Åkeriföretag).

http://www.akeri.se

Jesper Højte Stenbæk (JHS), Senior Advisor on Transport at the Danish Chamber of Commerce (Dansk Erhverv).

http://www.danskerhverv.dk/

Søren Hylstrup Larsen (SHL), Chairman of the Logistics Working Group at Eurocommerce.

http://www.eurocommerce.be/

Nicolette van der Jagt (NVDJ), Secretary General at European Shippers Council (ESC)

http://www.europeanshippers.com/

Poul Bruun (PB), Deputy Director at International Transport Denmark (ITD)

http://itd.dk/

Joachim Lindroth (JL), CEO of Uddevalla Lastbilcentral AB

http://www.uddevallalbc.se/

Håkan Johansson (HJ), Head of DHE Operations at DHL Express

http://www.dhl.se/

Morten Pernø, Søren Hylstrup Larsen, John Woxström and Håkan Johansson responded to the follow up questions.

6 The contribution by DTL was divided between Ove Holm and Morten Pernø. Where Holm answered the initial survey and Pernø answered the follow up questions.
4.2. Survey

4.2.1. Reliability and time criteria
Seven out of eight respondents regarded Reliability of pickups and Reliability of deliveries to be of very high importance, the highest rating possible in the survey. This aligns with previous studies by Abshire and Premeaux (1991), Lambert et al (1993), Murphy et al (1997) Kent et al (2001) and Premeaux (2002) where reliability criteria has been identified as the most important in the selection process. JW argues that shippers find a high reliability fundamental for a modern haulier and thus not as important in the competition as price since it is basically expected. JHS points out that the nature of the shipment determines the importance of reliability as most other criteria. However, seen from an average perspective JHS considers reliability to be of high importance to shippers.

The other time related factors Total transit time and Ability to manage expedited shipments received scattered ratings. JW, JHS and SHL believed a haulier’s ability to handle urgent shipments to be very important. JJ and HJ did on the other hand only consider it to be potentially important. Most respondents did, however, consider both urgent shipments and total transit time to be important.

PB went a completely different direction than the others in the assessment of the reliability of pickup and delivery criteria’s relevance to the competition. PB did not believe that these criteria are relevant at all. An opinion the other respondents did not shared since they all rated it as relevant or very relevant. The rating of the relevance of total transit time basically followed the same pattern as the reliability factors. The relevance of Expedited shipments had varying ratings.

Although rating of reliability in pickup and delivery follow the same overall pattern there are some differences. For example JJ believes Scandinavian hauliers to have an advantage in reliability of pickups but an ever larger one in reliability of deliveries. JW and SHL do on the other hand expect the opposite scenario as they give Scandinavian hauliers the advantage in pickup reliability but not in delivery reliability. PB and NVDJ did not believe that neither haulier group would have an advantage in reliability. OH expects a slight advantage to Scandinavian hauliers while HJ believes it to a significant advantage. The ratings of expedited shipments more or less follow the same pattern. In total transit time several respondents does not believe there is an advantage for any haulier. JJ and HJ foresee an advantage to
Scandinavian hauliers while NVDJ believes Eastern European hauliers to have the advantage. Unfortunately, none of the respondents did clearly argue for their cause. Probably because of the lack of studies and statistics in the area.

4.2.2. Price criteria
Everyone but SHL gave competitive prices the highest rating. The retailing logistics man did rate it as important but he regarded several criteria connected to service and reliability as more important. SHL explains his rating by pointing out that, although the price is important, the cost of a long term relationship is what matters the most. He to some extent joined by JW in this opinion, as JW also points out that the final cost and initial price may not always be the same and that it is the cost that is interesting.

Although JHS rated price as of highest importance he stresses that the conditions for each transport operation determines the extent to which the price is important. Moreover JHS argue that the same thing applies to the importance of the reliability factors. This correlates with the conclusions Pedersen and Gray (1998) had regarding the connection between the value of the goods shipped and the importance of a low price contra high reliability.

Competitive prices was not only considered to be among the most important criteria, it was considered the most relevant to the competition as well. All of the respondents regarded the criterion as relevant or very relevant.

Respondents were close to unanimous on which hauliers had an advantage in the criterion. SHL, NVDJ and PB predict that Eastern European hauliers will have an advantage, the others believe it will be a significant advantage. The lower salaries in Eastern Europe were the overall justification for the Eastern European hauliers advantage in pricing. This correlates with the statistics from Eurostat (2011) that showed that Scandinavian salaries are significantly higher than eastern European salaries. PB argues that the competitive advantage of lower driver salaries in Eastern Europe is already exploited by some Scandinavian hauliers that use subsidiaries or self employed drivers from Eastern Europe to perform domestic transports in Scandinavia. Thus the eastern European hauliers’ advantage in pricing may not be as significant as it appears to be.

The other two price-related criteria, Discount programs and Billing accuracy, were also generally considered as important by the respondents. With PB as an exception the respondents also discerned some relevance to the competition among the two criteria. The opinions on which group of hauliers that would have the advantage were, however, divided. JW, PB and JJ did not think any of the hauliers group performed better than the other. OH, JHS, SHL and HJ believed Scandinavian hauliers would have the advantage while NVDJ favors the Eastern European hauliers. Discount programs received diversified ratings.

4.2.3. Safety and security criteria
Cargo associated criteria as Freight loss and Freight damage received average ratings in both relevance and importance. With PB as an exception there seemed to be an overall agreement among the respondents on that Scandinavian hauliers had a slight advantage in these criteria. PB did not think anyone had an advantage. SHL explained his answer by pointing out the link
between salary and quality, meaning that the lower wages in Eastern Europe would likely have an impact on the quality of service. JW believed that the overall perception in Scandinavia is that local professionals are more skilled. He did himself not believe this to be the reality. According to PB many Eastern European hauliers seems to be more motivated and emphasize on quality service, compared to Scandinavian hauliers. A phenomenon, PB believed to be caused by a higher status of the driver profession in Eastern Europe.

Driver skills were generally considered to have a potential importance and a potential relevance. OH, SHL and HJ believed drivers at Scandinavian hauliers to be the better drivers, while the others favored no group of hauliers.

4.2.4. VEHICLE AND EQUIPMENT CRITERIA
The availability received, as in previous studies by Murphy et al (1997) and Kent et al (2001), high scores on importance by almost all respondents. NVDJ and PB only considered it to have a potential importance, while the others concluded it very important. The condition of equipment was considered to be of average importance, also corresponding with previous research. JHS believes that local hauliers have a slight advantage and argues that it has decreased over the last decade.

PB argued that statistics from German MAUT-tolls proves that the age of Eastern European vehicles was in level with the Scandinavian vehicles. He believed there to be no significant differences, except for some special vehicles that are only used in Scandinavia. Statistics from the European Commission (2011b) does, however, indicate that the vehicles used by hauliers from the new member states are generally older than the ones used by EU15 hauliers.

Regarding the special vehicles PB mentioned there are, as stated in chapter 3.6.3, some major legislative differences between the Eastern European and Scandinavian member states.

4.2.5. IT CRITERIA
Out of IT-services EDI-services was overall considered as more important and relevant to the competition than tracing-services. Especially SHL highlighted the difference when rating EDI as very important and tracing as not important. SHL explains the importance of EDI with the cost reduction benefits enabled by the technology. Along with the others, except JW, SHL also predicts a slight advantage for Scandinavian hauliers in offering these services.

Comments from the respondents indicate that the increasing importance of IT services, found in longitudinal studies by Crum and Allen (1997) and Premaux (2002), is likely to continue. Both JW and JHS suggest that IT services will increase in importance in the future, as the technology becomes cheaper and user friendly.

Although the longitudinal studies displayed an increasing importance, it was still considered less important than a vast number of other criteria. This is also suggested by the shipper representative NVDJ and confirmed by JJ, who argues that there is very little interest for IT services from shippers presently.
4.2.6. Services criteria
Respondents regarded most service oriented criteria to be important. In opposite to the study by Premeaux (2002), Scheduling flexibility and Communication quality was considered more important than the IT related services. There were indications of a general advantage towards local hauliers. Not surprisingly, particularly in Language skills and Geographical coverage. JW believed Scandinavian hauliers to be slightly more service oriented than the Eastern European driver. JHS argues that there is a widespread need for language and communication skills. Often there is no need for driver to be able to communicate easily. PB agrees and adds that most foreign drivers have the language skills to manage simple from A to B transports. SHL point out that it is usually in cases where something has gone wrong that the ability to communicate with the driver is critical.

4.2.7. Reputation and past performance criteria
Brand awareness received a lower rating then the other criteria in the category, proving that Scandinavian shippers are not very brand oriented. JJ points out that some shippers are constrained by public procurement legislation to consider these criteria.

4.2.8. Environmental criteria
Although the environmental criteria are not rated among the top criteria they are still regarded more important than in previous studies. Actually, in most previous studies environmental performance criteria are not even included. The growing importance of these criteria is noted both by Meixell and Norbis (2008) and later by NVDJ in the survey. Along with OH and JJ she rated all environmental performance criteria as important. Out of the three criteria Emission standard is regarded as most important by the respondents.

Eco driving and Use of alternative fuels received varied ratings in relevance to the competition. When OH and NVDJ believed the criteria to be relevant, PB did not think they were relevant at all. The other respondents were dubious of the relevance of these criteria. All but two respondents considered Emission standard to be relevant. Again PB did not think the criterion to be relevant to the competition.

In regard to environmental criteria there seems to be a slight advantage towards Scandinavian hauliers according to some of the respondents. HJ even expects the local hauliers to have a major advantage when it comes to both Emission standards and Use of alternative fuels. This is rejected by PB who claims that Scandinavian hauliers have the same average European Emission standard on their trucks as Scandinavian hauliers, according to statistics from the German MAUT-tolls. Statistics from the European Commission (2011b) indicate that Scandinavian hauliers have significantly less empty runs and a higher load factor than Easter European hauliers.

4.2.9. Social criteria
Differences in social standards and fear of social dumping have been a hot topic in the EU discussions on cabotage. Although social dumping is not mentioned explicitly by respondents there are a lot of discussions about social standards.
In some aspects the respondents opinions were consistent, in others they were opposites. Driver social situation was actually the one criterion that was identified as least important by the respondents as a group. NVDJ was the only one that rated it as Important. The other either rated it as Possibly important or Not important. Whether it was relevant to the competition received very diversified answers.

Regarding the rating of the advantage SHL took another direction than most of the others. NVDJ and PB did not believe any had an advantage. While OH, JHS, JW, JJ and HJ agreed that Scandinavian hauliers had either an advantage or significant advantage, SHL argued that Eastern European hauliers had the significant advantage. When asked to explain his diversified opinion SHL explained that he considered a lower social standard as an advantage for the hauliers, since it enables a lower price and thus a competitive advantage. Hence, SHL meant that Eastern European hauliers had lower social standards and favored from it. Looking at the others justification they are assumed to have interpreted the question differently as the seemed to have rated the social standard rather than the competitive advantage it provides. Meaning their opinion may correlate with SHL:s.

On the issue of social dumping PB argues that although the salaries of Eastern European hauliers are lower than their Scandinavian counterparts the purchasing power it provides them in their home countries are not.

4.2.10. Overall Advantage
In the last section of the survey the respondents are asked to estimate whether Scandinavian or Eastern European hauliers will have an advantage in the competition for domestic goods transport in a Scandinavian market without restrictions on cabotage. Respondents are also asked to justify their answers.

Of all the survey questions this last one was actually the one with the most scattered answers. JJ and JHS expect a major advantage to the Eastern European hauliers. JW and OH expect a slight advantage to the Eastern European hauliers. NVDJ does not believe that either of the two groups will have an advantage while SHL, HJ and PB expect local hauliers to have a slight advantage.

JJ argues that the lower wages of Eastern European hauliers will be overwhelming to the local hauliers. Considering the already low margins in the sector, JJ expects many Scandinavian hauliers to fall into bankruptcy when trying to match the lower prices offered by Eastern European Hauliers. JHS also identify the low wages as a major advantage for Eastern European hauliers. Although, he believes that the gap between Eastern European and Scandinavian wages will decrease gradually over time. He also argues that the lack in enforcement, of for example social legislation, in Eastern Europe favors hauliers from that region.

JW and OH mean that the lower wages and lower social standards of Eastern European hauliers will tip the scale their way. JW mentions an example of a shipper that explicitly told a haulier to hire none-Swedish drivers if they wanted to keep business.
NVDJ does not believe that a liberalization of cabotage will be the revolution many fear or hope for. She expects changes on some flows but a slow adoption from the overall market. As NVDJ, HJ does not expect any major changes. He only expects the shippers that exclusively buy the cheapest service to favor Eastern European hauliers. Considering that he identify this group of shippers as small he expects local hauliers to have an advantage.

SHL returns to his thoughts about the difference between initial price and actual cost of transport. He believes that Scandinavian hauliers will have an advantage and motivates his answer: “In the long run, a low price may be expensive”.
4.3. FOLLOW UP QUESTIONS

QUESTION 1 – WEIGHT AND DIMENSIONS

1: Regarding the weights and dimensions of vehicles in the EU, Sweden has an exemption from the regulation allowing them to use the European Modular System (EMS). Denmark lacks the exemption but is performing field trials. To what extent would Sweden’s exempt from the regulation and the trials in Denmark be a competitive advantage for the national
hauliers in the competition with eastern European haulier? The exemption allow Sweden, and to a certain level Denmark, to use 25.25 m and 60 ton vehicle combinations in domestic transport. Take also into consideration the somewhat higher limitations on trailers heights (4,5m) in Sweden compared to most other EU countries (4m).

Although the respondents conclude that the unique legislation on weights and dimensions favor the local hauliers they are doubtful over the magnitude of the advantage. MP is convinced that a full introduction of the EMS in Denmark would significantly increase the productivity of Danish hauliers and thus reduce the Eastern European hauliers’ favorable salaries. MP also mentions the recently increased allowed total weight of trucks in Denmark from 48 to 54 ton as a similar advantage. MP is, however, certain that these advantages will not match the advantage Eastern European has with their significantly lower driver wages.

According to JW it is only a small portion of Swedish transports that are shipped on 25.25 m trailers. Hence, the advantage local hauliers would have from this is very limited. Instead, John believe that the 4,5 m trailers would benefit Scandinavian hauliers more as cargo and equipment are adapted for those trailers. Both SHL and HJ stresses the fact that foreign hauliers are allowed to use the same trailers as locals do when performing domestic transports in Scandinavia. SHL does, however, conclude that there are some obstacles for Eastern European hauliers in that area. In the current legislation, EMS trucks, 4,5m high trailers or 54 ton trucks are not allowed to cross borders. This means that Eastern European hauliers will have to use trailers fetched in Scandinavia.

QUESTION 2 – ENVIRONMENT

2: Although respondents indicated that environmental criteria could be important they were rated among the least important. However, environmental and climate issues are hot topics in transport policy at the moment which raises the question on if you believe that the criteria will be considered more important in the future? If yes, what will be the reason(s) behind this? Will it be legislation, taxation, CSR (Corporate Social Responsibility) or another reason?

This question is basically divided into two parts. First if the environmental criteria will increase in importance and second, how this will happen. Overall, respondents seem to at least agree on the first question: Environmental criteria will become more important. MP and SHL are both suggesting that the instruments that will make this happen are already in place. As examples MP mentions the EU 2020 target on decreasing CO₂ emissions in transport with 20%, upcoming changes in the EU:s Energy Taxation Directive and the Eurovignette Directive. SHL argues that there already is environmentally oriented transport legislation that transfers into costs for hauliers. Charges, vehicle investments and filter installations are examples that SHL bring up. JW highlight that one of the largest costs for hauliers, the cost of fuel, have an environmental aspect to it.

Regarding CSR, some respondents are hesitant over the extent this would impact hauliers. HJ believes that legislation and taxation most likely will be the ruling factors behind the increased importance. JW agrees and argue that hauliers will act on direct demand from shippers and not on CSR related publicity. Both SHL and MP are on the same track, pointing
out that if CSR will have an effect, it will be on the shippers and then transferred to hauliers in the shape demand. MP actually claims that this to some extent already is the case in Denmark as some large shippers is requesting documents on their carbon footprint.

**QUESTION 3 – FLAGGING OUT AND USE OF FOREIGN SELF-EMPLOYED**

Differences in price is identified as the largest competitive advantage for eastern European hauliers. Labor costs are one of the largest parts of a hauliers cost structure and a significant factor in the favorable prices of the eastern European hauliers. Some Scandinavian hauliers already exploit the low labor costs in Eastern Europe by hiring self-employed drivers and driver pools from Eastern Europe. Do you believe that Scandinavian hauliers will use this strategy more often in the case of a liberalization of cabotage? Will it in that case disarm the Eastern European hauliers in the competition?

MP is confident this type of business strategy will be more widespread in the future. He claims that the number of trucks with foreign license plates registered to a subsidiary to a Danish company has increased since 2005. However, he expects it to mainly be limited to the larger operators. He believes that a liberalization of cabotage will largely increase the presence of foreign hauliers on the domestic market, forcing local hauliers to flag out their vehicles and use foreign labor to be able to compete. Since small hauliers lack the resources needed to relocate MP expects many of these to fall into bankruptcy.

SHL argues that Scandinavian hauliers using the same cost structure would be an obvious threat against Eastern European hauliers operating on the Scandinavian market. However, he doubts the likelihood of local hauliers seeing imported labor as an efficient long term solution for national transports. For international transport, it is another question according to SHL. Nor HJ believes in such a scenario. He believes that the language barrier combined with the risk of being accused of wage dumping will prevent local hauliers from using foreign labor in domestic transport. To the contrary, JW is convinced that hauliers will utilize this strategy. He considers it a natural action to try to decrease cost when possible. As long as there is no legislation preventing it, JW expects hauliers to exploit the opportunity.

**QUESTION 4 – INITIAL PRICE VERSUS FINAL COST**

4. According to the respondents Eastern European hauliers have a major advantage in their lower prices. Moreover the Competitive prices were considered the most important criterion as well as the criterion most relevant for the competition. However, respondents also indicated that Scandinavian hauliers have an advantage in the majority of the other criteria. Among these: Reliable pickups, Reliable deliveries and Vehicle and equipment availability that all were considered to be both important and relevant for the competition. Late or lacking deliveries etc can in the Just-In-Time world be very expensive. Hence, the initial price and the final cost of the transport may not always be the same. Do you believe that the difference in final transport cost is as big as the difference in the initial price if you compare Scandinavian and eastern European hauliers?

MP starts by clarifying that since DTL is constrained from examining prices by the Danish competition authorities, he cannot provide an answer based on accurate figures. He does,
however, provide statistics on transport cost differences to support his case. According to figures from 2010 from a study by the research organization Panteia/NEA, that MP quotes, transportation costs of hauliers from Eastern European member states are, depending on the state, between 10-35% lower than the cost for Danish hauliers and 12-37 lower than the cost for Swedish hauliers. Confirming the cost differences identified by Saurento and Pekkarinen (2004).

Not unlike JW and HJ, MP differentiates between the types of shippers on the Scandinavian market. MP believes that a significant part of these shippers are price oriented, at least on the Danish market. Where MP separates the types of shippers, JW and HJ separates the difference types of transport. JW points out that there is not much that can go wrong in a simple from A to B transport and that price will probably be the ruling factor, while shippers might use the familiar local hauliers to the more complicated transports. HJ arguments are quite similar. He believes that shippers will use the low cost Eastern European hauliers for volume transport and the “more important” transports will be handled as before.

SHL points out that one not should underestimate the quality of Eastern European hauliers since there is a competition going on in-between them as well. Meaning that if a Eastern European hauliers does not live up to standards it might be replaced by another foreign haulier and not necessarily a local haulier. SHL, was however, the respondents that first brought up the potential difference between initial price and final cost.
5. Conclusions

Important Criteria

This study confirms that reliability of pickup and delivery is still the most important criteria in carrier selection. Reliability was the number one criteria of close to all previous studies on carrier selection criteria. Also the criterion of equipment and vehicle availability was regarded as important as before. What was different was the criterion that followed reliability in importance. In this study, the competitive prices criterion was considered more important than in the previous studies. The exception is the study on Norwegian shippers by Pedersen and Gray (1998), where a low price actually received the highest average rating. The authors concluded that the high rating was a regional difference and this correlates with the results of this study, which also was focused on Scandinavian markets.

Environmental criteria were another group of criteria that received higher rating than previous studies. It is actually not even included in most of them, a fact that Meixell and Norbis also discovered their study. According to the respondents, this is an area that becomes more important as time goes by. There is also a framework for environmentally connected charges to hauliers that was not in place when most previous studies were performed.

Social standard has been given a lot of attention in Brussels, when discussing cabotage, but the respondents did not expect shippers to pay it the same amount of attention. It was actually rated the least important of the criteria.

Relevance to the Competition

On average the respondents more or less rated relevance after the same pattern that they rated importance. If a criterion was considered important the respondents regarded it relevant to the competition as well. The task was, however, to focus on the unique scenario and the competition between hauliers from Scandinavia and Eastern Europe. There are some indications that they did this after all. Competitive prices was clearly ranked the criterion most relevant. Statistics from Saurento and Pekkarinen (2004), confirm that there are major differences between cost levels. Price differences is also mentioned by several respondents as a key issue. Although not in agreement over the scope, respondents were convinced that for some flows of goods, transport price will be the ruling factor.

Overall the respondents had very different opinions on the overall relevance of criteria. For example: PB and OV both rated competitive prices as very relevant but OH had an overall average relevance rating of 2.0 (relevant), while PB had an average on 0.7 (between not relevant and potentially relevant. This significant difference was not noted in the rating of importance.

Overall there is a major risk that the interpretation of the task was not consistent across the respondents. The relevance to competition was also the least commented rating in the justification section. Thus it is difficult to draw any major conclusion in this section.
WHO HAS THE ADVANTAGE?

First of all, there are advantages that matter and those that do not. Scandinavian hauliers were, as an example, considered to have a significant advantage when it comes to providing a high social standard for their drivers. This does, however, not benefit them at all in the competition, since drivers social situation is not a highly rated criteria in the carrier selection process. When looking across all criteria, respondents tend to favor Scandinavian hauliers in most areas (this is clearly shown in figure 4.3) with pricing as a major exception. However, in the overall advantage rating the respondents were divided. JJ believed Scandinavian hauliers to have an advantage in almost every area but the pricing. Still, he expected Eastern European hauliers to have a significant advantage in the overall competition. OH, JW and JHS showed similar patterns. Considering the expected difference in pricing, they have a valid point. There is no statistics available on price differences but statistics on labor cost differences from Eurostat (2011) as well as the study by Saurento and Pekkarinen (2004) indicate a major difference in price between Eastern European and Scandinavian hauliers.

Although some of the respondents, as well as statistics from the European Commission (2011b), indicate that Scandinavian hauliers have advantages in newer vehicle fleet and better environmental performance though a higher load factor and less empty runs, the connected criteria is not regarded important. Less empty runs and high load factor would, however, imply a more cost efficient transport.

All the respondents seem to agree that a liberalization of cabotage will change the market and the difference in price will be the determining factor. It is also concluded that a lower price will not affect all flows. The disagreement is basically on the extent of the flows expected to be price oriented. More Scandinavian hauliers are expected to take advantage of the preferable cost structure in Eastern Europe, either by flagging out vehicles to foreign subsidiaries or by using self-employed hauliers with their business registered in Eastern Europe. The extent these practices will be used is also debated among the respondents.

Results from the studies by Gibson et al (1993) and Crum and Allen (1997) indicate an ongoing move from a transactional based philosophy toward a relationship based philosophy in their transportation purchasing strategy. This trend will lead to an increased integration of the carrier in the supply chain, probably benefiting the local hauliers. As indicated by the respondents there are differences between initial price and final costs. A cheap haulier can lead to high costs in other parts of the supply chain, as well as an expensive haulier can decrease costs in other parts. This is of course far from a rule but using the supply chain perspective when cutting costs would surely affect the choice of carrier for some shipments. It is also in competition for these none basic shipments, that the respondents expect the local hauliers to stand strong.
6. Discussion

There is no doubt that a liberalization of cabotage will increase the use of foreign labor in the sector. The question is whether the Scandinavian hauliers will be the largest losers after all. The current Cabotage restrictions allow for some domestic transports to be performed by foreign hauliers in connection to an international transport. Still, it is only 3.7% of transports in Denmark and 2.7%\(^7\) of transports in Sweden that are cabotage transports (European Commission, 2011b). These statistics, along with the expected increase of flagging out and use of foreign labor in the sector suggest that the local hauliers would not become the defenseless victims of an Eastern European invasion. The real losers would be the local drivers that could be forced to lower their wages or lose their jobs. Considering that risk and the power unions some time have in politics, the liberalization is perhaps further away than expected.

The Scandinavian hauliers have a significant head start. They are closer to the market and have been in place long before the foreign hauliers. If they offer high quality service and do their best to cut transport cost as well as provide the tools to cut supply chain related costs, shippers will act accordingly. If not, there is no reason for shippers to choose a local haulier when an Eastern European on is offering the same quality for a significantly cheaper price.

In a longer perspective, environmental and technological forces will probably change the business considerably. There will certainly be either increased taxes or other frameworks to decrease CO\(_2\) emissions from transport. This might change the cost structure completely, thus creating opportunities for innovative and investment capable business. At least when it comes to investment capability, Scandinavian hauliers seem to have an advantage. Technology provides the possibility to more or less run a business from the front seat of a truck, no matter where in the world one might find oneself. This will of course make it even easier to operate on another market than one’s home market, as well as far from home.

Removing restrictions on cabotage will change the road freight market. On the other hand, the road freight market will change nevertheless.

\(^7\) To clarify, these numbers are legal cabotage transports. Critics would argue that there is a significantly larger percentage of illegal cabotage. There is, however, no reliably method to prove these arguments.
7. References


Dieplinger M., Fürst E., & Lenzbauer S. (2010). Flagging out as a popular strategy of road freight transport companies. Evidence of three consecutive research projects in Austria. *Vienna University of Economics and Business, AT (Available at: Association for European Transport, 1 Vernon Mews, Vernon Street, West Kensington London W14 0RL England).*


# Appendix 1 – Survey Results

OH = Ove Holm (DTL), JW = John Woxström (SÅ), JHS = Jesper Højte Stenbæk (DE), SHL = Søren Hylstrup Larsen (Eurocommerce), NVDJ = Nicolette van der Jagt (ESC), PB = Poul Bruun (ITD), JL = Joachim Lindroth (ULBC), HJ = Håkan Johansson (DHL)

*=Above average.

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<th>JHS</th>
<th>SHL</th>
<th>NVDJ</th>
<th>PB</th>
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