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**THE STRATEGIC ANALYSIS OF THE CURRENT POSITION
OF HUNGARIAN STATE RAILWAYS (MÁV)**

Doctoral (PhD) Dissertation Abstract

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1. OBJECTIVES, HYPOTHESES

Ever since the establishment of the first railways, there have been debates about the ownership and organisational structure that would make rail companies operate efficiently. The major issue has always been whether railways should be in private, in public or in mixed ownership. Governments in general have had the tendency of opting for public ownership but nowadays, with the impact of liberalism globally, the choice is not so straight-forward. In fact, our predecessors, for example Count István Széchenyi, regarded as a liberal politician at the time, also argued for state ownership. And he had his reasons. Széchenyi himself argued that by keeping rail transport a state monopoly the state will be able to supervise transport, a great strategic sector and a valuable infrastructure. Hungary's first transport minister put great efforts into working out a harmonised investment programme for rail, road and waterway transport. Széchenyi also considered state railways to be the cheapest and most efficient mode of transport.

The European Union has been working towards the liberalisation of community transport which, as its experts argue, improves the standard of services and helps curbing prices.

But such measures, it seems, have not been enough to achieve real outcomes anywhere in Europe. This paper will discuss what Hungary has experienced as a result of these EU measures and what room Hungary has for manoeuvring. Both the top policy-makers in Hungarian transport policy and those responsible for operating rail transport will need to be familiar with the background based on which they can establish a new organisational structure of transport that will pave the way for a

competitive and flexible system. Consequently, the author of this paper shall first examine, with some obvious constraints, the current situation of MÁV (the acronym for Hungary's state-owned Railway Company), then will go on to compare the situation of Hungary with the current international practice, and will also describe some major international trends and best practices available in this sector.

The author of this paper prepared in-depth interviews with current and former managers of the rail sector which helped him map out the opportunities available for MÁV. Then, basing on the findings of the interviews, he compiled a questionnaire which sought to support or challenge the efficiency of the measures taken. The question arose whether there was some kind of a strategy behind the measures or steps taken, or there were only pseudo-decisions taken with a view to complying with the requirements. To obtain a clear picture concerning the above question, the following hypotheses had been made:

2. HYPOTHESES

- H1. The company's strategic restructuring following 2000 has not improved MÁV's competitiveness in comparison with road transport.
- H2. Residents' expectations were not taken into account when drawing up MÁV's strategy.
- H3. Using MÁV's services is influenced by the passengers' age, and the concessions available to them – and these factors in turn influence MÁV's competitiveness.
- H4. MÁV's organisation restructuring is assisted by its highly qualified staff and their loyalty to the company.
- H5. Steps taken with a view to restructuring the company between

2002 and 2010 have not improved the market position of rail passenger services.

H6. Extra resources spent on raising the standard of rail services exceed the amount obtained from revenues and turnover.

H7. Restricting the size of the network (i.e. winding up side tracks) does not result in lower maintenance costs.

H8. Curbing passengers' concessions (e.g. for students) and raising the price of services (extra fare for speed trains) does not improve the output and economic position of the railways.

If the above 8 hypotheses are proved, we would see a justification that the situation has failed to improve despite the measures taken by MÁV.

If the hypotheses are rejected, then the decisions were clearly right, and therefore it can be concluded that the political and economic administration in charge of MÁV's restructuring has been successful.

3. CONTENT, METHOD AND JUSTIFICATION OF RESEARCH

During the course of the research, the author relied on already available data (secondary data) when preparing a summary of the relevant historical background and current international practice. The data used in the summary was obtained from articles published in specialised international journals and periodicals between 2000 and 2010 (in English, German and French); from MÁV's annual reports and from the author's own databank. A great deal of data was obtained from the author's own experience as a leader (he was the head of MÁV's Regional Management Centre in Szombathely between 2005 and 2012), he relied on daily records, his colleagues' reports as well as from discus-

sions with leaders of the relevant ministry. The specialised articles he consulted were available from MÁV's Documentation and Information Library. Additionally, colleagues working for the Erfurt Office of DB also provided a great deal of support. Between 2005 and 2012, the author of this paper was in regular contact with some of the most prominent leaders of DB, the German state railways, and had the opportunity to meet several managers of SNCF (the French railway company) responsible for the European division.

In the second stage of the research, the author of this paper conducted in-depth interviews with some of the key managers of the Hungarian state railways. He contacted the former manager of the Szombathely MÁV Unit and supplemented the data with his own views. Then he contacted the current CEO of the Győr-Sopron-Ebenfurt Railway Company (GySEV) as well as the head of MÁV's Marketing Department.

Based on the interviews, he devised the questionnaires to find out whether respondents filling them in would confirm the findings of the in-depth interviews. The questionnaires were then distributed among secondary school students, university students, MÁV employees and passengers, a total of 584 respondents.

It was interesting to see the intensity of emotions that both the railway employees and the passengers displayed in their responses. The majority of additional and critical remarks were made by railway employees in the space provided for them.

Finally, on the basis of the results of the primary and secondary data collected, the analysis of the broader environment was carried out.

The so-called PESTEL-method was not applicable in this case as the various factors could not be clearly divided and the impact could only be identified on the basis of comparison of individual elements. It must be highlighted that without a complex and thorough analysis of political, economic, social, technological, environmental and legal aspects the current situation of MÁV cannot be carried out appropriately

The author used the PORTER analysis to map out competitive environment and explored what it looked like within the transport sector.

As the next step, he conducted an SWOT-analysis: he investigated the strengths, weaknesses, opportunities and threats, and via observing the internal resources available he attempted to make recommendations for MÁV's restructuring.

When formulating the hypothesis it was a major prerequisite to outline what the real of theoretical presumptions look like. These hypothetical questions were the following: Has it been proved that the measures compelled to be adopted by the decision-makers have indeed produced the expected results? Have we encountered the same impacts experienced and described by Western European expert of the sector? What do the clients, service-users and external stake-holders perceive from the MÁV's reforms? Have the recent reforms and streamlining attempts improved MÁV's economic position? What recommendations can we give based on the findings of this paper? This paper will attempt to find a response to each of the above questions and, by way of conclusion, it will also to offer a list of recommendations for the competent stake-holders and authorities to consider.

4. RESEARCH FINDINGS

The respondent's answers given in the questionnaire may only be used if we conduct a proper analysis of the responses given. To achieve this end, we needed to have specific information on the respondents involved in the study.

More than 50% of the **respondents** are middle-aged; another 25% are young adults; a total of 10% are either young or elderly, which means that the majority of the respondents belong to the economically active population.

Over 50% of the respondents are employed by a specific railway company, and along with other employees they make up 75% of those being economically active. It must be noted, however, that railway employees are overrepresented in this study.

In terms of **income**, almost half of the respondents belong to the lower-middle category (earning less than a net sum of 100.000-200.000 HUF), while another 25% of the respondents belong to the lower-middle income category.

When asked about the **purpose of travelling**, over 50% use train services to go to work or to school, while 40% take a train to go to a particular tourist destination.

As for the **distance of the journey** covered, one third of the respondents travel between 120 and 500 km; one in every five covers a distance of 60-120 km, while another one-third makes a maximum of 30-60 km at a time.

In terms of **frequency of travel**, one-third travels every day, one in every six travels every week or month, while one in five uses train services several times a year. 75% of the respondents filled in the ques-

tionnaire with regard to MÁV; one in five respondent concerning GYSEV, while 10% did not provide an answer.

Responses concerning **internet usage** on board of trains produced rather interesting results: although over 50% of the respondents claim to be using the internet on board of a train to look for some information, while only 1 on every 20 respondent books a ticket online. It seems we still have a long way to go in this field: although one-third claim to have heard about developments in this area, there is still a significant 40% who have never heard of the opportunities provided via the internet.

As regards the responses given in relation to the **current situation** of MÁV, one-third believe that there has been no development; another one-third think there has been some development but, more importantly, the last one-third of the respondents think that MÁV's position has changed for the worse. All things considered, respondents do not regard the development as convincing.

As for the **public opinion of railway companies**, the answers were rather diverse. One third of the respondents thought that the public opinion had not changed, 44% thought it had deteriorated and only 17% believed that it had improved over the years.

Regarding the **standard of services**, 30% claim that it has improved and 37% think it has not changed considerably. Still, 26% think the standard of services has become lower, and this means there are still more sceptics than optimists.

When asked about the **cleanliness of carriages**, 32% did not see significant changes; 30% saw a decline, and 32% detected improvement, which means that overall, respondents have experienced some

improvement. When asked about another relevant issue, the hygiene of restroom facilities, only 25% experienced progress; one third of the respondents could not see any changes but a substantial 37% claimed it had grown worse; which seems to be in contradiction with the previous response.

At the same time, a rather significant 38% said that there had been development in the **comfort of carriages**, while one third did not see changes and only 22% thought that the situation is presently actually worse than before. This means an overall progress in terms of carriage comfort, which in turn has been reflected in passengers' overall comfort: one third say that the **degree of comfort** in carriages has not changed, another third has experienced improvement while only 27% think that comfort is more modest than it was before.

As for the responses concerning **railway personnel**, they were judged positively across the board but, as highlighted earlier, railway employees were overrepresented among respondents and therefore certain reservations must be voiced here.

When asked to judge railway employees in terms of **competence**, 41% said they were more competent; 34% saw no difference and only 16% of the respondents thought they were less competent than earlier.

46% claimed railway staff was **more polite**, 32% believed they were as polite as before, while only 15% of them regarded railway employees as more impolite.

Regarding **appearances**, 49% of the respondents said staff had a more attractive appearance, 29% saw no changes, while 24% detected a decline in this respect.

Another interesting topic was **railway employee's uniform**. The majority of the respondents (62%) claimed that wearing uniforms does improve the public's impression of railways. 17% saw no difference, while only 12% believed that uniforms actually present a negative image of railways.

When asked to judge **railway employee's conscientiousness**, 29% of respondents saw no improvement; 20% claimed it had improved, while 43% said railway employees were less conscientious now than they used to be.

As far as the **punctuality of train services** are concerned, 43% claimed that trains were less punctual nowadays, 29% see the situation unchanged, while only 20% of the respondents notice improvement in this field.

As to the availability of **corresponding services**, 41% claim that the situation has worsened; 27% see no major difference, and only 21% of the respondents have experienced improvement in this respect. Overall, respondents have detected significant deterioration in the availability of corresponding services.

As regards the **time taken to reach a particular destination**, 24% of the respondents said it was shorter, 22% claimed it had not changed and 46% indicated a significant growth which, again, reflects passengers' impression of negative tendencies. Similarly, concerning the **degree of organisation at the railway company**, responses paint a rather pessimistic picture: 41% claim MÁV seems less organised; 20% see no changes, while 21% have found some improvement. The figures seem to support the claims put forward earlier in the present study and the remarks given by respondents in the corresponding lines.

In terms of the **safety of train journeys** 37% sensed improvement, 36% saw no difference while only 17% experienced deterioration.

5. NEW RESEARCH FINDINGS

This is the first time that such a comprehensive study has been conducted since the establishment of MÁV. There have been some analyses performed at the order the company's management but these studies never went beyond the scope of secondary investigations. The new research findings of the current paper, in light of hypotheses detailed above, are the following:

- T1. Following the company's strategic restructuring after 2000, MÁV's competitiveness has not improved (in comparison with road transport). On the basis of the in-depth analyses and the responses of the questionnaire we can say that restructuring attempts have further deteriorated MÁV's situation and public opinion.
- T2. Residents' expectations had not been taken into account when drawing up MÁV's strategy or, at least, respondents did not perceive that their expectations had been taken into consideration.
- T3. Using MÁV's services is influenced by the passengers' age, and the concessions available to them – and these factors in turn influence MÁV's competitiveness. The in-depth interviews conducted by the author revealed that both 'age' and 'concessions' are important factors as MÁV's services are being used, to a larger extent, because of the concessions granted to students, senior citizens and employees (the former two are entitled to discount fares while the latter receive reimbursement).

- T4. MÁV's organisation restructuring is assisted by its highly qualified staff and their loyalty to the company. Commitment and qualification have both been found to support rationalistic organisational reorganization but restructuring attempts, which have a negative effect, will provoke outright hostility.
- T5. Steps taken with a view to restructuring the company between 2002 and 2010 have not improved the market position of rail passenger services. Research data support that decision-making levels and problems to be tackled run on two different tracks. Decision-making processes have been found way too lengthy, scopes of competences and responsibilities have become blurred, and both regional control and coordination have been made impossible.
- T6. Extra resources spent on raising the standard of rail services exceed the amount obtained from revenues and turnover. Secondary research has found that the resources spent on raising the quality of services can achieve a tenfold return.
- T7. Restricting the size of the network (i.e. winding up side tracks) does not result in lower maintenance costs. Secondary research has also proved winding up tracks has in fact proved to be more expensive than maintaining them.
- T8. Curbing passengers' concessions (e.g. for students) and raising the price of services (extra fare for speed trains) does not improve the output and economic position of the railways.

6. CONCLUSIONS AND RECOMMENDATIONS

Corporate requirements to be met:

It must be guaranteed that revenues and expenditure are transparent.

The company structure will need to become increasingly homogeneous to facilitate the coordination of highly complicated activities.

To achieve maximum efficiency, the principle of subsidiarity will need to be observed and fully implemented.

In order to improve the standard of services, ancillary railway services will need to be introduced (e.g. bus and truck transport).

Social requirements to be met:

A well thought-out transport concept.

A predictable long-term financing scheme that boosts infrastructural development and sustainability, and that provides for a service or utility.

Public and political support to be able to take action;

An independent control system;

Working towards operational management to become free of politics.

External requirements to be met:

The “polluter pays” principle needs to be fully applied and, to achieve this end, external costs will need to be internalised.

In cities, private means of transport need to be restricted.

Mileage-based tolls will need to be imposed first on trucks, than on heavy goods vehicles, and the revenues derived from this measure will need to be spent on the maintenance and upgrading of public roads and track-based infrastructure.

We will need to work towards the reduction of truck and lorry transport (in terms of mileage) to ease the burden on state-maintained public roads.

We will need to work out a complex system with specific roles for private means of transport (linked to community transport), for local bus networks operated in villages and for public and track-based modes of transport.

We will need to establish a National Transport Holding that would not work as a centralised company, but as a system comprising of economically autonomous regional units that could operate regional and county-level bus (Volán) companies.

The state would order national and international services from the holding, and the holding would operate as a service-provider.

At a regional and local level, county and town municipalities would be the clients, and the regional directorate of the holding would provide the services, and these directorates would provide services in the suburban areas.

These directorates could make independent decisions about the most optimal and efficient methods of providing these services.

In order to ensure adequate development for track-based infrastructure, we will need to adjust the regional system of national infrastructure to the holding, and to insert an autonomous regional management level with decision-making powers.

Recommendations to finance regional management

The financing of regional management will need to be supported by setting up three pillars:

- Revenues from train tickets - from passengers.
- Municipal support – from resources provided by the state.
- Transport contribution - from enterprises in the form of taxes, levied by the municipalities. (At the same time, bus services run to company premises will need to be wound up, and we will have to offer services of appropriate standards to make employees and other enterprises to use and finance public transport (e.g. TESCO, etc.).

Objectives to be achieved:

- to achieve long-term sustainability in Hungary's transport sector while making passengers' demands a priority;
- to prevent Western European transportation anomalies;
- to make an optimal use of existing infrastructure;
- to devise a service-structure best suiting passenger needs;
- to adjust flexibly to local demands;
- to reduce the length of decision-making processes, to introduce and operate rapid and cost-efficient decision-making mechanisms;
- to ensure an optimal division of labour between the different modes of transport;
- to work towards the optimal allocation of the available resources.

7. PUBLICATIONS RELATED TO THE TOPIC OF THE PAPER

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2. Danka Lajos (2010): A MÁV ZRT. hatékonyságjavító intézkedéseinek hatásvizsgálata. (Research into the Measures Taken by the Hungarian National Railways to Improve Efficiency.) Hitel, Világ, Stádium nemzetközi tudományos konferencia tanulmánykötete. Nyugat-Magyarországi Egyetem. Sopron. Management II. szekció ISBN 978-963-9883-73-4
3. Danka Lajos (2011): A vasúti területek funkcióváltozásai. (Changes in the functions of real estates that belong to railway companies.) Változó környezet-innovatív stratégiák nemzetközi tudományos konferencia tanulmánykötete. Nyugat-Magyarországi Egyetem. Sopron. 384-393.p.
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7. Danka Lajos (2012): The Effects of the Exaggerated Observance of the EU Regulations on the Efficiency of MÁV Ltd. Gazdasági élet és Társadalom. Társadalomtudományi Folyóirat. (Economy and Society Learned Journal) Wekerle Sándor Üzleti Főiskola. Budapest. I-II szám, 85-97.p. ISSN:2060-7466