COMPETITIVENESS OF LITHUANIAN FREIGHT TRANSPORT SERVICE SECTOR IN THE CONTEXT OF THE EUROPEAN UNION

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Progressive changes, dynamic business environment become a constant of life in several economics spheres, including the Lithuanian freight transport service sector. Lithuanian freight transport services are characterized as sector acting on the terms of high rivalry. The aim of this article is to analyse the competitiveness of the Lithuanian freight transport sector in the context of the European Union. The competitive theoretical background, estimation of competitiveness of freight transport services are analysed. The competitive analysis of the sector through the Porter's model of five forces and internal characteristics of the enterprise defining the Lithuanian freight transport sector in terms of size and specialization is carried out. The methods of the research are systematics and a comparative analysis of scientific literature, quantitative research based on freight transport organisation survey. An empirical survey in which 349 freight transport service enterprises were examined allowed to reveal and estimate the most important factors influencing the competition intensity and the main firm-level factors that influence the companies' competitiveness in the economic sector.

Keywords: *freight transport sector, competitiveness, model of Porter's five competitive forces, resource-based view theory*

Introduction

In terms of economics, enterprises that are active in the market more or less meet the competition. The general situation of the country's economics, economic politics of the government, methods applied for regulating economics also shape the competitive environment in which an enterprise is acting. The economics of services is growing. The main economic indices of the country change, too. This situation allows analysing separate sectors and the opportunities for organizations to develop activities in these sectors. Economic and political changes that appeared since 1 May 2004 when Lithuania entered the EU evidently touched also the freight transport services. Volatile customers and their needs, the increasing number of enterprises that provide freight transport services and thus increase competition among them have changed the zone of the sector's activity and relationship with their customers. Various difficulties appeared. They rose as a result of growing competition which is stimulated not only by the new enterprises, but also by prognosis of substitutes, new competitors, alteration of customer's needs and the negotiating power of suppliers. From the economic point of view, the intensive competition in freight services shows that enterprises get less profit from their activities. If the competitiveness of enterprises is known, also resources of competitive advantages are disclosed, and decisions regarding continuation of these activities could be made. Thus, competitive analysis of the sector becomes important for estimating the main difficulties of competitiveness and for finding their solutions.

Scientists analyse competition in the sectors through the cooperative relations among the individuals of the market or through the factors of firm level. Here, Porter's (1998) five competitive forces model should be noted. Also, works of a resource-based view conceptions (Grant, 1998; Barney, Arican, 2001; White, 2004) should be estimated. Although rather numerous surveys were conducted in the field of competitiveness employing the theoretical models mentioned above, there is still a lack of practical surveys in the sector of freight transport services. These freight transports as logistics services are one of the most popular in Lithuania. The carriers are united by the national carrier association "Linava" Thus, a survey conducted in the freight services sector enables to estimate the main drivers of competitiveness that strengthen the development not only of freight transport services, but also the whole logistics services.

Theoretical presumptions of competitiveness: industry level and firm level factors

Competitiveness of the sector is described usually by the aspects of how long competitive enterprises operate in the sector and whether intensity of competition in the sector is apparent. Consequently, it is purposeful to describe the concepts of competitiveness identified by several authors. According to Weinert (1997), competitiveness is a capability to produce such items or services that correspond to international market requirements and thus it is the capability of enterprises, regions, nations to keep a high level of incomes and employment in the competitive market. After Porter (1998), competitiveness means the ability of items, services or market to operate on the same level with analogicous interfering items, services or market subjects. Porter (1998) also mentions the international aspect of supply. Thus, it is possible to state that competitiveness comprises such aspects as the competitive environment and its subjects, characteristics of the organization and its capability to use them trying to achieve competitive advantages in the market and economic result. Even if several models of competitiveness are known, we will analyse those that show the level of sector competitiveness and the factors of organizations' competitiveness.

The industry level factors. Analysing competitive aspects, the majority of scientists (Porter, 1998; Amit and Schoemaker, 1993) maintain that the largest influence on the potential of enterprise competitive advantages is made by the industry-level factors. In the scientific literature analysing the organizations' environment, Porter's (1980, 1998) five competitive forces' model is used, which enables to estimate the level of competitiveness. This model is rather universal and could be applied to analyse the environment of competitiveness for various products and services both in local and global markets. Porter (1998) believes that the analysis of competitive environment should start from its most important forces. Five factors in the model are underlined: rivals, customers, suppliers, potential rivals and substitutes.

By Porter (1980, 1998), *a threat of new rivals arises* in the case when new rivals enter the market that has no barriers for entering it. Also, the profit in this market should be credible. New rivals mean new enterprises that enter the market. Usually, newcomers bring about more opportunities for production and attempt to create a safe place in the market.

A threat of rivals manifests as a permanent observation of rivals, various methods of surveying the competitive environment, also observation of the dynamics of prices of competitors, etc.

A threat of substitutes is very important. In some cases, substitutes are able to move analogous goods or services out of the market because of a lower price and better quality of their product. Therefore, the demand for goods or services may decrease, together with the rivals' turnover. Substitutes allow customers to compare the quality of the goods, their relevance to the demand, and, of course, the price.

The negotiating power of the supplier displays itself through the relationship with them. Such analysis enables to foresee the directions for reversing the strategic relationships with suppliers. Negotiations with suppliers are serviceable for customers, but reduce the profit of service enterprises and the possibility to compete, because acquiring a competitive advantage involves expenses on advertisement, scientific researches and testing.

The negotiating power of the customers is manifested through relationships with customers.

According to Hunt (2000) and Jucevičius (1998), this model does not account for *governmental institutions* a very important factor that shapes the competitive environment. Laws and normative acts initiated by governmental institutions very often predetermine the solutions of organizations.

Analysing all factors separately, the enterprise is able to identify challenges of competition in the market and to estimate the importance of each individual factor. Besides, this method of estimation helps the enterprise to calculate the profitability of the sector: the stronger the competition, the less profitable business in these sectors may be. Porter (1980) maintains that some sectors are more profitable naturally, and enterprises in these sectors are able to optimize the results of their activity depending on the situation how this enterprise is positioned in the context of the five competition forces. The importance of each of the five competition forces underlines the structure of the branch; these are the main economic and technical characteristics of this structure. On the presumption of Jucevicius (1998), competitive strategy according to this model is grounded on the analysis of the competitive environment and analyses the possible competitive advantages and the strategy necessary for implementing these advantages.

The firm-level factors. The influence of firm-level factors on the competitiveness of enterprises is properly analysed through the concept of resource-based view. The resource-based view theory was developed by various scientists (Collis and Montgomery, 1995; Grant, 1998, Barney and Arican, 2001) who investigated the role and importance of enterprises' internal factors and types of enterprise resources. The theory of resource-based view, contrary to the model of Porter (1980, 1998), is oriented to the inside of the organization but not to its surrounding. This theory underlines that competitive advantages are determined firstly by the organization's internal tangible and intangible resources. Resources should meet the requirements and terms listed by Barney (2001): they should be valuable, rare, inimitable and corresponding among themselves.

Tangible resources are usually physical and financial resources. Building, equipment, stocks of goods are called physical resources. The size of the enterprise, information and data bases, channels of distribution, information systems of buyers, automated systems of storage are also assigned to physical resources (Fitzroy, Hulbert, 2005). The resources of a financial enterprise are related to its capability of further investments into equipment, people, purchasing and innovations (Fitzroy, Hulbert, 2005).

Intangible resources, by Marr (2005), are the capital of people (for example, skills, competence, motivation of employees, loyalty, know-how, technical skills, skills to deal with the problems, etc.), the capital of relationship (relationship by which the enterprise is related to other interested parties, customers). They could be expressed by a licence agreement, agreement on partnership, contracts, distribution agreement, etc. Structural capital is one of the parts of intangible resources (for example, culture of corporation, routines, practice, informal rule, intellectual capital: patents, copying, marks, registered design and so on). Tangible and intangible resources often become sources of competitive advantage.

Competitive advantages are identified as economies of scale and scope, relationship development, quality, organizational learning, organizational culture, innovation, information technology, function-specific efficiency, environmental friendliness, branding (Harris, Ogbonna, 2000). Grant (1998) notes such resources of competitive advantages as relationship development and vertical integration, information technology, function-specific efficiency and flexibility.

Summarizing the literature, we notice that there are no relevant researches to elucidate the resources of internal competitive advantage among enterprises of freight transport services. Here we should to keystone surveys made by Tongzon (2004), Litvinenka (2005) in logistic services. Their findings show several macro and micro level factors that determine international competitiveness in logistics, such as the cost of production in which wage cost constitute an important component, particularly in labour-intensive production, management quality, prices, quality of the service, exchange rates, government policies, political stability, investments in human and physical infrastructure. They noted that the most relevant firm level factors are cost and service quality. The quality of services becomes the most important condition for competitive advantage. To refer to the of works of Parasuraman, Zeithaml, Berry (1988, 1991), five – tangibles, reliability, responsiveness, assurance, empathy – of even ten criteria – tangibles, reliability, responsiveness, competence, courtesy, credibility, security, access, communication, understanding the customer – are emphasised for evaluation of service quality. An enterprise able to meet the requirements of customer is able to survive. In order to examine what services the customer wants, his main criteria of service quality should be evaluated.

An exceptionally valuable survey was made by the Lithuanian national carrier association

"Linava" The findings of this survey highlight the factors most important for strengthening the competitive advantages of Lithuanian freight transport enterprises. According to the analysis made by the Lithuanian national carrier association "Linava", the competitive advantages are transport fleet, technologies used in the supply system, employees and their experience, training of people, differentiation or specialization of services (Linava, 2006).

Methods

A questionnaire survey was made in 2006. The questionnaire was based on theoretical studies by Porter (1980, 1998), Parasuraman, Zeithaml, Berry (1988, 1991), Grant (1998), data of the Lithuanian national carrier association "Linava" (2006), Tongzon (2004). The survey was made in 2006 by authors of this paper with the aim to analyses the competitiveness of Lithuanian freight transport services, to find out the actual and the possible advantages. Presuming that Lithuanian freight transport enterprises have lost the possibility to sell their services at low costs, attention was focused on what exceptional services are provided by Lithuanian freight transport enterprises, to which provider preference should be given by the customers. There are 1150 enterprises in Lithuania now (2006) able to provide freight transport services. More than 1/3 of them were covered by our study for the reason that answers could be representative and conclusions of the survey could be applied for taking decisions in strengthening the competitiveness of Lithuanian firms. Questionnaire examination was made in 349 enterprises of freight transport services of Lithuania. The data were analysed through the two criteria: 1) the volume of freight transport services of the enterprise; 2) specialization of the enterprise.

These two criteria were chosen because the earlier investigations had shown that these parameters exert a great influence creating of competitive advantages (Linava, 2006).

Large freight transport *enterprises* are serious competitors in the freight transport services market. Powerful enterprises are able to enter the foreign markets, to compete with small companies, to provide more services and to create the competitive package of these services (Vengrauskas, Langvinienė, 2003), they have more possibilities to manage the cargo and to deliver it in time by trucking (via a satellite, etc.) and to do it at no high costs. Only larger enterprises are able to organize multimodal transport, to intermediate in the customs, to deliver a load from a storage and back, to store loads, to package, to distribute and do other logistic functions. Enterprises, according to the data of the survey, were divided to six groups: very small, to 10 employees (90 enterprises in our investigation were inquired); small, 11–20 employees (65 enterprises investigated); middle, 21–50 employees (95 enterprises); larger than middle, 51–100 employees (44 enterprises); large, 101–200 employees (32 enterprises); very large (15 enterprises).

The second criterion – *specialization* – becomes very important in finding and keeping a customer. There are not many enterprises in Lithuania able to provide services of different transport means (air, sea, etc.) or different kinds of loads carriage (by tents, tanks, etc.). Specialization is an opportunity to gain advantage in the competitive market. Experience shows that freight transport services in Lithuania will survive if they are capable decide in which sphere to specialise. Besides, investigation shows that non-traditional transportation gains some advantages. It allows increasing the effectiveness of enterprises themselves. Enterprises were divided into four groups: enterprises using their own transport only (226 enterprises were examined), further called transport enterprises; forwarders that have no their own transport and who act as intermediates in the market (42 enterprises); logistic enterprises who mix their own transport and transport leased from other carriers (66 enterprises); and others (only 6 enterprises were examined).

Results

Analysing the data of the questionnaires, two layers will be underlined: the size of enterprise and its specialization. The industry and the enterprise levels factors were examined.

The industry level factors. ***Competitors on the market.*** The power of the Lithuanian freight transport services is in the hands of the joint stocks companies located in industrial centres of the country, i.e. in larger cities. Small enterprises are active in the market 1–5 years or longer, middle ones approximately 5–10 years, and very large even more than 10 years. Transport enterprises act 5–10 years, forwarders up to 5 years, and logistic companies differ greatly in their age. Analysis of staff structure has shown, that middle companies have the largest part of drivers among their employees. Very large enterprises employ more of contacting staff than drivers. Also, transport enterprises have more drivers than contacting staff as compared with forwarders and logistic enterprises. Transport fleet is the largest in large enterprises, and 10–50 vehicles are owned by middle enterprises. The transport newer is in middle and large freight transport enterprises, as is also logistics as compared with transport and forwarding enterprises. Rather old vehicles are exploited in the largest enterprises and in enterprises that are purely transport organizations. Satellite, i.e. trucking services, for customers are provided more often by middle and logistic enterprises. The same situation has been found in the navigation equipment which allows delivering cargoes more quickly. Security issues are provided by almost all middle, large and logistic enterprises, also by transport enterprises.

Describing the ability of competitors to create a competitive advantage, we will underline the aspect of exceptional service provided by freight transport enterprises. As the data of our survey show, Lithuanian enterprises usually supply one-two, more rarely two-four kinds of load delivery services. Specialization to freight a cargo that requires a specific temperature is one of the most frequent (approximately 30 enterprises noted it); loads in containers (the same % of enterprises); loads in auto wagons (26% of enterprises). Beside this specialization, Lithuanian enterprises as a second or third specialization (we could say, differentiation) note of dangerous / hazardous loads or of food products. Delivery of expensive products (for example, computer sets) and cars is rather a clear specialization of a few enterprises that commonly supply exactly services of such specialization. Analysing data through two layers (size and specialization), middle enterprises do no alienate from the means presented above, but small enterprises have often only one specialization; for example, freight by refrigerators or containers, and very large enterprises also freight powdery loads that are not specialized by other enterprises. Analysing this point from the specialization aspect, forwarders have the largest differentiation, they supply a lot of kinds of cargo transport services. Transport enterprises are rather specialized in one-two or three kinds of loads. Logistic enterprises oscillate between differentiation and specialization.

Survey data show also service package specialization of Lithuanian enterprises. Creating a value added to definite specialization services is another competitive advantage for strengthening the power of these enterprises. Creating the value added as service package formation in Lithuanian freight transport enterprises is shown in Figures 1 and 2.

It is easy to see in these figures that small enterprises provide mostly three elements of the freight transport service package: full loads convey, partial loads convey (which does not occupy a full vehicle), and forwarding. Only middle and large, sometimes only largest enterprises

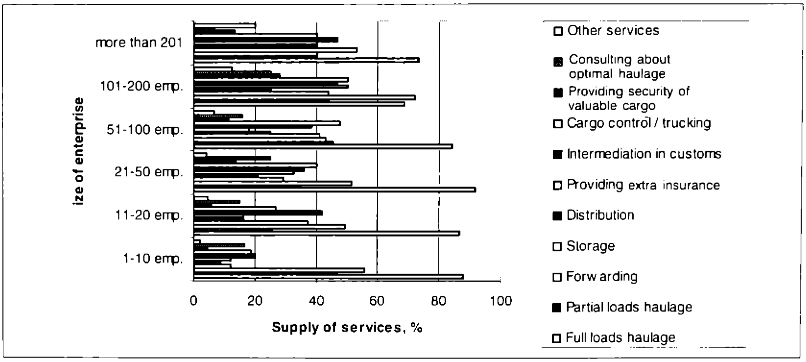

*Figure 1. **Services supplied by freight transport enterprises according the size of surveyed enterprise, %***

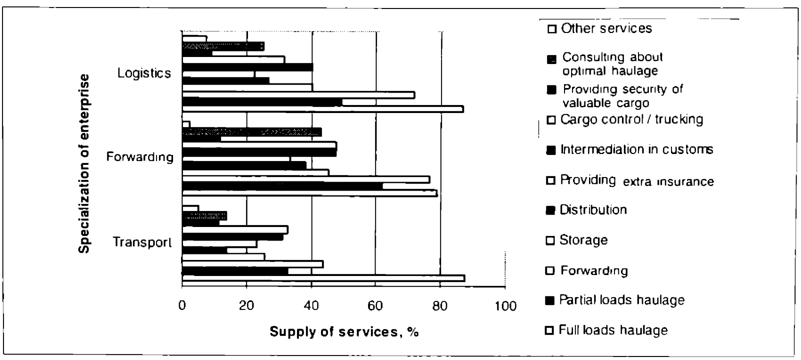

*Figure 2. **Services supplied by freight transport enterprises according to specialization, %***

are able to provide the whole package of services: cargo distribution, storage, intermediate in customs on behalf of a customer, to provide extra insurance and other services related to transport operations. Even large enterprises (more than 101 employees) have noted marked that they are engaged more often in forwarding than in transport of full loads. Interestingly, middle and large enterprises have noted that they supply services as *other*, it is services that were not listed in the questionnaire. The larger the enterprise, the larger division is noticeable between extra services. For example, 101–200 employees' enterprises supply almost all supplementary services listed in the questionnaire. Analysing the value added by freight transport enterprise specialization, we see that enterprises with their own transport more seldom supply extra services such as extra insurance of load, storage and other. Forwarders and logistic enterprises supplies very various supplementary services related to transport, but forwarders have marked rarer the transport services as one.

Describing ***competitors on the market***, freight transport service enterprises, depending on their size, have noted that commonly their competitors are enterprises that have their own transport. Answers that transport enterprises are the most serious competitors for them were noted by all enterprises (59% of answers). Only the largest enterprises that have more than 201 employees, and the smallest (less than 10 employees) have noted that they compete also with logistic enterprises (42 and 23%). Forwarders are not serious competitors to small, middle or large enterprises (only 14% of enterprises marked that forwarder are able to compete in this market very seriously). Analysing the estimation of competitors from the point of specialization, transport enterprises have marked that serious competitors are other transport enterprises (62% of answers), also logistic companies (19% of transport specialization enterprises). Forwarders think that competitors in this market are transport (48%) and logistic enterprises (24%). Logistic enterprises have pointed out that transport (62%) and logistic (20%) enterprises are the most serious competitors. In general, transport and logistic enterprises estimate the competition market very similarly.

Inquiring respondents themselves what they think about their ability to compete and which enterprises in freight transport services are competitive, the majority of them indicated enterprises that are able to act on the basis of lowest costs. Even if we know that to compete with the lowest prices becomes very difficult because of increasing fuel prices, prices for insurance, wages for drivers and so on, respondents still think that the most competitive enterprises in freight transport services market are those that are able to sell a carriage at the lowest price (54% of all respondents). The smaller the enterprise, the larger part of respondents agree with this opinion. Not only the smallest, but also the medium and large enterprises (101–200 employees) agree that acting on the lowest costs describes an enterprise as competitive (respectively 29 and 31%). There is no great difference in the opinion of the respondents as regards their specialization. Interestingly, forwarding service enterprises have noted that supplying the widest package of services is also very important for identifying an enterprise as competitive (26%), and transport and logistic enterprises (26 and 20% of respondents) also think about acting on the lowest prices more than forwarding enterprises.

The EU context. Competitors. Concentration of freight transport services is not very large. Twenty largest enterprises in the EU have occupied only 33% of the market (EU Changes its View to a Road Transport, 2006). The rest of them are small enterprises: 34% have only 1, 51% – 2 to 10 transport means. Only 25% of the EU enterprises have more than 11 means of transport. Thus, the competition in this market is large, but the possibilities to concentrate the market are small. Alternatives to services are transport by sea, by train or by air. Transport by road is not a field financed by the European Structural Fund. Enterprises should think themselves how to compete and what to do for gaining advantages before other transport. That is why Lithuanian freight transport service enterprises start thinking how to use these resources. Transport means are engaged in multimodal transport when several transport means are engaged: road transport, railway or marine. Only the largest enterprises are able to provide the whole package from one hand: to deliver a load to the airport to a plane, to organize loading to the plane, transportation by plane, unloading and delivering to train and after that to the storage of customers. Also, analysing the power of rivals as a factor for competitive advantage, we should note that the price of fuel is growing, so road transport becomes rather expensive as compared with, for example, sea transport, Entering the EU, Lithuanian enterprises encountered the growing prices of fuel because of the related agreement with the EU. Another requirement that we are able to notice is the financial funds requirement for suppliers.

Rivalry in industry is high. As was mentioned above, concentration is not very prominent in this service sector. Also, the distance from buyer to supplier is not an important thing. Competitors in this service market compete by cost advantages (offering low prices) or differentiation advantages (offering exceptional services). Entering the EU, Lithuanian freight transport services met low costs strategies from the former Soviet Union countries (Latvia) socialist regime countries (Slovakia, Poland). This increases the competition, too. However, the low-cost strategy is not a competitive advantage in the former EU countries. The transitive period allows Lithuanian freight transport services to use this competitive advantage – to sell at low prices. However, this is very temporary. Lithuanian enterprises are able to differentiate their services, to look for the possibilities to differentiate their risk. Lithuanian freight transport service enterprises remain are most competitive as compared with Slovakian, for example, in transporting loads from Belgium to Russia. However, Lithuanian enterprises have no possibility arranging documents for customs in Germany for foreigners.

Describing buyers of these services, we have had one goal in this survey – how they estimate who is the freight transport services supplier having competitive advantages. Customers of smallest enterprises without exception have noted that enterprises specializing in transport services (69%) and logistics enterprises (20%) have competitive advantages over others. Only customers of the largest enterprises more rarely gives preference to transport enterprises, but still they dominate over logistics (29%). Forwarders have no chance before enterprises of other specialization. Only customers of very small enterprises choose forwarding enterprises for services (8%). Customers of transport specialization enterprises prefer transporters (80%) or logistics (12%). Customers of forwarding enterprises give preference to transport enterprises (49%), followed by logistic enterprises (22%) and forwarders. Customers of logistic enterprises give preference also to transporters (68%) and other logistic enterprises (22%).

Customers are other business services or industry business units. There are no identifiable dependence between the size of a freight transport service enterprise and its customer's activities. Transport services are used by forwarders very often (40%). Wholesalers as freight transport services buyers are customers of largest enterprises. Wholesalers and retailers together are almost all customers independently of their size. Analysing customers' activity depending on their suppliers, there is no exception for freight transport service enterprises that act on their own transport fleet. However, it is interesting to note that almost half of the customers of forwarders are other forwarding enterprises. It means that forwarders sell their services to other forwarders. In this situation, a lot of supplementary chains appear in the freight transport service supply chain. A half of logistics' customers are wholesalers and retailers and 35% are forwarding enterprises.

Analysing the loyalty of customers, we should note that 85% are regular customers. The most regular customers are middle and large freight transport service enterprises, but not the largest. The smallest enterprises have the largest part of casual customers (25% of them are casual who buy from time to time, but not always from one supplier). Analysing the regularity of customers depending on the supplier's specialization, the most regular customers are customers of transport enterprises (87%). Forwarders (19%) and logistic (25%) enterprises have a little more casual clients.

The EU context. Analysing the *power of buyers* in EU, some facts should be noted. The economic power of buyers is growing every year (Quinet, Vickerman, 2005; Garrison, Levinson, 2006). A customer of freight transport services is a business organization that has a need to transport a load. The growing GNP shows that sells are growing, so the need to provide continuous production industry, wholesale and retailing is growing, too. Buyers understand that there is no need to buy transport themselves for providing some of transport functions. Thus, they apply to freight transport service enterprises for meeting those needs. Buyers of this service usually do not act near the transport enterprise. A telephone call serves to order this service. It could be one thousand miles away from the transport enterprise office. Statistical data show (Quinet, Vickerman, 2004; Garrison, Levinson, 2006; Indicators of, 2007) that the need to use freight transport services is growing every year. A threat of reducing this growth is very small. Here we are talking about the general number of buyers. However, customers of these services are not very consistent. They change their suppliers from time to time. With joining the EU, Lithuanian freight transport service enterprises have more possibilities to find customers, but some customers have gone to other suppliers, too. They have a possibility to apply to Polish, Slovakian or other freight transport service providers.

Describing substitutes of freight transport service, other kinds of transport are analysed. The larger the enterprise of freight transport services, the larger the use of different kinds of transport. Small enterprises use road transport (100%) and sometimes sea transport (17%). Middle interprises besides road and sea, use also railway (18%) and air transport (9%). Enterprises that are have more than 101 employees use also mixed transport (multimodal) (19%). Threats for the road freight transport substitutes are other kinds of transport. We think it is multimodal transport whose part the a road transport is. However, Lithuanian enterprises are not able to provide multimodal transport in all cases. As we see from this survey, only large enterprises have a competitive advantage to provide such mixed transport of cargoes. All enterprises (transport, forwarding and logistic) engage in road transport (98.5%). Transport enterprises provide practically only transport by road. More kinds of transport are used by forwarders: 24% of forwarders supply by air transport, 41% by sea transport, 10% by railway transport, and 21% by mixed transport. Fewer kinds of transport means as compared with forwarding enterprises are used by logistic providers: 15% by air transport, 15% by sea, 22% by railway and 6% by mixed kinds of transport.

The EU context. *Threat of substitute* has an influence on creating advantages, too. A customer is able to choose whether he wants a road or an air transport for delivering his cargo. But this is not so in all cases. If you need to transport a small parcel, for example, 1 kg, you may choose to transport it by post; if loads are large, a ship or a train will be needed. But not in all cases you are able to transport a load by train. The transport infrastructure limits the customers' choice. So, road transport remains to be necessary for the majority of deliveries, also in multimodal transport. The buyer will calculate what to prefer railway or road transport. Expenditure is growing on both of them; trains are cheaper for long transportation, but for small distances road transport remains to be competitive. Wholesalers and retailers understand that to buy a transport requires a lot of money, so specialization in their own business is most important. So, transport services are ordered usually from outsourcers.

Potential competitors inside the market do not threaten the rest that are already acting. A barrier for starting freight transport service is first of all the means of transport. Financial capitals that are necessary for it are not very small. Besides, a freight transport service enterprise should buy a transport means that meets all growing technical and environmental requirements. He should provide a guaranteed capital for each means of transport. Insurance for carried cargoes is growing every year. As the dynamics shows, the number of freight transport service enterprises has been reducing for a few years (Linava, 2006). Only cooperation and consolidation allow to survive.

The EU context. *A threat of new entrants* to freight transport market is a next factor that has an influence on creating advantages for competitors existing in this market. Since the beginning of 2007 each first transport means in a Lithuanian enterprise should be covered by 3000 Euro of capital funds and each other by 1500 Euro. This requirement has reduced the ability of small and financially unstable enterprises to enter this market. Scale economics shows that small enterprises that have one or five means of transport have little possibilities to act efficiently. The largest companies (about 200 transport means) become not economically efficient, either. So, to enter the market of these services, an enterprise should buy at least 10 transport means to start this business. Another legal barrier is known from earlier, – it is a transport licence to do this business in the whole Europe, which permits doing cabotage (carriage inside foreign countries). Thus, they are not new for Lithuanian freight transport services. Besides, in five-ten years Lithuanian carriers will be able to provide cabotage services in the all EU countries that have not been allowed earlier. This should increase the competition for all freight transport services, too.

The suppliers for freight transport service enterprises are factories producing transport vehicles (trucks and trailers), fuel suppliers, insurance companies (insurance of load, driver, transport vehicle, civil reliability), and governmental institutions that collect taxes for roads, payable bridges and tunnels. Suppliers are also telecommunication companies, other suppliers who provide a working place with all necessary equipment for managers of freight transport companies, banking institutions, providing transfer of money from customers, and so on. As all these providers are in Lithuania and in other countries, freight transport services depend on the same conditions of survival as other freight transport service enterprises in the European Union. No truck is able to fill the fuel in Lithuania and not refuel in, for example, Belgium, if routes are long. Lithuanian freight transport services buy fuel as it Polish, Czech or German drivers – in almost all countries of Europe. There is not threat that the number of suppliers will reduce and they will become a monopoly and will gain a power for negotiation. Governmental institutions in each country that collect road taxes will remain likely a monopoly further. Resources of fuel are limited, of course, and this is one of the limitations for freight transport business development.

The EU context. The EU has a direct influence on the perspectives of the growth of the number of suppliers and on the possibilities to develop freight transport enterprises. As results of our research show, the number of suppliers remains relatively constant. Only supplementary suppliers are appearing. Limitation of freight transport services by road is the main direction of the EU policy; more and more taxes from more and more suppliers appear. In five or ten years, all highways will be payable for commercial transport. Providing the security of cargoes for a customer, taxes for cargo insurance are increasing. Logistic equipment and access to it for freight transport services are being developed. More and more international terminals will be constructed in the near future both in new EU members and all around the EU. Electronic communication, distribution employing the newest technologies and innovations to freight transport sector enable this sector's enterprises to facilitate their operations.

The influence of governmental institutions on the sector is directly related to the regulation of European Union politics. On the level of state transport, organizations are regulated by local general regulation rules and specific rules. One of the most important institutions that influence freight transport services is Ministry of Transport and Communications. Its activities include initiation of laws on transport organizations, implementation of state transport policy, shaping the directions of transport development, participation in secure environmental policy, participation in preparing strategic documents for subsidizing the EU, etc. (Statute of, 2007). Another important institution for freight transport services is Ministry of Economics which supervises the implementation of Lisbon Strategy related to all sectors of economics, including transport and transit development strategy. The main goals whose achievement is supervised by Ministry of Economics in implementing Lisbon Strategy for Lithuanian transport policy are:

- integration of the Lithuanian road transport network into the system of the European road transport by technical-technological and juridical regulation aspects, using a favourable geographical and geological position of the country, increasing opportunities of Lithuanian freight transport service enterprises and their role in the international road transport services market;
- development of the local road network, achieving a rational location of power production and the development of several

branches and objects of economy in the regions;

- providing security and secure environment corresponding to EU requirements for transport (Šakalys et al., 2007).

These goals are strictly described for a period until 2015.

The firm-level factors. *The firm-level factors* influencing the competitive advantages of Lithuanian freight transport services are tangible and intangible.

Analysing the *tangible resources* that influence the advantages of the Lithuanian freight transport sector, we should note that with joining the EU Lithuanian enterprises have got more perspectives, because the limit for expanding the transport fleet in the enterprises was eliminated. Before entering the EU, Lithuanian enterprises were allowed to buy means of transport, but no more than 20% of the existing transport fleet per year. This limitation was aimed at limiting the development of freight transport service enterprises. The new situation in transport development policy gave a rather good impulse for freight transport service enterprises to grow. As mentioned above, capital fund is also important in these enterprises, and each transport vehicle should be covered by a certain amount of capital. Buildings, premises for freight transport services are also important for choosing a place for offices, transport fleet parking, maintenance and repair of vehicles, etc. Growing prices for commercial purpose real estate is a limit to choose a place for office anywhere. Technical novelties and IT are the common things that freight transport service enterprises have to adopt in their practice to meet the requirements of the EU for transport sector. Navigation systems, satellite, computers were installed in transport means after entering the common market. All these measures required large investments to freight transport services, and also reduced the profit of these enterprises.

Intangible resources are also important for entering the freight transport services market. In the first part of the paper, the importance of service quality in creating competitive advantages for freight transport service enterprises was already mentioned. As our findings show (Table 1), the criteria for estimating freight transport services

*Table 1. **Criteria of freight transport service quality as an instrument for creating a competitive advantage for enterprises according their size and specialization***

Criteria for quality estimation	*Size by employees*						***Mean***	*Specialization*		
	1–10	11–20	21–50	51–100	101–200	over 201		Transport	Forwarding	Logistics
Reliability	***4.67***	***4.77***	***4.66***	***4.80***	***4.48***	***4.73***	***4.69***	***4.71***	***4.68***	***4.64***
Responsiveness	4.20	4.08	4.10	4.29	4.04	4.43	4.16	4.15	4.21	4.17
Competence	3.91	4.30	4.20	4.32	4.35	4.50	4.18	4.14	4.15	4.30
Access	3.81	4.12	3.81	3.88	3.85	4.31	3.90	3.88	3.58	4.16
Courtesy	4.03	4.08	4.13	4.20	3.97	4.43	4.10	4.10	3.83	4.29
Communication	3.82	4.13	4.13	3.95	4.24	4.43	4.04	4.05	3.70	4.16
Credibility	***4.54***	***4.53***	***4.59***	***4.80***	***4.58***	***4.80***	***4.61***	***4.58***	***4.55***	***4.67***
Security	***4.67***	***4.71***	***4.90***	***4.76***	***4.84***	***4.93***	***4.78***	***4.80***	***4.56***	***4.82***
Tangibles	3.33	3.69	3.30	3.35	3.68	3.54	3.45	3.44	3.06	3.73
Understanding the customer	3.72	3.91	4.08	3.83	4.14	4.00	3.93	3.91	3.90	4.00

as quality ones and as an instrument for creating a competitive advantage for freight transport service enterprises are different.

Respondents were asked to estimate these criteria on a 5-point scale. As we see, reliability, credibility and security are the main things appreciated by customers and the main instruments of shaping the competitive advantages for freight transport service enterprises. There was no criterion estimated in the survey as the main one 5 points. But the security of the cargo is the highest value for a customer (4.78 points of 5), followed by reliability of suppliers (4.69 points) and credibility as a guarantee to solve all problems rising in the service supply process (4.61).

Analysis of these data according to the size of enterprises has shown that reliability and credibility are more important for middle-sized enterprises (4.8 points). Responsiveness, courtesy, and communication become important for large enterprises (having more than 201 employees) (4.43 points). They appreciate the competence of freight transport service staff, too (4.50 points). Analysing these data according to the specialization of enterprises, we see that transport services enterprises that have their own transport should provide security of load haulage in the first place (4.80 points). Reliability and credibility are also important for transporters (4.71 and 4.58). Forwarding service enterprises somewhat differ from the mean data. Credibility and security are less important for them. Logistics service enterprises should provide almost all aspects of quality to their customers. Almost all criteria were mentioned as important (more than 4) except one – tangibles (3.73).

The EU context. With joining the EU, Lithuanian freight transport services have encountered another problem – drivers became emigrate from Lithuania to the EU countries. Competent and experienced drivers went abroad, so freight transport service enterprises that have got a chance to buy much more trucks met the problem of who will drive these trucks. Qualification requirements of drivers are rather high in the EU, and Lithuanian enterprises should follow them: special courses for drivers, training, certification, age, etc. Trying to keep skilled drivers, enterprises have started to rise their salaries. This reduced their profit. Managers of freight transport enterprises are not a very big problem in Lithuania after entering the European Union. High schools prepare new specialists that gain knowledge rather soon. Technical competence (knowledge of transport communication, infrastructure, possibilities to create value added by adding new services in the package and so on) of Lithuanian freight transport services enterprises was rather good and remain to be good enough for competing in the entire EU market. Communication abilities have not changed after entering the European Union. There are no specific requirements for it in EU that we have not had before.

Conclusions

The competitiveness of the sector depends on how long competitive enterprises have been operating and on the intensity of competition in the sector. Competitiveness comprises such aspects as the competitive environment and its subjects, characteristics of an organization and its capability to use them trying to achieve competitive advantages in the market.

The competitiveness of the Lithuanian freight transport sector in the context of the European Union is analysed in two theoretical aspects on the industry level and on the firm level. Analysis of the literature led to the conclusion that in freight transport services, the main drivers of competition are cost, quality, technologies and employees.

The capability to compete in the EU market depends *on two parameters of freight transport services*: the size of an enterprise (measuring by the number of employees, and not only by transport means) and specialization (transport, logistic or forwarding enterprise). Very small and very large enterprises are not very competitive in the market, because small enterprises are unable to provide more services than cargo transportation, and large enterprises lose the possibility to operate effectively. Regarding specialization, logistic enterprises are most competitive: they are able to provide a customer with both transport and other related services and to do it at the lowest or medium prices.

The low costs strategy is not a competitive advantage. At present, Lithuanian freight transport service enterprises compete on differentiation: they are able to differentiate their services, to look for possibilities to differentiate risk supplying more services related to haulage, providing not only a means of transport, but also intermediation in customs, consultations, etc.

Analysing the firm-level factors, we have found that *essential factors of enterprise competitiveness are technical innovations and service quality*. The most important criteria of the quality of freight transport services are *reliability of the company, credibility and security.*

In the context of the European Union, Lithuanian freight transport services have almost equal opportunities and capabilities to compete. Since Lithuanian enterprises are no longer the cheapest transporters in the EU market, improving *service quality and implementing IT* in the service providing process are necessary steps for getting advantages in the competitive freight transport services market.

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LIETUVOS KROVINIŲ GABENIMO PASLAUGŲ SEKTORIAUS KONKURENCINGUMAS EUROPOS SĄJUNGOS KONTEKSTE

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Santrauka

Visos įmonės didesniu ar mažesniu mastu susiduria su konkurencija. Bendra šalies ūkio padėtis, valstybės ekonominė politika ir ekonomikos reguliavimo metodai taip pat formuoja konkurencinę aplinką, kurioje veikia konkreti įmonė. Didėjant paslaugų sektoriaus apimčiai, keičiasi ir pagrindiniai šalies ekonominiai rodikliai, o tai leidžia plačiau analizuoti atskirus sektorius, organizacijų galimybes plėtoti veiklą juose. Lietuvai tapus visateise Europos Sąjungos nare, atsiradę ekonominiai ir politiniai pokyčiai šalyje neabejotinai palietė ir krovinių gabenimo paslaugų sektorių. Atsirado įvairių sunkumų dėl didėjančios konkurencijos, kurią skatino ne tik besikuriančios naujos įmonės, bet ir pakaitalų, naujų konkurentų prognozavimas, klientų poreikių kitimas bei tiekėjų derybinė galia. Ekonominiu atžvilgiu intensyvi konkurencija krovinių gabenimo paslaugų sektoriuje rodo, kad įmonės, dirbančios intensyvios konkurencijos sąlygomis, gauna mažesnį pelną. Žinant, kiek ūkio šakos įmonės yra konkurencingos, pagrindinius konkurencinio pranašumo šaltinius, galima daryti išvadas, kiek vežėjams ekonomiškai naudinga plėtoti savo veiklą tame sektoriuje.

Krovinių gabenimo paslaugų sektoriaus konkurencingumo problematika aktuali Lietuvoje. Nors šios logistikos paslaugos yra vienos iš populiariausių šalyje, tačiau pasigendama praktinių tyrimų krovinių gabenimo paslaugų sektoriuje. Todėl atliktas tyrimas yra aktualus ir laiku.

Tyrimo tikslas – atlikti Lietuvos krovinių gabenimo paslaugų konkurencingumo analizę Europos Sąjungos kontekste. Tyrimas atliktas remiantis Porterio penkių jėgų modeliu bei vidinėmis įmonės charakteristikomis akcentuojant įmonės specializaciją bei įmonės dydį.

Pirmoje šio straipsnio dalyje apibrėžiama konkurencingumo samprata, išskiriami lygmenys, kuriais remiantis analizuojamas krovinių gabenimo paslaugų sektorius. Analizuojant sektoriaus konkurencingumą būtina atlikti konkurencinės aplinkos ir įmonės vidaus veiksnių analizę. Straipsnio autoriai, atlikę teorinių konkurencingumo veiksnių analizę, pažymėjo, kad, analizuojant krovinių gabenimo paslaugas, pagrindiniais konkurencingumo veiksniais dažnai įvardijami kaštai, paslaugų kokybė, technologijos, taikomos tiekimo grandinėje, ir darbuotojai.

Atlikus empirinį tyrimą paaiškėjo, kad plačiausią krovinių gabenimo paslaugų paketą siūlo vidutinės ir didesnės įmonės. Krovinių, užimančių visą gabenimo vienetą (puspriekabes), gabenimo paslaugas teikia visos įmonės, nesvarbu, kad ir kokio dydžio. Papildomo krovinio draudimo, kontrolės krovinio judėjimo trajektorijoje, konsultacijų dėl optimalaus krovinio gabenimo ir kitas papildomas paslaugas teikia ne pačios mažiausios įmonės. Atsižvelgiant į įmonės specializaciją, paslaugų paketo dydį nulemia ir tai, įmonė turi nuosavą transportą ar ne. Vien transportu užsiimančios, krovinių gabenimo paslaugas teikiančios įmonės teikia gerokai mažiau paslaugų sudarantį paketą, palyginti su tomis, kurios derina savo transportą su nuomotu arba apskritai transporto priemones pernuomoja. Nepaisant to, kad konkurencinga laikoma įmonė, galinti pasiūlyti paslaugas mažiausiomis kainomis, vis daugiau dėmesio skiriama formuoti platų paketą, pačiai paslaugų kokybei, efektyviau naudoti išteklius, papildomoms paslaugoms.

Apibrėžiant ES įtaką Lietuvos krovinių gabenimo paslaugų sektoriaus konkurencingumui, būtina įvardyti, kad ES vyrauja nedidelės įmonės. Vartotojai teikia pirmenybę įmonėms, kurios geba pasiūlyti ir kitų susijusių paslaugų „iš vienų teikėjo rankų" ES politika transporto atžvilgiu nulems tai, jog transporto paslaugos kelių transportu privalės būti integruotos į multimodalinį transportą, teikiant ne tik transportavimo paslaugas, bet ir ekspedijavimo paslaugas, tarpininkavimą muitinėse, papildomai draudžiant krovinius, konsultuojant dėl optimalaus krovinio gabenimo ir pan. Be to, vartotojai gaus visas garantijas, kad krovinį gabena finansiškai patikima įmonė, nes paslaugų teikėjai privalės savo transporto priemones aprūpinti garantiniu fondu, drausti krovinius pagal tarptautinius standartus, garantuoti visas reikiamas krovinio gabenimo technines ir informacines paslaugas.

COMPETITIVENESS OF LITHUANIAN FREIGHT TRANSPORT SERVICE SECTOR IN THE CONTEXT OF THE EUROPEAN UNION

Neringa Langvinienė, Jurgita Sekliuckienė

Summary

All enterprises acting in the market encounter competition. The general situation of economics, economic politics of the government, methods of regulating economics, also shape the competitive environment in which the enterprise is acting. The service sector is growing every year. The main economic indices of the country change, too. This situation allows to analyse separate sectors, the opportunities for organizations to develop activity in these sectors. Economic and political changes since the moment when Lithuania had entered the EU evidently touched freight transport services, too. Various difficulties appeared. They rose as a result of growing competition which is stimulated not only by the newly entered enterprises, but also by prognoses of substitutes, new competitors, alterations of customers' needs and the negotiating power of suppliers. From the economic point of view, the intensive competition in the freight services shows that enterprises get less profit from their activity. If the competitiveness of enterprises is known, also resources of competitive advantages are disclosed, and decisions concerning possibility to stay in this market could be made.

The topic of the freight transport sector's competitiveness is relevant in Lithuania. As freight transportation as logistics services is among the most popular in Lithuania, there is still a lack of practical surveys of its functioning.

The main aim of the article was to analyse the competitiveness of Lithuanian freight transport firms in the context of the European Union. The comparative analysis of the sector through the Porter's five forces model and internal enterprise's characteristics, defining the Lithuanian freight transport sector in terms of size and specialization has been carried out.

Competitiveness, the levels of competitiveness are defined in the first part of the article. Analysing the competitiveness of the economic sector, it is necessary to know the competitive environment and the internal factors of an enterprise. The authors indicate that when analysing freight transport services, the main competitive factors are identified as costs, service quality, technologies applied to the supplying chain, and employees.

The largest package of freight transport services is offered by middle and larger enterprises. The haulage of loads that fill up the whole unit of haulage (trailer) is provided by enterprises independently of their size. Extra load insurance, control throughout the route of load movement, consultations because of optimal haulage of the load and other extra services are provided not by the smallest enterprises. Depending of

the enterprise's specialization, the proportion of service package is influenced by the presence or absence of its own transport. Freight transport service enterprises engaged only in transport provide a package containing less services as compared to enterprises that mix their transport with lent transport or totally use transport from other enterprises. Notwithstanding whether enterprises were defined as competitive, in the opinion of respondents competitive is an enterprise with the lowest prices for services, more attention to expanding the package of services, improving their quality, effective usage of resources, extra services.

Defining the influence of the EU on Lithuanian freight transport sector's competitiveness, it is essential to note that small enterprises in the EU prevail. Customers prefer enterprises that are able to provide also other related services. The EU politics in transport will decide whether transport services by road will be integrated into multimodal transport supplying not only transporting but also forwarding services, intermediation in customs, extra insurance of cargoes, consultation on optimal haulage, etc. Besides, customers should get all guarantees that an enterprise is financially reliable.

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