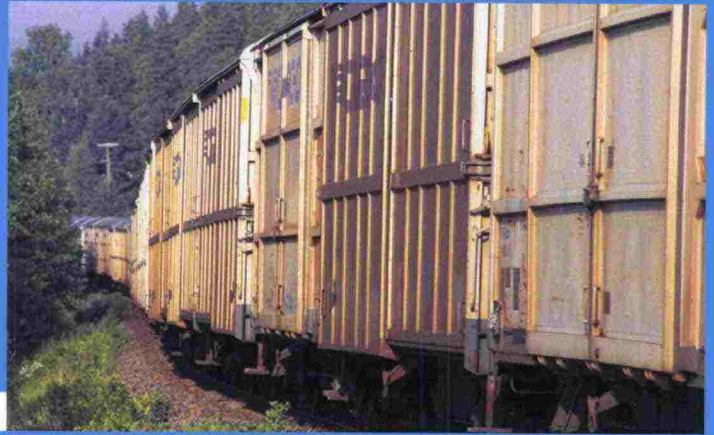


The liberalization process in Europe

Market entry barriers versus competition stimulation – cases of Germany and Hungary



Mikko Simola - Bulcsu Szekely



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Keywords: Market deregulation, privatization, market entry barriers, railway freight transport, Germany, Hungary

ABSTRACT

According to the literature, governments make great efforts to reduce their involvement in this transportation sector. The assumption behind the EU policy is that through market liberalization, competition can be boosted that in turn lowers price of railway freight transport services provided, while increasing their service quality in the eyes of the customers. The emphasis is on strategy to increase the share of inter-modal transport solutions in the markets. Former incumbent railway freight undertakings still control the majority of market shares on the markets and they managed well to keep their position, despite the effects of deregulation and privatization. Former research reveals that the main market entry barriers are bureaucracy, investment, especially acquiring rolling stocks and unfavourable settings of market structure with related abuse of market power.

The motivation behind this study is to clarify the quality and type of difficulties different companies in EU have in entering the railway freight markets. In order to achieve this objective two different countries were selected, where railways have a significant role in the freight transportation markets. The countries differ significantly in their structural railway market settings, market volumes and the length of time that they have been full members of the EU. The objective of this case study was to shed light on the main facets of liberalization processes and market entry barriers in Germany and Hungary, through case studies. This case study was done by interviewing local professionals in the railway sector, in Germany and Hungary.

The empirical material shows that in Germany the greatest obstacles for market entry are investments and interoperability, while in Hungary bureaucracy is seen as the major bottleneck for railways freight undertakings to enlarge their share on the markets. The market entry strategy varies in each country, but in Central Europe the most common ones are vertical integration from the logistics service sector and heavy industry, or entirely new start-ups. The competition between different modes of transport can be said to be fierce all over Europe. It can also be argued that railway freight undertakings in Central Europe see the biggest potential for increasing profits in international transport corridors that partly extend their reach outside Europe. By the same token it has to be stated that road transport is conceived to be a real threat for the future expansion potential of railway freight markets. As a conclusion it can be argued that these phenomena often result in a situation, where big players in the markets increasingly collaborate with each other against new market entrants. Therefore, it can be claimed that mergers and acquisitions in many cases outweigh the effects of deregulation and privatization. In turn this might lead to a perception where competition is seen as an obstacle for entering railway freight markets. Railway freight transport service providers are forced to cut costs continuously and go for more road transport, especially when the global economic recession has led 20 to 30 percent drop in demand of freight transport. The pressure to show profit has started a trend of focusing on more transportation related value-added services within a scope of ever increasing international market enlargement toward Russia, Ukraine and China.

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Avainsanat: Markkinoiden vapautuminen, yksityistäminen, markkinoille tulon esteet, rautatie-tavaraliikenne, Saksa, Unkari

TIIVISTELMÄ

Kirjallisuuden mukaan hallitukset näkevät suuresti vaivaa vähentääkseen mukanaoloaan rautatiekuljetussektorilla. EU:n liikennepolitiikka perustuu teoriaan ja käsitykseen, jonka mukaan Euroopan rautatierahtimarkkinoiden vapauttaminen lisää kilpailua ja sitä kautta tarjottavan kuljetuspalvelun hinta laskee ja laatu nousee asiakkaiden silmissä. Strateginen painopiste on lisätä monimuotokuljetusten osuutta markkinoilla. Valtiolliset rautatierahtiyhtykset ovat silti pääosassa markkinaosuuksia mitattaessa, ja he pitävät asemansa vahvana, vaikka kilpailua yritetään lisätä. Nykyisillä valtiollisilla rautatieyhtiöillä on vahva asema ja he hallitsevatkin suurinta osuutta markkinoista. Tämä on heille helppoa yksityistämisen ja kilpailun vapauttamisen vaikutuksista huolimatta. Kirjallisuuden mukaan suurimmat markkinoille tulon esteet ovat byrokratia, investoinnit ja kaluston hankinta sekä markkina-aseman väärinkäyttöön ja yleiseen markkinan rakenteeseen liittyvät ongelmat.

Työmme tavoitteena oli selvittää rautatierahtiliikenteen operaattoreiden alalle pääsyn esteitä ja markkinoille pääsyn strategioita EU-maissa. Jotta tämä tavoite saavutettaisiin, valittiin kaksi maata, joissa rautateillä on merkittävä rooli maan tavaraliikennemarkkinoilla. Jotta tutkimukseen saatiin lisänäkemyksiä, tutkimukseen valittiin maat, joilla on toisistaan poikkeavat rakenteet rautatierahtimarkkinoilla, ja joiden volyymit poikkeavat suuresti. Myös maiden unionin jäsenenä olo aika on poikkeava. Tämän tapaustutkimuksen tavoite oli selvittää Saksan ja Unkarin rautatierahtimarkkinoille pääsyn esteitä ja strategioita tapaustutkimuksen perusteella. Tutkimus suoritettiin haastatteleamalla paikallisia rautatiealan ammattilaisia sekä Saksassa että Unkarissa,

Haastatteluissa kävi ilmi, että saksassa suurimmaksi markkinoille tulon esteeksi muodostuivat kalustoinvestoinnit ja standardoinnin puute (interoperabiliteetti) kansainvälisessä liikenteessä, kun taas Unkarissa byrokratia nähdään suurimpana pullonkaulana. Markkinoiden vapautumisen jälkeen toimintansa aloittaneiden yritysten pääasiallinen markkinoille tulotapa vaihtelee, mutta Keski-Euroopassa käytetyin tapa on siirtyminen logistiikka-alalta tai raskaasta teollisuudesta rautatierahtikuljetuksiin, tai kokonaan uuden yrityksen perustaminen ko. alalle. Lisäksi haastattelujen pohjalta voidaan todeta, että kuljetusmuotojen välinen kilpailu on varsin mittavaa koko Euroopassa. Voidaan myös sanoa, että rautatieyhtiöt Keski-Euroopassa ovat kiinnostuneita kansainvälisestä liiketoiminnasta, suunnaten muihin maihin, kuten Puolan markkinoille. Yleisesti ottaen kuitenkin voidaan todeta, että kumipyöräkuljetukset nähdään suurena uhkana rautatieyritysten laajenemissuunnitelmille. Nämä ilmiöt johtavat usein siihen, että suuret yritykset yhdistyvät ja näin kilpailevat pieniä markkinoille tulijoita vastaan entistä vahvempina. Täten voidaan sanoa, että usein nämä kasvuprojektit toimivat markkinoiden vapauttamista vastaan, ulosmitaten markkinoiden vapauttamisen tuoman hyödyn. Näin ollen tällainen tilanne voidaan nähdä syynä olla menemättä markkinoille. Rautatierahtikuljetuspalvelutarjoajien on ollut pakko keskittyä leikkaamaan koko ajan lisää kustannuksia ja siirtymään enemmän maantiekuljetuksiin, varsinkin kun globaali taloudellinen taantuma on ajanut rahtikuljetuksiin kohdistuvaa kysyntää Euroopassa alas vähintään 20–30 prosenttia. Paine luoda uusia liikevaihdon lähteitä on johtanut siihen, että keskitytään enemmän kuljetuksiin liittyviin lisäarvopalvelujen tuottamiseen, alati laajenevassa kansainvälisessä markkinakentässä kohti Venäjää, Ukrainaa ja Kiinaa.

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Nyckelord: Avreglering av marknaden, privatisering, hinder för marknadsinträde, godstrafik på järnväg, Tyskland, Ungern

SAMMANDRAG

Litteraturen påvisar att regeringar haft problem med att minska sitt engagemang i den här transportbranschen. Anledning till att EU önskar avreglera marknaden för godstrafik på järnväg är att det förväntas öka konkurrensen och följaktligen sänka prisnivåerna samtligt som transportkvaliteten ökar. Ytterligare ett motiv är att en avreglering ger möjlighet till att öka andelen intermodala transportlösningar, vilket har en strategisk betydelse. Trots avregleringen och privatiseringen så har de tidigare statliga transportoperatörerna fortfarande en stark marknadsposition. Forskning påvisar att de största hindren för marknadsinträde är byråkrati och investeringar, särskilt anskaffning av rolling stock och ofördelaktig marknadsstruktur relaterat till missbruk av marknadsposition.

Motivet för den här studien var att klargör vilken typ av problem olika företag inom EU har vid inträde på godstrafikmarknaden för järnväg. För att uppnå syftet valdes två länder ut där järnväg har en stor betydelse på godstrafikmarknaden men som samtligt skiljer sig markant åt avseende marknadsstruktur, volym och längd på medlemskap i EU. Syftet var att belysa nyckelaspekter kring avregleringen samt hinder för marknadsinträde i Tyskland och Ungern genom fallstudier. Dessa fallstudier gjordes genom intervjuerna i Tyskland och i Ungern

De största hindren för marknadsinträde i Tyskland var investeringar och brist på intermodalitet, medan det största hindret för marknadsinträde i Ungern var byråkratin. Marknadsinträdesstrategierna har varierat efter avregleringen men i Centraleuropa är det vanligast att komma från logistikbranschen, tung industri eller att starta ett helt nytt företag. Konkurrensen mellan olika transportsätt kan betraktas som stark i hela Europa. Vidare kan det argumenteras att järnvägstransporter i Centraleuropa har den största potentialen för ökning av vinstmarginaler tack vare sin involvering i internationella transport korridorer som förlänger dem utanför Europa. Vidare måste påpekas att vägtransporter utgör ett stort hot för framtida expansion av järnvägstransporter. Som slutsats kan det argumenteras att dessa fenomen ofta leder till en situation där stora företag samarbetar mot nyetablerade aktörer. De här tillväxtprojekten arbetar på så sätt emot liberaliseringen och makulerar fördelarna av att marknaden avregleras. Den här situationen kan också ses som ett skäl till att inte gå in på marknaden. Transportoperatörerna på järnvägsmarknaden har varit tvungna att fokusera på att reducera stora kostnader och på att övergå mer mot vägtransporter, i synnerhet när den globala ekonomiska nedgången har lett till det att efterfrågan på godstransporter i Europa har minskat 20-30%. Trycket att öka vinsten har lett till att operatörerna fokuserar mer på att producera mervärdestjänster vid transport på den internationella marknaden, i ett ständigt expanderande fält mot Ryssland, Ukraina och Kina.

FOREWORD

This work was done for Lappeenranta University of Technology and it was commissioned by the Finnish Rail Administration. The research was done by undergraduate B.Sc. (Eng.) Mikko Simola and M.Sc. (Econ.) Bulcsu Szekely. At the same time the work forms part of Mikko Simola's Master's Thesis.

The work was examined by professor Olli-Pekka Hilmola from Lappeenranta University of Technology. The mentors from the Finnish Rail Administration were director Miika Mäkitalo and senior officer Kaisa-Elina Porras.

Helsinki, December 2009

Finnish Rail Administration
Traffic System Department

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ABBREVIATIONS

DB AG	Deutsche Bahn AG
EC	European Commission
ECMT	European Conference of Ministers of Transport
ERA	European Railway Agency
ERIM	European Rail Infrastructure Managers
EU	European Union
GYSEV	Győr-Sopron Ebenfurti Vasúti Zrt.
HCA	Hungarian Competition Authority
HRO	Hungarian Rail Office
HCSO	Hungarian Central Statistical Office
HTA	Hungarian Transport Authority
IM	Infrastructure Manager
MAV	Magyar Államvasutak Zrt. (Hungarian State Railways)
OECD	Organisation for Economic Cooperation and Development
RCA	Rail Cargo Austria
RU	Railway Undertaking
RZD	Российские железные дороги (Russian Railways)
SNCF	Société Nationale des Chemins de Fer Français (French Railways)

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1 INTRODUCTION

In the twenty-first century, increasing globalization and trade liberalization schemes have become primary forces in the European business environment. Companies and even governments all over the continent have been under pressure to apply lean strategies to revitalize and adapt their strategies to utilize positive network externalities related to liberalization in the transportation freight markets (Quinet and Vickermann 2004). In line with the set objectives, many EU countries have embraced revitalization of the railway freight market, striving for sustainable growth (Caramia and Guerriero 2009; Gomez-Ibanez and Rus 2006; Boeri et al. 2006).

The motivation behind this study was the aim to have a picture on competition dynamics currently evolving on the rail freight markets in the EU and postulate some future directions for development scenarios. In order to achieve this objective, two different countries were selected where railways have a significant role in the freight transportation markets. The countries differ significantly in their structural railway market settings, market volumes and the length of time that they have been full members of the EU. Germany has the largest logistics sector in Europe and it also has over 15 years of experience of liberalizing its railway freight industry with 'over the top' results (Deutsche Bahn 2009b; Wiczorek 2009). Hungary, on the other hand, is a smaller economy and very much dependent on transit goods flows. It has only approximately six years of involvement in open market conditions on the railway freight transportation markets, with relatively slow progress (Koós 2008).

1.1 Background to the study

As these endeavours are rather complicated, expensive and lengthy system projects have received vast attention from both private entrepreneurs and public media (Lalive and Schmutzler 2008; Janic 2008; Vaughan 2007). The magnitude of problem is visible when viewing the slow progress of the market opening process: in many EU countries even the first railway package is not fully implemented (Eye for Transport 2009). Still it has to be noted that private rail freight undertakings have succeeded in capturing increasing volumes of cargo, and their operations have become more and more productive as years pass.

So far, the EU has adopted three directive packages and through these centrally built policy agendas member states are expected to carry out their restructuring initiatives (Volkenandt, et al. 2007; Eisenkopf, 2006). The specified directions for achieving these objectives include increasing the share of cost-efficient inter-modal rail solutions on the markets in an effort to suppress time and distance factors (Kreutzberger, 2008; Rodrigues, et al. 2008; Kidd, 2007; Hilmola, 2007).

1.2 Objectives of the study

The main goal of this work is to highlight the difficulties of potential private railway freight undertakings in entering the markets in Germany and Hungary into the railway freight transportation industry in general. A particular goal is also to reveal how these problems could be addressed to increase sustainable competition in the markets. In order to achieve these sets of objectives, interviews were carried out on the market entry processes as experienced by each company. The target group for these interviews was managers and directors. The aim is to obtain a longitudinal – over time – holistic view of the process that is shaping the current system towards a new direction.

1.3 Research methodology and limitations of the study

The analysis employs a case research methodology, focusing on the evolution of railway industry development process. The main purpose is to shed light on new findings, yet building on the existing ones. Consequently, this review can be seen as a cumulative case study based on both deductive and inductive approaches (Barros and Hilmola 2007; Hilmola 2003; Yin 1994). This approach is an ideal tool for gaining detailed knowledge as this research method facilitates to take into consideration the contextual factors that are essential in specifying the problems within processes that form an emerging system (Woodside and Wilson 2003). System view is necessary in order to be able to explore market conditions for competition in the age of global economy (Min et al. 2009; Liu and Zhang 2008; Otto 2008).

The cases were written on the basis of face to face interviews with people belonging to the top management groups of the companies. The basis for these meetings was semi-structured questionnaires, and in this way in-depth information could be gained during the discussion sessions with the representatives. The interviews were held in both countries in their own official languages. The material from the interviews and from the literature is very versatile, and it gives a good view from the markets. In order to be able to ensure the reliability of contents of the cases, a specific procedure was adopted. First, the targeted companies received a brief description of the objectives of the study. The meetings took place between March (Hungary) and August (Germany) 2009, based on a semi-structured questionnaire. (See Appendices 1-9) After completion, the minutes of the meetings were sent back to the cooperating representatives of the enterprises involved, in order that they could check the accuracy of the written material.

The companies interviewed were selected with a view to obtaining a comprehensive picture of the local railway freight markets in the two target countries. The case companies were selected so as to have a representative selection of both large and small companies. The case companies can be seen as representative of the entire railway freight sector, as the selection includes companies with long experience in the market as well as potential new companies, which aim to enter the market at any suitable moment in the near future. In addition, companies involved in heavy industries were also interviewed as were former monopoly holders. It has to be noted that the situation changes all the time, and at any moment an inactive railway freight undertaking might become an active one, or vice versa. Nevertheless, the companies studied are a representative group of market players, and therefore the results can be considered worth recording. In order to have updated and reliable information available, trusted

websites of large international and national organizations were visited. These Internet resources were compared to the outputs of the academic literature.

1.4 Structure of the study

In the theoretical part of the study in Chapter 2 a literature review is completed to be followed by a theory framework relevant to the context. The empirical part of the study depicts the specific features of transport mode development in both countries and the findings from the case studies relating to market entry barriers, competition, interoperability and future prospects at country level. In this connection, Chapter 3 is devoted to Germany and Chapter 4 to Hungary. In Chapter 5, the aim is to mirror the findings of the case studies to the literature review and the theory framework as well as present a general description of the evolving market development trends in Germany and Hungary. Chapter 6 concludes the report with suggestions for further research directions.

1.5 Definition of key concepts

Privatization is defined as the transfer of ownership of rights and assets from public to private control (Väättänen 2008). It is considered that privatization of former monopolies is part of the liberalization process of the railway industry together with deregulation and other regulatory measures so as to make the whole sector more competitive in comparison to road transport. Service quality in this study is set out as transparent administrative and operational procedures that help new railway freight undertakings to enter the markets so that these companies could provide better value for their customers with less cost (Borger et al. 2009; Gunasekaran et al. 2008).

In the end the final goal of a nation is to raise the level of regional competitiveness (EC 1996). Market entry barriers are referred to as market dynamics defined by the EU (2002): "Barriers to entry are factors which prevent or hinder companies from entering a specific market. Entry barriers may result for instance from a particular market structure (e.g. see definition for sunk cost industry, brand loyalty of consumers to existing products) or the behaviour of incumbent firms. It is important to add that governments can also be a source of entry barriers (e.g. through licensing requirements and other regulations)".

2 LITERATURE REVIEW AND THEORETICAL FOUNDATIONS

2.1 Literature review on market entry barriers into rail freight markets in Europe

Despite the efforts in Europe to revitalize the rail freight sector to become more competitive, there is a long way to go for rail to regain its lost position. In 2008, only 10 percent of all cargos were carried by railway against 44 to that of road (EU 2009). Actually not only road transport has to be taken into account, but also the integration to waterway channels, which is especially important for landlocked countries such as Hungary (Min, Ko and Lim 2009). So far, the EU has delivered two directives packages for rail freight transport, in 2001 and in 2003, so that through these policy packages member states could carry out their restructuring initiatives. The specified directions for achieving these objectives include increasing the share of cost-efficient intermodal rail solutions on the markets in an effort to suppress time and increase delivery efficiency and visibility in supply chains (Viau, Trepanier and Baptiste 2009; Kreutzberger 2008; Rodrigues et al. 2008). There are still problems; in 2009, 21 EU member states have still not implemented in full even the first railway package (Eye for Transport 2009). Hungary is one of the countries that might even face trial for failure to take action. One of the most prevalent difficulties here is to find a common vision and tangible benefits for all the partners within the context of international supply chain networks (Dath, Rajendran and Narashiman 2009; Liu and Zhang 2008).

To this end, recently a significant EU-level project (CREam = Customer-driven Rail-freight services on a European mega-corridor based on Advanced business and operating Models) was embraced to harmonise logistics processes along an international transportation corridor from Rotterdam in the Netherlands to Constanta in Romania. According to the existing literature, the main reasons for the low level of market entry in the rail freight transport sector are lack of investment, especially in rolling stock and infrastructure elements, thus facilitating interoperability. A further reason is the complexity of procedures of regulative/institutional specifications (EU 2009; Borger, Dunkerley, and Proost 2009; Ludvigsen and Osland 2009; Heiming and Möllmann 2008). These obstacles are often connected to unfavourable settings related to market structure and to the abuse of market power by incumbent rail operators (Lun, Lai and Cheng 2009; Pittman 2009; Mäkitalo 2009; Heiming and Möllmann 2008; Porter 1988).

For measuring the relative progress of market opening, the European Commission has developed in cooperation with IBM a Rail Liberalization Index. Since 2002, data has been collected twice, in 2004 and 2007. The work has been conducted as a repeat process so as to be able to compare the results of previous years with the current state of affairs (Volkenandt, Auner and Kirchner 2007). However, there was a separate measure developed as well that was left outside the overall Rail Liberalization Index. The "COM" index is to give a picture about the actual degree of competition in the rail freight transport markets. The scale is from 100 to 1000 points, dividing countries into four classes in line with their development stages. At the lowest level in the class of "Pending" there are countries that do not progress at all with their policy initiatives (100-299 points). In the class of "Delayed" with point- range of 300-599, there are countries that have progressed with their liberalization process, but are not within the

timeframe set by the EU. In the third class “On Schedule”, with point range of 600-799, there are countries that have proceeded with their market opening policy efforts relatively well and are within the timeframe set by the EU. The class of “Advanced”, with point- range of 800-1000, covers those countries that have reached better results up to 2007 than the schedule set by the EU, in terms of the degree of market liberalization.

According to the overall Rail Liberalization Index these days there are no countries left in the “Pending” class. Four new top performing “Advanced” class countries have emerged: Great-Britain, Germany, Sweden and the Netherlands. It is interesting that the gaps between these four are quite marginal. By the same token it has to be noted that Hungary is well behind in terms of success in implementing reforms, for example in comparison to the European logistics market leader, Germany.

As a conclusion, it can be argued that the real market entry barriers cannot be eliminated completely and there is a need for system dynamics studies, in order to identify innovative ways of finding solutions to these complex optimization problems (see Borger, Dunkerley and Proost 2009; Ludvigsen and Osland 2009; Min, Ko and Lim 2009; Pittman 2009).

2.2 Conceptual Research Framework

The dynamics behind the railway freight industry development are quite well known, though it is acknowledged that the liberalization process in general takes a very long time. Basic conditions, market structure conduct of companies and their performance is often used to examine the profitability chances in industries in Structure-Conduct-Performance (SCP) theory frameworks. The SCP paradigm has been employed in assessing the possibilities of government to influence the operation of rail freight markets (Mäkitalo 2007). When examining the market opening process in general, it can be argued that processes aiming at developing new business models need financial support and a coordination mechanism, in order to achieve the state of a sustainable system (Figure 1 below).

2.3 “Transport Policy Initiative” phase

The first stage of the “Transport Policy Initiative” suggests that the markets are still under total supervision of the government, and the emphasis is on establishing the right strategic choices when progressing with the objectives of liberalizing the rail freight transport market. The basic platform for business model renewal is to determine that the operational services will be separated from infrastructural management. Governments are, however, left with room to manoeuvre, for example in terms of adapting the infrastructure charging system. “Third party access” is an example of this phenomenon, where incumbent rail freight transport service provision has not been completely separated from infrastructure management, which is the case in Hungary (Pittman 2009).

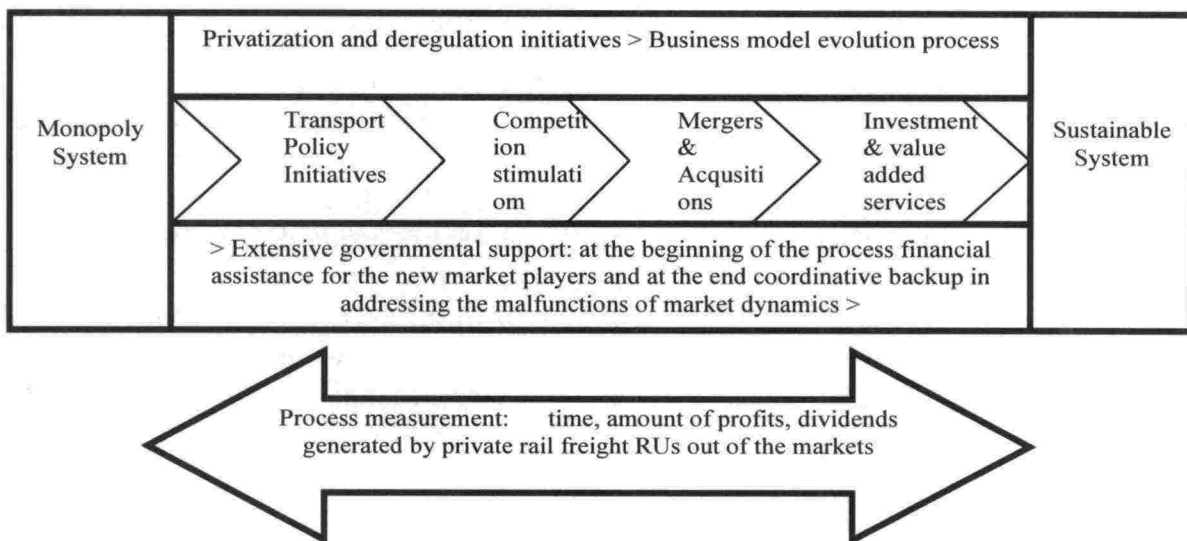


Figure 1 The process of opening the market in the rail freight industry. (Modified from Szekely and Hilmola, 2007).

2.4 “Competition” phase

After the stage of initiating the structural setup, deregulation and privatization policy schemes should come into effect, if elements such as infrastructure charge regulations are to induce steeper inter-modal competition between rail and road transport. Public/private partnership projects should encourage new private actors to engage in railway freight operational services. New independent rail transport regulators should also be established, in order to ensure the existence of rules of fair competition.

2.5 “Mergers and Acquisitions (M&A)” phase

After a while, an expected increase in competition forces companies to engage extensively in mergers and acquisitions, in order to be able to attain benefits not only of economics of scale and scope, but also of leveraging risk diversification (Lun, Lai and Cheng 2009; Balaton 2008; Häkkinen 2005). A new set of strategic alliances between market actors evolves, with the aim of cutting costs and increasing the value experience of customers. This is done in an effort to generate further investments into value-added services for better quality of rail freight transport with less cost. These days it can be stated that railway freight transportation has become heavily dependent upon port centric logistics networks, extensive containerization and fuel prices (Mangan, Lalwani and Fynes 2008; European Conference of Ministers of Transport 2007).

2.6 “Investments and Value Added Services” phase

As a result of positive network externalities, investors will have to regain their trust in the profitability opportunities offered by inter-modal rail transport initiatives such as the Light-Combi project in Sweden (Woxenius 1998). In the end, as a result of a new flow of capital base, a specific set of value-added services might be developed and these might serve as motivation for investment in a new branch inside the industry (Saranen 2009). On the other hand, the pressure to generate profits might create enduring inefficiencies, - i.e. low service levels with inadequate quality and lack of trust by investors to inject new capital into the industry - that in the end hold up the process of evolvement toward the sustainable system (Hungarian Competition Authority - HCA 2008a, b).

2.7 Towards sustainable growth

It can be argued that extensive government support is needed all the time. The railway freight transport industry is a capital intensive industry. As the new market conditions evolve, competition might render the circumstances so tough that extensive coordination is essential, in order to keep the rules of fair competition decisive (Pittman 2009; Porter 1988). Companies tend to look for dominance and control over the market in the long run, and market entry barriers might be created by themselves (Pittman 2009; Häkkinen 2005). Pressure is created between two groups of market player, in particular: the former incumbent railway transport service providers and the new private entrants. In this instance, a sustainable system refers to a group of intermodal transportation clusters that can be a cradle for new clusters of industries. In these clusters business models tend to be lean-oriented, structured on objectives of environmental, economic and social values being of equal importance (Tao and Hung, 2003; Porter 1988). This way the process should lead to a self-strengthening regional competitiveness of industries, motivating transport policy makers to set up new initiatives for enhancing the evolution of new clusters. In an ideal situation, monopolistic competition will take place in the markets. In order to measure process efficiency, owners of the liberalization process concentrate on suppressing the time needed to realize the transformation of market structures. They form models such as SCP in order to see the profit generating potential of the markets.

The conclusion can be drawn from the literature review that government policies can be the main source of inefficiency and that higher level EU coordination is essential if we wish to advance with harmonizing the fragmented rail freight transport markets (EC 2002). Bureaucracy and interoperability problems lead to situations where the market opening process might increasingly result in expanding costs, as uncertainty on the markets continues to grow.

3 OPERATING IN THE RAILWAY FREIGHT SECTOR IN GERMANY

3.1 Historical development of transport modes

Germany has one of the most liberalized railway markets in Europe (Kirchner, 2007). The implementation of Directive 91/440/EEC on 1 January 1994 meant a breakthrough for the opening of the rail infrastructure in Germany for competition. A regulatory body was also established to safeguard fair access. Until 2005, competition was controlled by the Federal Railway Authority; on January 1st, 2006, these duties were given to the Federal Network Agency (IBM, 2006). Based on the LIB Index, Germany belongs to the “Advanced” class in terms of railway transport liberalization. This means that Germany has made considerable progress in market opening compared to the other European countries. Germany has achieved more than 800 points in this rating, measuring legal and practical access conditions. The scale of this index is from 0 to 1000 points and the best class is from 800 to 1000 points. Based on this rating, Germany offers one of the best markets in Europe for a newcomer. As a matter of fact, Germany is the only country in the “Advanced” group that has more than 800 points in the Rail Liberalization Index for both passenger and freight transport.

One area of rating is “Organizational structures of the incumbents”. This is an area where widely varying models can be found in Europe. The separation extends from having separate accounts to separation between infrastructure and transport. Germany belongs to the model where functional, organizational, accounting and legal separation exists (Rail Liberalization Index 2007). It is very interesting that the countries in the top group are characterized by very different organizational structures. For example, the Netherlands has separated its infrastructure and transport, whereas in Germany there is no separation between these.

Other interesting thing inside the top performing group is that Sweden has the lowest infrastructure charges, when Germany is in the other side, having one of the highest charges in Europe. This was mentioned also in the empirical findings as a problem for new undertakings.

Figure 2 below, which illustrates the modal split in Germany, shows that there is an increase in rail transport. Rail transport is taking over volume from inland waterways and from road transport, but this is happening very slowly. Overall, the volume of rail transport has increased over the last decade, as is shown in Figure 3. It is clear that road transport is very popular, being more convenient for the customer because of its “last minute” availability. Cargo flow moves from door to door, which is not possible in rail transport.

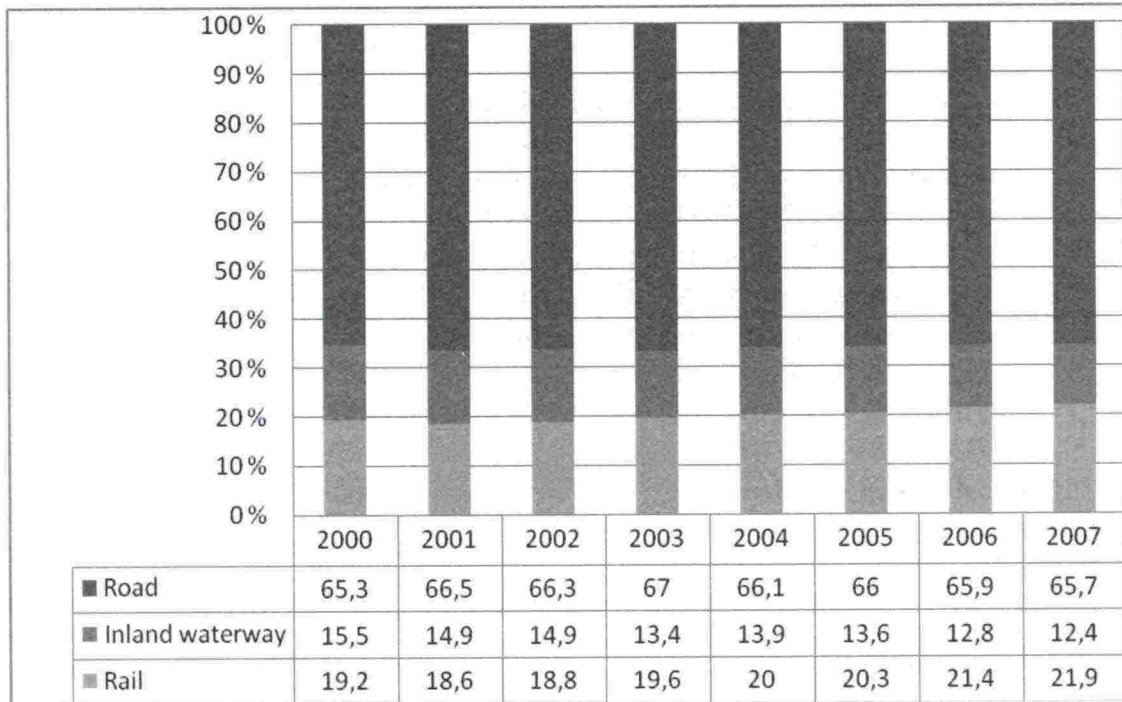


Figure 2 Modal split in Germany between rail, road and inland waterway transport in percents (Eurostat, 2009).

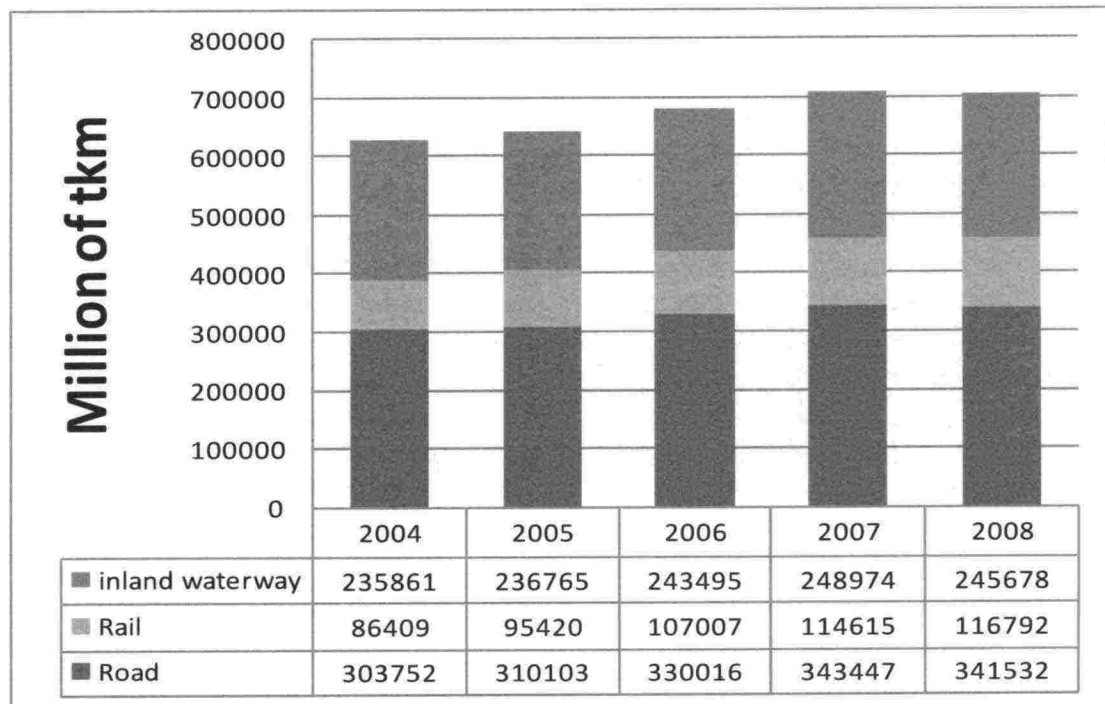


Figure 3 Performance of freight transport in Germany (million tkm.) (Eurostat 2009).

Looking at Figure 3, volumes in tonne kilometres are on the increase and the split is growing in all modes. The structure of the German state railway organization can be seen in Figure 4. This model includes the German infrastructure manager DB Netz, which concerns all the RUs that are using the rail network of DB Netz, i.e. the majority of German railway undertakings. Only a minority has its own railway infrastructure.

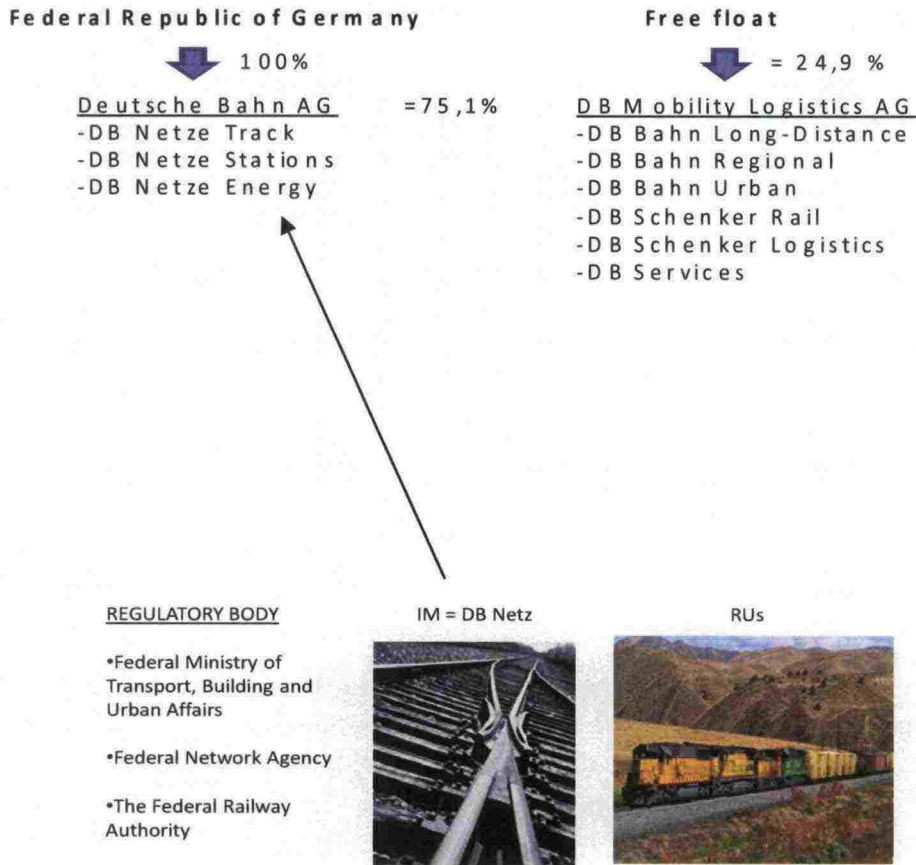


Figure 4 The management model of the railway industry in Germany in 2009 (IM = Infrastructure Manager, RUs = railway undertakings) (Deutsche Bahn 2009, VDV 2009).

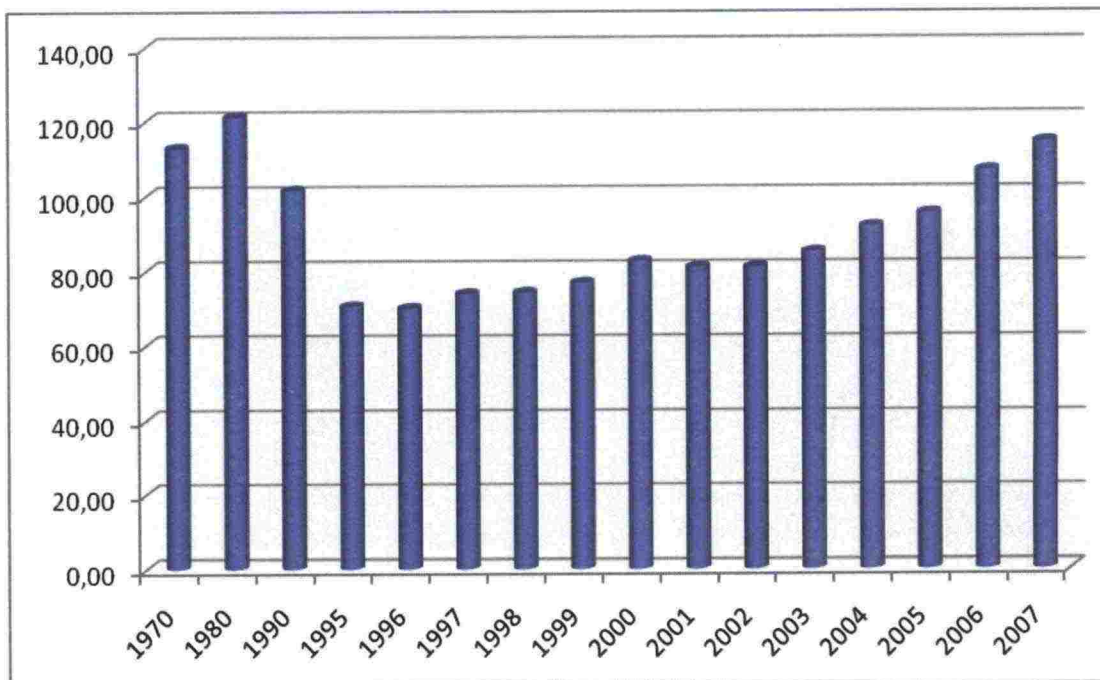


Figure 5 Performance of freight transport in Germany, in 1000 mio tkm. (EC, Transport, 2009).

Based on Figure 5, transport volumes have been increasing from 1996, and 2007 saw the biggest boom of the transport business. Year 2009 has been much worse due to the global recession, and based on interviews in Germany, volumes have gone down more than 20 per cent.

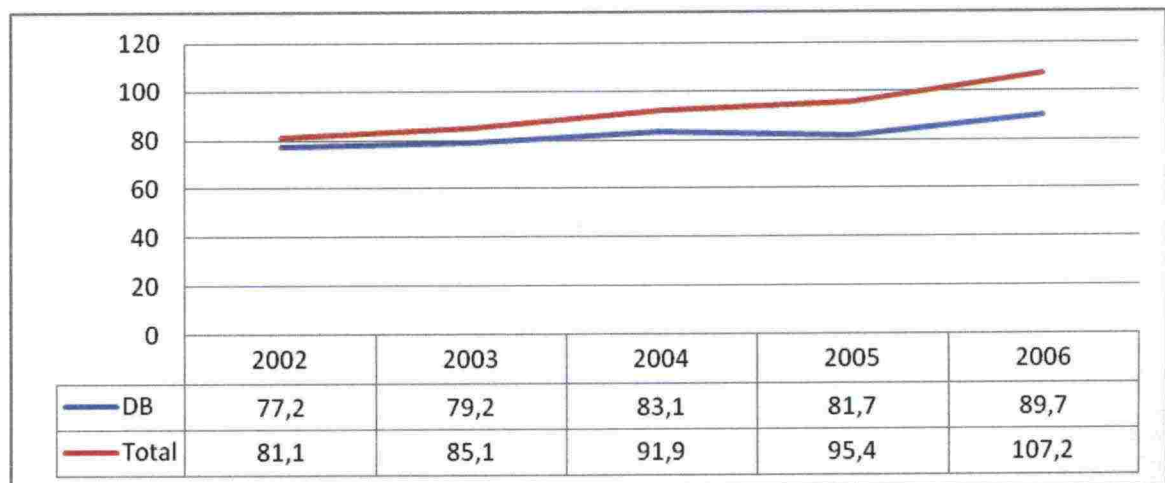


Figure 6 Ratio incumbent – new entrants between 2002 and 2006 in Germany, Billion tkm (Deutsche Bahn, 2007).

Due to increasing activity, the new entrants increased their market share from 1.1% in 1996 to 16.4% in 2006. The share of new entrants in the German market is 20%, when measuring tonne-kms. The major operator, DB Schenker Rail, has 80% of the market. (See Figures 6 and 7).

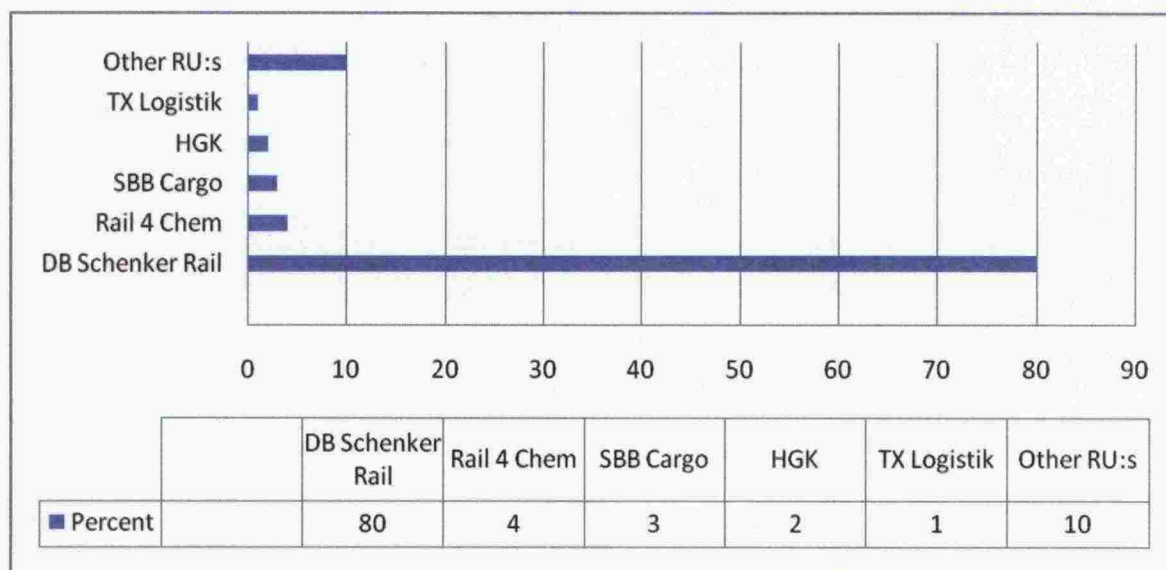


Figure 7 Share of undertakings in the German rail freight market. Source: VDV, Statistics, 2007)

The rapid increase of competitors' market share is due to a general boom in the German rail freight market (see Figures 6 and 7). Transport performance increased by 25.9 billion tkm between 2002 and 2006. DB Schenker Rail improved their transport performance by 12.5 billion tkm, while new entrants improved it by 13.4 billion tkm. In other words, 51.7% of the rail market growth has been absorbed by the new operators. This clearly indicates intra-modal competition is evolving in Germany.

3.2 Germany: Empirical findings from the interviews

Summary of the findings of the interviews can be seen in Appendix 10. These include all the railway undertakings interviewed. The table includes some operating volumes of the companies concerned as well as the most important findings from the interviews.

The interviewed operators were located in the northern, western and eastern parts of Germany. However, many of them operate throughout the country and also have international business, crossing German borders into Poland, for example. German railway undertakings are located around the country, but they are focused in certain areas, such as industrial zones. As one RU commented: "It is important to be near the customer. That's why the firms are located in the industrial zones." This kind of statement is easy to interpret, because it is much more convenient to serve customer(s), when the service provider is in the near proximity. It is easy to form third and fourth party logistics services from a point nearby by managing in close cooperation the transportation and e.g. the warehouses of the customer.

This sub-chapter will collate the empirical findings from the interviews into five separate thematic sections. These sections contain the key issues emerging from the interviews. This chapter can be seen as providing the conclusions to the survey. The key issues for consideration in the case study are market entry, market barriers, interoperability, competition and the future.

Market entry

The model deployed for market entry in Germany depends on the previous experience of the railway undertaking concerned, on the size of the railway undertaking and also on the business and the geographical area of the planned business. Undertakings whose business is based on previous business in ports form one group. The second group consists of companies which have previous transport business in other countries and the last group is new railway undertakings. They all have their own particular experiences and these experiences are recounted in this sub-chapter.

When establishing a new business, some important issues must be considered before it is even possible to have permission to conduct business. In Germany these necessary considerations comprise commitment insurance, safety certificate, and certificate of the company's financial position and of course, the person in charge of the business. Even these requirements can be very difficult for an inexperienced railway undertaking to fulfil. The following comment illustrates this further: "The division Rail Logistics is attempting to obtain a licence to act as a railway traffic enterprise; however, the safety certificate is still missing." This comment was made by a very large company, which proves that the official requirement for certification is very demanding. Obtaining the safety certificate might prove to be a problem even for a large railway undertaking.

Establishing a good organization is cited as a problem in the interviews. This was mentioned, because the problem exists in smaller railway undertakings. The same problem is not found in larger ones, because the experience of managing a large organization already exists. The following comment illustrates this further: "When building an organization for single wagon transport, a complex organization is needed. DB is very strong, because they have everything ready for operating. For a small enterprise there will be significant problems in building an organization for single wagon transport." This means that when there is no previous experience of managing a larger organization, problems might be encountered, because the regulations demands are tight in this area, as well.

Once there is an appropriate organization in place for forming a railway undertaking, it is important to collect information from potential customers and make a business plan. The information that is required is, for example, whether it is easy to get into the competed market and whether fair competition is possible without discrimination or corruption. Some comments on these issues: "Is it possible to have fair competition and be independent of the other organizations?" This means that when railway undertakings are assessing the situation, it is important that they are able to educate their employees themselves, and decide how and where they are going to operate - within the confines of the circumstances of competition and local rules. It also means that there is no desire to operate a business in circumstances of soft corruption. Operators who were interviewed wanted clear and fair competition in all operating locations.

After the decision has been made to form a new railway undertaking it is time to build up the business. This is the difficult part, because competition is tough when entering the markets, and competitors are against the newcomer. Any support when entering the markets is welcome. In Germany, new entrants have the problem of "the old boys' network". This means that there is the perception that old and former railway workers

always know best how things should be done and consequently it is not easy to promote new ideas. Furthermore, such networks oppose new railway undertakings.

Because investment into rolling stock is very expensive, financing was perceived to be a big barrier for entry into the markets. It is obvious that in order to get financing you need a good business idea. The financing should come from the industry which the new railway undertaking would be part of, as is the case in the third party logistics model. Road transport is a very tough competitor and one that is able to set very low price levels. It is also a much more flexible mode than railway transport. Furthermore, customer contracts in road transport are very short-term these days. No one wants to be “married” to the service provider. When the contracts are short-term the customer gains in flexibility, but the service provider lives in uncertainty. However, it is possible that a short-term contract means a higher price, which is a negative issue for the customer.

“Road transport is a very tough competitor and it sets the price level”. There is also political pressure in Germany in favour of the local automotive industry, which has a negative effect on railway transport.

Taking into account all these issues, it is very hard to compete for the same customers. The new entrant must have a niche business idea to secure customers. This might be a terminal or port owned by the entrant in the middle of an industrial area, near key customers. Another good solution is having a terminal in a major port like Hamburg. Generally, it is very difficult or impossible to compete with just a “functional product”. When the product or service is “innovative”, the potential for success is much better.

We can conclude that companies with some type of niche product noted that they gained significant benefit from having their own service centre for rolling stock. In Germany, DB is in this position as well as some private railway undertakings. DB also told us that they also sell services to others, when free capacity exists.

When a new organization is being formed, it is very important that the newcomer gets assistance with bureaucracy as well as in other matters relating to new railway undertakings. If the newcomer gets sufficient help, it is able to concentrate on the main business idea. If the entrepreneur has to spend too much time and effort on bureaucracy, problems can develop and the whole railway undertaking might collapse. Generally, newcomers must have a fair share of the railway capacity. As an environmentally friendly mode of transport, the state should provide inducements to move road transport volumes to the railways.

Market barriers

In this section we deal with the market barriers, which are impeding workable railway business. In the section “Market entry”, some of those problems were already discussed. However, in the following we will also go through some issues which belong in the section “Interoperability”.

When first establishing a railway undertaking, the biggest barriers are investment into rolling stock, finding customers and competing with other rail operators and other

transport modes. These issues were already discussed in the chapter "Market entry". In this chapter we go into detail regarding these issues.

Rolling stock, investments and infrastructure charges

First of all, when building railway undertaking, it is important to know what kind of rolling stock will be needed in the future, and whether it is better to buy it or whether the possibility exists to lease it from somewhere. In Germany, wagon leasing is popular, and can be seen as the best alternative. It is part of the company's risk management, because quite short-term contracts are possible. In the majority of the interviews it became clear that leasing is always the best alternative. When it is not possible, buying the rolling stock is the only alternative. It also became clear that electric trains are popular for long distances and diesel for shorter legs. Investment depends largely on the country's economic situation. We were told that in Germany new rolling stock is popular, but for example in Poland the same company is obliged to use older rolling stock, because of the lower price level. Problems in interoperability between countries often mean using diesel locomotives, because of the difference in electricity standards in the two countries.

Consequently, wagon leasing presents a business potential in the Finnish markets, as well. The German experience is promising.

The aim of business is to sell services to customers. Without customers, there will be no business, and because of that, it is important to conclude customer contracts at some level even before really entering the markets. It is very important to analyze the need for railway transport, before forming a railway undertaking. In Germany, just five railway undertakings dominate the markets. It is nearly impossible to compete with them. It is vital to identify the correct market for the potential new railway undertaking – the company's survival depends on it. It is clear that, for example, in the petrochemical industry, the business survives in the recession, because it is a niche business from the transport perspective. Companies that could be categorized as niche told us that even in a recession the situation remained positive. A niche business requires implicit know-how, and it is important to keep the acquired know-how inside the company.

Investment for infrastructure is also seen as a barrier for entering the markets. This becomes a problem when warehouses, terminals and for example port operations are required. This kind of business might be a good niche business, but the initial investment is a problem for the entrepreneur, if no financial support is forthcoming from partners. If the newcomer wishes to cross borders, problems might arise if local entrepreneurs oppose the entrant. Every country wants to hold on to its own business. There is very little interest in helping the foreign newcomer.

Investments required for rolling stock are significant. If second-hand rolling stock is unavailable, a wagon leasing service can be an interesting option. In Germany, many operators also cited infrastructure charges as a problem. Personnel might also become a problem for a business that requires "specialist know-how". In that case, it is important to train the employees in order to boost their know-how and subsequently look after them well, in order to keep them. In identifying the best possible business idea, it is important to consider whether there are any investors who would be willing to help with

the investment required for rolling stock and infrastructure. Often, it is beneficial to set up this kind of business in collaboration with the particular industry which can provide the operator with work and also help with the investment. In the long term, this kind of cooperation can be fruitful, offering the potential for innovation and a good mix of horizontal and vertical integration in the field of industrial logistics. In other words, it can be a significant “win-win” situation for the industry concerned and the railway operator. Both partners can focus on their core competence, while still supporting each other.

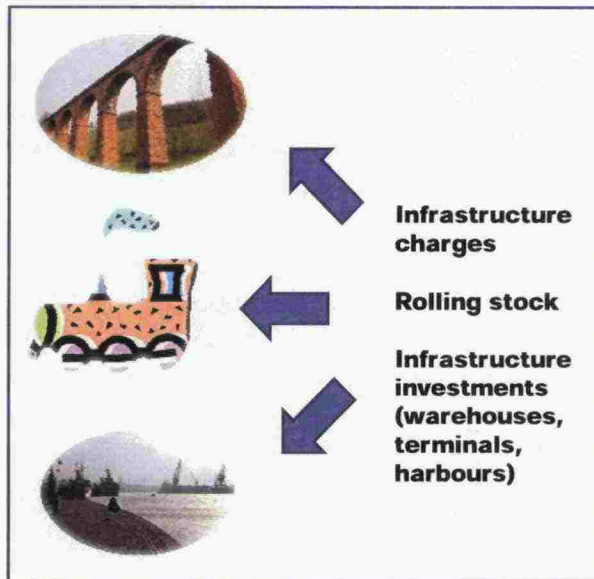


Figure 8 Costs seen as a barrier for RUs.

Interoperability

In international transport, it is very important that everything is well organized and standardized between the operated countries. The level of interoperability depends on standards of gauge, couplings, signalling systems, messaging and communication systems and also the brakes and operating rules. Interoperability can be a problem in cross-border freight transport. In Germany, this is a big problem, because of the volume of transport from Germany to eastern or southern Europe. The problem comes from the non-standardization of many facets involved in train transport. The following comments on interoperability were made: “There are over 20 systems for signals and over 30 systems for communication. This kind of issue blocks free movement between countries and areas.”

Because Germany is in the centre of Europe, it is a potential area for transit. Ports like Rotterdam in the Netherlands and the port of Hamburg are also good departure and destination points for goods. However, cross-border transit does not work without technical standardization. We heard the opinion that many countries wish to be part of the EU, but still want to stick to their own ways, without standardizing or synchronizing with other EU countries.

There are not just technical issues involved with this problem, but different certificates and licences are also required in the different countries. As one interviewee said: "There are certification problems in connection with interoperability. In Poland, Warsaw grants all permits and in Germany they come from Brussels. The rules are not the same."

With regard to the EU, there is much bureaucracy concerning liner waybills and other documents, which are not standardized between countries. These issues cause a lot of work. There are many types of signalling and messaging systems, and generally the systems are not compatible with each other in the different countries which are operated by the same train. Rules and practices differ, as well. This will be a significant problem and it will force the operator to find out how things are done in the operated country. Issues with personnel also relate to interoperability. In Germany, for instance, things might work well technically, but simultaneously in another country the same equipment cannot even be used by a German employee. Consequently, the only way to operate is to have multinational employees, who can work in all of the operated countries. Interoperability issues also include language and familiarization skills. In Germany, the employees are highly certificated, but the skills and competence of the personnel must be adjusted to fit in with local demands and manners, if German personnel are to work in countries east of Germany. They must have local know-how, in order to cope.

The Network Statement is a very important tool for interoperability. It is a well-known source for railway undertakings which are in contact at the international level. It is seen as an important tool for getting information, where to drive and what kind of rolling stock is compatible for that region. The problem is that there are countries that do not produce a Network Statement or if they do, it is only available in the national language. The Network Statement is considered a very important document when entering new countries. It contains information on whether it is possible to drive in the region, and how to prepare for the new business area.

An issue connected with "Interoperability" and the "Network Statement" is the fact that many railway undertakings lack good rail network maps, which indicate all the service points for trains and, most importantly, the connections via rail from place A to place B. An important point to mention is that many operators expressed a wish for contact persons in the local railway administrations, who could be contacted by telephone. These persons would be "international" contact persons, to answer questions about the local railway infrastructure.

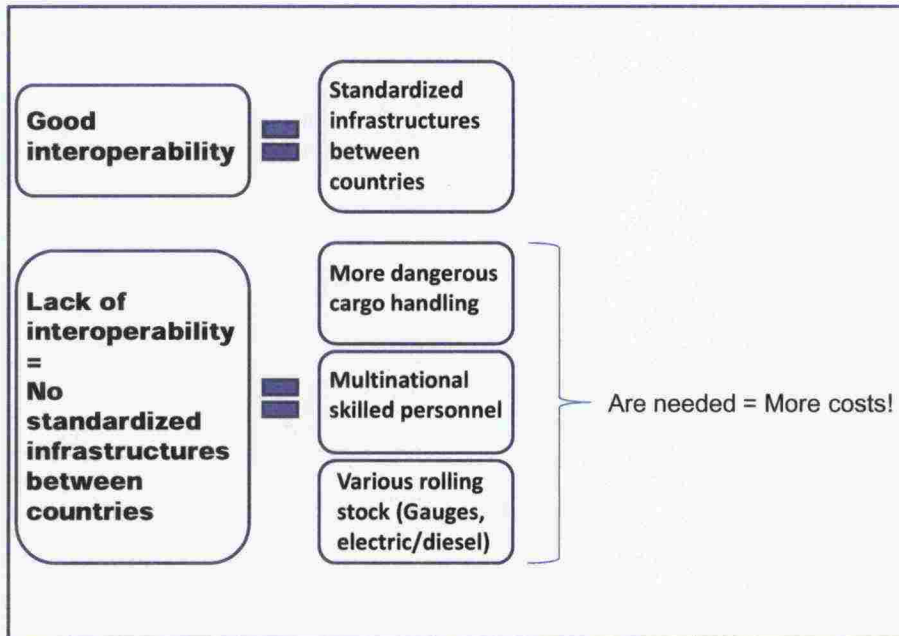


Figure 9 *Inside interoperability.*

It is easy to operate in a homogenous area where there are no significant problems with interoperability, because systems and habits are similar to each other. Generally, it is very important to standardize everything, as this makes transport faster, more “just in time”, and consequently more economical, efficient and lean. A significant improvement would be to enable a group of wagons to go from country A through country B to country C without irrelevant stops. Smarter transport is a vision for the future. There would not be empty wagons driving on rails, and the cargo handling would be centralized in the big hubs, such as major ports.

The Finnish railway market is very different from the German one. Germany is in the centre of Europe, while Finland is located on the edge of Europe. Standardization issues become topical in connection with transport between Finland and Russia. If rail/ship connections between Hanko and Germany ever become a topical issue, some interesting questions will have to be resolved. In terms of investing in the elimination of problems, the issues of “Interoperability”, “Infrastructure” and “Safe cargo handling” are interconnected. Better interoperability will improve the handling of dangerous, and this in turn will diminish the need for better cargo handling infrastructure. Furthermore, investing in improved interoperability infrastructure minimises cargo handling.

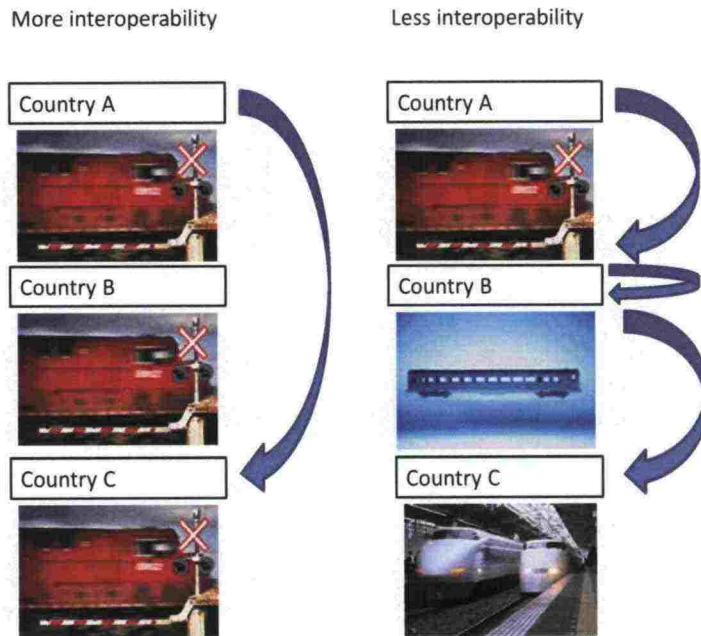


Figure 10 The level of interoperability.

Competition

According to the interviewees, competition is tough in Germany and a real problem for railway undertakings. In Finland, there is no competition. In Germany, every interviewed operator said that price competition is a problem. Germany has nearly 260 RU licences. Less than hundred of these are real railway operators. This is still a big amount of undertakings. The biggest competitor, DB Schenker Rail, operates 80% of the German railway freight transport. The remaining 20% are in competition with DB Schenker Rail. According to the interviewees, the best way to survive is to have more scope than scale. This means that RUs must compete on quality and customer service, not volume. An interviewee made the comment that “Sometimes, small is beautiful.” As was mentioned earlier, the name of the game is “niche”.

Free competition has introduced much that is positive:

- Higher service level
- Regular timetables
- Better working motivation
- Scope advantage in niche business
- Better innovations, when more cooperation with customer exist

Competition between the railways and road transport is also tough. In interviews it became clear that for many railway undertakings road transport is a problem due to its

greater flexibility. With a truck it is possible to drive from door to door, whereas in rail transport you still need a truck for the first and last miles. This causes severe price pressure. In the opinion of the interviewees road transport sets the price level for rail transport. Severe price competition will cause numerous problems, since every customer wants more than just transport. They demand a whole service package, consisting of transport and all warehousing and forwarding logistics. And all this at the lowest possible price. Often such severe competition pushes the price too low for the operator. In that case, good service levels are very hard to maintain.

People want more competition in order to lower the price level, and this has now happened. The interviewees pointed out that prices have decreased by 20-30 per cent since competition was introduced. Therefore things are as they should be, but like in every business, there is a critical price level below which it is not possible to render an appropriate service. It is important to be able to conduct the business at a profit. Without profit the business will not survive in the long run, or a larger company will take it over. Competition is healthy, even when it is between two or more different transport modes. There should, however, be some motivation for transport operations to become more environmentally friendly. The EU has conducted projects related to this issue. If there is a will to conduct transport operations in a more environmentally friendly way, someone must pay for it, because it will not happen without costs. However, the desire for cleaner transport is not that strong. Customers who are ready to pay extra for "green" transport are few in number.

Future of the railway undertakings

The future of the rail sector looks bright, because of its good reputation as an environmentally friendly transport mode. There are plenty of plans in Germany to merge with other countries, and Poland for example was seen as an interesting market. This is because Poland is perceived to be an economically emerging country. Poland is also near and it is a good area to go through in an easterly direction. Overall, many interviewees talked about merging with the East and the Far East. This is an interesting issue, because the interoperability will come towards on borders when going through countries and regions. It will first be encountered on the border between Poland and Belorussia, where cross docking is needed.

The future is interesting because of innovations and better and safer cargo handling equipment. All this has a link with interoperability, because it would be very important to get the cargo flow moving from country A through country B to country C on the same wagons. This means that it would be good to have the loading and unloading take place only in the hubs, such as major ports. After that the cargo would continue on the same wagon to its destination, without unloading and loading onto other transport modes. This would minimise any damage to the cargo in handling. The future for rail transport looks positive enough to warrant investments in rolling stock and infrastructure, such as warehouses and terminals, and most importantly in personnel trained by the employer. Also RFID (Radio Frequency Identification), GPS (Global Positioning System), messaging standards and "tracking and tracing" were mentioned as important issues of the future.

From the German perspective, Finland is seen as an interesting market. Some ideas about a "rail-ship" connection between Hanko and Germany were mentioned in the interviews. The opening of the Russian border was also mentioned as an interesting issue.

3.3 Summary of operating in the German environment

This sub-chapter will collate together all the main problems in market entry and in starting a business. The chapter entitled "Market barriers" will deal with the problems encountered in operating in Germany. This chapter also discusses problems relating to interoperability, which is a significant issue when starting and operating in international traffic. This sub-chapter is also an overview of today's railway transport market in Germany.

To start with, it is important to know what the biggest problems are in business start-up in Germany. The normal point for start-up in Germany is the moment when potential is identified based on the ecological and economic image of railway transport. Some of the operators conducted market studies, but there were also operators who entered the market and learned as they went along.

When entering foreign markets, the new RU wants to know how easily it can fit into the new market. In other words, is the market fair and are you at all welcome, or is the market only willing to accept its own national operators. At start-up the business needs customers to serve. These days the service must comprise a full package of logistic services put together in cooperation with the client (third party logistics). All the innovations and the development of the transport operation are carried out in cooperation with clients, in order to strengthen the supply chains and increase the safety of cargo handling. The best way to survive in Germany is to specialize in a certain branch, or niche, where the operator can focus on good quality, good service level and good know-how of the personnel. It is recommended that the business is launched in cooperation with an industrial partner, who might be able to provide financing. The collaboration might prove to be beneficial for the industrial participant as well, because they might get the opportunity to outsource the logistics of their business to the railway undertaking.

Because there is tough price competition between the transport modes, the transport of functional products is not the best alternative. It is a better option to conduct business in a branch of "innovative service" and be a niche operator.

Several market barriers are identified in the German market, such as bureaucracy, investments for rolling stock and infrastructure and tough competition. Some of the interviewed firms also cited high infrastructure charges. Bureaucracy relating to certification is a problem. Investment is a problem when the option to lease the fleet does not exist.

Interoperability problems are the biggest barrier to international traffic. Problems with interoperability mean that the supply chain between countries is not complete. This is because standardization between countries is not sufficient. There are many projects for better interoperability in the EU, but they are expensive and it is difficult to find funding

for them. Technical interoperability problems include signalling, messaging and gauge standards. Electricity is also a problem, when using electrically powered trains. Diesel locomotives are the only alternative in these regions. Interoperability problems can also be found in personnel. For example, German personnel are not the best alternative for Polish operations, because of language differences and lack of knowledge of local practices.

The future appears bright in this sector. Railway transport is seen as an ecological and effective transport mode and ecological issues can also be used in marketing. However, the most important things to take into account are the functioning of high technology, punctuality and a good level of service in general. These are the elements for which customers are willing to pay.

Overall, if more operators are to be attracted to the sector, it is very important to assist newcomers with bureaucracy. Financial support from industry is another important factor which will contribute to the survival of this environmentally friendly transport mode of the future.

4 OPERATING IN THE RAILWAY FREIGHT SECTOR IN HUNGARY

4.1 Historical development of transport modes

In Hungary the share of railway freight in the overall modal split has come down in comparison with road freight transport during last five years. In terms of tonnes, rail lost 107 thousand tonnes between 2004 and 2008, whereas road gained more than 44927 thousand tonnes (see Figure 11). By the same token, it has to be stated that international transport remained dominant, accounting for about 80 per cent of all transportation during this period in Hungary (Hungarian Transport Authority - HTA 2009a). However, railway freight grew significantly in absolute terms during the period from 1995 to 2006. However, one can notice a cycle of fluctuation (see Figure 11). Cargo volumes carried on railways started to decrease in absolute terms in 2007 and this continued in 2008, both in terms of tonnes and tonne-kms.

In terms of tonnes, the decrease is 6 per cent from 54705 in 2006 to 51542 thousand tonnes in 2008. In tonne-km the corresponding figure is 3 per cent from 10167 to 9874 million tonne-km from 2006 to 2008. When comparing figures from the first half of 2008 and 2009, a further decline can be seen from 25155 to 20270 thousand tonnes, i.e. almost 20 percent, and from 4785 to 3522 million tonne-km, i.e. 26 percent. (Hungarian Central Statistical Office - HCSO 2009.) The main reason for this is the drop in international cargo movements (HTA 2009 a, b).

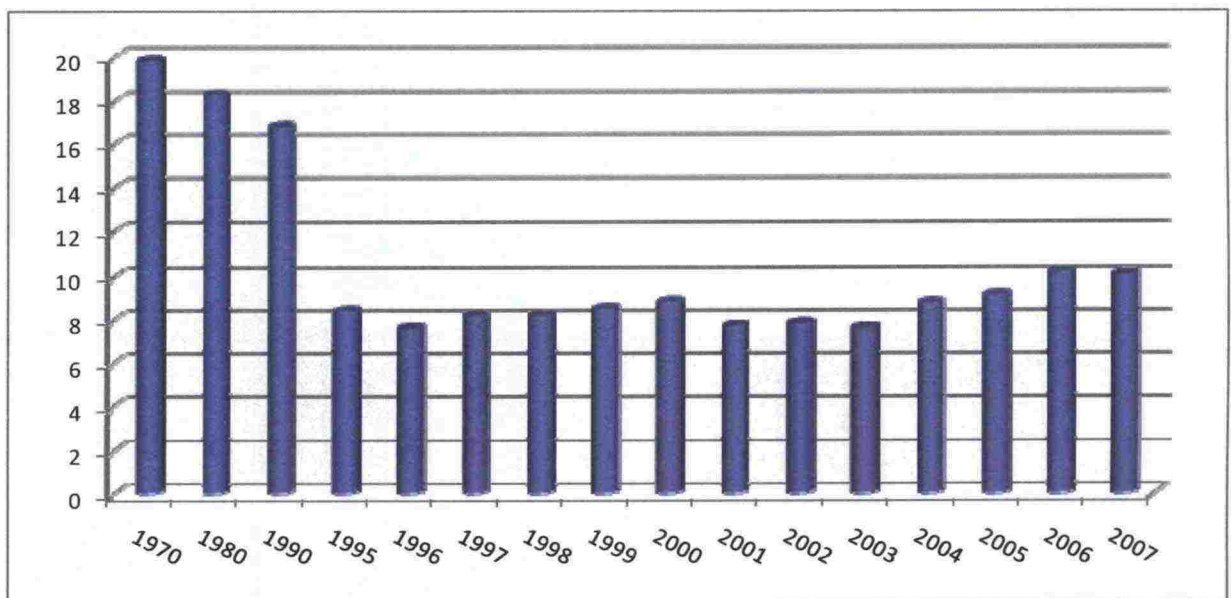


Figure 11 Performance of rail freight transport in Hungary in billion tonne-kilometres between 1970 and 2007. (EC 2009; ECMT/OECD 2007).

Government action has been launched in order to change these negative trends. In 2008 the institutional setting of the railway industry was modified and a new coordination body was founded; the Hungarian Rail Office was replaced by the Hungarian Transport Authority. However, one can argue that MAV and GYSEV should not function as

Infrastructure Managers; instead, an independent organization should be charged with the duties involved. The new management model can be seen in Figure 12 below. It has to be pointed out that the real infrastructure manager is the Capacity Allocation Office (CAO) that publishes the Network Statement and not only delegates some duties to MAV and GYSEV, but also purchases services from them. The range of tasks addressed by it continues to expand. In June 2008, CAO took over from MAV Zrt. And took on the responsibility of creating timetables for both passenger and freight connections.

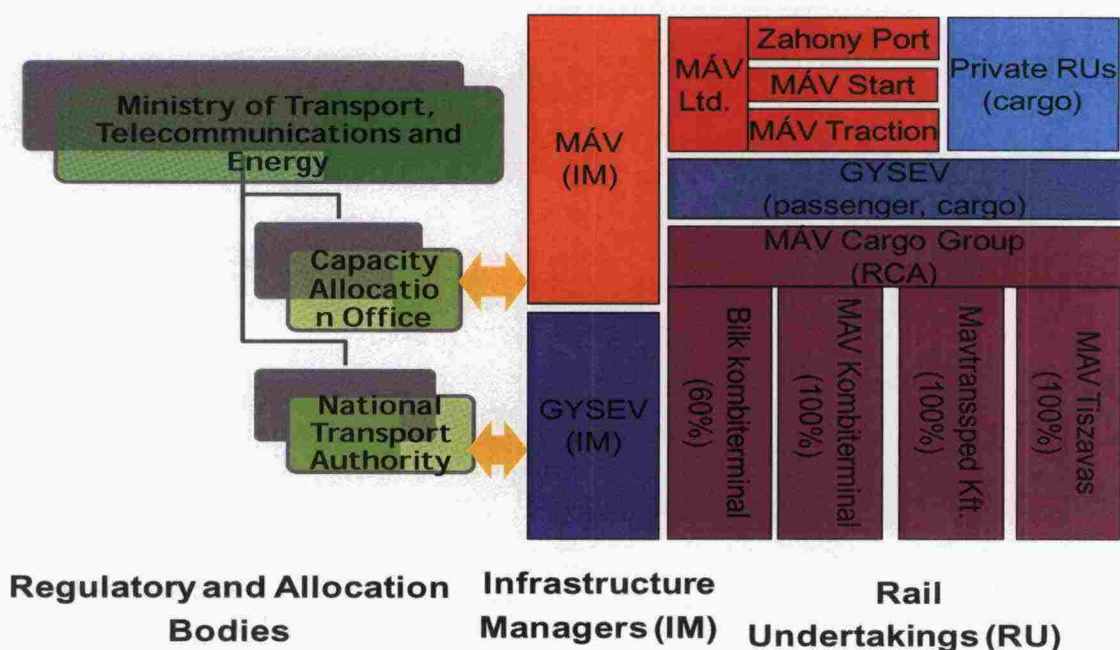


Figure 12 The new institutional management model of the rail industry in Hungary in 2009.

According to the literature (HTA 2009a, b; Koós 2008) despite these reorganization efforts, one cannot expect significant improvements in the near future: It might be that three or four new railway freight undertakings could enter the market during the next two years, but volumes will continue to shift towards road transport. One core concern in the system management is that MAV still has the opportunity to influence the legislation process of national regulations (Koós 2008).

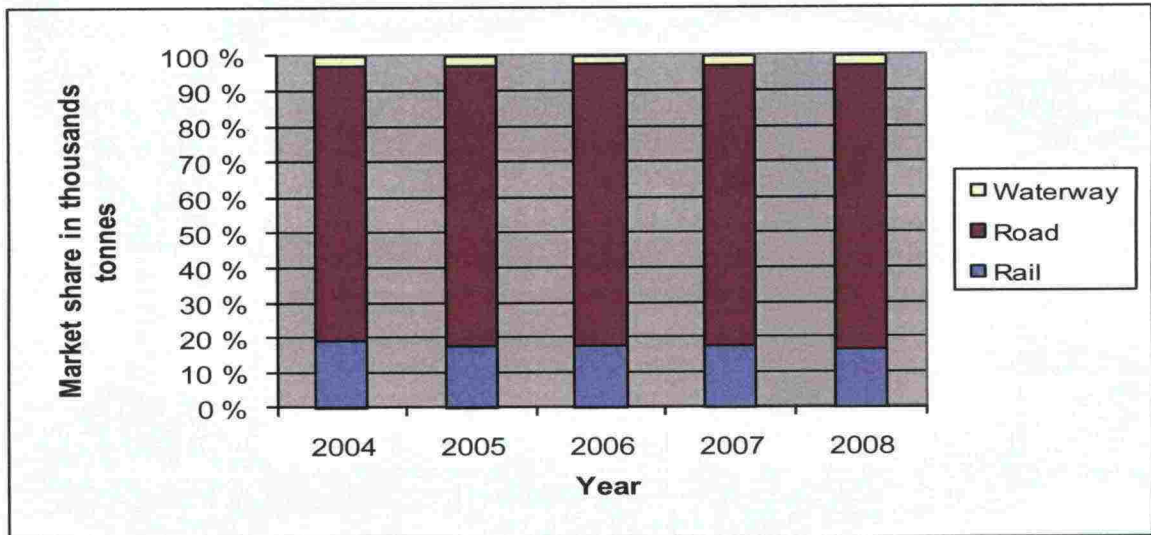


Figure 13 The development of volumes of rail, road and waterway freight transport over the period of five years in terms of tonne covering both domestics and international cargo data (HCSO 2009).

Since the beginning of the era of railway freight market liberalization in 2003, there has not been any change in the direction of development. In terms of absolute market share, railway freight has lost market share to road transport between 2004 and 2008. The volumes measured by tonnes dropped for rail by 0.4 percent from 51726 to 51542 thousand tonnes whereas the volumes carried by road grew during this time by 21.1 percent from 213339 to 258380 thousand tonnes (see Figure 13 above). Similarly, looking at tonne-kilometres the difference is even clearer: rail managed to grow only by 12.8 percent from 8749 to 9874 million tonne-kilometres, whereas road transport indicated an increase of 73.5 percent from 20598 to 35743 million tonne-kilometres. These numbers show that over this five year period companies opted for road to carry more volumes for longer distances (Figure 14).

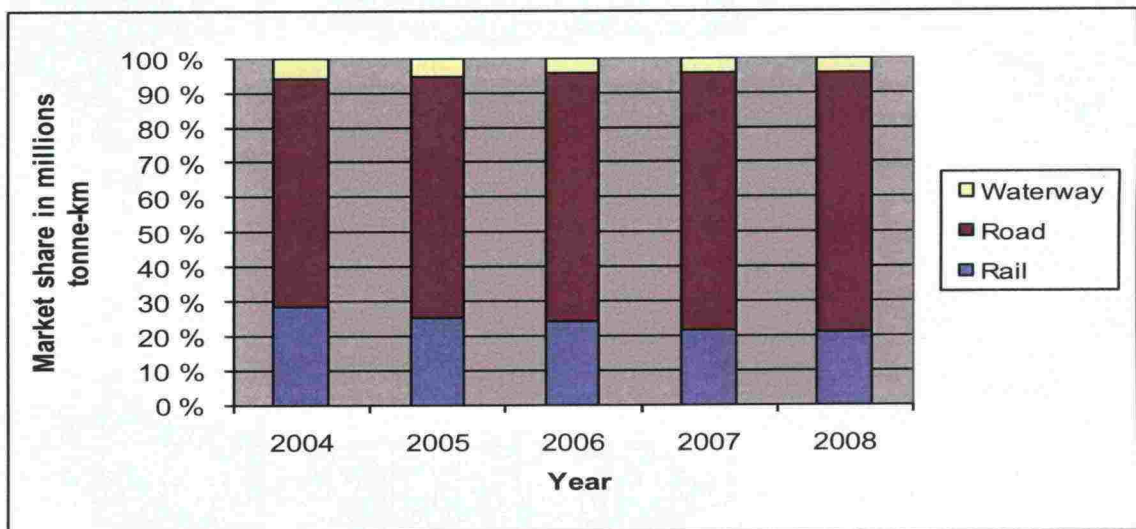


Figure 14 The development of volumes of rail, road and waterway freight transport over the period of five years in terms of tonne-kilometres covering both domestics and international cargo data (HCSO 2009).

In light of the above, it can be expected that further subsidiaries of MAV Ltd. will be sold to foreign investors. In the end, it is a trend in this sector to offer services on the principle of a “one-stop-shop”. As a result, traditional railway freight undertakings will become full scale logistics service providers.

4.2 Hungary: Empirical findings from the interviews

Introduction

The process of opening the railway freight market commenced in Hungary in 2003, and the first private rail freight undertaking started its operation in 2004 (Koós 2008). Currently, as of September 2009, there are 16 to 18 companies with a licence to operate railway freight transport on the market (Gecse and Bokor 2009; European Railway Agency – ERA 2009). The situation is, however, changing all the time. Out of these, ten are traditional railway freight undertakings including the two former national incumbents. At the moment approximately 10 companies run active services. To date the market share of new entrants is approximately 5 percent, GYSEV holds circa 10 percent and MAV Cargo Group is the market leader with 85 percent (Gecse and Bokor 2009; HTA 2009a). Among these targeted companies there are two railway freight transport undertakings, two logistics service providers, one transshipment service provider, one energy (coal) producer and one railway line constructor. At the time of the interviews in March 2009, the transshipment service provider, the energy (coal) producer and the railway line constructor had already all needed licences to access the market, but were still not operating. The transshipment service provider is 100 per cent owned by MAV, but it is separated completely from its parent company in terms of accounts. One of the logistics service providers was previously a rail freight and passenger undertaking and this company also performs some of the tasks that traditionally belong to the Infrastructure Manager.

Themes of analysis: Market entry, market barriers, interoperability and competition

The collected material indicates that the main incentive for entering the markets is to generate more revenue and/or to cut costs. In order to be able to do so, these case companies cut investments intended for rolling stock. Instead of purchasing, they focus on leasing and renting. The case companies estimated that in the first months of 2009, as the economic recession deepened in Europe, the drop in demand for railway freight transport was 35-40 per cent from the level in the first half of 2008.

However, these goals are difficult to achieve since the main barrier to entering the markets is the bureaucracy involved in the market entry process. The Network Statement does not help new entrants, and the process for acquiring the necessary licences and permits requires a great deal of effort, even from experienced market players. Inter-regional differences in interoperability matters, such as inter-organizational information systems and the technical specifications of the railway traffic control system, still exist and they reduce the efficiency of international rail freight transport corridors, especially in relation to the ones starting in the EU and going through Russia and Ukraine. Further unfair competitive conditions make the circumstances even harder for any new small enterprise. In the interviews it emerged

that former monopoly holder railway freight undertakings form a group of alliance, in order to profit more out of their contracts with the new small market players. As a result, these new market players are forced to find new larger partners with whom to enter into alliance. The deepening economic downturn in Europe and worldwide will most probably lead to more mergers and acquisitions.

Consequently, it can be argued that the most common strategy for entering markets in Hungary is currently vertical and horizontal integration. The railway freight transport business has such high fixed costs that new entrants have no other choice but to find a partner. There are market actors who are not even afraid of illegal commercial arrangements, and fines have already been imposed. Currently there is an investigation into cartel and respective price agreements (HCA 2008a, b; HRO 2008). It can be envisaged based on the discussions with the case companies that railway transport will fail to increase its market share in relation to road transport.

Future

From the above it can be argued that intra-modal competition is fierce and has disruptive effects on inter-modal competition, where railway is about to lose more market share to road. Price competition within the railway freight sector is so steep that it even forces companies to take illegal action to defeat opponents (see HCA 2008a, b; HRO 2008). In this sense intra-modal competition can be seen as a market entry barrier for new potential railway freight undertakings. In the future it seems that further mergers and acquisitions with German and Austrian markets will make the Hungarian market more vulnerable to economic downturns, as companies will be governed by foreign investors. It can be expected that in the near future more and more non-rail freight undertakings will apply for operating licences and set up basic fleets of wagons and locomotives. With the help of these measures, former customers of incumbent railway freight undertakings can ascertain the cost savings objectives that they wish to achieve.

International transport corridors such as between Rotterdam and the Port of Constanta in Romania will improve interoperability in the region and will generate new opportunities for inter-modal competition. Inter-organizational enterprise resource planning systems will become a primary target of investments. The share of international cargo will most probably increase for Hungary and a simple and effective infrastructure charge system will become vital, in order to increase transparency in the railway freight markets. By the same token, it can be argued that the role of personnel will also become a critical factor in bringing about better knowledge-value for implementing transport services at lower cost.

4.3 Summary of operating in the Hungarian environment

In summary, we can note that the railway freight operating environment in Hungary is heavily dependent on foreign investors and that the deepening economic recession in the region is about to shrink this transport industry even more. Railway freight transport providers are forced to collaborate more closely with each other, form alliances and access financial assets from abroad. The “one-shop stop” stimulates even more mergers and acquisitions while the process of market opening is slowing down. It seems that

most of the problems can be traced back to institutional settings in the sector. Competition for and in the market is so fierce that government agencies are no longer able to control the situation very well (see Figure 15 below). With the help of leasing and renting, some of the infrastructure-related rolling stock deficiencies have been solved, but the requisite decision power is already in the hands of foreign owners and shareholders. Recruiting well trained personnel is not a problem yet. In the future this resource class will be in a key position to facilitate productivity growth with more value and less cost.

Both categories of case companies presented in Table 2a and 2b (See appendix 10) show similar types of problems in entering the markets, and they show that the problems are related to system efficiency itself. In addition it seems that the factors of unfair competition circumstances, bureaucracy, market uncertainty and no demand or customers compound on each other with the result that companies might at some point consider competition to be a market entry barrier. Nevertheless, it has to be stated that currently there are already new private railway freight undertakings in Hungary that have been generating profits for a while. The positive attitude can be seen also in the number of operating licences granted during the first eight months of 2009. Three new licences have been granted, with two of them to logistics service providers and one to a construction company (ERA 2009). This trend tells us that railway freight transport is considered a potential future option. All the interviewed companies have provided evidence that they realize that tighter cooperation is a must and they have all the commitment to make the future even brighter and worthwhile to invest in.

Against this background it is understandable why vertical integration is the most popular way of entering rail freight markets in Hungary. It has been recognized that the harmonization of the infrastructure charge system in the region could bring in such a positive injection that it might generate more income for the Infrastructure Managers and the state. In the cumbersome setup in this country infrastructure charges only worsen the cumulative effects of other market entry barrier factors.

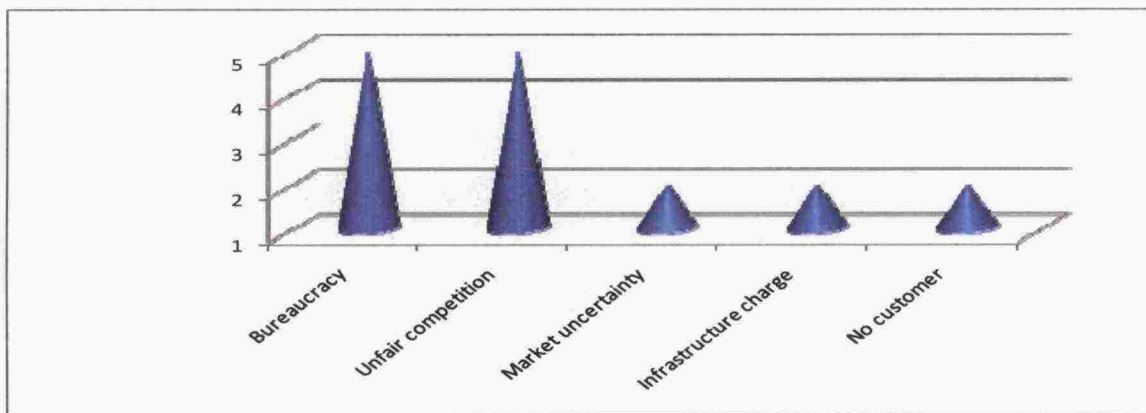


Figure 15 Major entry barriers to railway freight market in Hungary.

It can be argued as well that the adoption of multi-annual contract platforms for implementing railway infrastructure investments would stimulate further transparency in the railway freight markets and increase investments from private railway transport service providers into this transport sector. These arguments support the view that

government has a key role to play in this transition phase of the market opening process. This has already been acknowledged, since there is a novel infrastructure charge system on its way which will bring the domestic stipulations into line with EU regulations. The new methodology should be in use in 2010/2011, facilitating sanctions for delays in transport service performance (NTA 2009). The biggest challenge for government remains to influence the attitudes and perceptions of incumbent and private railway service providers in a positive direction, to instil some brotherly spirit and put them on a friendlier footing – all this to equip them with the means to compete against the dominance of road transport.

5 DISCUSSION AND CONCLUSIONS

5.1 Interplay of market entry, market barriers, interoperability and competition

Globalization leads to further regional integration in Europe, and governments experience problems when they want to reduce their involvement in this transportation sector. The theory behind the EU transport policy is that competition can be boosted through market liberalization and that in turn lowers the price of railway freight transport services, while increasing their quality in the eyes of the customers (Lalivé and Schmutzler 2008; Kreutzberger 2008; Zomer and Islam 2008; Vaughan 2007; Eisenkopf 2006). During the last ten years, the railway industry has suffered from the negative effects of globalization and the unpredictability of the changing business environment. These effects have been compounded by the historically fragmented nature of this transport sector in Europe and the fact that it has been a loss-making business activity for a long time. The EU has issued three directive packages to revitalize the sector. Nevertheless, until now the results have been mainly moderate with the exception of some countries, such as Great Britain, Sweden and Germany.

Despite the efforts made towards privatization, in terms of growth in inter-modal traffic volumes for instance, the difference between DB AG (DB-Schenker Rail) and MAV Cargo Group is still great. As Figure 16 indicates, between 1997 and 2006 MAV Cargo Group was able to increase volumes by 10 percent from 4866 to 5358 thousand tonnes, while Deutsche Bahn AG improved figures by 62 percent from 29119 to 47191 thousand tonnes (Figure 16).

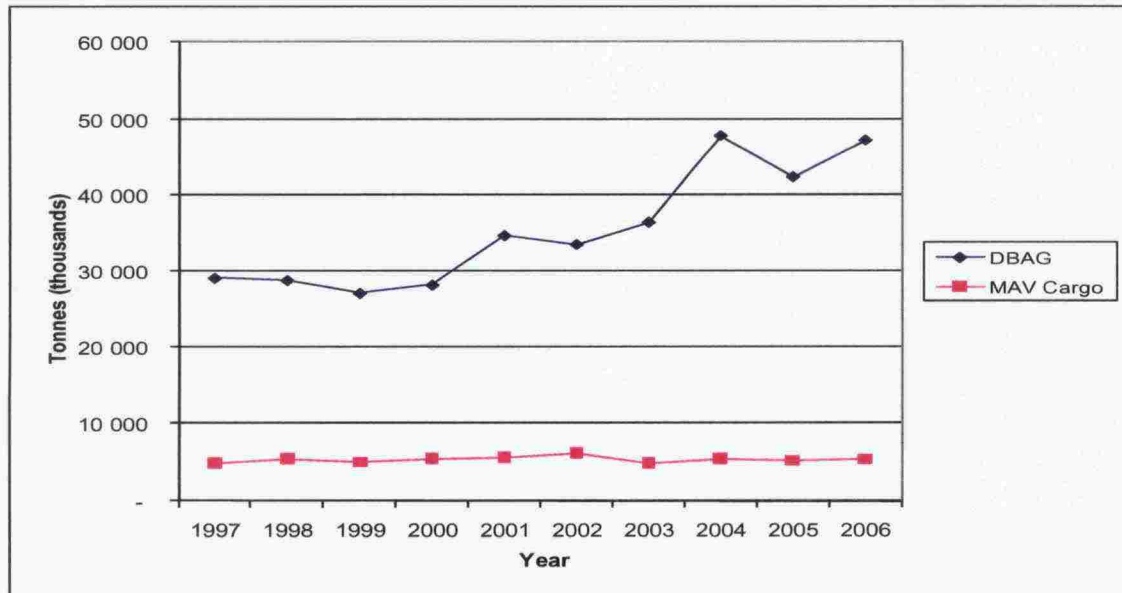


Figure 16 Comparison of the performance of Deutsche Bahn AG inter-modal traffic with that of MAV Cargo Group between 1997 and 2006 (UIC 2007).

Monopoly incumbent railway freight undertakings are under pressure, and the platform of services they offer is not that flexible and most often of lower quality compared to

their private counterparts. However, they usually have large fleets of rolling stock and a large customer base, which will ease the competition situation for them. As a consequence, these giant railway freight undertakings have a great need to carry out investments, despite the volatile economic circumstances and the decreasing volumes.

On the other hand, private railway freight undertakings need to provide transport services with higher value and they must focus their efforts on cumbersome official procedures. In Hungary there was one example where a case company requested and received unofficial help from a railway freight undertaking with obtaining the obligatory operating licence. These smaller private railway freight undertakings increasingly rely on leasing or renting rolling stock, which relieves the pressure of cutting costs by minimizing the amount of input of capital needed for further investments. However, the efficiency of the market also depends on the relationships of all the companies with the Infrastructure Managers and other relevant government agencies, such as national rail offices or transport authorities. For the system to function smoothly, there must be streamlined capacity distribution between the requesting companies. The processes for this activity vary greatly from country to country. The infrastructure charging system is another factor that has a direct impact on the profitability of each rail freight undertaking and on the whole network of relationships between the market players.

The price pressure is still hard on the whole railway freight market for many reasons. The reasons include the general customer trend, where customers demand more but want to pay less. At the same time, railway freight undertakings themselves also believe that an improvement strategy of "more with less" is a viable option. As rail freight volumes are decreasing, as are the volumes of other transport service providers, the only opportunity to generate profit seems to be to offer more specialized "package service products" to a niche market. Value-added services such as warehousing, assembly or transshipment automatically promote the trend of "one-stop shops". Factors that are external to transport systems, such as the economic recession and the increasing uncertainty and unpredictability in the business environment of the future, support movement towards a business model, where more is provided with fewer resources. On the other hand, the intensification of inter-regional trade sets certain logistics trends in focus which have implications for the price levels of railway freight transport services. As Iikkanen (2007) pointed out, shorter delivery times, the accuracy of operations, the larger size and higher frequency of the delivery quantities as well as increasing transport costs in general result in a situation where road transport becomes more optimal. Much of the pressure is focused on human resources through whom it becomes possible to provide more at lower cost and in a shorter timeframe.

Railway freight markets are becoming more international, which means that even small companies target not only European-wide distribution channels and corridors, but also markets in China and parts of Russia. There is also evidence of growing integration between railway transport, logistics service providers and international ports. Former monopolists are on their way to becoming full-scale logistics service providers, such as DB AG already is. This has forced smaller companies to focus on niche markets, such as oil and gas transport or chemical cargo.

On the basis of the recorded observations, it is justified to note that Germany (and Sweden) are in the last phase of the market opening process as described in the theory framework presented in sub-chapter 2.2. In other words, there is no state aid for private railway freight undertakings, but the state is about to stimulate stability in the constantly changing market conditions. An example of this is the recent adoption of a multi-annual contract for infrastructure development. The financial standing of railway freight undertakings and other transport service providers is not that stable in Germany either, but increasingly they are able to show a profit by specializing in niche markets and by acquiring target companies from Eastern Europe. They must do so to be able to compete on the markets with DB AG, which still has a dominant position.

On the other hand, Hungary (and Poland) is at the beginning of phase 3, with waves of mergers and acquisitions stimulated by extremely tough competition on the market. Companies are no longer given financial aid, but instead there is a need to stabilize the market from the effects of unfair competition. The gap in the advancement of the liberalization process in Germany and Hungary is illustrated by the fact that while the market share of private railway freight undertakings is 20 per cent in Germany, in Hungary it is approximately five per cent.

Table 1 Main rail freight market development trends in Germany and Hungary.

GERMANY	HUNGARY
Private ru:s increase market shares	Private ru:s increase market shares
DB is still very strong	Close cooperation is a necessity
Finance is a problem	Finance is a problem
Increasing focus on internationalisation	Increasing focus on internationalization
Interoperability is a problem	Infrastructure charge is a problem!
Human resources well available	Human resources well available

The mergers and acquisitions under privatization schemes indicate an emerging competition between the great giants of Europe: DB AG, RCA, RZD and SNCF (Sorgetti 2009; Pittman 2009 Carruthers 2008). It seems that in the near future in the EU in many regions oligopolistic competition will become a more significant factor in the railway freight market. It can be argued that only system management improvements could help railway to capture a bigger stake out of the markets to eliminate interrelated network, institutional and performance related problems (Lorentz 2009). These initiatives could include standardization of industry-wide contracts for inter-modal transport initiatives and empowering competition authorities and national transport authorities to impose much more serious penalties in case of breaching the rules of fair competition (ERIM 2008; Rangaraj et al. 2008; Voltmann 2007).

5.2 Future prospects

In the future the situation should change towards “with collaborative competition towards productivity”, such as the situation today in Sweden (Vogt 2008). Intermodality considerations included in the “corridor – approach” of research and

development transport projects will take deeper effect in Central Europe (Zomer and Islam 2008). This is important as already nowadays even small railway freight undertakings in Europe operate increasingly on an international scale under the one-stop shop philosophy and in circumstances of unpredictable demand patterns of customers. In addition it seems that international regional markets will turn into more global ones, where market entry conditions will become harder to comply with in general. This scenario poses its own challenges on bureaucracy in documentation processes for essential permits and licences.

The gap between Germany and Hungary is visible. In Germany the transparency of the business environment stimulates stability and therefore railway freight undertakings are more willing to carry out further investments even where this is not very easy because of financial reasons. In both Germany and Hungary road transport is seen as a real threat for the rail freight market, but in Germany railway freight undertakings face fierce competition also from sea and inland waterway transportation segments. Inland waterway transport is not a very tough competitor because of its inflexibility, but road transport is seen as setting the price level. In Hungary markets are more ineffective and in many cases intra-modal competition takes the attention away from the inter-modal dimension. In Germany the amount of new start-ups and new entrants to the railway freight markets indicate that the markets perform better in relation to the ones of Hungary.

European railway freight markets are on their way to becoming more deregulated, with a greater amount of private involvement. According to the literature, globalization results in greater regional integration of transport markets and international traffic management is gaining attention. The theory behind the EU policy is that through market liberalization competition can be boosted which in turn lowers prices of railway freight transport services provided, while increasing their quality through inter-modal transport solutions in the eye of customers. Countries in Europe deal with similar difficulties in relation to market liberalization process in the railway freight markets, but they address different solutions to handle them. This is interesting as governments have a common goal of reducing their involvement in managing this transport sector.

Former incumbent railway freight undertakings still control the majority of market shares on the markets and they managed well to keep onto their position despite the effects of deregulation and privatization. The main market entry barriers are bureaucracy, investments and acquisitions of rolling stocks. However, it can be argued that railway freight undertakings in both countries see the biggest potential for increasing profits in international transport corridors that partly extend their reach outside Europe. Lack of interoperability is the biggest problem in international transport. It is a problem, and solving it is a tough task. Much of it is in the hands of the EU. All member countries must maintain good standards.

The market entry strategy varies in each country. In Central Europe the most common strategies are horizontal and vertical integration from the logistics service sector and heavy industry or entirely new start-ups in the transport segment in question. Competition is fierce between the different modes of transport throughout Europe. This often results in a market model where big players collaborate against small and new market entrants. Therefore it can be claimed that mergers and acquisitions in many

cases outweigh the effects of deregulation and privatization. In turn this might lead to a perception where competition is seen as an obstacle for entering rail freight markets.

Service quality problems in railway freight transport are mostly of a system dynamic nature, related to the efficiency of market regulations. These in turn set into focus questions of contractual law pertinent to collaborative agreements between railway freight undertakings. In addition, more specific problems such as infrastructure charges and ad hoc requirements in the inspection procedures render often promising service offers into ones where the customer has to pay a higher price and not have all the service elements it wants.

These factors influence governments to reinforce their role in the economy as channels of financial support. Railway freight transport service providers are forced to cut costs continuously. This in turn makes road transport more feasible, especially since the global economic recession has led to a 20 to 30 per cent drop in demand for freight transport. The pressure to show profit has started a trend of focusing on more transport related value-added services within the scope of ever-increasing international market enlargement towards Russia, Ukraine and China. Scientific contribution can be seen here in a new set of empirical material, with the help of which the previous theory framework could be refined. At the same time, the practical implication of this scrutiny is that even small firms can reveal their views on the extent of market functionality and competition dynamics, bringing up new details that were not covered before.

Future research might be needed into the practical way in which rail freight could increase its share in regional intermodal rail and road transport systems. Despite the efforts so far, it seems obvious that road transport solutions still dominate the scheme in Europe. Railway transport is not employed as a result of its image of being a capital intensive, inflexible, and an unreliable option. In particular, it would be necessary to improve the liberalization process of railway freight markets by linking sea transport system models into the existing inter-modal networks of railway and road. In addition it would be beneficial to scrutinize the role and effects of railway infrastructure charges on the progress of market opening in regional international transport corridors. Currently there are wide ranges of infrastructure charge systems in place all over Europe and experiences are mixed concerning their influence on the service quality of inter-modal railway freight transport systems.

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2009 Február 16
Kouvola, Finnország

TANULMÁNY A MAGYAR VASÚTI TEHERSZÁLLÍTÁSI PIACRA LÉPÉSRŐL – A MEGFELELŐ HÁTTÉRTUDÁSI BÁZIS KIALAKÍTÁSÁVAL A PRIVÁT VÁLLALKOZÁSOK TÁMOGATÁSÁRA

Tisztelt Vezérigazgató Úr!

A Lappeenranta Műszaki Egyetemről Székely Bulcsu PhD doktorandusz vagyok, Finnországból (Internet hozzáférhetőség: <http://www.lut.fi>). A doktori disszertációm az Európában a vasúti áruszállítási piacokon létező akadályokat hivatott felderíteni összpontosítva bizonyos országokra, mint például Magyarország, Lengyelország, Németország vagy Svédország. A cél az, hogy pontosabb képet lehessen kapni a piacra lépési folyamatról, amivel így láthatóvá válna, miként lehetséges megkönnyíteni az új (potenciális) vállalkozások lehetőségeit a terjeszkedésre. A kutatás kivitelezése esettanulmány keretén belül, a vállalkozások képviselőinek meginterjuvolása útján történik. A riport szigorúan kutatási érdekek megvalósítását szolgálja, és sem a hazzájáruló vállalkozások neve sem más részlet nem fog nyilvánosságra kerülni a résztvevők beleegyezése nélkül. Az akadémiai tanácsadó Prof. Olli-Pekka, Hilmola a Lappeenranta Műszaki Egyetem egységéből.

Az Ön vállalkozásának nagy tapasztalata van a magyar vasúti piacon, s ezért a közreműködése nagyra becsülendő. Az interjúk 2009 márciusára vannak betervezve és 1 es 2 óra közötti időt vennének igénybe. Megtisztelne résztvetele biztosításáról tartalmazó levelet kapni Öntől a következő email címre: bulcsu.szekely@lut.fi. Valamilyen oknál fogva ez az email nem működik most, ezért kerem a lehetséges válaszlevelet a következő címre küldeni: bszekley88@yahoo.com. Ezután egyeztetnénk a találkozás időpontjáról.

Baráti üdvözlettel,

Szekely Bulcsu

MSc (Econ.) Székely Bulcsú
PhD kandidátus, projekt kutató
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16 February 2009

**A STUDY ON MARKET ENTRY INTO HUNGARIAN FREIGHT RAILWAY
MARKETS – GENERATING KNOWLEDGE TO SUPPORT PRIVATE
UNDERTAKINGS**

Dear Mr/Ms Contact Person!

I am a PhD student from Lappeenranta University of Technology, Finland (homepage: <http://www.lut.fi>). My dissertation has an intention to discover the main market entry barriers and market entry strategies of freight railway undertakings in Europe in specific countries such as Hungary, Poland, Germany and Sweden. The aim is to gain a better understanding from the entry process so as to be able to see how to ease the market entry for these potential actors. The research is carried out by employing case study approach and interviewing company representatives. The report will be strictly for research purposes and not revealing the names of any participating company or any details that are not agreed to. The academic advisor is Prof., PhD Olli-Pekka Hilmola from Lappeenranta University of Technology, Kouvola Research Unit.

Your company has a strong experience in the Hungarian railway markets and therefore Your contribution to this research is highly appreciated. The interviews are scheduled to be conducted during March 2009 and they will take from one to two hours long. I would appreciate to receive Your confirmation of interest for participation via e-mail to address bulcsu.szekely@lut.fi. Please notice that currently my email is out of order so may I request you to send the Your response to bszekely88@yahoo.com. Thereafter we would arrange a meeting for an interview

Yours sincerely,

Bulcsu Szekely



THE SEMI –STRUCTURED QUESTIONNAIRE

A PIACRA LÉPÉSI FOLYAMAT

A piacra lépés előtt és annak időpontjában

- Milyen indokok szóltak a piacra lépés mellett?
- Milyen várakozások voltak a piacra lépést megelőző időszakban? Milyen előzetes felkészülési intézkedéseket hajtottak végre a piacra lépéssel kapcsolatban? Valóra váltak a várakozások?
- Milyen információszerzéssel kapcsolatos, adminisztratív, és tevékenységet érintő problémákkal szembesültek a piacon való megjelenéskor? Legyen szíves idézze fel az akadályokat, különösen azokat, amelyek kapcsolatban voltak az állami szervek működésével a biztonsági engedély a működési-, műszaki engedély és a kapacitás elosztás kapcsán. Legyen szíves, mérlegelje az állami eljárások átláthatóságát, (nehézségi fokát) a piaci belépés engedélyezésével kapcsolatban (beadando adatlapok).
- Milyen módon működtek együtt a többi áruszállítási fuvarozóval a piacra lépés idején?
- Hogyan alakult a kiadások között a feloszlás a beruházásaikat illetően (terminálok, vasúti gördülőállomány, személyzet) a piacra lépésre készülve?
- Piaci liberalizáció az EU:ban 2007:ben: Legyen szíves, becsülje fel, milyen hatással voltak az EU szabályzatok es megállapodások az Ön vállalkozásának vasúti teherszállítási szolgáltatásaira a piacra lépés ideje alatt.

A helyzet ma

- Hogyan osztaná fel Ön a költségeket most az egyes beruházásaik között (terminálok, vasúti gördülőállomány, személyzet).
- Milyen információszerzéssel kapcsolatos, adminisztratív, és tevékenységet érintő problémákkal szembesülnek ma? Legyen szíves sorolja fel az akadályokat, különösen azokat, amelyek kapcsolatban vannak az állami szervek működésével a biztonsági engedély a működési engedély + vasúti gördülőállomány + kapacitás elosztás kapcsán. Legyen szíves, mérlegelje az állami eljárások átláthatóságát, (nehézségi fokát) a folytonos kontroll alatt álló követelmények betartásával kapcsolatban (beadando adatlapok).
- Milyen együttműködési formák fejlődtek ki a többi áruszállítási fuvarozóval? Mely eszközök/folyamatok vannak ma kihelyezve a partnercégeknek vagy megosztva velük?
- Piaci liberalizáció az EU:ban 2007:ben: Legyen szíves becsülje fel milyen hatással vannak az EU szabályzatok es megállapodások mostanság az Ön vállalkozása vasúti teherszállítási szolgáltatásaira.

A jövőre való előretétekintés

- Miként látja Ön, hogyan alakul majd a költségek felosztása a beruházások között a következő 2 évben (terminálok, vasúti gördülőállomány) ?
- Miként látja Ön, milyen Milyen információszerzéssel kapcsolatos, adminisztratív, és tevékenységet érintő problémákkal szembesülhetnek a közeljövő során? Legyen szíves sorolja fel az akadályokat, különösen azokat, amelyek kapcsolatban vannak az állami szervek működésével a biztonsági engedély a működési engedély + vasúti gördülőállomány + kapacitás elosztás kapcsán.
- Miként látja Ön, milyenek a várakozások a jövőre nézve a többi áruszállítási fuvarozóval kapcsolatos együttműködéssel? Mely eszközöket/folyamatokat fogják kihelyezni a partnercégeknek vagy osztani meg velük?
- Piaci liberalizáció az EU:ban 2007:ben: Legyen szíves becsülje fel milyen hatással lesznek az EU szabályzatok es megállapodások a jövőben az Ön vállalkozása vasúti áruszállítási szolgáltatásaira? Miként látja Ön a vasúti szerepét a többi áruszállítási módhoz viszonyítva a következő 2 évben?



THE SEMI-STRUCTURED QUESTIONNAIRE

THE MARKET ENTRY PROCESS

Before and at the time of entering the markets

- What reasons were brought up to support the market entry?
- What kind of expectations you had before entering the markets? What kind of preliminary preparations you made? Did the expectations come true?
- What kind of informational, administrative and operational problems you faced when entering the markets? Kindly describe the barriers, especially with regard to the role of governmental organizations in safety certificate and operating license + rolling stock approval + capacity allocation. Please evaluate the transparency of procedures employed by the government for requesting market entry (needed documents)
- In which ways did you collaborate with other freight operators at the time of market entry?
- How your expenditures were divided between the investments (terminals, rolling stock, and labour) when preparing for the market entry?
- Market liberalization in EU 2007; please assess how EU regulations and stipulations affected your company with regard to rail freight transport service offerings at the time of market entry?

The situation today

- How your expenditures are divided currently between the investments (terminals, rolling stock, labour)
- What kind of informational, administrative and operational problems you face these days? Kindly describe the barriers, especially with regard to the role of governmental organizations in safety certificate and operating license + rolling stock approval + capacity allocation. Please evaluate the transparency of procedures employed by the government for controlling continuously the requirements to be met (needed documents).
- In which ways did you develop the collaboration with other freight operators? What resources/assets/processes are you outsourcing and/or sharing with partners?
- Market liberalization in EU 2007; please assess how EU regulations and stipulations have been affecting on your company with regard to rail freight transport service offerings?

Future outlook

- How do you see in what ways expenditures are going to be divided between the investments (terminals, rolling stock, labour) toward the future?
- What kind of informational, administrative and operational problems do you see your firm could face in the near future? Kindly describe the barriers, especially with regard to the role of governmental organizations in safety certificate and operating license + rolling stock approval + capacity allocation.
- What are your expectations concerning the development of collaboration with other freight operators? What resources/assets/processes will you outsource and/or share with partners?
- Market liberalization in EU 2007 and 2010; please assess how EU regulations and stipulations will affect your company with regard to rail freight transport service offerings? How do you see the role of rail freight transport in the transportation markets against other transport modes during the next two years?

HUNGARY

New entrants / freight transport

1. Balatoni Iparvasút Szolgáltató Kft. (G. Transport' 96)
2. Bobo Conveyance Repairing Industrial Commercial Service Ltd.
3. BSS 2000 Energetikai Szolgáltatóipari és Kereskedelmi Kft.
4. CER Central-European Railway Transport, Trading and Service Co.
5. COLAS Építő Zrt.
6. G&G Pest Control and Trade Ltd.
7. Eurocom Automatizálási és Vasúttechnikai Zrt.
8. Floyd Ltd. (Eurogate intermodal GbmH)
9. JÁSZ-VASÚT Műszaki, Tervező Kft.
10. Logistic Center Hungária Kft.
11. Mased Rail Cargo Magánvasút Zrt.
12. MMV PLC. (MMV Magyar Magánvasút Zrt)
13. MÁVÉPCELL Mély-, Magas- és Vasútépítő Kft.
14. MTMG Zrt.
15. Pannontrain Vasúti Zrt.
16. Szentesi Vasútépítő Kft
17. Train Hungary Ltd.
18. Vasútépítők Pályatervező, Kivitelező és Iparvágányfenntartó Kft.
19. Vasútvill Kft.
20. Záhony-Port Záhonyi Logisztikai és Rakománykezelési Szolgáltató Kft.
21. Hungaria Intermodal Ltd.



Sehr geehrte Damen und Herren,

Ich bitte um kurze Aufmerksamkeit für eine Anfrage.

In der Anlage finden Sie meine Angelegenheit, mit der ich mich an Sie wenden möchte.

Es geht um meine Masterarbeit an der Technischen Universität Lappeenranta Finnland (www.kouvola.lut.fi). Ein Teil der Arbeit sind Interviews mit Kontaktpersonen in deutschen Firmen. Die Interviews mache ich in Deutschland.

Die Interviews sind ein wesentlicher Bestandteil meiner Arbeit.

Diese Masterarbeit mache ich im Auftrag der Universität an der Forschungseinheit Kouvola und der Partner ist die Finnische Bahnverwaltung (The Finnish Rail Administration)

Ich danke Ihnen für Ihre mögliche Zusammenarbeit.

Mit freundlichen Grüßen

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DIE STRUKTUR UND DER INHALT DES INTERVIEWS

1. *HINTERGRUND DER FIRMA*
2. *AUF DEN BAHNMARKT (Vorbereitungen, Kunden, Information)*
3. *MARKTLIBERALISIERUNG*
4. *“ROLLING STOCK” (Lokomotive, Waggons)*
5. *INTERNATIONALE ZUSAMMENARBEIT*
6. *FRACHTOPERATOREN ALLGEMEIN*
7. *MARKTBARRIEREN*
8. *INFRASTRUKTURE*
9. *KONKURRENZ*
10. *KOSTENFRAGEN*
11. *PERSONAL*
12. *EU*
13. *MARKETING UND KUNDENDIENST*
14. *ZUKUNFT*



MASTERARBEIT

Betreff:

STUDIE BETREFFEND DIE MARKTERSCHLIESSUNG DER BUNDESBahn-FRACHTMÄRKTE UND WIE EINE STAATLICHE ORGANISATION PRIVATE UNTERNEHMER BEI DER MARKTERSCHLIESSUNG UNTERSTÜTZEN KÖNNTE.

Die Struktur des europäischen Bahnmarktes änderte sich am 1. Januar 2007, als die Frachtmärkte auf Gleisen in allen Mitgliedsstaaten der Europäischen Gemeinschaft eröffnet wurden. Obgleich einige Länder die Märkte früher liberalisierten, gehörte Finnland zu den Ländern, die die Liberalisierung erst Anfang 2007 wahrnahmen.

Ich bin in den Endstadien der Masterstudien, im Fachbereich Technik an der Technischen Universität Lappeenranta, Finnland (www.kouvola.lut.fi). Meine Masterarbeit ist Teil eines finnischen Projektes der Bahnverwaltung, einer staatlichen Organisation, die das Bahnnetz vermietet. Die Bahnverwaltung hat die Absicht, die Hauptmarkterschließungssperren und die Markterschließungsstrategien, die in Deutschland zu merken waren, zu untersuchen.

Mein Ziel im Projekt ist es, einen besseren Überblick über den Markterschließungsprozess zu erhalten und herauszufinden wie eine staatliche Organisation ihren Service für Neueinsteiger der Frachtmärkte entwickeln könnte. Die Forschung wird durchgeführt, indem man die Firmenrepräsentanten in Deutschland interviewt.

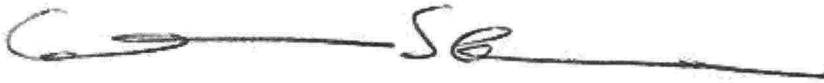
Der akademische Berater ist Prof, PhD Olli-Pekka Hilmola von der Technischen Universität Lappeenranta, Forschungseinheit Kouvola, sowie Dr. Direktor Miika Mäkitalo von der Finnischen Bahnverwaltung. Die Zielsetzung der Studie ist, die speziellen Eigenschaften der Markterschließung nach der Bahnliberalisierung zu verstehen.

Ihre Firma hat grosse Erfahrung von den Märkten auf den Gleisen und dadurch würde Ihr Beitrag zu dieser Forschung in hohem Grade geschätzt werden. Das Interview ist wichtiger Teil des Forschungsprojektes und gibt wertvolle Information darüber wie sich die Bahnliberalisierung auf die Märkte des Operatorenlevels auswirkt.

Erfahrungen Ihrer Firma würden dabei helfen, authentische Information zu bekommen.

Die Interviews werden in Deutschland im Juli 2009 geführt. Das Interview nimmt eine bis zwei Stunden in Anspruch. Ich würde es schätzen, Ihre Bestätigung über Ihr Interesse an meinem Vorhaben per E-Mail, mikko.e.simola@lut.fi zu empfangen. Danach können wir einen Termin für das Interview vereinbaren. Ich danke Ihnen im Voraus für Ihre Kontaktnahme.

Mit freundlichen Grüßen



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Dear Recipient

A STUDY OF MARKET ENTRY INTO GERMAN RAILWAY FREIGHT MARKETS – GATHERING LEARNING POINTS FOR FINNISH GOVERNMENTAL ORGANISATIONS TO SUPPORT PRIVATE UNDERTAKINGS

The structure of European Railway market changed 1st January 2007, when the railway freight markets were opened in all of the European Union's member states. Although, few countries had liberalized the markets earlier, Finland was among the countries that faced the new situation in the beginning of year 2007. I am in the final stages of my master's studies (Engineering.) at Lappeenranta University of Technology (Lappeenranta, Finland, www.lut.fi).

My master's thesis is a part of The Finnish Rail Administration's project (organization is governmental and leases railway network), which has an intention to discover the main market entry barriers and market entry strategies in Germany.

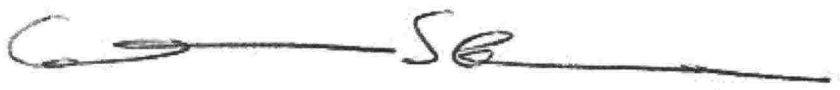
Our aim of the project is to get better understanding from the entry process, and how governmental organization could enhance its service towards new entrants of freight market. The research is conducted by interviewing the company representatives in Germany.

The academic advisor is Prof., PhD Olli-Pekka Hilmola from Lappeenranta University of Technology, Kouvola Research Unit as well as Dr., Director Miika Mäkitalo from Finnish Rail Administration.

The objective of the study is to understand the special characteristics of entering the markets after the railway liberalization. Your company has a strong experience in the German railway markets and therefore Your contribution to this research is highly appreciated. The interview is important part of the research project as it gives valuable information how the railway liberalization affected on the markets at actor level. Your company's experiences would help to gather genuine information.

The interviews will be conducted in Germany during July 2009. The interview takes one to two hours. I would appreciate to receive Your confirmation of interest via e-mail to address mikko.e.simola@lut.fi. Thereafter we can arrange a meeting for an interview.

Sincerely Yours,



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**Das semi-strukturierte Fragebogen
Deutschland**

3.7.09

HINTERGRUND DER FIRMA

Geschichte

- Bitte erzählen Sie etwas über Ihre Firma.
- Wann sind die Bahntransportaktivitäten in Ihrer Firma angefangen?
- Haben Sie oder hatten Sie Aktivitäten auch im Strassentransport?
- Wenn Sie auf die Bahntransportmärkten gingen, gab es da einen
- Zusammenhang mit der Marktliberalisierung?

AUF DEN BAHNMARKT

- Warum möchte Ihre Firma auf diesen Markt?
- Bitte erzählen Sie etwas über die Nachfrage nach Transporte allgemein, und nach Bahntransport.
- Welche Vorbereitungen wurde gemacht, bevor Ihr Business wirklich im Bahntransport anfangen hat?
- Wohin hat Ihre Firma das Information über Marktentry (Markteingang) zusammengefasst, gespeichert, archiviert?
- Ist Ihnen "the Network Statement" bekannt?
- Wenn Ja, haben Sie das benutzt?
- War es Ihnen nützlich?
- Was für rolling stock (Lokomotiven, Waggons) / sonstige benötigte Infrastrukturen (wie Lagerhäuser, Terminals) haben Sie? Wie haben Sie das alles organisiert?
- Wo haben Sie rolling stock gekauft? Neu oder second-hand?

PERSONAL

- Wo und wie haben Sie das Personal angestellt, gewählt?
- Hatten die Personen frühere Erfahrung über Bahnoperationen?
- Sind Sie zufrieden mit ihren Qualifikation
- Organisieren Sie Training für Mitarbeiter? Was für?
- Zusammenarbeit?
- Was für Businessserwartungen haben Sie gehabt, bevor Sie auf den Markt eingetreten sind?
- Haben Sie eine spezielle Strategie angewendet?
- Was für Probleme oder Schwierigkeiten haben Sie getroffen im diesem Prozess?
- Hatte die Staatorganisationen eine besondere Rolle am Anfang?
- Beschreiben Sie bitte Marktbarrieren.

DIE HEUTIGE SITUATION

- Bitte nennen Sie Stärken und Schwächen (Entwicklungspunkten) Ihrer Firma in Bahntransport?
- Bitte nennen Sie die wichtigsten Probleme mit denen Sie sich heute beschäftigen in Bahntransport?
- Ihre wichtigsten Investitionen? (Jetzt / Zukunft) (Terminals, Rolling Stock (Lokomotiven, Waggon), Arbeitskraft)
- Hat das Preisniveau der Bahntransport sich (im Laufe der Zeit) verändert?
- Intermodal Konkurrenz/Wettbewerb?
- Hat die Zusammenarbeit mit Kunden sich (im Laufe der Zeit) verändert?
- Was möchten die Kunden? Fordern die Kunden ausführliche Lösungen (Bahntransport ein Teil der Industrie)? Welche Service?
Bitte nennen Sie ein Beispiel?
- Welche Energieform benutzen Sie? Diesel oder Elektrizität ?
- Warum haben Sie genau diesen bestimmten Lokomotiven typ gewählt? Haben Sie anderen Typen überlegt?
- Sind die Bahnfrachtmärkte Transparenz und Objektiv?
- Wie ist es mit Funktionalität der Ministerium?
- Wie ist es mit Funktionalität der Infrastruktur?

ZUKUNFT

- Welche sind Ihre Zukunfterwartungen?
- Gibt es neue technologischen Innovation zuerwarten? Gibt es neue Transportinnovationen in Aussichten?
- Haben Sie Expansionspläne?
- Wie entwickelt sich diese Bahntransportbranche allgemein?

INFRASTUKTURE

- Bitte beschreiben Sie die Bahnmärkte Deutschlands allgemein.
- Hatte/hat die Marktliberalisierung im Jahr 2007 einen Einfluss auf Ihr Business? Welche Einflüsse?
- Wie gross ist ihre Rolling Stock. (Wie viel?)
- Wie gross ist Gebühr für Bahnnetzwerk? Gibt es überhaupt das in Deutschland?

EUROPEAN UNION

- Hat EU's Directionen (White Papers / Railway Packages) einen Einfluss auf Deutschland und Bahntransportbusiness?
- Hatte und hat es immer noch die Marktliberalisierung in EU im Jahr 2007 einen Einfluss auf Ihre Firma?
- Welche Probleme oder Möglichkeiten EU Gesetze schaffen?

KONKURRENZ

- Haben Sie Konkurrenten? Bitte können Sie einige nennen?
- Dominieren nur einige Firmen die Märkte?
- Ist es einfach auf den Markt eintreten? Können Sie etwas über die Intensität der Konkurrenz sagen?
- Gibt es Preiskonkurrenz?
- Hat die Branche verschiedene Konkurrenten? Einheimisch? Ausländisch?
- Ihrer Meinung nach, hat die Branche hoch Exit Barrieren? (wirtschaftlich, strategisch, psychologisch)?
- Haben Sie aktives Marketing? Bewerben Sie über ihre Tätigkeiten und Service?
- Vorstellen Sie neue Produkte / Service als Wettbewerbsmittel? Bitte erzählen Sie ein Beispiel.
- Was ist Ihr spezieller Vorteil im Vergleich mit anderen Firmen in Bahntransport? Warum Sie sind besser als die anderen?

FINANZ

- Können Sie etwas über Kapitalanforderungen sagen?

KUNDENDIENST

- Was für eine Rolle spielt Kundendienst?
- Welche Verträge machen Sie mit Kunden wenn es um Volumen und Zeitraum geht?
- Haben die Kunden ausführliche, genug Information über den Markt?

SUBSTITUTEN

- Ihrer Meinung nach, welche sind die Hauptsubstituten für Bahntransport?
- Ihrer Meinung nach, hat Regierung einen Einfluss, darauf welche Substituten für Bahntransport auf dem Markt gibt
- Grüßen nach Finnland?

Table 1a Information about the interviewed firms of Germany 1

	A	B	C	D	E
Year of establishment	1991	1951	1938	1913	1970
Size of the company	Small	Medium	Big	Medium	Small
Background	No	Transport	Transport	Harbour	Forwarding
Knowledge before	Potential business.	Potential business.	Potential business.	No	From logistics.
Why company entered	Potential business.	Cost effective, Safe transportation mode	Potential business, Know-how	Potential business and area.	Good choice for the transportations in the future.
Rolling stock	Own and leased	35000 own wagons, access to 50 000 wagons	52 locomotives and 300 wagons.	8 locomotives, More than 120 wagons	Forwarder
Market barriers	Interoperability, access charges, local rules and attitudes against newcomer, Hard competition between road, rail and feeder.	Know-how, Certificates, Access charges, Getting know-how(educating), Hard competiiton between road, rail and feeder.	Interoperability, Infrastructure charge, Local rules and attitudes against newcomer, Hard competition between road, rail and feeder.	Price competition, Getting customers, Expensive infrastructure, Hard competition between road, rail and feeder, Access charge.	Interoperability, Need of road transport in the end, Hard competiiton between road, rail and feeder.
Company strengths	Multinational competence	Know-how and big volumes	Effective low organization, independency, service level, innovative subsidiaries, rolling stock.	Near the customer, own service center, good business area,	Own good terminals, good equipment for loading and unloading.
Price level	Went down 20%	No change	Went down 25%	No change	Went down 20%
Network statement	Not well known	Not well known	Well known and usefull	Not well known	No information
Investments	Telecommunicati on infrastructure, warehouses and rolling stock.	Know-how of personnel.	Personnel, interoperability, independent business.	Rolling stock, when no leased available.	Safe cargohandling, independent port.

Table 1b Information about the interviewed firms of Germany 2

	F	G	H	I	J
Year of establishment	1993	1960	1999	2001	1991
Size of the company	Medium	Small	Very big	No information	No information
Background	Ferries	No	Infra	No	No
Knowledge before	From logistics.	Business.	No information	No information	No information
Why company entered	Interesting market	No information	No information	No information	No information
Rolling stock	Infrastructure	No information	No information	No information	No information
Market barriers	Price competition, Interoperability	Price competition, Getting customers, Holding price of wagons.	Sertificates, Railway does not cover whole country. Infrastructure is not good for every operator , Hard competition between road, rail and feeder.	Organisation, DB is very big, Rail capacity not sufficient, Access charges,	Rolling stock, Sertificates, Organization, The interoperability, Financing business, Sertificates
Company strengths	Good terminals and rapid connections by train through whole Europe.	Good product and services. Niche business is good also in recession.	No information	No information	No information
Price level	Getting lower.	Getting lower.	No big change	Went down 20%	Went down 25%
Network statement	Well known and usefull	Not well known	Well known and usefull	Well known and usefull	Well known and usefull
Investments	Safer cargohandling.	Rolling stock	Electronic Train Control System, Better infra for high load trains.	No information	Safety

Table 2a Summary of the finding of the interviews with four active market railway freight market players in Hungary.

Measure/Company name	Company A	Company B	Company C	Company D
Year of establishment	1872	2003	1996	2005
Size of the company	Medium	Small	Small	Small
Backgroud of the company	Rail engineering	Oil and gas industry	Merged with a rail freight ru.	Rail line construction
Personnel's background	MAV and acquired	MAV and acquired	Acquired	MAV and acquired
Management of the rolling stock	Own and rented	Own and leased	Own and leased	Leased
Reason for entering the markets	Increase revenue	Increase revenue	Increase revenue	Increase revenue
Main market entry barriers	Bureaucracy	Unfair competition Bureaucracy High infrastructure charge	Unfair competition High infrastructue charge	Unfair competition Bureaucracy

Table 2b Summary of the finding of the interviews with three potential railway freight market entrants in Hungary.

Measure/Company name	Company E	Company F	Company G
Year of establishment	2007	1993	1967
Size of the company	Medium	Small	Medium
Backgroud of the company	Transshipping (MAV)	Rail line construction (MAV)	Energy sector
Personnel's background	MAV	Acquired	Acquired
Management of the rolling stock	Own	Own	MAV and Own
Willingness for entering the markets	Increase revenue	Cost savings	Cost savings
Main market entry barriers	No demand/customer Inadequate infra investments Bureaucracy	Market uncertainty Bureaucracy No customer	Unfair competition Market uncertainty

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