

# COMPARISON OF THE DEMAND AND SUPPLY SIDES IN THE HUNGARIAN LOGISTIC MARKET

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### **ABSTRACT:**

This paper contains the results of a joint study has been accomplished by the Institute of Enterprise Management at the Budapest Tech and the Department of Logistics and Forwarding at the Széchenyi István University. Participants of both demand and supply side of the logistic market were under examination. Based on the responses by more than 30 suppliers and nearly 190 users of the logistic services the users' demands and the quality level of service requested could be compared.

#### **KEYWORDS:**

Logistic market, demand and supply

#### 1.INTRODUCTION

Regarding the recent economic decline in Hungary and market changes under no circumstances would have been successful to define the principles of representativeness in the field of logistics. It would have been not only very difficult and expensive but would have taken an extremely long amount of time. So we have to set down that the companies taken part in this survey on both the demand and supply sides of logistic market cannot be handled as a representative sample neither in the point of view of the Hungarian market nor in the field of logistics. By the way this examination is a robust approach because the composition of the sample is determined by professional experts and it doesn't contain extreme disproportions. The questionnaires detailed were filled by 188 different companies on the demand side in whose operations utilizing the logistic services playing an important role. Some data weren't given referring to business secret but the quantity of them is insignificant. 35 responses have arrived from firms on the supply side. Each questionnaire filled is based on personal talking with leaders of firms and companies.

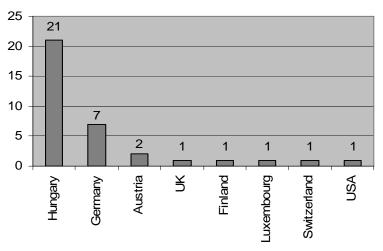


Figure 1. Frequency of suppliers sorted by home country

Some companies taking logistic services belong to more than one industry. It is shown in Figure 2. That's why the sum of them is more than 188.

If we liked to measure the size of these companies we can choose different ways. We can pay attention to income, fortune and assets but measuring the number of employees gives us important information as well.

According to Figure 3 we can state that companies are mostly middle-sized. In our sample we have some small and some big companies too.



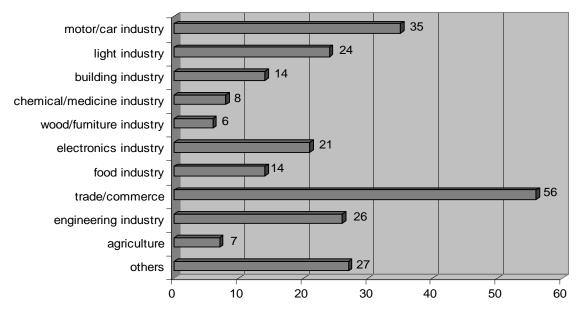


Figure 2. Companies taking the services sorted by branches of industry

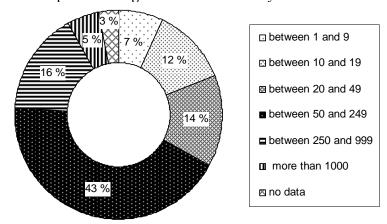


Figure 3. Companies taking the services sorted by number of employees

## 2. FORMS OF TRANSPORT

The major forms of transport used in the trade are the following: rail, road, air, sea, waterways (rivers) and pipelines. In our point of view only some of them can be used. Nearness to motorways, railways, RORO ports can easily determine the form of transport so the

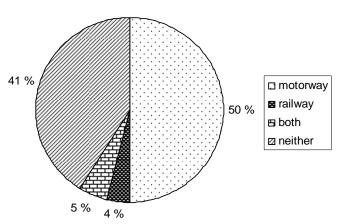


Figure 4. Forms of Transport used by users of logistic services

geographical positions of the companies are very important. According to our investigation railway connection marked means that the company has its own ramp or railway track. Motorway means that the company able to reach at least one motorway within 30 minutes on the open road without crossing any settlement. First we asked the users of logistic services to indicate their possibilities based on location.

20% of the companies indicated that they already have experiences on railway transport. 27% indicated that they are ready to make contract on transporting by railway.



In Figure 5, based on the responses by providers of logistic services both from the point of views of composition and different transportation ratios are displayed.

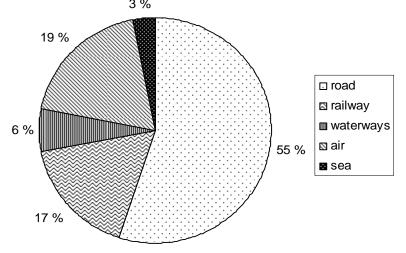


Figure 5. Forms of Transport used by providers of logistic services

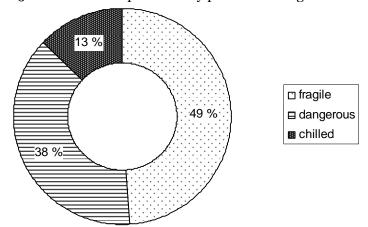


Figure 6. Special demands of transporting

#### 3. SPECIAL DEMANDS ON FORWARDING

Among the questionnaires special demands are not marked 100 times from 188. The others indicated fragile, chilled or dangerous goods. Some respondents have indicated more of them simultaneously. In this case we counted them in each groups. Based on the frequency of marking we can display this distribution as follows.

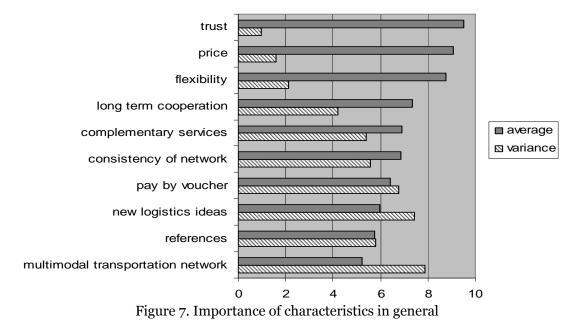
We have 54 responses indicating fragile goods. 42 responses have arrived indicating dangerous goods and 14 indicating the need of chill.

# 4. IMPORTANCE OF CHARACTERISTICS OF SERVICES PROVIDED

In connection with logistic services provided 10 parameters were chosen. These characteristics express the level of services. We were interested in how important these parameters are in general. The level of importance could be marked from 0 to 10. This was not a ranking so characteristics could have the same importance. 10 indicated the highest 0 the lowest importance. One of the results is the order of importance measured by average value. Variances are shown as well in order to make the analysis deeper and the comparison better.

We were also interested in how important these characteristics are in connection with the present providers of logistic services. Figure 8 shows us the level of satisfaction. This time the level of satisfaction had five items. The highest value (5) is the best. If 1 is marked then the service provider is completely unsatisfied. Data regarding this issue is evaluated by averages and variances.





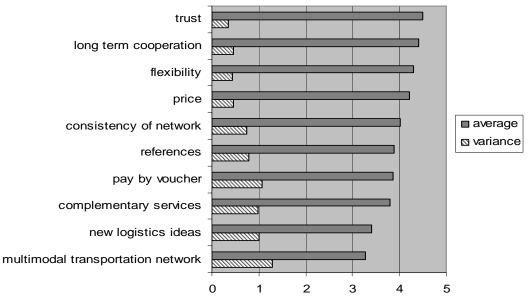


Figure 8. Level of satisfaction with the present service providers

# 5. SATISFACTION WITH SERVICE PROVIDERS CONTRACTED

In the survey filled by users of services there were some questions referring to the providers of logistic services. Each company filled this questionnaire could mention up to 5 providers and sort them according to the level of satisfaction. Not adequate, acceptable, good enough, perfect were the options could be chosen. Only one percent of companies are unsatisfied with its one or more providers. Five percent of them have some problems and think that the quality of services taken is poor but just acceptable. The others have good connections with their providers.

Level of qualification	Number of qualification
Not adequate	5
Acceptable	20
Good enough	218
Perfect	124

Figure 9. Satisfaction with service providers



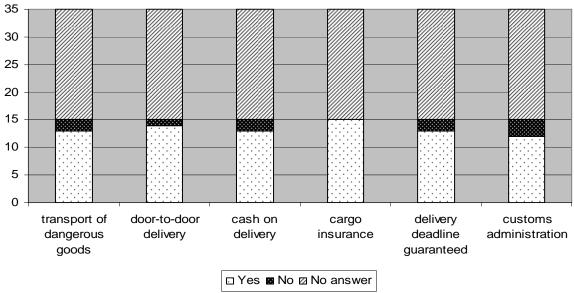


Figure 10. Frequency of complementary services offered

#### 6. COMPLEMENTARY SERVICES

Lots of firms offer complementary logistic services in order to increase their competitive edge or incomes, to increase the growth of the company and to maximize the market share. If they can provide a service at lower cost and with more efficiently than their competitors, it is worth concentrating on such services. Complementary services play an important role in the field of forwarding. The more requirements a company can meet the easier it can find new customers. Using special devices, equipments and tools would result in cost- and time-efficiency.

# 7. DURATION OF CONTRACTS

Although companies are satisfied with their providers still they do not make contracts for long term. That is shown in the next figure.

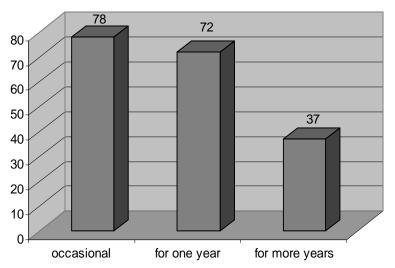


Figure 11. Duration time of contracts

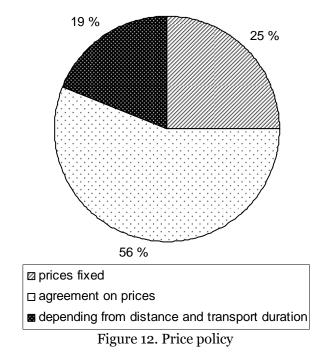
At first blush we cannot state that companies usually trust their service provider because 78 responses have arrived indicating that they make a contract on logistic services only occasionally. 'Yearly' answer was marked 72 times, and the number of companies that make a contract for more years was 37.

It is not about trust but the competition in the market. In this survey the reasons aren't searched but after talking to leaders of companies we can state that the price is the key factor because of the competition. That's why

companies do not make contracts for long term. Regarding the long term prices we can set down that they depend on many items of contingent exposure (e.g. fuel prices, unutilized capacity, etc.).

Examining the price policy on the side of providers we can find some background information to the frequency of making contracts.





Only one forth of providers use fixed prices. Providers predominantly prefer making an agreement with their customers on prices.

# 8. CONCLUSIONS

The present study has shown some characteristics of both companies taking logistic services and providers. Trust, price and flexibility play an important role in the field on logistic services. The quality and price of service are the most important factors in the success of companies providing logistic services. We cannot state, that companies usually do not trust their logistic providers. Only low rate of contracts are made for long term because of the prices. The usually high storage prices have recently appeared to decrease because the demand has dropped due to the global crisis. Nearly the half of the companies filled these questionnaires on

the demand side of logistic services have some special requirements on transporting of their goods. It is worth for provider to concentrate on such services too.

#### REFERENCES

[1] Tamás Hartványi – Viktor Nagy: Critical Decision Making Issues for Logistic Services from Users' Perspective in Hungary. 7<sup>th</sup> International Conference on Management, Enterprise and Benchmarking. Budapest, Hungary. June 5-6, 2009