

Rapport to be presented on the ECE/OECD Workshop on the *Role of Economic Instruments in Integrating Environmental Policy with Sectorial Policies*, held in Pruhonice, Czech Republic, 8-10 October 1997

## **THE ROLE OF ECONOMIC INSTRUMENTS IN INTEGRATING ENVIRONMENTAL POLICY WITH TRANSPORT POLICIES IN HUNGARY**

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### **INTRODUCTION**

First of all I have to declare separately my approach towards the two steps appeared in the title of the conference: namely *the integration of environmental policy with sectorial policies* and *the use of economic instruments*.

### **INTEGRATING ENVIRONMENTAL POLICY INTO SECTORIAL POLICY**

#### **It's importance**

It was one of the main shifts of the past 25 years of environmental thinking, that it became a general recognition, that the environmental approach can not be any more an external control of the sectorial activities, but have to penetrate into them such having a greater effect on the everyday performance. There was also a shift from the pipe-end approach of looking products and polluters to a more preventive control of technologies, investments (EIAs) and by now also to a harmonisation on policy level.

#### **The practice**

Looking at the infrastructure branches it was the energy sector, where this convergence started first, partly due to same coincidences of the growing environmental

concern on raw material shortage and the real oil price shock in the early 70s. Since - at least in policies and declarations - it belongs compulsorily to the energy priorities that not the more energy, but the more effectively used energy, the more service with less energy is the target.

The same process started later in the transport sector and even now it is not self-evident that the sector policy should declare that generally *not the more movement, but the similar service with less movement would be advantageous*. This declaration is general already in urban transport, or at local, protected, resort areas, but did not yet become part of the general priorities, or if still, it sometimes understood at a logistical/technological level, considering the demands as a given fate to be served also in long term by transport tools and the environmental approach should but achieve that these tools cause less harm.

This situation is also characteristic for Hungary. The environment as a chapter is important part of any transport policy and also appears among priorities: but its meaning is a kind of technical development and an elimination of emissions rather than a really policy-level environmental approach. There is a more advanced approach in the new Transport Development Plan of Budapest, where it is a general target to achieve a smaller traffic in dense urban areas and the plan aims to differentiate the possibilities between different land use and protection zones, (and, naturally also between transport modes).

#### THE ROLE OF ECONOMIC INSTRUMENTS

The second part of the title of the conference relates to the role of the economic instruments. If I want to declare my approach shortly, I have to say, that *the economic instruments have an important, but limited role*: they can well promote a socially and governmentally accepted policy, sometimes also a not declared but accepted one, (sometimes also something that nobody expected...) but if the declared targets are socially clearly not-accepted, generally the system does not work, and it is also not sure, that an instrument that worked perfectly in a developed industrial or post-industrial society, adopting to the Eastern-Central European region would cause the *same* effects.

That is why it is unavoidable that speaking on the role of economic instruments in present Eastern European countries we pay our attention not only to operating developed systems but also to the heritage that creates the environment where the economic instruments should play their role. (See chapter The Heritage)

*Effectivity and sustainability*

Here we also have to touch another aspect namely the differences between economic and environmental targets. Many economic instruments intend to promote a partial effectivity within the whole transport process. Such important tools are different tax measurements influencing vehicle or fuel efficiency, and it is also a declared aim at market deregulations that the cost of ton/km should decrease. We have to point out that the effectivity in such understanding can promote that the given short-term demands of the transport should be satisfied with less cost (fuel, energy, time, pollution) while it is a general experience, that on the long-term these economic (and technical) effects result more transport: the society uses the new possibilities (higher speed, less unit-cost etc.) at a way that using the earlier expense or time frame achieve a greater transport performance. (Greater distance, more goods, bigger vehicles, more movement). As a result the long-term environmental conditions are not improving even it is a fortunate situation, if not worsening.

What we need to introduce here is to make the distinction between *partial effectivity of the process* (less expenses for the same transport performance) and a *total or external effectivity* (less transport for the same service, or for the same well being). On long-term policy level and from environmental point of view it is but this later that really promotes the better future and the cohesion between environmental and transport targets. In any cases if partial cost-effectivity increases in itself, the *gap* between the direct costs perceived by the users and the total (external and direct) costs *is also increases*. This gap gives a mistaken signal to users and promotes more transport loading further expenses to the environment. The only possibility to harmonise sectorial and environmental targets if this gap is decreasing and not increasing. This can be a key element in evaluating if economic instruments helps environmental targets or not.

## THE HERITAGE

The Hungarian future development possibilities are greatly influenced by two side: the different patterns of existing more developed countries and a strong inertia of the past historical development. Especially in the case of such slowly changing structures as the transport network, the effects of the past can be very important, sometimes last century development structures - as the density or direction of railroads - can determine present possibilities. But there are also conserving structures in social, cultural or institutional systems that react specially on economic changes.

### **Clusters of heritage: global, developing- and command economy features**

It seems to be practical to cluster the elements of the Hungarian heritage in several groups, to make it easier to understand why the reactions can be different from those in more developed countries.

There are problems that *newly emerge in the whole world* due to extended globalisation, to environmental recognition or to new technical possibilities, and that need new solutions also in the most developed economies. These type of problems are widely negotiated between high-level experts and new instruments (also new economic instruments) are created to handle the problems. As these new instruments promise solutions for the most serious problems in the given sector of the highly developed countries, the experts are inclined to suggest these instruments as general solutions to other countries too, without more respect to special local circumstances.

In the heritage of the Hungarian (transport) economy we have to distinguish those elements that can be *originated from the given general development level of the Hungarian economy*. If we compare different transport supply indexes of Hungary with other countries, there are many that fit well to the trend of those other countries at similar GDP level in South America or South and Central Europe: but there is a gap between all these countries mentioned and the more developed countries. In these cases the differences can be explained with the development level, and the experiences of the similar or slightly more developed market economies can be studied and sometimes also adopted.

There is a general belief that in Hungary the infrastructure sector was extremely neglected, but many comparisons show that relative to the GDP this quantity gap not so significant, while within the sectors there are really huge differences between those constructions politically kept of great importance and those not.

This leads us to the another type of the Hungarian heritage where the supply indices differ sharply from those of the above mentioned market economies, and show similarities but with the neighbouring Eastern and Central European cases. In these cases we can speak about a special heritage of these countries that goes back to the marketless command economy development of the past half century. We consider important to mention three major consequences of this special infrastructure past, that effect also present perspectives:

*Extremely low service prices causing also a huge over-demand towards services,* that fact was perceived by the sectors as a lack of supply possibilities due to the lack of investments and financement, while the potential users also met with an underdeveloped infrastructure relative to their expectations and (monetarily not limited) demands

*A general territorial and institutional centralisation,* that (in Hungary) partly goes back to last century roots when the development of the capital Budapest making it capable to racing with Vienna was a political target, while the development after WWII fully used and endeeded the centralisation well fitting to the forming political centralisation ("tree-structures": development of hierarchical links, neglecting horizontal relations and local poles).

In the general circumstances of central redistribution the way to the prosperity of a branch did not lead through the better supply of the (not existing) market, but through getting more and more central resources. In a competition for new resources it became secondary, how to manage and maintain the existing tools, even certain almost-crises situation proved to be useful in demonstrating the urgent need for new financment. It is general by now that *both infrastructure elements and equipment are low maintained, over-used and face with quality problems.*

The three above-mentioned main pillars as the heritage of the past also influence those frames the Hungarian transport economy able to adapt to as newly introduced regulations and instruments.

### **Changes and samples in developed economies**

When we are speaking about the environmental policy we are speaking about a kind of thinking frame or paradigm.

At an early phase of the transition period there was a kind of illusion both from western and from local side, that in the newly transited Eastern and Central European region the environmental consciousness is general and that these societies can start at a thinking level that can be compared to that of the most developed West European countries. As the adaptation to the world market meant also that these countries have to be measured on the scale of the market economies and as by that comparison their place was found among the lower and upper middle income economies, soon became clear that the possibilities of the economic development of these countries are also not far from those others with similar income. By now it have to be clear, that the economic problems in the transition economies (lack of local capital, growing disparities in income, low wages, inflation etc.) determine the everyday thinking comparable to other market economies of similar development level and give environmental problems a recognised but secondary priority status.

#### *User pay principle*

The most developed countries reached a kind of post-industrial development phase, where the basic service networks are already existing and the main task is to construct parallel networks of special quality to satisfy special demands. (mobile, ISDN, TGV (high speed train), motorways, Concorde etc.) In this stage it was a general recognition, that the construction of the new, expensive, special networks have to be paid by their potential users and that the operation and maintenance of the already constructed basic networks can also be loaded to their general users as a principle. Otherwise this situation was similar to the last century starting position of the European local (electricity, gas, paved road etc.) networks: generally these were con-

structed from private money, and only later, as they become more extended (and also served strategic and power interests) they became subject of state and public investments.

While the user pay principle is very evident in the above cases, it is not so clear, that in a country where 70 or 85% of the inhabitants have an access to certain basic infrastructures (that were constructed earlier from public or at least mixed sources) and the poorest 15-30% have not, whether the principle of user pay can be introduced similarly to that advised from more developed economies or there are other equity and temporary rules that have to alter the original principle in certain cases.

In Eastern Europe there is a mixture of pressures in which there are paths of a rational recognition of above facts, but mixed with a more general pressure against the emerging prices just remembering the "good old days" when the services were very cheap. For a politician and in short time it is not the rationality of the pressure, but rather the strength of it that counts: so even the not rational or not realistic part can temporary win in a postpone of price changing or in a choice of an investment construction. Our task here while speaking about the role of economic instruments in Eastern Europe is also to select those special circumstances where this role can be different from those in more developed countries, understanding both the rationality of the western approaches and of the rationality of the local economic background in our countries.

In the next chapter we try to get closer to concrete transport issues.

#### **BEFORE THE ECONOMIC INSTRUMENTS: PAST AND PRESENT POLICY PRIORITIES**

The economic instruments effects *how* the money is spent, but there is an equally interesting question before, namely that *whose* money is spent (and by whom).

It was clear, that in all command economies there was a starting position, where majority of the investments was centrally collected and redistributed by the state budget. As for the *services* (and manufacture also) the change was clear and huge: while in goods transports in 1980 from the total 68 relating organisations in Hungary there were 43 state owned enterprises and another 13 direct budget organisations, by 1990 more than 30 000; by 1994 nearly 67 000 companies and (mainly) small enterprises appeared on the goods transports market. This change explains in itself the growing importance of economic instruments in the whole economy, as there is no other way any more to effect on such a huge number of actors.

In the same time the changes were not so quick in the field of the construction of the infrastructure, even if the directions are very clear. The legal frame was changed

by the early 90s and by adopting the Concession Act in 1992 the construction and operation of networks become possible through concession.

The Act proved to be followable as in 1996 the first motorway in the Eastern-Central European region based on concession has been finished. It was part of the Vienna - Budapest M1 motorway, a 42 km missing section between Győr and the Austrian frontier.

While the theory was clear, the situation was still unique: this western link of Budapest had been urged in great extent from both Western and Hungarian part, and even if the investment was formally free from state budget, the implementation was mixed with implicit political state guaranties. The result was a special sample that can not be repeated: formally 100% private capital investment, with a toll rate that is close to the double of the average Western European per Km toll price.

If we look at the situation from an environmental point of view, the result is attractive: *we can see, how much was the real price of the motorway*, and also, that *just the domestic users are those, who are not willing to pay that price* for the advantages they can gain in the given section. So it is clear, that those urging the construction of the motorways would like to use it at a cheaper price than its "real" (at least present market) costs. The pressure was very clear, and strong: the users (through their representative like the Hungarian Automobile Club) claimed lower tariffs and would have liked the government to be involved assuring these lower prices.

The situation became much more complicated, as in other parts of the Hungarian motorway network the concession agreement mixed the construction of new sections with the rehabilitation or enlargement of existing motorway sections, that had been constructed earlier from state budget. While in the above mentioned M1 case the road toll appeared at a section that did not exist before, and would not have existed at all if the concessor had not constructed it, in the other cases (M5, soon also M3) the toll gates also appeared at earlier free used sections and those not willing to pay were pushed back to roads crossing towns already free from transit traffic for ages.

This situation underlined an important and hardly analysed fact. Those earlier constructed motorway sections unified two functions up to now. On one hand they are high quality roads with motorway characteristics ready to fulfil the needs of the long-distance inter-regional road transport, but on the other hand they are part of the basic national road network, as it were they, that assured the capacity extension of the national roads and also the by-pass of the settlements touched. Without the earlier construction of the motorways it would have already been necessary to construct by-pass roads at the settlements, because the traditional national road network would have caused conflicts with the local life. If the new toll gates tax the long-distance inter-regional transit traffic they also push back the rest of the traffic to the old road,

and makes clear, that earlier a step was over-jumped: the country constructed motorways for solving also the bypass function at settlements.

We could learn two things here.

*We could learn from the M1 case*, that seemingly there was no real demand (willingness to pay) from those part who wanted to use the motorway, or at least they tried to load the bill partly to those *not* users. From equity and environmental, but also from economic point of view the answer is clear in this case: the private operator is given, those willing to pay are given and it is the market that have to assure the regulations. The operator have to find a tariff that would be optimal for him in this case and he and others can also decide, whether a next investment among the given conditions is attractive or not.

What happened is quite different. The users' representatives and the concessor together (while speaking to each other) was able to frighten the government and to push it towards admitting the necessity of further contributions and to declare as if the government should involve budget money into motorway constructions if the users say they are not able to pay the full costs. It is quite clear, that this is a state support for motorway constructions, (and to road users). Supporting the transit road constructions also changes the cost rates just at the expense of the railway, while for the Hungarian railway it would be just one of the most important potential for the future to gain back a bigger role in the goods transit transport, and that tendency would also be good from environmental point of view.

*We could learn from the M5, M3 cases*, that the heritage of the past in physical structures, namely the existence or lack of elements of the basic networks has an important effect on present possibilities in financial modes too. So when we try to learn from the practice of the developed countries, it is not enough to focus on several chosen elements, in this case to deal with the motorway network in itself. The motorway network in its present state is a kind of overlay network for interregional links assuring a special quality for those demands. Those really using it for that purpose have to pay for the extra level of service, while those not intended can not be forced to use a higher level than wanted. For this second, bigger and mainly domestic group the key question is the state and existence of the basic level of the national networks, including the national road network.

It is really a government responsibility to maintain the integrity and operability of the basic networks. While in case of extra quality services the user pay principle can be of no question, in the case of the basic networks where the supply level is 80-90% it can be accepted that it is of general interest that the supply level should be increased even if those potential users are not able *fully* compensate the costs. In these cases those already disposing with the service help (with their tax through state budget) those still in need.



Another special case (and such ones are the M5 and M3 cases) when owing to the past experience the basic network does not able to fulfil its basic role without certain elements of the existing high quality network. In this case the integrity of the basic network was hurt if the regulation phased out the high quality sections. In such cases the government must not privatise the section in question unless there is a substitution constructed to maintain the integrity of the basic network. One possible solution if the double function section remains part of the national network with the same rules as other sections of the same network (in our case allowing free use), or it can be effective to construct *now* the missing by-pass sections of the traditional roads and *then* privatise the motorway section. It can be the concessor itself who construct the by-passes, to make possible for himself disposing with the motorway as a toll road.

In all above cases we were dealing paralely with *economic* and *legal* instruments (concession) and also with a *financement* construction as an economic instrument. It is not widely accepted that this approach of the problems can be part of the environmental policy involvement into the sectorial policy. My personal opinion is, that it is a fundamental question of the environmental policy, determining how and why there goes special financial support to high quality transit and overlay motorway constructions.

In the Hungarian case unfortunately it became a main priority of the new Transport Policy (1995) [6] that we have to urge motorway constructions to assure the crossing of more transit through the country. From environmental point of view there are four basic objection against that priority:

- (a) It gives priority for special demands against the needs of the basic network,
- (b) it gives priority for development against the maintenance of the existing network,
- (c) it gives priority to transit against the needs of the domestic transport, and
- (d) it gives priority to the road against the integrated transport solutions.

If we speak on the integration of the environmental policy with sectorial (here transport) policies first of all we have to assure, that the priorities of the transport policy could get closer to the environmental priorities. Without that no economic instrument able to serve as tool for that kind of harmonisation.

#### **THE GOODS TRANSPORT IN HUNGARY: TRENDS, MODAL SHARE, HIDDEN SUBSIDIES**

In 1990 the specific transport demand projected to the GDP [tonkm/GDP] in Hungary was double of that of the EU average and 30% higher to that of the southern members of the EU. The main causes of this high transport intensity could be:

- special structure both in the industry and in transport of big state owned enterprises,
- high raw material and energy demands in the whole economy, extended heavy industry
- low effectivity organisation,
- mistaken land use, ineffective settled industry,
- low quality infrastructure services,
- low transport prices

Between 1990 and 1995 the GDP in Hungary decreased by 20%. During the same period the goods transport [in ton/kms] decreased by 31,7%, that means that the specific transport intensity of the Hungarian economy decreased. All those macroeconomic pressures and regulations that have changed the enumerated conditions of the Hungarian economy can also be considered as tools serving the environmental policy too, even if they were not introduced for that definitive purpose. In this case, that is looking the total amount of goods transport, the changes of the command economy towards market economy brought in itself positive results the environment, decreasing a certain over-demand towards transport.

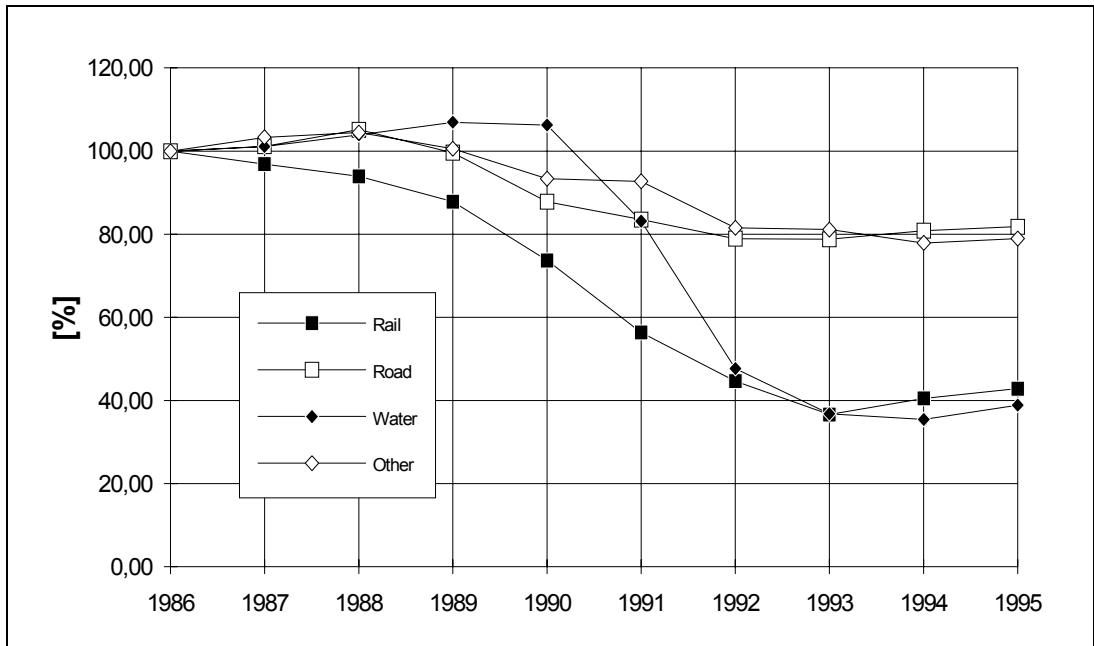


Source: Infrastruktúra és szolgáltatásai Európai Tükör 9. [2]

**Figure 1. Market share of rail in goods transport [ % of ton/km-s ]**

There are other changes in the same period, that show very different results. The average age of the lorry (also the bus and car) park in four years increased by three years and in all categories exceed 10 years. There was also an important shift in goods transport from rail to road.

As we can see on *Figure 1.*, this decrease of the share of the rail in Hungary is not a new trend and was more or less parallel with the similar trend of the EU countries, with the speciality, that the share of the rail in the transport of goods in Hungary was practically always the double relative to those EU average. Just in the last years the decrease in share also stopped, even a slow increase started.



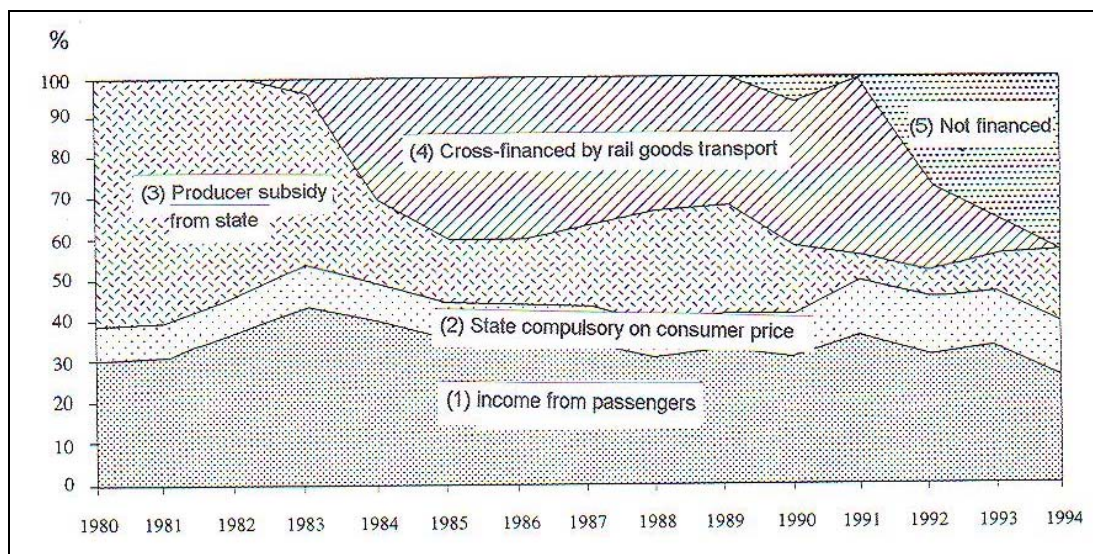
Source: Transport Data 1986-1995. Infrastructure booklets. Ministry of Transport, Communication and Water Management 1996 [5]

**Figure 2. Trend of the quantity of the goods transported in Hungary**  
[ton, 1986 = 100%]

We can study this trend of recent years in Hungary better on *Figure 2.* but here we see the trend of goods transport in ton. While in the given period - but rather between 1989 and 1992 - the road traffic decreased by 20%, the rail transport decreased during the whole period until 1993, and altogether by 60%. The cumulated decrease of inland navigation was also 60%, but here the dramatic fall was concentrated on four years between 1990 and 1993.

It is not our task here to make a general analysis of the goods transport trends in Hungary, we rather try to state if there were economic instruments or direct subsidies involved to promote the changes during the period and how or whether these pressures have changed.

While the comparisons generally concentrate to rail and road goods transports in itself, the race between them is much extent depends on internal, subsector cross-finances in road and/or in rail field.



Source: Infrastruktúra és szolgáltatásai Európai Tükör 9. [2]

**Figure 3. Sources and financing of the rail passenger transport between 1980-1994**  
[%]

On *Figure 3.* we can see the sources of the financing of the railway passenger traffic between 1980 and 1994. The price of the tickets does not cover more than 25-35% of all expenses, while the state subsidy of users side (students, elder people,) gives another 10%. While in the early 80s this sum needed a further 50-60% producer side price subsidy, by the mid 80s more than two-third of this price subsidy was changed to a cross-financing inside the railways, as the railways goods transport results substituted that part of the state subsidy.

As we saw on previous *Figure 2.* since the mid 80s the railway lost more than half of the goods transport, while the rest had not just to pay its full cost, but also support the passenger transport. On one side we can see, (*Figure 3.*) that from the early 90s this was not possible any more in its earlier extension and the not-financed proportion of the costs emerged pushing the whole railways company to a near-crises situation. But due to that cross-financement the goods transport costs at the rail became also more expensive and this higher tariff pressed more consumer to use the road at a period when there was also a spontaneous tendency to turn towards roads.<sup>1</sup>

<sup>1</sup> We use from here in this chapter the paper of Pavics Lázár: A vasúti és közúti áruszállítás fejlesztésének dilemmái (=Dilemmas of the development of the road and rail transport in Hungary) See [3].

On the other side we have to look at the road transit. It is a general argument, that while the rail pay for its track and these expenses are involved into the transport costs, the road transport does not pay for the infrastructure. (Or by more fine arguments pays in the fuel tax but less, than the real expenses.) In this paper it is not our task to calculate the direct and external costs of the road, rail, and other modes of transports, what we want to show is but the real changes or tendencies of the last years. In that extent, that is in covering the infrastructure costs there were no changes in Hungary that would have changed earlier cost proportions.

If we look into the road subsector, (and even we accept temporarily that the fuel tax covers the infrastructure costs,) we find that there is a crossfinancement here too, but here car users support road transporters, as the use of the road in the reality is proportional not with fuel consumption, but with axle pressure on pavement on fourth power. Earlier calculations estimated this crossfinancement as similar in magnitude to those in rail, while the direction in both case helps road goods transport. [3]

Another hidden support on road transport is the mutual release of transporters from the obligation of the payment of the transit tax between the different countries. Here the state budget loses a greater sum just to make the road transport cheaper for those get the mutual permissions.

Pavics Lázár [3] in a calculation estimated about 90 bn HUF in 1992 (900 million USD in that time) as a hidden relative support on road transport, including also the loads on rail goods transport.

Here we do not want to decide if the estimation was exaggerated or not. What we can state, that those issues giving the main part are not changed, so to the extent the calculation was correct by 1992 can also valid by now.

We could see that the tendency, that rail loses share in goods transport was general and not a special case in Hungary. There were calculations and researches in this topic in Hungary, also policy suggestions worked out, but, also similarly to the most Western countries the real changes are modest.

We have to mention here first the product fee, introduced four years ago as half a HUF in each litre of fuel and risen by now to 2 HUF. There were also administrative instruments introduced in the last years promoting the equalisation of the balance by worsening the chances of road transporting. Such instruments are the seasonal and weekend restriction of the road transport for heavy lorries, and even if it was not an intended tool, the several hours, sometimes several days delays for lorries at frontiers operates as such an instrument too.

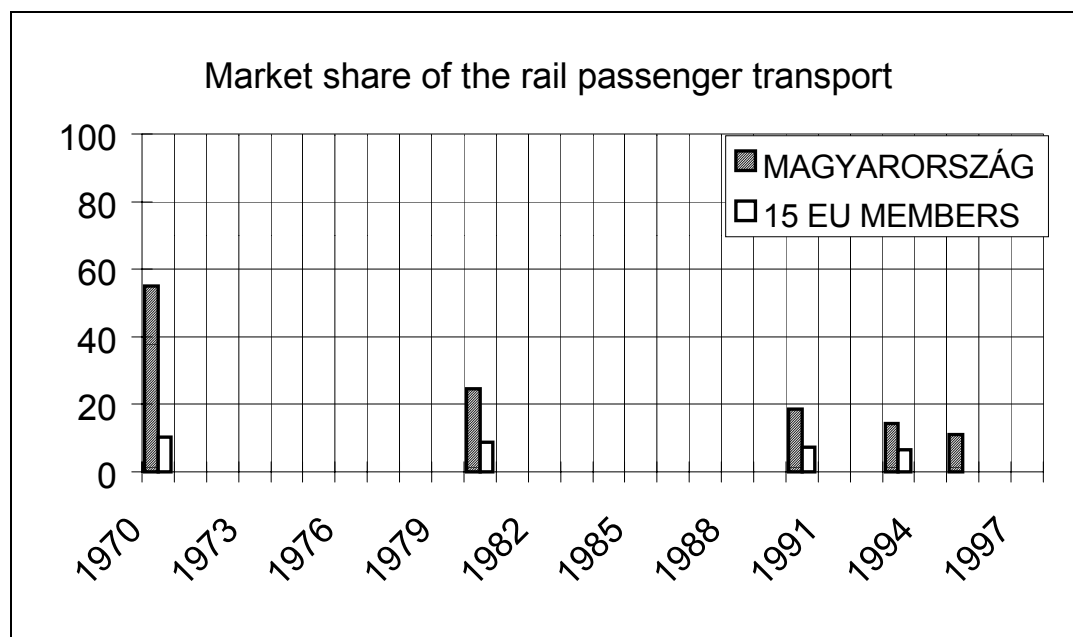
There is another tendency not directly appearing as economic instrument, but in its effect work like that. As in EU countries environmental rules rise the emission

norms as a condition to take part in the traffic, more and more Eastern forwarders are driven out from the competition for international transport. If an Eastern country want to follow that rules in environmental legislation, phases out the majority of its existing lorry park and gives the market to those international forwarders disposing the more expensive but environmentally accepted park. From strictly environmental point of view this more expensive transports and better emission norms are much better, but if the whole process is too rapid, and does not give a possibility for a gradual exchange of the vehicles by the domestic transporters, the result is first of all the shift of the transport market to foreign enterprises and a phase out of the domestic concurrence.

Here *deregulation* means to phase out national prescriptions but in the same time introduce the European *regulations* also in domestic transport. (Without that the deregulation would prefer those forwarders using amortised and dangerous lorry park achieving by that a higher short-term partial effectivity in road transport!) The question that remains that if the eastern forwarders can hope in a *transition regulation*, that could assure that neither their low quality dumping nor their administrative exclusion would cause a one sided advantage to eastern or western forwarders. Theoretically it is a forced higher total transport price on a defended market that could create a source for a change in vehicle fleet and other equipments in a transition periode. But this would need not less, but *more* regulations and there is no real guaranty that the higher income would really be used for the change of the structure. The further complication in the issue is that a consequent environment-friendly regulation should decrease the proportion of the road transport (together with the total decrease in goods transports) both on western and eastern side, thus pressing the firms to live on a decreasing market in advance.

#### **THE PASSENGER TRANSPORT IN HUNGARY: TRENDS, MODAL SHARE, SUBSIDIES**

In the period 1985-1995 the number of passengers transported on EU railways increased by 20.1%, especially in Southern EU countries by 31%. That was already a kind of post-industrial, post-motorisation development starting from a very low level, and due to the changing role of suburban rails and tariff associations, besides many other components. In the same period in Hungary the number of passengers transported decreased by 40%



Source: Infrastruktúra és szolgáltatásai Európai Tükör 9. [2]

**Figure 4. Market share of rail in passenger transport**  
[ % of passenger-km-s]

The *Figure 4.* compares the market share of rail transport in the last decades in EU countries and in Hungary. We can see, that even if the number of rail passengers increased in the last decade in EU countries, the shift towards roads did not stop and the share of the rail by now is not more than 6-7%. The Hungarian share is still, after the significant decrease in passenger numbers, about two times more.

If we focus on Hungary and look the long-term trend from 1970 we can see the effect of the whole motorisation period, and also, that until 1990 the domestic and Comecon international rail tariffs were kept at an extreme low price level (unchanged between 1951 and 1982!). So, similarly to earlier, here also we can say that partly the decrease in rail passenger traffic is originated from the decrease of an earlier over-demand towards rail transports. But if we look at the total passenger transport of Hungary, we can state that between 1990 and 1995 there was a decrease of 11,1% (in passenger kms), that was smaller, than the decrease of the same period in GDP (20%). This means that there was no specific decrease in passenger transport demands if we compare it with the GDP, the main tendency in Hungary was still the shift from rail to road.

Another important field of passenger transport is the local transport. About half of the total passenger traffic in Hungary can be estimated as local traffic, and half of all local public transport takes place in the capital, Budapest. Here the last decades also changed the basic proportions from a 80% public transport share to 60%

If we look at the BKV, the local transport shareholders company of Budapest, the first statement we can see, that the price of the tickets does not cover but the 33% of the total (construction, maintenance, operation) expenses. On one hand this proportion seems to be too low, on the other hand it was preceded by significant tariff rises exceeding the inflation rate, and causing growing social loads to a big part of the local population. Even if it is not the task of this paper we have to underline, that the main changes that needed to get closer to a more liveable urban life are not depend just on economic instruments but rather on policy, planning, and organisational steps like radical zonal speed limits, transport and tariff associations between different actors, better control on existing rules (restrictions, bus lines, parking), priority in planning and in construction for pedestrians, for public transport on the surface (including trams), better circumstances at stops and changes P+R parking facilities and a better road structure to make possible to push out the car traffic from defended zones etc. The economic instruments can not support but existing policy decisions.

The BKV as an enterprise able to react to but the existing regulations and price rates. For the enterprise practically all tram operation is more expensive than the operation of bus lines, and even if there are long-term plans, practically the tram lines are closed (ceased) one after the other. A little bit different case is the new construction or the rehabilitation of tram lines, as there are possibilities to gain support for such actions as same as for trolleybus purchasing, or changes of bus motors for environment friendly ones. The source of these supports are the Environment Fund that collects among other production fees, environment fines and other state sources and redistribute the money to special purposes.

It is clear that in long term the huge support of the public transport is not tolerable. In the same time it is only a high level and comfortable public transport that able to attract drivers instead of using their cars and that kind of public transport is necessarily expensive. For a good solution the microeconomic tools are not enough: it also depends on land use (urban surface use) policy and its social acceptance. The economic tools have to be used parallelly with these changes and that evidentially need more time than just introduce a higher price.

## CONCLUSIONS

After a short survey on the role of the economic instruments that try to implement environmental policy into transport policy in Hungary, we have to make some simple statements.

The environmental policy that should be integrated with transport policy is exists or at least the more essential outlines and directions are clear.



The acceptance of such changes are more developed in urban transport policy level, and less in countrywide transport policy level. But even this level the acceptance is much better than in the practice, first of all in cases of bigger investments.

The great motorway investments or metro investments practically follow their own way, even there are ideologies to present that these investments serve the general environment and that is why they use public money to the construction. Relative to these expenses and future harms all other environmental improvements in the transport sector can be considered as marginal. There is also a danger, that environmental measurements become a kind of devise by what the greatest investors able to buy the social support to get support to their above-mentioned investments.

In the same time there is a significant development in the recognition of the importance of environmental arguments and also in measures that influence operation and through that present and short-term future environment. Many economic instruments belong to that category, like charges that are able to make more expensive polluting goods on one side and help with supplying vehicles or motors of better technology on the other. There is also an important role of that tools, that those introduce them begins to be proud of it and considers himself as a pro-environment warrior. We can only hope, that this self image determines also further thinking and acting.

We distinguished three elements of the Hungarian circumstances: the global lessons, the heritage of the relative underdevelopments and the heritage of the special past of state socialism, but these elements are also mirror of existing thinking in the sector. While deregulation and the free market can cause significant changes within each structure, it is hardly able to solve the transition from one structure to another. Those educated in command economy (*"more transport with less cost"*) could understand deregulation as free use of deteriorated and outmoded vehicles and infrastructure and that tendency evidently needs regulations to avoid that outcome. Similarly those educated in market economy (*"better transport with less cost"*) would use economic tools to improve phasis effectivity (less fuel, less time, less emission) hardly understanding that in long term even a theoretic *0-emission, 0-consomation 0-cost car* would cause enormous environmental problems and unbearable life conditions. Only those able to look behind economic targets thinking macro level and long term harmonise really environment and sector economy on policy level (*"better life with less transport"*) thus offering a frame where the economic instruments are able to promote real harmonisation targets.

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*June 30, 1997*

## **THE ROLE OF ECONOMIC INSTRUMENTS IN INTEGRATING ENVIRONMENTAL POLICY WITH TRANSPORT POLICIES IN HUNGARY**

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<b>INTRODUCTION</b>	<b>1</b>
<b>INTEGRATING ENVIRONMENTAL POLICY INTO SECTORIAL POLICY</b>	<b>1</b>
It's importance	1
The practice	1
<b>THE ROLE OF ECONOMIC INSTRUMENTS</b>	<b>2</b>
<i>Effectivity and sustainability</i>	2
<b>THE HERITAGE</b>	<b>3</b>
Clusters of heritage: global, developing- and command economy features	3
Changes and samples in developed economies	5
<i>User pay principle</i>	5
<b>BEFORE THE ECONOMIC INSTRUMENTS: PAST AND PRESENT POLICY PRIORITIES</b>	<b>6</b>
<b>THE GOODS TRANSPORT IN HUNGARY: TRENDS, MODAL SHARE, HIDDEN SUBSIDIES</b>	<b>9</b>
<b>THE PASSENGER TRANSPORT IN HUNGARY: TRENDS, MODAL SHARE, SUBSIDIES</b>	<b>14</b>
<b>CONCLUSIONS</b>	<b>16</b>
<b>REFERENCES</b>	<b>17</b>