THE INFRASTRUCTURE IN HUNGARY: SITUATION, VIEWS, ATTITUDES[1]

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1. INTRODUCTION

1.1 Beyond phenomena, opinions and views also have to be changed in order to understand relevant relationships

If we look at the different development conceptions about domestic infrastructure, we can realise that several proposals are based on experiences gained from *well-functioning* (or simply: functioning) foreign infrastructure systems. Although it is obviously extremly important to study, to know, such well-functioning systems, it should not be restricted to the description of actual functioning, but it should include a detailed analysis of those circumstances on which the functioning of the given system is based.

To adapt the adequate tools and methods it can be possible only when the real conditions and modes of functioning have been revealed in depth. The assumptions that the Hungarian economy is an *ill-functioning market economy* or that the existing structure of *deadlocked socialist development* may - after diagnosing the deadlock - be abolished in one stroke and a totally new start is possible, are both wrong and *misleading*.

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[1] English translation of an article published in Hungarian as: Fleischer Tamás (1990) Infrastruktúra: helyzetek, nézetek, szemléletmódok. Közlekedéstudományi Szemle Vol. 40. No. 5. pp. 193-196.

2. THE EFFECTS OF A MACROECONOMICALLY COORDINATED REDISTRIBUTION

2.1 The infrastructure suppressed by ideology

It has been well-known since the late sixties, that the Hungarian way of ecanomic development, declaring with its ideological stance the *priority of production* as the only source of value added, forced investment occurred in industry and first of all heavy industry. Productive investments draw away resources from consumption on one hand and from the *development of already existing infrastructure networks on the other.*

Criticisms served from the seventies as a point of reference in inter-sectorial plan bargains, while requesting for infrastructural branches (e.g. transport, communication, education, health) a larger share of budgetary sources.

2.2 The cause of sickness is the insufficient amount of money: "More money for the infrastructure!"

At the same time, a pseudo-objectivity appeared in sector-level desciptions of their actual economic situation. Whereas in previous reports only results were listed (which kind of establishments had been built and had put in operation), in the typical reports of the last decade an ever larger role was given to "frank accounts of the existing situation". These reports listed problems broken down to establishments and branches: means of production were old, replacement had been neglected, therefore there were regular stoppages in smooth functioning, total breaking down threatened etc. What was common in these reports, is that all of them suggested or even said it outright: the problem was that *the given economic branch had not had enough money.*

If somebody knows only the report of one single branch, he is ready to believe that the budget has neglected the said economic branch. But from a broader perspective it is evidently impossible that education and health, transport and water supply, manufacturing and agriculture all have been neglected, and at the same time - metallurgy and extraction, construction and energy sector need a reconstruction too, as previously neglected sectors.

It is clear from the above, that it has not be the special problem of infrastructure. Therefore the slogan that infrastructure should obtain more money is unfounded even if it can be proved true.

2.3 The "right" sector-level strategy: blackmail for more money by threatening with breakdown

A deeper analysis of the above reports made it possible to place the infrastructure into the framework of the national economy. Thereby the hierarchic, overcentralised, overpoliticised use of power and the centralizing-redistributing macroeconomic mechanisms had as their logical consequence the helplessness of all the economy. As a result of the above mechanisms, instead of concentrating on the rudimentary market and the consumer, both firms and the sectors as a whole concentrate almost exclusively on their share in the budgetary distribution. Therefore, *survival strategies* too are *linked to shares in the distribution process.* Those, who can prove their indispensability for the national economy, can catche the interest of the central distributor. The more severe the bankruptcy one can threaten with, the greater the chances are to secure the appropriate resources. In this competition, peculiarly, that branch has the larger priority which can *cause more visible harm with its being out of order,* and thereby make potential victims his allies.

According to this priority list, energy sector and heavy industry have better positions than manufacturing and/or agriculture: like *among services_productive servicing networks have more respectfull protectors than consumer ones.*

3. COORDINATED REDISTRIBUTION HAS A DISTORTING EFFECT EVEN INSIDE A GIVEN ECONOMIC BRANCH

3.1 Even within the infrastructure: "Give priority to production"

Within this logic it was important to differentiate between *the productive infrastructure* and the so-called "non-productive" infrastructure, what had previously been maintained by the already mentioned ideological varnish (the priority of production) and the whole edifice of socialist statistics and accounting system which were based on it: but until central distribution of resources is the decisive factor in obtaining funds, the distributor is constrained to make such decisions. It can be added that in the meantime "productive infrastructure" became the label of branches previously had been called *material services.* It is important to stress, however, that originally it had another meaning: and what is more important, it functioned also otherwise.

3.2 The infrastructure also got money when it was especially important

The above reduction of the infrastructure problematics into the logic of redistributive economic policy reveals not only the problem of distribution of money

among the economic sectors but also that of the *distribution funds within one or another given branche.*

Centralized power structures and the behavior of looking at upwards have their impacts on *further* distribution of resources too. Not entire industries/branches were simply misfavoured but within each of them *the consumers, the service sector were dispreferred*, i.e. the lower levels of the hierarchy, which cannot be seen from the top. At the same time, it is *important* an economically underpining hierarchic power were estalished in each branches. The radial elements of different networks (center - country center - subcenter) could be mentioned here, such as the one-way central radio and TV networks, hot lines in the telephone network, the establishments of wholesale trade; hierarchy was an important element of educational and health networks too (not even to mention defence and strategic industries that support it).

A further related problem is that the logic of hierarchic networks dominates the centralized model of *regional development too* and necessarily reflects in the structure of power in space as well.

Turning back to the distribution aspect of the problem, one should declare that it was not *infrastructure in general* which did not get enough money, but it can revealed selectively, which areas did and which ones did not get money. All the above could be analyzed inside the given branches too related to the mechanisms of redistributive resource allocation and not separately from that.

4. MARKET-COORDINATION AND DOMESTIC CHANCES OF INFRASTRUCTURE

4.1 Instead of distribution: "More market in infrastructure!"

Due to criticisms of the model of socialist command economy, it was revealed that several problems what planning couldn't solve despite its constant efforts, the autoregulation of the market solved them effectively. The task of government is not to substitute the market, but to secure its conditions.

The idea, that the problem area of infrastructure may be reduced to the general problems of the economy, resulted in a new set of suggestions. On the same way, like within the logic of distribution the slogan "more money to infrastructure" became preponderant, the principle of "more market in infrastructure" became dominant inside the logic of duality of state and market.

This principle is due, on the one hand, to a true recognition: nowadays there are no such self-regulatory economic mechanisms which would make unnecessary constant interferences. On the other hand, the suggestions rely on several concepts (such as: "*infrastructure as the engine of economy*") which are factually true for

functioning market-economies, but one cannot prove that they are the driving force necessary to make our present economy *functioning.* Instead, with references to marketisation and reforms, the unilateral shifting of burdens on the population began. This step is unilateral if it tries to involve the consumer's money into state-initiated investments without delegating the adequate decision-making authority. A typical example is the *urban development tax*, but several road-public utilities, telephone contributions, etc. behave similarly. But the path is unilateral even if it is not separated, at least on macro-level, from the principle of tying the source of financing to the task to be performed and does not involve a thorough wage reform which would mean *the real transfer of the disposal rights.*

Industries, branches which are competing today for money centrally distributed, will concentrate on the customer (search for its needs, compete for its money) if the preponderant part of resources too, originate from the customer. Until the state is financing an important services (by keeping wages low) through budgetary resources, market cannot assert its real effects, the correction of the state redistribution remains the only option - instead of restricting the role of state to the correction of adverse market effects.

4.2 Market environment is required for a real driving effect, for an effective engine role

In a functioning market-economy governmental infrastructure development has a pulling effect, and two main relationships assert themselves. Firstly, concerning the *very content of infrastructure: networks assist regional development*. This effect is characteristic for networks built by a state interested in boosting prosperity in general, local development in particular. But, as we have just mentioned, the state, being interested in centralized power, builds not such types of networks. The state-built networks do not serve the goal of versatile local cooperation, the enrichment of contacts, etc.

Another experience is the *pulling macroeconomic effect of infrastructural development as an investment.* In a market-economy in crisis, increasing demand becomes a pulling force through the outflow of wages that boosts production. In a resource-constrained socialist economy, however, infrastructure does not behave the same way as does in a market economy. To increase demand, which is unconstrained anyway, does not lead to prosperity, only the imbalance between demand and supply as well as inflation is increasing.

While treated in a separate way, infrastructure cannot be a pulling force in the sense of *being able to pull the economy out of its distribution-type mechanisms*. Quite the contrary: if infrastructural investments are increasing in the old structure,

the structure of the whole economy can be petrified for longer term than with a short term productive investment!

5. COORDINATIVE SYSTEMS ARE BUILT ONE ABOVE THE OTHER: MARKET IS ONLY ONE OF ITS LEVELS

5.1 There are both marketable infrastructures and externalities as well

The economic approach to the problems of infrastructural, regional and environmental problems lead to the concept of day-to-day management and financing, nonetheless the concept of day-to-day management was formulated in terms of microeconomy. Thus, the problems of regional management or school-building were based upon *return on investment calculations*, therefore, location - and resource - valuation problems became the subjects of profitability calculation.

On the other hand, if we want to understand the macroeconomic effects of infrastructural development, we have to cease to consider *the whole of infrastructure* as a market. I do not deny that several elements of the economic branches, generally called as infrastructure - the majority of *service* activities (e.g. trade, transport, communication, water and energy) - should essentially function in a market environment. At the same time there exists an activity of network creation, which has no direct links with calculation of market return. The latter is the infrastructure in the narrower sense of the term.

It is generally accepted that one cannot leave out of calculations such elements, which are not influenced, - or at least not strongly enough - by the logic of market return.

The economic point of view is so pervasive that such phenomena are called *extra-economic.* Some of their elements are called *infrastructure*, background industries, - in order to express that they reach beyond the logic of *return* both in time and space. Others are called *externalities*, in order to express that they do not fall under the system of financial return (their return occurs later or further away, to somebody else, or perhaps it cannot be measured by money, the increase of the value added has no sense at all.)

The case is similar with the category of *environment*, which, in a systems approach, means that from the point of view of the system examined only external relationships are existing between the system and its environment.

It became ever more evident that there are very important relationships between social-economic phenomena and the above-mentioned external factors which cannot be neglected, because of the danger of unrealistic, hence senseless calculations.

Previous methods tried to *internalise* externalities, i.e. to incorporate them into the logic of management and financial return. Cost-benefit analyses first tried to characterise external factors in monetary values but efforts failed to express the loss due to an accident, the value of life, that of comfort, clean air etc.

The other approach did not mean the incorporation of external factors into the one-dimensional system of monetary return but to *extend the system of economy,* to create regulatory loops around it. This is essentially the logic of the market economy, supervised by the state, that reacts sensitively on monetary flows but from a different value basis.

In order to make intelligible the autonomous regulatory loops of regional, infrastructural or environmental policy, which surround economy, one has to reveal processes materialising in these spheres. Here against research faces a specific problem.

Not only the names but to a certain extent even the characteristics of infrastructure, externalities, environment were determined from the point of view of a different, namely of the internal system.

Those characteristics which express the *divergences* from microeconomics are very useful because they make it possible to differentiate among systems. But, wanting to analyse externalities in their relationships, characteristics such as longterm return, unexpressibility in money equivalent, etc. are totally irrelevant: if we want to describe an ecosystem it is totally senseless to rely on such properties.

Perhaps it is not self-evident, but in the case of both infrastructural and regional development, one has to discard certain characteristics described above as important, because they do not follow their own system logic; and we have to search for other characteristics which could replace them.

The system-approach will provide further help by inserting the systems investigated into the context of not only the financial-management system but also of one-another.

5.2 What we need are stable boundary conditions and flexible feedbacks

In order to reveal interrelationships, in the following I shall compare individual systems as for their stability in time. *Boundary conditions* of the functioning of a system "A" can be represented only by another system which is *a structure*, a framework, a skeleton in its relation to system "A", whose functioning is more stable in time, whose changes are slower. At the same time the control of system "A", its feedback cannot rely upon a slower system than only a system with shorter cycles is

able to sense effects in time and to offer *information* on it, thereby react continuously on the original system.

One can formulate as a general law of evolution that the swifter system with shorter cycles is the more adaptive one.

Therefore it is very important that boundary conditions of a system follow the logic of a more stable system, but the signalling on functioning be based on swifter system(s).

The majority of the above mentioned systems can be arranged according to their cycle periods. The most durable system is that of natural endowments, of the environment, social structures are somewhat more variable, than come regional, settlement- and infrastructural networks. The latter function as condition, as "man-made" environment for production systems which on their turn are data for the world of business, commodity - market relations etc.

These rules of tendency have an important role when deciding on development priorities.

To use an (often misunderstood) expression borrowed from studies on infrastructural development, we have *follower-type development* when a more variable, more adaptive system determines a structure and distorts emerging elements of the slower system. In this way the internal balance of the slower system is upset but the system is unable to signal back quickly, the distortions accumulate up to the total collapse of the system. This is the case when the state directly interferes with production, and regional and infrastructural networks are adapted to the production (even more: development does not take into account natural environment and endowments).

5.3 To measure symptoms and to construct structures

The principle of necessary state interventions, that of the different partial policies should be the following: **to measure symptoms and to construct structures.** One has to prepare oneself to the perception and evaluation of signals but one should not interfere on that level. Such a superficial treatment is good for nothing, when the deeper lying causes remain. In this way one can only justify the necessity of further and further interference. (This is sometimes in the interests of interfering institutions and persons!)

Interference has to take into account the changes in systems which are more rapid than that on the level of the interference but which fit into the previous, higher order system (otherwise the latter system would be constrained to follower type

change). This requirement, evidently, cannot be always fulfilled, but the principle has to be acknowledged.

To return to our narrow area, evidently the one that can interfere with production with an *aim of market orientation,* but it is impractical doing it in order to trigger changes in production or in structures supporting it. A policy aiming at changes in production has to change the frameworks of production, i.e. regional and infrastructural systems and has to leave details to internal movements of the production sphere.

Generally, it can be said, that self-regulating systems are more apt to *fill structures.*

The *characteristics of government interference* into regional and infrastructural policy should be as follows:

- *taking into account the natural environment*, its likely reactions (this is environment orientation);
- only *by knowing development laws* of regional and infrastructural systems *can we change networks* (this is the leader-type infrastructural and regional development - or otherwise infrastructure orientation);
- recognising interrelationships between regional and infrastructural systems on one hand and the system of production and services on the other, recognising likely reaction of production (services) to structural change;
- *providing market conditions* for production and services as well (market orientation);
- *following actual reactions of production*
- in case of divergences, unintended effects, it's needed to review the whole system of relationships, possibly modify the original action on the level of man-made environment (but never by superficial treatment)

6. SUMMARY

In the Central- and Eastern European countries the neglecting of infrastructure first had an ideological basis, but the lack of interest has remained so far. While fighting for resources individual economic branches use the weapons and arguments of threatening with bankruptcy. If this state and the intra-sectorial systems of wastage cannot be changed, "modernisation" even with permanent reference to the market will lead to a wrong direction.

The author treats market, environment and their interference as a unified system and tries to draw conclusions about the theoretical frameworks of a manageable regulation.