

Experiences of private provision of road transport infrastructure in Hungary

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1. Introduction

In line with basic political, social and economic changes, road transport and management of road networks in Hungary underwent substantial changes during last decade. Transition from planned to market economy has been characterised by a serious economic recession due to restriction of production, consumption and foreign trade, and heavy decrease of GDP from 1990 until the mid-nineties. Performance of the Hungarian transport sector reflected this decline as well. The performance of the Hungarian transport sector in 2000 was lower than that observed in 1990 by 5,2% in passenger-km terms and by 17,4% in ton-km terms.

According to Timár (June 2004) due to historical circumstances and development in almost every country the regulation principles of market competition apply only partially (yet, to a very different extent in each case) to the funding of transport infrastructure and of the relying transport services. In most cases, there is rather a controlled market where a legally authorised institution (sometimes also the proprietor, "manager" of assets) acting on behalf of the public authority. In defence of public interests, these institutions can limit free competition to a certain extent by defining and controlling the conditions of the activity in order to ensure general accessibility of public road transport services.

It is common that the creation of the conditions for road service provision, the acquisition and operation of the means required and the management of the different service organisations have to be financed by the owner of the means and equipments needed for road services. Of course, financing is only a means helping to achieve an economic goal. In general, this goal is identified with efficient

assets management and also increased productivity and enhanced quality of services that meet consumer demand.

Management of the national road network was reformed in 1996, this transformation created new responsibilities in road management and strengthened the accounting discipline and transparency, without giving actual financial independence. The crucial problem was: how to allocate the extremely limited resources (collected at that time into the Road Fund) among essential tasks. This problem has not been solved satisfactorily ever since.

This study presents the most important desirable institutional changes using the theory of regulation, which changes are requirements of primary importance for improving the quality of operation of a state motorway company. The analysis focuses on price regulation and its role in view of users' protests, the subsidisation policy in operation of motorway companies and the risk sharing and its effects between state and private investors.

Problems of implementation of regulatory policies

The statements of this chapter have been based on Timár (June 2004).

For a proper transport service provision several means are needed to be at hand at the same time and in a harmonised way, of which the proprietors and operators may be different organisations or institutions. The management goals of these organisations may as well be opposed to one another in the short run; therefore it is crucial to have a unified, consistent and global regulation enabling a reliable long-term planning and calculable management reactions. A significant, sometimes crucial element of this regulating system is the regulation of financing.

Financing is used in the sense of generating, distributing and paying of resources needed for covering costs incurred by rendering road services. The vehicle-related issues of transport operators as companies and that of the control and regulatory authorities are neglected and only the infrastructure-related financing issues of the transport facilities (roads/networks and accessories) are covered.

By the beginning of the 21st century Hungary has developed a chaotic, fuzzy and contradictory situation concerning the financing of transport infrastructure, i.e.

- Blurred proprietary responsibilities,
- The retaining the artificial monopoly of transport providers, elimination of competition
- The continuous lack of assets evaluation and inventory records,
- The lack of transparent, controllable and "down to elementary activities" cost calculation,
- The common practice of cross financing,
- The over-estimation of the role of transport pricing in the social redistribution of income,
- The neglecting of the rational and profitable basic criteria and too much political influence in investment and management decisions,
- From all the above results the lack of an unambiguous economic-political and management regulatory system that could set up the standards for the leaders of the public institutions responsible for the operation of transport companies and the transport system.

These problems stemming from the old times have induced new problems that now directly influence the operation of service providing companies and institutions and also the regulatory policies (and their introduction) defining their operation. First, a complex presentation of these problems will follow and then in later chapters after the application of examination procedures proposals will be made to solve the individual problems.

Detailing the examined regulatory policies the following elements will be focused on:

- **Regulation of tendering, financing and resource generation**

The strict control of the tenders (public procurement or concession) for development and building of infrastructure unambiguously defines the mobility range, rights and obligations of the parties. In the past decade several important changes took place regarding regulations, thus the relation, interest and goals of the parties in relation to regulatory politics and to one another changed, too.

- **Management of assets**

Due to the constantly insufficient resource generation (under financing) aimed at covering technically and economically reasonable expenditures there has been a significant loss in assets in terms of the national road network. This process has greatly changed the reactions of the managing institutions towards the organisation practising the rights of controller and proprietor.

- **Risk sharing among liable parties**

The assessment and sharing of various risks among the parties interested in the project is an important part of the implementation of the project. The proper distribution of risks is a must in order to have a harmonic relation of the parties concerned. The following types of risks are differentiated: political, construction, operation and maintenance, commercial, financial and legal risks.

- **Regulation of resource distribution and payment**

The distribution of resources for covering the costs of transport infrastructure is done by differentiation of competence and titles (development, maintenance, renewal, operation, management, etc.). The basic rule of distribution is the calculation of technically and economically reasonable costs by titles. Payment is identified with the transfer of financing resources allocated to different titles and functional areas. The basis of the transfer is the contract containing the way and conditions of the operation, which is constantly monitored by a third party.

- **Pricing, allowances and regulation**

The biggest part of the revenue of service companies is generated from road tolls. Law and the concession contract regulate pricing methods, the rate of tolls and the possible allowances or discounts. The economic situation of the companies depends strongly upon them; they are important factors to influence their reactions.

The detailed analysis of regulatory policies and proposals to solving current problems are found in Chapter 3. (Application of the positive theory of regulation.)

2. Methodology of the analysis

This case study focuses on the analysis of private sector involvement in the provision of transport infrastructure from the point of view of legal regulation, organisational and operational issues. The selected methodological approach of the case study is based mainly on the positive theory of regulation and institutional economics.

The selection of methodologies is based on the fact that positive theory is able to explain regulation questions, which covers the focused issues of this case study, mainly the practical interplay between

the current regulation and the actors concerned, furthermore it can assess how institutions can be reformed.

All in all, positive theory depicts how regulation works in practice. It analyses the interplay between what gets regulated and who will win and who will lose from a given form of regulation. Positive theory recognises that interest groups can influence regulatory and other political decisions by bending the ear of politicians or drowning out the voices of other constituents. Politicians and regulators can be captured by these interests. Besides describing the outcome of political struggles, positive theory can shed light on how institutions can be reformed to constrain opportunistic or rent-seeking behaviour (De Palma & Robin, 2003).

Institutional economics is an approach to the study of institutions. Unlike with standard game theory models, individuals and other agents are not assumed to be perfectly informed or to have unlimited cognitive powers. Institutional economics emphasises that institutions are endogenous and human values changeable. This also contrasts with game theory, where the protocols or rules are usually taken as given. Institutional economics therefore can aid game theory by identifying the historical background and by helping to identify the rules of the game; i.e. the objectives of the players, their capabilities, what they know and so on. A careful inspection of institutional considerations can also aid in narrowing down the set of plausible outcomes of a game (De Palma & Robin, 2003).

This is understandable given that this study covers an extended time period (from the early nineties to present days) and that one of the roles of institutional economics is to identify the historical background to policy reform, and to assess whether change came from within organisations or was imposed from outside (De Palma & Robin, 2003). The methodology is dynamic / evolutionary and examines how the co-ordination, regulation and effectiveness of road infrastructure development projects have changed in Hungary.

The paper does not contain any mathematical modelling. However, statistical and financial data are used to illustrate the nature of described institutional factors.

The paper limits its scope rather on descriptive/positive analysis and draws conclusions by evaluating and comparing the experiences of different periods/forms of road infrastructure development/operation.

Regarding previous studies, this paper focuses on the degree of centralisation, degree of participation and consultation, degree of interest group influence, degree of quantification of policy objects and targets, incorporation of feedback and evaluation mechanism, degree of regulatory intervention.

Institutional economics

As explained in previous chapter, institutional economics is an approach to the study of institutions. Unlike with standard game theory models, individuals and other agents are not assumed to be perfectly informed or to have unlimited cognitive powers. Institutional economics emphasises that institutions are endogenous and human values changeable. This also contrasts with game theory, where the protocols or rules are usually taken as given. Institutional economics therefore can aid game theory by identifying the historical background and by helping to identify the rules of the game; i.e. the objectives of the players, their capabilities, what they know etc. and to aid in narrowing down the set of plausible outcomes of a game. This is understandable given that this paper covers extended time period and that one of the roles of institutional economics is to identify the historical background to policy reform, and to assess whether origin of change are organisations or was imposed from outside.

Actors and objectives

This part of the chapter contains the set of actors involved in the analysis and their objectives, which seem to be relevant in the paper. Table 2.1 presents the actors, and Table 2.2 details their different objectives.

Table 2.1: Set of actors involved in the analysis

| | |
|--------------------------|---|
| National level | <ul style="list-style-type: none"> ⇒ Governments and ministries: Ministry of Transport, National Motorway Administration ⇒ Trade unions, different economic sectors and industrial lobbies: commercial users of road infrastructure ⇒ Citizens as private users of road infrastructure ⇒ Motorway companies |
| Regional and local level | <ul style="list-style-type: none"> ⇒ Citizens as affected by road infrastructure: inhabitants of local regions with high traffic flows |

Table 2.2: The objectives of the actors

| | |
|-------------------------|--|
| Government, authorities | <ul style="list-style-type: none"> ▪ Economic efficiency of road infrastructure operation ▪ Integration, economic growth: strengthening the role of Hungarian high speed road network in TEN ▪ Regional development: balancing regional disparities by improving the road network |
| Commercial users | <ul style="list-style-type: none"> ▪ High level infrastructure services ▪ Equity: fair financial conditions of infrastructure use ▪ Safety |
| Private users | <ul style="list-style-type: none"> ▪ Accessibility ▪ Equity: fair financial conditions of infrastructure use ▪ Safety |
| Inhabitants | <ul style="list-style-type: none"> ▪ Liveability of streets ▪ Environmental protection |
| Motorway companies | <ul style="list-style-type: none"> ▪ Feasibility of financial construction ▪ Profit maximisation |

This study focuses on the government and ministries, motorway companies and citizens and their objectives.

Positive theory of regulation

As mentioned before, positive theories concern how regulation works in practice. They analyse the interplay between what gets regulated, and who will win and who will lose from a given form of regulation. Positive theories recognise that interest groups can influence regulatory and other political decisions by bending the ear of politicians or drowning out the voices of other constituents. Politicians and regulators can be captured by these interests. Besides describing the outcome of political struggles, positive theories can shed light on how institutions can be reformed to constrain opportunistic or rent-seeking behaviour (De Palma & Robin, 2003).

The selection of methodologies is based on the fact that positive theory is able to explain regulation questions, which covers the focused issues of this paper, mainly the practical interplay between the current regulation and the actors concerned (actors and their objectives are identified in previous chapter). Furthermore it can assess how institutions can be reformed.

This methodology focuses on the following issues:

- a) what gets regulated
- b) the methods chosen for regulation
- c) the likely winners and losers from regulation

Positive regulation focuses on the interplay between questions a) and c), i.e. it studies how potential winners from a particular regulation lobby for it, how potential losers lobby against it, and how the political system determines the outcome of the opposing forces.

This analysis focuses on problems of implementation and operation of regulatory policies identified in Chapter 1, such as regulation of tendering, financing and resource generation, management of assets, risk sharing among the liable parties, regulation of resource distribution and payment, pricing, allowances and their regulation.

3. Institutional structure in the Hungarian road sector

Next, further relevant organisations of the road institutions are presented. Every one of them is a member of the decision chain located at different levels. Their roles and positions in the regulatory system have been changing for the last 10 years due to aforementioned reasons. The structure to be presented reflects their current set-up and their current role in regulation politics. The changes influencing their functioning are detailed in the next chapter 2. (Application of institutional economics analysing the policy / institutional changes).

The activities of the operators of the national roads are harmonised by the managing organisation founded by the Ministry for Economy and Transport. Based on a decree of the ministry the following organisational bodies carry out its tasks:

- Directorate for Road Management and Co-operation(UKIG)
- State Road Technical and Information Public Company (ÁKMI)
- State Motorway Management Public Limited Company (ÁAK)
- County-level Public Road Management Companies

In the case study apart from the ministry the first 3 organisations will be examined, as well as the formerly mentioned private AKA Rt. Detached from the management and operation is the

development, which is carried out by a separate company the National Motorway Co. (NA) that will also be presented.

For a better understanding let us stand here a brief presentation of the companies/parties (Further particulars can be found in the original case study (TIPP, Task Report 6.9)).

Ministry for Economy and Transport (GKM)

The GKM governs the economic and transport sector, beside others is responsible for the development of the economy, technical innovation, incentives for investments, economic research and tourism. Regulation issues are assigned to numerous under-secretaries and departments.

Directorate for Road Management and Co-operation (Útgazdálkodási és Koordinációs Igazgatóság - UKIG)

UKIG is a centrally-financed sovereign organization. Among its tasks are the co-ordination of the activities of the road management public companies and carrying out planning, commitment-related, revenue-related, contract-related, payment and control tasks and information and report obligations to the State. UKIG is responsible for management of governmental orders, signing contracts and its controlling in connection with the development, maintenance and operation of the national road network except motorways and motor-roads. Along with UKIG attends to the function of trusteeship of the national roads. Together with UKIG manages the classification of the national roads as well as organises the transportation of dangerous materials.

State Road Technical and Information Public Company (Állami Közúti Műszaki és Információs Közhasznú Társaság - ÁKMI)

Among its tasks are the management and in part the completion of tasks related to the protection of the quality of national public roads and the making of State contracts, carrying out technical control, the definition of contract prices and maintenance. Moreover, it operates the National Road Data Bank (OKA) and the ÚTINFORM providing national road information service and keeps professional records and provides data for the EU.

National Motorway Co. (Nemzeti Autópálya Rt. - NA)

The NA was founded by the Government for managing motorway developments. The majority (99%) stakeholder is the state owned Hungarian Development Bank Inc (MFB). The twofold task of the MFB is the financing of new investments and the payments of the debts (taken over) from the existing motorways (loans for the M1 section between Győr and Hegyeshalom and the EBRD loans for the M15). The management of the ongoing investments and the operation and maintenance of the motorways is allocated to ÁAK where NA is major shareholder.

State Motorway Management Public Limited Company (Állami Autópálya Kezelő Részvénytársaság - ÁAK)

Their task is the operation of motorways assigned to them. ÁAK is responsible for about three fourth of the high speed network of Hungary, 446 kms of motorway, 43 kms of motor road and main road and 194 kms of junction and lay by. The company operates the M1, M3, M7, M30, M0, and also the M5 between the M0 junction and Budapest. It also has for task the utilisation of the area next to the high speed roads, the operation and maintenance of the roads and buildings, vignette sales and control (applied for M5 since 12th March 2004). The current network and the new sections planned within the 15-year development program ensure continuous tasks predictable in the long run for the company with almost 1000 employees.

Alföld Concession Motorway Co. (Alföldi Koncessziós Autópálya Rt. - AKA)

Based on a concession contract for 35 years (expiring in 2030) the AKA has continued to build and operate and maintain a 100-km section of the M5. The company was founded in 1995, the value of the accomplished project was approximately HUF 70 billion at the 1993 price rate. The contract contains the concession rights regarding the building of further sectors. Currently, the state as a minor stakeholder - but the biggest one - practises proprietary rights and in exchange of various financial contributions can use the unified national toll system for toll collection.

4. Application of institutional economics

ÁAK Rt. is a sovereign economic organisation as 100% state property from 2003. The task of the board of directors of the ÁAK is to ensure a legal and economical management. Members of the board

are also delegates of the ministry. There is no regulation of information in the ministry between the board member and the department practising the proprietary rights. According to the protocol the tasks and scopes were split between members. The delegate of the ministry is responsible for reporting to the entity with the proprietary right and for co-ordinating tasks in relation to the management of the company. The regulation of the operation and management of the ÁAK is carried out by the board of supervision as put down in the law on economic entities. It became more and more defenceless against the decision makers regarding both its management and financial policy. It seems a negative actor of the regulation politics and reflects an organisational structure controlled from the outside. But it is a positive fact that upon the initiation of the proprietor there is a separate Bureau of Pricing Strategy within in the ÁAK. Their task is to co-ordinate the Pricing Policy Expert Committee to set up a pricing strategy for the coming 5-10 years. The Bureau informs the professional life and the user groups on the work of the Committee. The strategy prepared must be in line with principles accepted on Hungarian and international platforms. This is a way to resolve the prevailing pricing conflict from the point of view of the company.

Concerning AKA Rt., the committee announced the winner HUMIC consortium led by BOUYGUES SA and the contract was signed in 1994. The tendering was finished then but the conditions (funding of the concession company, paying the 20% of the whole investment as registered capital, acquisition of licences and other contracts, and many other factors) necessary for the contract to come into effect were realized only at the end of 1995. Owing to the changes that took place in the meantime the first modification of the concession contract was also signed at the end of 1995 together with the "licences for operation" and a EUR 48 million warrant from the Ministry of Finance. This, however, meant a step back compared to the original concept and an extra load on the budget. This move was necessary for multiple reasons: the EBRD requested a warranty from the state and on the other hand that was the only way for the government to fulfil its commitment to the development of the south eastern part of Hungary. The consortium had always had a better position than the representatives of the state. The pricing policy of the company met serious opposition from the society and also from political circles. The constant increase laid down in the contract made the M5 very expensive and according to certain calculations the most expensive motorway in Europe. Therefore the traffic was diverted to the old

roads going through small towns, thus causing traffic and pollution problems. After 7 years of public demonstrations, due to social repercussions the necessity of the decrease of tolls reached the platform of politics. The protests resulted in a reduction of tariffs through another form of state support as well as in the implementation of traffic control measures in the small towns. The negotiations between the government and AKA aiming the universal use of a vignette system started years ago but only resulted in tangible measures in March 2004.

In 2004, upon the decision of the government the ÁAK purchased a package of shares of 39.48% of the AKA. The contract was signed on the 9th of 2004. It was the State Privatisation Agency that financed the transaction from the sale of the formerly state owned Postabank. This step allowed the Hungarian state to introduce the cheaper vignette system on the motorway. The concession company does not collect tolls but receives an availability fee from the State for the building, operation and maintenance of the motorway. The fee is agreed upon by the parties based on a financial model for the whole length of the concession.

As a conclusion, in the mirror of the change of the position of the AKA, it can be stated that after a relatively risky period the company has been given good securities in 2004 for a firm return of investment of stakeholders. The State made decisions on changing the concession conditions under constraints taking an extra burden. Seeing the possibility of continuous risk minimisation the company was of course always a positive partner at every negotiation. As mentioned, almost the total revenue of the company comes from the State and the company has no further payment obligations to the State. Although the State can be represented in the company with one person each in the two boards, there is no political influence in the management. The State is the biggest shareholder of the company but when comparing the property ratios with the other private stakeholders the State is a minority proprietor.

Due to the changes in the governmental structure also influencing the basic tasks of the ministries the transport-related issues were assigned to always different ministries. After the first free elections in 1990 after the communist era there were three different forms of Ministry of Transport integrated into other political areas. From 2002 the transport issues were allocated to the former Ministry for Economy and so the Ministry for Economy and Transport (GKM) was formed. The continuous

structural and regulatory changes resulted in an uncertainty to say who will be given or deprived of what rights. Even a deputy under secretary position was created within the ministry in view of the European Integration. With regards to motorway operation the most relevant changes are needed (SAO, 2001 & December 2003):

1. companies with state administration tasks should be financed by the treasury and in order to minimise risks a strict control protocol of financing procedures is needed;
2. It is necessary that ministers give a report on the assets-retaining or increasing activities of companies with state proprietorship under their scope;
4. The possibility of the transformation of companies with state administration roles and financed from the budget to budgetary organisations must be considered;
6. Fully comprehensive institutional regulations with task and liability allocation must be introduced;
7. A system of objectives serving to judge the effects of the subsidies on the economy must be incorporated into the planning system;
8. Monitoring system that forecasts the results of projects with subsidies must be further developed;
9. The professional implementation and use of subsidies from the budget of the ministry and their effects on the economy must be appraised annually;
12. Regular control from the side of the proprietor must be intensified;
13. The information control and communication between the corresponding department of the ministry and the delegate of the ministry to the board of the ÁAK must be regulated.

5. Application of the positive theory of regulation

5.1. The regulation of tendering, financing and resource generation

In case of the private project, given monopolistic rights are transferred by the State under certain conditions and for a limited time period. This could be worked out under a private law act, a contract, to a private enterprise established for the purpose of carrying out the activity in question with several limitations. The Hungarian State allows the enterprise winner of the tendering procedure to finance, build and operate certain motorway sections, using its own resources, and to collect tolls from the users of the facilities to obtain a return for its investment.

Public financing could be realised in form of public procurement procedure or without it, but regulary tendering procedure. Transaction of planning and means and construction procurement tasks are the liability of the Public Procurement Office at NA Rt. with direct control of the director general. The Office elaborates and updates the procurement related proceedings and competition regulations, and initiates the procedures, discloses announcements and tender invitations, transacts tender opening, participates in evaluation processes and announces results. It stores and backs up all documents that are generated in the course of procurement.

5.2. Management of assets

There has been a tremendous loss of assets on the national road network int he last years. The budget resources for maintenance and rehabilitation of the national road network are under dimensioned every year by EUR 80 million (at 2000 rates) compared to the minimum required resources that would suffice to preserve the national road and bridge "stock", a considerable portion of national assets.

5.3. Risk sharing among liable parties

The assessment and sharing of various risks among the parties interested in the project is an important part of the implementation of the project. The proper distribution of risks is a must in order to have a harmonic relation of the parties concerned. The following types of risks are differentiated: political, construction, operation and maintenance, commercial, financial and legal risks.

In case of private motorway M5 the risk allocation seems to be the following (Table 5.1):

Table 5.1: Risk sharing in motorway project M5

| Category | Concessionaire | Public stakeholders |
|--------------------|---|---|
| Political risks | change in acquis and tax regulation - general | termination, change in acquis and tax regulation – specific, appropriation, convertibility of currency |
| Construction risks | quality of plans, cost overrun – due to others, timetable and quality of works, delay due to licensing procedures, disruption from construction | land acquisition & transfer, quality of plans, cost overrun – due to modifications by procurer, delay due to licensing procedures, archaeological exploration |
| O & M risks | environmental impact, force majeure, technological impact, cost overrun | environmental impact, force majeure, change in regulation |

| | | | |
|------------------|---|---------|--|
| Commercial risks | insufficient volumes/revenues | traffic | insufficient traffic volumes/revenues, control of price mechanism, new competitors |
| Financial risks | change in inflation/interest rate, increasing financial costs, bankruptcy | | change in inflation/interest rate/foreign exchange rate |
| Legal risks | legal contest | | legal contest, covering necessary licences for smooth operation |

Regarding public project, several risks do not arise here compared to private project, but all risks belong to the public sector. Thus, no special controlling procedure is required and the parties concerned can exploit the advantage of the low risk factors attached to public projects because the Ministry is the overall supervisor of every stakeholder. It is controlled directly by the State and indirectly by the Parliament. Well known that the state budget is the best guarantee for risk covering.

5.4. Regulation of resource distribution and payment

Timár (June 2004) stated that as a consequence of the EU accession of Hungary the possibilities of financing road infrastructure projects became larger. There were numerous changes in road network financing, finally to the Infrastructure Development Basic Programme (FIFA) in 2003. Due to the EU membership these financing resources were widened by the budget fund of the union, by the Structural Funds and the Cohesion Funds and the connecting Hungarian co-financing (budgetary) resources. Structural Funds are also reachable to finance the National Development Plan (NDP) in Hungary.

In case of a "public service project", nearly all costs are financed from the equity paid up by the shareholders and from loans raised by the company from the money market without any governmental guarantee. The availability of funds and borrowed finance depends mostly on the revenue generating potentials of the project and its assessed risks. The investment and borrowing decisions are made by private sector investors and lenders, purely on the basis of financial feasibility and bankability studies. The equity invested by private investors is expected to be fully returned and to yield acceptable profitability after an acceptable period of time. It is essential to carefully identify, assess and estimate the costs of each risk (see Chapter 5.3). From 2004 ÁAK Rt. owns a minority share in AKA Rt.

In case of a project implemented with the objective to perform public services, all costs are fully paid from the public budget or State guaranteed credits and/or raised by the public organisation on

favourable terms. The investment decisions and eventually the borrowing decisions are prepared by civil servants and employees, and taken by statesmen mainly considering social and economic criteria. The liabilities of the private sector including warranty and compensated damages are limited to construction and/or operation and maintenance activities as they are subcontractors according to standard commercial contracts. The selection of the private subcontractors is in accordance with previously used procedures defined in public purchase acts, where price is of the essence.

5.5. Pricing, allowances and their regulation

After few changes of the Concession Contract, cancelling the high toll rates on motorway M5, the national-wide vignette system has been extended. Table 5.3. summarises the former and recent toll rates on the selected motorways.

Table 5.3: Average specific toll rates on M3 and M5 from 1997 to 2004

| Tolls | M3 | | M5 | |
|-------|-------------|--------------------|-------------|--------------------|
| | Length [km] | Toll rate [EUR/km] | Length [km] | Toll rate [EUR/km] |
| 1997 | 56 | 0 | 56 | 0,081 |
| 1998 | 99 | 0 | 97 | 0,066 |
| 1999 | 99 | 0,036 | 97 | 0,075 |
| 2000 | 99 | 0,015 | 97 | 0,081 |
| 2001 | 99 | 0,019 | 97 | 0,097 |
| 2002 | 99 | 0,021 | 97 | 0,111 |
| 2003 | 166 | 0,015 | 97 | 0,117 |
| 2004 | 166 | 0,011 | 97 | 0,134/0,011* |

Public motorway (motorway M5 after 2004 as well) toll levels are defined in the regulation of Ministry for Economy and Transport. Besides, it identifies the discounts and exceptions on specific sections, too. The regulation is according to the relevant European directives.

6. Conclusions and recommendations

A determinant source of financing of the road infrastructure is the revenues from taxes and duties of the central, regional and local governments. The financial burden of road users (vehicle tax levied in a differentiated way, fuel tax above general taxes and tolls) cannot exceed the amounts needed for the maintenance, operation and development of the road network. An overall reform of infrastructure financing is needed that can stop the degradation of assets of the last couple of years and can augment the assets of the road and bridge stock and also increase service standards.

After several changes in institutional structure there are new challenges and the urge to learn European trends made it necessary to further develop and reform the maintenance, control and co-ordination systems of public roads. The institutional reform in the road sector shall be based on international trends and corresponding EU guideline. Four major components are clarification of scope of duties and roles on different levels of regulation, forming transparent ownership on public, appropriate and stable financing of development, operation and maintenance, and improvement of commercialised operation and maintenance activities. The rationalised structure could succeed in shaping up relevant institutions, supplying trusteeship by independent organisations suspected by the owner (state or local government), execution of development, operation and maintenance according to the rules of market economy and using European Union substituted funds in financing. One of the main goals is to form a three-level (national – regional – local) administration and reduce overlaps in road sector. Strength of this administrative structure covers a modern, market oriented complex organisation, resulting in a smaller number of administrative workforce. The weakness is how to prove the due diligence in ordering the privatised engineering agency. Another possible problem is the modification of respective regulations and laws about proprietary rights and responsibilities by the politicians, because the present structure of road administration is incoherent with existing legal regulations. This step shall be performed before any change in institutional setting.

The reform cannot be implemented without new jurisdiction of course. The main problem is the lack of the law, which states the public utility role of transport infrastructure. This reason has slowed down and held up the purchasing or acquisition procedure of requested lands, and the investor has to choose unduly expensive technological solutions regarding operation and maintenance. The level of service, jointly the minimum expenditures is not specified in any regulation in operation and maintenance of road facilities. Additionally, the minimum level of reinvestment into development, operation and maintenance is also missing, which reinvestment financed by all the levied taxes of motorisation. With regards to these important criteria are: engagement on improvement and conservation of road network as national property, public utility of establishing infrastructure, financing improvement, operation and maintenance of infrastructures and setting up a uniform road network.

Conclusions - Institutional economics

During its history the ÁAK became more and more defenceless against the decision makers regarding both its management and financial politics. The rights and scopes of the proprietors, supervision and management are obscure and hinder the efficient work. The transparency of the economic processes is quite limited due to mostly the proprietors and the supervisory organisations, and political pressure sustains. It seems a negative actor of the regulation politics and reflects an organisational structure controlled from the outside. The only positive point is the forming of the Bureau of Pricing Strategy which strives to transfer the pricing rights to the authority of the company.

Analysing the position of the AKA the company has been given good securities in 2004 for a firm return of investment of stakeholders. The State made decisions on changing the concession conditions under constraints taking an extra burden. Seeing the possibility of continuous risk minimisation the company was of course always a positive partner at every negotiation. Almost the total of the company comes from the State and the company has no further payment obligations to the State. There is no political influence in the management. The State is the biggest shareholder of the company but when comparing the full property ratios it is a minority proprietor.

Concerning the ministry no preliminary studies were prepared for the reallocation of tasks put down in laws and decrees. Based on the problems revealed the following changes are needed: companies with state administration tasks should be financed by the treasury and in order to minimise risks a strict control protocol of financing procedures is needed in (majority) state owned companies. The possibility of the transformation of companies with state administration roles and financed from the budget to budgetary organisations must be considered. The professional implementation and use of subsidies from the budget of the ministry and their effects on the economy must be appraised annually. The regular control from the side of the proprietor must be intensified. The information control and communication between the corresponding department of the ministry and the delegate of the ministry to the board of the ÁAK must be regulated. Among the reforms needed there are deregulation, the possibility to enter the market for all parties and the modernization of organisational structures. The first two criteria have been fulfilled more or less the past years but the modernisation of organizational structures still has a long way to go.

Positive theory of regulation

During the negotiations for winning the European Union's Structural Funds the National Development Plan (NDP) of the country, as a program document, puts down the negotiation position of the given country. When the total budget of the program exceeds EUR 1 billion this plan is compulsory. The NDP describes the all the development concepts of a member state by sectors that is wished to be realised in the given program period. The distribution of the resources of the Structural Funds is based upon administrative regions the country is one region yet. The EU support within the frameworks of the ISPA has contributed to reach the goals put down in the pre-accession documents of certain favoured countries, such as Hungary, thus among others to the participation in international programs on the development of transport infrastructure networks.

The assessment and sharing of various risks among the parties interested in the project is an important part of the implementation of the project. The proper distribution of risks is a must in order to have a harmonic relation of the parties concerned. It is commonplace that the state budget is the best guarantee for risk covering. Investors and lenders are very strongly interested in predicting and assessing all imaginable events and to develop a process providing for the mandatory remedial actions. Comparing the Hungarian price regulation to the general European concept, the goals are different. While in countries with higher GDP level the main reason could be traffic demand management (according to the new directives and law of European Parliament regulating pricing policy). Contrarily, e.g. in Hungary the decision makers like to enhance the State revenue generating financial resources for operation and maintenance (and for development as well in future plans). An extended motorway network could also improve social cohesion and the economic growth.

In the Hungarian practice there is a clear tendency in cost allocation between road users with commonly accepted pricing principles but time is needed for implementation.

7. References

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