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INDUSTRIAL ENTERPRISES
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IN THE HUNGARIAN
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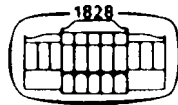
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Editor – in – Chief: Ádám Török
Editor: Erzsébet Viszt

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PREFACE

The 1994 Special Issue of the Review of Industrial Economics in English is meant to give an overview of the main research projects being carried out at the Research Institute of Industrial Economics of the Hungarian Academy of Sciences. This small research unit is consistently working on the industrial and microeconomic aspects of the Hungarian economic transition.

The common keyword for this collection of papers is “enterprise adjustment”. This type of adjustment has a major importance for understanding Hungary’s transition to a market economy, and it has several aspects hitherto not sufficiently analysed by the literature. This term includes or is closely related to topics such as enterprise management, foreign direct investment, industrial policy, privatization, labor relations and regional policy. All these topics are covered by the five papers included in our Special Issue.

The study by Ádám Török is based on a working paper prepared for the famous Blue Ribbon Commission, a consultative body with a spectacular record of scientific achievements helping Hungarian transition. One of the last research projects of the Blue Ribbon Commission gave an in-depth analysis of the quite good Hungarian performance in attracting foreign direct investment. This article tries to establish a linkage between industrial policy and the inflow of FDI with a thorough assessment of the structural and microeconomic impacts of this inflow on the Hungarian industry.

The role of managers in privatization is not subject to suspicion in Hungary, especially at a time of a slowdown of privatization. Moreover, the already five year long history of Hungarian privatization shows a certain one-sidedness of this process in the technical sense. A number of modern techniques of privatization have not been adequately implemented in this country. One of them is management buyouts (MBOs). The study by Judit Karsai gives an assessment of the technique itself, but it also explains why it has not gained enough ground in Hungarian privatization yet. Many firms to be privatized are in crisis, managers becoming owners could be both well prepared and interested in successful restructuring. Therefore MBOs could be an additional tool in accelerating the so much needed structural change in the economy.

Crisis management is the explicit topic of our next article. The author, Gábor Hovny, has done much work in adapting models of crisis management to the Hungarian transition environment. The specialty of his approach is the idea of multidimensional enterprise crisis which is, in fact, a theoretical concept very strongly embedded in the everyday practice of Hungarian industry. In case management wants to tackle only one aspect of enterprise crisis, it might make other parameters of the company even worse.

This is why the synthetic approach to crisis management suggested and analysed by the study is an inevitable element of micro-level restructuring.

Crisis management is a keyword for Hungarian regional policymaking as well. This is especially so in cases where regional and sectoral problems are combined. The study by Erzsébet Viszt offers a comparative international analysis of regional crisis management in the steel industry. It is quite interesting to see the extent to which former problems of the founding members of the European Coal and Steel Community arise in the current Hungarian steel industry, albeit on a much larger scale due again to the “multidimensional” character of the crisis.

Regional crisis management means an increased emphasis on labor market policies. Judit Ványai examines a primarily agricultural and mining region in Hungary, the county of Baranya, as a “textbook” case of crisis phenomena linked to backwardness and undercapitalization rather than to distortions in the structure of manufacturing. This analysis is also made in an international context, with one region in France and one in former East Germany. The latter example gives the study a special color because it becomes a challenging exercise in comparative cum regional economics as well.

A handwritten signature in black ink, reading "Adám Török". The signature is written in a cursive style with a prominent initial 'A'.

Editor-in-Chief

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Ádám TÖRÖK

Industrial policy and foreign direct investment (FDI) in Hungary¹

1. HUNGARIAN INDUSTRIAL DEVELOPMENT IN THE 1980S AND EARLY 1990S

1.1. Structural change and “de-industrialisation” (the changing shares of industry, agriculture and services)

A major achievement of the country's post-war development seems to be that the Hungarian economy seemingly became highly industrialized. At least this is the impression from macrostructural indicators. The share of industry within GDP reached 37.2% in 1980, the share of construction was 8.0%, agriculture and forestry had a share of 19.6%, transport and telecommunications 9.1%, commerce 9.7%, and other services 16.4% [*KSH Statistical Pocket Book 1989*, p.101.].

There were no significant macrostructural shifts in the eighties. In 1988, the respective shares of the different sectors within GDP were as follows: industry 36.2%, construction 6.5%, agriculture and forestry 21.1%, transport and telecommunications 9.2%, commerce 8.4%, other services 18.6% [*KSH Statistical Pocket Book 1989*, p.101.].

Figures for 1991 show a 26.8% share for industry, 5.3% for construction, 10.0% for agriculture, and 43.8% for all services [*Economic Survey of Europe in 1992 and 1993*. ECE, Geneva-New York, 1993., p.78.].

The macrostructural developments of the last years have been quite haphazard and erratic. An ever deepening crisis of most parts of agriculture and industry went hand in hand with the government's mostly poorly coordinated efforts to intervene in the “spontaneous” shrinking of several sectors on a case-by-case basis. Concentrating ourselves on material production for the moment, agriculture is a case very much in point.

In *agriculture*, the government's efforts have been focussing on the creation of a legal framework for transition from a cooperative-based property structure to a proper-

¹ This study is based on a working paper for the team working on the Blue Ribbon Commission's Research Project on “Foreign Direct Investment in Hungary”. The author wishes to express his thanks for the comments of Péter Balázs, Gábor Beke-Martos, András Inotai and Paul Marer, but he is responsible for all the remaining errors.

ty structure based on smaller private farms. These efforts have, however, accelerated the decline of agricultural production rather than stopping this decline.

A few figures to show the size of the crisis in the Hungarian agriculture:

- the total volume of agricultural output decreased by 0.4% in 1988, 6.2% in 1989, 9.2% in 1990, 15.7% in 1991 and (preliminary data) 33.6% in 1992 [KSH, 1993., p.32.]. The volume of agricultural output in 1992 corresponded only to 47.4% of the 1987 level;

- in the same period, the volume of sales of the main crops and produces changed at substantially different rates: wheat -60.4%, barley +0.2%, maize -30.3%, sugar-beet -30.3%, potatoes -83.6%, sunflower seed -41.4%, vegetables -84.2%, fruits -84.3%, cattle for slaughter -36.4%, pigs for slaughter -58.4%, poultry for slaughter -56.1%, cow milk -28.0%, eggs -61.3% (calculations based on preliminary data for 1992, but the scope of the distortion is low) [KSH, 1993. pp.32-33.].

Recent structural trends in the Hungarian industry also speak of a process of almost continuous shrinking. Industrial sales and output in the 1980s showed only a modest growth already in the first half of the decade. The deep crisis in Hungarian industry beginning in 1988-1989 was distributed quite evenly across the Hungarian industry. *This is why there was not much structural change in industry during the 1980s.* This is true as well in the macroeconomic as in the microeconomic sense. This also means very few firms could show outstanding performances of growth.

The branch structure of gross output did not change dramatically during the 1980s in most cases. Some energy- and capital-intensive sectors (mining, metallurgy) even managed to regain their share of 1980 in gross output in 1988 or 1989 after a temporary fall during the decade.

Favorable structural trends like that of the growing percentage of engineering had been also reversed by 1988-1989. The only technology-intensive branch of industry benefitting from macrostructural changes in the 1980s was electrical engineering. Its seemingly spectacular development was, however, mainly COMECON-market oriented.

Investment trends of the 1980s speak of an increasingly serious *undercapitalisation* of Hungarian industry. The bottom of the trend within the decade was 1988 for most branches. The volume of overall industrial investment was down by almost 20% from its 1980 level in 1988. Mining and the also highly capital-intensive chemical industry were the two sectors that got increasing bits of the shrinking pie of industrial investment.

The iron and steel industry was neglected by investment policy. The increasing undercapitalisation and the opening up of the domestic market of this industry for import competition was not followed by the corresponding phasing out of its redundant capacities. Most Hungarian steelmakers were unable to adjust as suppliers to the ambitious restructuring programs carried out by several privatized engineering firms in the country [cf. Nyers, 1993.].

An average share of the iron and steel industry in total industrial investment over the decade would probably not have been sufficient to stop the dramatic degradation of its capacities. Its rapidly falling share in industrial investment can be compared with its almost constant percentage within industrial output. As a result, the rapidly ageing capital stock was more and more exploited in the iron and steel industry but the relative share of its output did not even decrease within the Hungarian industry.

Separate figures for rouble and non-rouble exports are available in a *sectoral approach* only from 1986. The shrinking of exports to the COMECON region had started much before this trading system was finally dissolved. The process started in 1986-1987 with the decrease of the ratio *rouble exports/non-rouble exports* in most branches. This decrease accelerated during the "terminal status" of the agony of the COMECON system, i.e. in 1989.

A methodological note seems inevitable at this point. Separate figures for the rouble and non-rouble exports of industrial branches are given only from 1986 on in the Hungarian statistics. The explanation is the conceptual difference between *industrial statistics and trade statistics*. The Hungarian system of industrial statistics is based on enterprises belonging to a given sector. The *industrial statistics* register, for example, steel plates exported by an engineering firm as engineering exports. The same export item is considered iron and steel exports by trade statistics.

Even such a brief analysis of the main trends of Hungarian industrial development seems to be able to support the conclusion that *there was no sudden crisis* in the late 1980s. This means the external shocks were far from unpredictable. The slowness or even a certain reversal of structural changes together with slow output growth during the decade prepared the ground for the dramatic crisis.

A more detailed analysis of the *macrostructure of industry* shows a process of an evident dwindling of output. This dwindling of industry then leads us to the question of the *role of the state* in the restructuring process.

At this point of our study, a *definition* of the process we call "de-industrialisation" seems inevitable. In our view, "*de-industrialisation*" takes place when an at least *medium-term fall of the volume of output is accompanied by a definitive loss of industrial capacities*. The latter might mean the discontinuation of using productive capacities which could be restarted only at a significant cost (a special form of *investment*), a sizeable layoff of manpower going beyond a mere rationalization of production, or both. It goes without saying that a *significant loss of market shares in exports* is a crucial factor of "de-industrialisation", although losses in exports cannot be understood as a perfect equivalent of "de-industrialisation".

Another key issue in interpreting the "de-industrialisation" process is the combined outcome or "balance" of the loss of capacities and greenfield investment. We can speak of "de-industrialisation" only if this "balance" is negative, i.e. new capacities do not make up for lost ones. It has to be borne in mind, though, that *no new capacity is a close substitute of a lost one* which means the "balance" cannot have a perfect statistical interpretation.

Indexes of output have shown a marked decline for each sector in industry during the period 1988-1992 as well as for its last year. This across the board decrease is shown by Table 1.

Table 1
**Indexes of volume of output by sectors and subsectors of Hungarian industry
 (1988-1992), previous year=100**

Sector	1988	1989	1990	1991	1992
Mining	96.3	94.8	88.2	89.1	80.9
Electricity	100.1	102.2	100.2	92.0	88.5
Metallurgy	104.3	104.4	81.0	67.3	73.7
Engineering	100.0	100.2	83.8	65.1	73.2
Building mat.101.6	98.4	95.0	67.0	86.4	
Chemicals	101.3	96.1	94.6	81.5	86.4
Light ind.	100.2	95.2	88.3	75.1	83.5
Food ind.	97.5	101.0	99.1	90.3	87.4
All industry	100.0	99.0	90.8	78.5	90.2

Source: *Statistikai Havi Közlemények*, 1993/1. KSH, Budapest, March 1993., pp.17-23.

The size and the magnitude of the “de-industrialisation” process in Hungary can also be well seen from 1992 output volume indexes if the figure for 1987 (the last year of real output growth) is 100. The *decrease of the volume of output* during this six-year period was in the different sectors as follows:

mining:	42.4%
electricity industry:	16.5%
metallurgy:	56.2%
engineering:	60.0%
building materials industry:	45.0%
chemicals industry:	35.2%
light industry:	47.2%
food industry:	23.0%
all industry:	37.4%

The sectoral averages seem to indicate that Hungarian industry has collapsed. *This is true only for a few big and inefficient state firms*. More detailed trends of structural change show the presence of “distributed lags” in this process of apparent “de-industrialisation”. Our next table presents subsectoral data as compared to the volume of output observed in 1989. The basis year is the initial year of the transition process².

² The other reason we chose 1989 for the basis year is *methodological*: from this year on, Hungarian industrial statistics have a higher degree of intertemporal comparability than before. Figures of output include all firms with more than 50 of employment, and give a good representative coverage of those having between 21 and 50 employees. Therefore the figures of output have an *inherent downward bias* first of all in subsectors (clothing, metalworking, or the entire food industry) where small firms with less than 20 employees have an important role in structural trends.

Table 2
**Indexes of volume of output by sectors and subsectors of Hungarian industry
 (1990-1992), 1989=100; the structure of sales of Hungarian industry
 (in percentage, 1992)**

Sectors, subsectors	Volume indexes Years		Structure	
	1990	1991	1992	1992
Mining	88.2	78.6	63.6	3.21%
Coal mining	81.5	77.8	61.0	2.29%
Oil and natural gas prod.	92.2	80.3	84.5	0.48%
Electricity	100.2	92.2	81.6	0.93%
Metallurgy	81.0	54.5	40.2	7.04%
Ferrous metallurgy	82.8	48.9	34.3	4.09%
Aluminium metallurgy	83.0	71.0	56.8	2.46%
Engineering	83.8	54.6	39.9	18.46%
General engineering	86.1	62.2	49.7	5.27%
Transport equipment	69.8	40.2	26.0	3.71%
Electrical engineering	86.3	62.3	47.4	3.15%
Telecom. equipment *	89.7	52.9	44.5	2.60%
Precision engineering	89.8	46.6	22.8	1.14%
Building materials industry	95.0	63.7	55.0	3.51%
Chemical industry	94.6	77.1	66.6	28.26%
Crude oil processing	96.0	83.9	85.5	11.54%
Fertilizers, pesticides	79.4	46.7	32.0	1.41%
Rubber industry	79.3	55.4	41.8	0.41%
Pharmaceutical industry	103.1	71.3	53.2	3.88%
Light industry	88.3	66.3	55.4	12.13%
Wood processing industry	91.2	74.4	66.0	n.a.
out of which:Furniture ind.	95.8	76.5	62.5	n.a.
Paper industry	95.3	73.4	71.3	n.a.
Printing industry	88.5	70.7	61.7	n.a.
Textile industry	87.9	57.8	42.5	3.08%
Leather, fur and shoe i.	83.6	61.6	46.6	1.28%
Textile apparel industry	88.8	77.9	71.0	1.82%
Other manufacturing	n.a.	n.a.	n.a.	0.48%
Food processing industry	99.1	89.5	78.2	26.38%
Meat industry	96.7	92.7	72.8	5.06%
Poultry, egg processing	98.5	77.5	65.7	1.73%
Dairy industry	93.7	80.7	78.3	n.a.
Canning industry **	97.3	87.5	72.3	2.76%
Beer industry	105.6	107.2	112.4	n.a.

* Including vacuum and lighting equipment.

** Including the deep-freezing industry.

Source: for the trend figures *Statistikai Havi Közlemények*, different issues from the years 1990-1993. KSH, Budapest. (data compiled by Judit Kóczián); for the structural data *Statistikai Havi Közlemények*, 1993/1. p. 25. (our own calculations).

Table 2 also presents, as our point of reference for the analysis of structural trends, the structure of sales of Hungarian industry in 1992 (output figures are not available)³.

The overall picture has been changing quite significantly at the lower levels of the industrial structure. There was only one subsector (the brewery industry) with some (1.5%) growth in 1991 and more (4.9%) in 1992. *This was also the only subsector with growth along the period 1987-1992.* This only example is by far not sufficient for establishing direct linkages between FDI and industrial development or growth, but the brewery industry belonged to those sectors in which FDI led to foreign control of most firms in the industry already in early 1992.

Industrial averages, in fact, do not tell much because the main subsectors have performed in extremely different ways. Iron and steel, for example, was more or less able to resist structural pressures before 1990. Its output even increased by 4.6% in the 1987-1989 period. But the size of the decrease between 1989 and 1992 was 65.8%. Major producers such as the companies based at Ózd (OKŠ) and Diósgyőr (DIMAG, formerly LKM) even disappeared temporarily from the market. As a contrary example, the DUNAFERR metallurgy complex has been undergoing *spectacular modernization*. The cold rolling mill of this firm is already a joint venture with VOEST of Austria⁴.

Engineering has been a field with widely varying subsectoral performances. The formerly COMECON-market oriented subsectors were hit the most. In four of these subsectors, the vehicles, the electrical engineering, the telecommunications and the precision instruments industry the loss of output was between 27.8% (electrical engineering) and 48.1% (precision engineering) in 1991.

Figures of the decrease of output for the 1988-1992 period (75.1% for vehicles, 55.2% for electrical engineering, 55.3% for telecom equipment and 75.0% for precision instruments) show dramatic losses of output. This is tantamount to the *quasi-disappearance* of whole industries. This occurred only in some sectors while *overall de-industrialisation* did not take place in Hungary. Therefore the significant shrinking of whole subsectors has been the major element of the quite fast but rather one-sided structural change in the Hungarian industry. This is illustrated by in kind figures of industrial production. All figures are for the period 1989-1992.

Out of the 19 engineering product groups listed in our statistical source (*KSH*, pp.26-27.), there were only two, *household refrigerators* and *fluorescent tubes* whose

³ The same methodological remarks also apply here. In addition to them, the definition of sales has to be made clear as well: sales receipts excluding turnover tax (VAT), but including price supplements paid by the state and accounted by the firms as part of their sales receipts.

⁴ Technology change in the Hungarian steel industry can be illustrated with a few technological examples. This industry used the Siemens-Martin technology still at a 40% share in 1990, while oxygen converters gave only 50% of the output of steel. In 1992, on the contrary, only 3% belonged to the former and 97% to the latter, much more modern technology. During the same period, the percentage share of continuous casting grew from 76% to 83% in the industry.

⁵ The amount of *Diesel engines* produced for road transport decreased from 17 363 to 3 278. The output of *metalworking* lathes diminished from 943 to 68. The production of buses went down from 11 980 to 3 546. The output of household refrigerators (made first by Lehel and, after its privatization, by Electrolux-Lehel) increased from 390 333 to 482 131. The amount of spin-driers produced went down from 166 934 to 79 195. A considerable fall of the production of telephone exchanges: from 449 to 107. The manufacturing of radio receivers basically disappeared: decrease from 124 341 to 821. The output of color TV sets diminished from 501 719 to 243 485.

physical output increased between 1989 and 1992. The domestic producers of both product groups belong to major multinational corporations, Electrolux and General Electric which is a partial proof of the positive impact of FDI on industrial growth in Hungary⁵.

The *chemical industry* is another sector with very varied performances. Two sub-sectors (the rubber and the fertilizer industry) lost much of their output between 1988 and 1992. The fall of output was 56.3% for the first and an astonishing 72.8% for the second. The fertilizer industry registered a 41.2% drop in output in 1991 alone.

The petroleum processing industry performed relatively well, its output volume decreased only by 19.2%. The pharmaceutical industry was apparently much less performant with 49.5% of loss of output in the same period, but it is also true that this industry could preserve most of its high-level R&D base⁶. It is just this R&D base that makes Hungarian pharmaceuticals firms quite lucrative for FDI, although the recent Hungary-United States agreement on the protection of intellectual property rights makes investment in import-substituting, imitative R&D quite a losing bet for most Hungarian pharmaceutical firms.

The partial acquisition of the painting materials plant of TVK, the biggest Hungarian manufacturer of heavy chemicals, by AKZO of Holland has been a good sign of positive change in the heavy chemicals industry. This joint venture is one of the very few Hungarian companies accepted by General Motors Hungary as a regular supplier.⁷ AKZO-TVK supplies more than just a product: it helped GM install an environment-friendly paint shop in its Opel car plant in Hungary.

Light industry has been a sector in deep structural crisis. The microeconomic aspect of the crisis of the light industry also shows a very dramatic picture. A number of traditionally well-known textile companies gave up production (these include BUDAPRINT, BUDAFLAX, the Kőbánya Textile Spinning Works, the Sopron Cotton Works, the Hungarian Cotton Works etc.), and several medium-size furniture firms had to close down as well. The domestic output of wool fabrics decreased by 75% in 4 years. The same figure for cotton fabrics is about 60%.

The *food industry* performed relatively well, even in spite of the fact that its backward linkages became much weaker due to the spectacular decrease of agricultural pro-

⁶ A decline of output in a subsector does not necessarily prove it is in crisis. The good performance of the pharmaceutical industry, for example, is shown by its several successful privatization deals. Such is the partial purchase of the pharmaceutical firm Chinoin by Sanofi of France, where the final value of acquisition will depend on profitability achieved in the meantime by the joint venture still in Hungarian majority ownership.

⁷ This approach to domestic suppliers is markedly different from that of Suzuki Hungary. The comparison of the attitudes towards domestic subcontractors of the two major foreign investors in the Hungarian car industry could be quite instructive for understanding the motives of multinational investors one of which (in our case, rather Suzuki) seems to strive for market share while the major strategic target of the other is rather the optimization of the return on investment.

The Japano-Hungarian joint venture has set the target of increasing the share of Hungarian suppliers of all material inputs to 50% in one year. The differences in these attitudes vis-à-vis the suppliers can be mainly explained with the differences in marketing strategies. GM Hungary is assembling cars mainly for the Hungarian market, while Suzuki Hungary wants to become a competitive exporter to EC markets. This is expected from the trade-creating impact of the Association Agreement between the EC and Hungary. The agreement makes duty-free imports of the EC from Hungary conditional upon a predetermined level of value added in Hungary.

duction. The worst performers in this industry (the poultry and the dairy industry) "only" registered losses of output of 32.8% and 23.8%. Some subsectors of the food industry such as the vegetable oil industry or the sugar industry fared much better than even the best branches within other industries.

The food industry includes the best performing subsector of the entire Hungarian industry, the brewery industry. The brewery industry could benefit from two things both closely linked to the political and economic transition: 1. the fast increase of tourism, 2. the introduction of Western brands (Holsten, Dreher, Gold Fassl) manufactured on a licence basis in Hungary. It is interesting to note that this industry has been a preferred target of FDI: five out of seven major Hungarian breweries were sold to foreign investors already before mid-1992.

The growth picture of Hungarian industry is very clearly that of *shrinking production across the board*, although the speed of this process has been markedly different in a subsectoral comparison. Several subsectors have seen more than half of their output disappear since 1988 or, in some cases, just in 1990 and 1991.

Our experience with an array of Hungarian industrial companies has taught us that many fluctuations of industrial output could have reasons *very special to the Hungarian economic transition*. Several such reasons are behavioral, and are mostly very rarely mentioned or not at all in the "mainstream" literature on industrial economics.

Just one characteristic example can help understand the problem. The volume of output of the Hungarian industry was, in January-March 1993, only by 1% below its level in the corresponding period of 1992. There were, however, spectacular non-seasonal decreases in a few subsectors such as paper and cardboard [ISIC 2101] (-17.0%), detergents and cosmetics [ISIC 2424] (-27.0%), and cement [ISIC 2651] (-33.0%) [*Statisztikai...*, 1993. p.8.].

These subsectors have two things in common. First, their privatization was carried out in a quite negligent way. The formerly oligopolistic or eventually even limitedly competitive domestic markets of their products became de facto monopolistic because the foreign investor acquired most or all domestic players on the market. This was also the case when seemingly different foreign investors participated in the privatization of the same subsector – but they belonged to the same group or strategic alliance [cf. *Beszámoló...*, 1993., pp. 4-5.].

Second, the foreign owners of most or all firms in these subsectors tried to lobby for increased customs protection or the introduction of non-tariff barriers. The government has treated, however, import liberalization as an absolute priority. Therefore it did not yield to the pressure. In response to this, some of the foreign owned paper, detergent and cement manufacturers *temporarily lowered or stopped production*.

These decreases in industrial production seem to have much more a tactical than a strategic character, but their impact on the overall output picture in industry has been strongly negative. The motives of such behavioral patterns manifested by foreign investors in Hungary definitely belong to the scope of our research.

1.2. Privatization and restructuring at the firm level

The restructuring of private companies is not an industrial policy problem in most cases. The restructuring and the crisis management of state firms might, on the contrary, very easily become a policy-related issue. This is mainly true for bigger state firms playing a key role in the output and employment of their respective industries.

The restructuring of ailing state firms can be financed from budgetary resources only in a very few exceptional cases, like the 13 state companies (IKARUS, Dunaferr, the Pét Nitrogene Works, the Hungarian Aluminium Industry Co., RÁBA, Borsodchem, etc.) suffering from the consequences of the collapse of their traditional markets. Even in their cases, however, the government did not provide direct financial help, but it designed special financial packages comprising credit guarantees, debt-equity swaps and support schemes for interest repayment.

Privatization is a top economic policy priority in Hungary. Therefore the only feasible solution in many enterprise cases is privatization *prior to* restructuring. This means that the new owner will have to take care of the crisis management and the restructuring of the company. The price of restructuring including crisis management is always part of the privatization deal. If restructuring has not been done before privatization its price lowers the privatization value of the firm. If the former owner (the state) takes care of restructuring and crisis management, the cost of this will be (or should be) paid by the new private owner as part of a higher privatization price.

Privatization does not necessarily take place after the restructuring effort of the government. This means one could not find any new owner at all for the firm, because *the capital market would eventually not recognize the effort and money spent on restructuring and crisis management.* In case there is a new owner he or she might be not ready to pay for all the restructuring and crisis management carried out by the government. The most important reason is that the outcome of the restructuring and crisis management program would be probably only partly acceptable to the new owner.

If the firm is, however, sold in a poor financial condition, its sales price will be so low that the difference between the combined value of its assets or its theoretical market value and its sales price could cover the cost of restructuring and crisis management.

The condition of many Hungarian industrial firms is such that *even normal management practices usually include elements of restructuring and crisis management.* There are very few companies in the Hungarian industry not suffering either from financial, technological, manpower constraints, marketing problems, uncertainties of transformation or privatization, or simultaneously all of them. In addition to this, the very severe bankruptcy legislation has made restructuring and crisis management necessary even at some otherwise normally functioning firms.

Another aspect of the widespread necessity of restructuring and crisis management in the Hungarian industry is linked to takeovers by foreign investors. Such examples are the cases of Intercsokoládé (Nestlé), Lehel (Electrolux), Tungsram (General Electric), the Orosháza Glass Factory-HUNGUARD (Guardian Glass), Debrecen Tobacco Factory (Reemtsma) and Telefongyár (Siemens). *Companies standing out within Hungarian industry due to their efficiency and good management also became subject to some sort of restructuring and crisis management after their acquisition by multinationals.*

This meant a more or less complete restructuring of the organizational pattern of the company in question, a revision of accounting and bookkeeping systems, quality management, environmental and safety regulations. For most or all of these aspects of their functioning, most apparently successful Hungarian companies were much below minimal Western standards.

A case in point was Lehel-Electrolux, where the seller, the Hungarian State Property Agency had to spend almost all of its revenue from the privatisation of the firm for an extensive environmental cleanup operation. This operation was made necessary by the practice of the former management of dumping hazardous industrial waste in the soil on the company's premises.

We can distinguish between two types of crises hitting Hungarian firms that face privatisation. "*Strategic*" (or "competitiveness-linked") crises hit most Hungarian companies due to their unpreparedness to the use of modern management, production and accounting practices and their sometimes anachronistic structures. "Strategic" crises do not mean the firm is in danger of disappearing, but it still needs restructuring in order to adapt itself to modern practices of functioning and competition. Such crises can be called "strategic" because they are a constraint on the firm's *strategic options*.

"*Tactical*" (or "survival-linked") crises were, on the other hand, observable only at firms with acute financial and/or marketing problems. These were the crises needing immediate intervention in order to ensure the survival of the firm. Such crises can be called "tactical" because they are a constraint on the firm's *tactical options* (everyday management decisions).

The two types of crises have common organic roots in

1. the formerly secured access to traditional markets
2. the significant delay in introducing modern management, accounting and marketing techniques⁸ in Hungarian industrial firms and
3. the unclear efficiency criteria of the use of factors of production.

2. THE OPTIONS AND TOOLS OF INDUSTRIAL POLICY IN HUNGARY

2.1. Alternative definitions of industrial policy: approaches and strategies

Hungarian industrial policy had a decreasingly interventionistic character from the mid-1980s on. Several strategic goals of the immediately pre-1990 industrial policy and the behavioural patterns suggested by it for the government were accepted by the industrial policymakers of the new government elected in 1990.

Such common goals included privatization, the liberalization of entry to the Hungarian market, and the creation of a well functioning system of R&D financing for promising projects or firms. As a matter of fact, these goals and the industrial policy designed (or, more precisely, to be designed) to meet them represented a mix of three main approaches

⁸ With other words, the narrow understanding of firm-level modernization comprising only technological modernization.

to industrial policy: the “picking winners and/or losers” approach, the “resource allocation” oriented approach and the “framework-creating” approach. The proportions between the three components of this mix are, of course, not exactly measurable, but they seem to have undergone considerable changes in the 1990-1993 period.

In the first one year or two the “framework-creating” behavioral pattern was prevalent in the attitude of the Ministry of Industry and Trade. The ministry contained itself to defining a broad strategy for the industrial development of the country, and it was very careful to avoid interventionistic measures. This attitude was, first of all, politically motivated. The ministry wanted to show itself a counterpart of the former allegedly “dirigiste” industrial policymaking practices in the country.

The industrial policy tasks of the new government had dimensions different from those of its predecessor in scope and in size. These differences were linked to:

1. the much larger extent of privatization,
2. the new challenges arising from the almost complete liberalisation of imports and
3. to the definition of industrial and structural policy itself, with all its implications for the reallocation of resources for the R&D purposes of industry.

Privatization remained a major responsibility of industrial policy, but the creation of the State Property Agency (SPA) in early 1990 made it clear that no former ministry would be given the task of coordinating and carrying out privatization policy as a whole. The Ministry of Industry and Trade has participated in the transformation and privatization of industrial enterprises in a rather special role.

This role combined a *decisionmaking function* during enterprise transformation (due to the fact that the Ministry of Industry and Trade was the founder of most state-owned industrial enterprises) and a rather consultative role in the subsequent privatisation process already directed by the SPA. This “hands-off” approach to industrial policy manifested itself in the first industrial policy document presented by the ministry in late 1991. This document gave very little room to defining policy tools, and - with some evident simplification - it mostly wanted to say *what industrial policy should not do*.

The constraint of “non-interventionism” on industrial policy was meant to be put in conformity with an active role of industrial policy. This active role would have consisted of “picking up winners” the way modern industrial policies in Western Europe do, but the document gave only very general guidelines for sectoral structural policies. It emphasised the role of the state in orientating resource flows towards promising products, technologies or enterprises. This “strategy mix” had a very low share of sector-specific targets or tools, and it almost completely abandoned the traditional macro-level approach of former Hungarian industrial policies.

This strategy document was quite well received by the Hungarian scientific and industrial community. It did not go into fulfilment because a *wave of bankruptcies or deep financial crises swept through big state firms* of the metallurgy, the motor vehicles and the electronics industry. Enterprise restructuring and crisis management became the foremost task of industrial policymakers.

It became obvious by mid-1992 that industrial policy should redefine its major tasks and functions with more emphasis on picking some of the most promising winners as well as some of those losers whose disappearance from the country’s industry would have had very dramatic consequences on Hungarian industrial exports and employ-

ment. The changing scope of the ministry's policy effort was well demonstrated by the second industrial strategy document issued in late 1992. It used quite much from the industrial policy related experience of EC member countries in comparable situations.

We will deal with the scope of the new industrial policy and with its toolkit in subsequent subchapters. It has to be seen, however, that the Ministry of Industry and Trade has a very limited ground for action with respect to picking losers or winners, since it does not have any significant amount of financial resources to help restructuring big state firms. Therefore it has to perform a role of mediating between managements, banks and the Ministry of Finance.

This is why it could not really take any major step ahead in implementing its well formulated industrial strategy. Neither proved it able to pick up or simply identify those fields of Hungarian industry which could be prepared for integration into the context of European industry operating on the Single European Market. In spite of this constraint, it is certainly true that the ministry proved able to formulate its new policymaking role but it was less successful in finding the financial resources to support this role. Moreover, recent developments (referred to earlier in Subchapter 12.) might be showing a shift in the functions of industrial policy towards firm-level restructuring. *If this is true the "non-interventionist" stance of Hungarian industrial policy is eventually becoming less evident.*

2.2. The debate over "industrial policy versus economic policy"

The Hungarian industrial policy is, at least in 1993, not subject to serious criticism as far as its scope and the role of "interventionist" elements in its policy mix are concerned. Much more discussed is, on the other hand, the extent to which the ground for action or the effectiveness of industrial policy is influenced by economic policy in general. With other words, the lack of coordination between economic policy in general and industrial policy is quite often emphasized.

Three fields of economic policy deserve special interest in this respect. All three of them influence the competitive position of Hungarian firms, and should therefore be understood as *de facto* complementary elements of the industrial policy mix.

1. *Exchange rate policy.* The National Bank of Hungary has been consequently carrying out an antiinflationary monetary policy during the last three years. One of the main tools of this policy is the avoidance of any real devaluation of the national currency, whereas its real appreciation is tolerated. During the years 1991 and 1992 inflation as measured by the CPI was 10 to 15 percentage points higher than the combined nominal annual devaluation of the Forint.

This "strong currency" policy of the NBH is under attack from two directions. One of these is the "camp" of export-oriented firms including several major multinational companies present with significant productive capacities in Hungary. The interests of such firms are represented by the Ministry of International Economic Relations on the government side - voices from this ministry repeatedly stress the strong link between Hungary's rapidly deteriorating export performance and the exchange-rate-based loss of competitiveness.

Among the export-oriented enterprises, of course, *high value added* exporters might lose the most from the real appreciation of the Forint. Their opinion appears the

most frequently in publications of economists linked to Tunggram – General Electric and, to a lesser extent, experts representing General Motors and the Austrian paper manufacturer, the Prinzhorn group.

The other kind of pro-real-devaluation argument can be found in several publications of *Gábor Oblath* [e.g. *Oblath*, 1991.] with the most clarity. His argument is based mainly on trade policy linked considerations. In his approach, the too fast liberalization of imports in 1989-1991 was not accompanied by a corresponding strengthening of Hungary's GATT-conform barriers to imports. The average level of customs duties being already rather low (13%) without any significant legal way to raise it, and in a situation where – as Oblath's argument goes – there is absolutely no room for introducing other protective measures, the only feasible solution would be *eroding the domestic competitiveness of imports* with successive steps of real devaluation.

Both approaches have to be judged according to their meaning for the enterprise sphere, because their macroeconomic validity cannot be put in serious doubt. It is hardly questionable that an increasing part of so-called *competitive imports* (i.e. imports able to directly substitute domestically produced goods) could be effectively kept out from the domestic market with successive real devaluations, *but if and only if several conditions are jointly fulfilled*. Such conditions include

- a) a strong price elasticity (price sensitiveness) of domestic demand for imports (the *Marshall-Lerner-Robinson* constraint);
- b) an approximately absolute product-level (“qualitative”) substitutability of imports with domestically produced goods;
- c) a high level of price elasticity of the domestic supply: and
- d) serious inflationary expectations (partly linked to the possibility of further devaluations) on the domestic demand side.

The conditions mentioned above have to be united. If at least one of these conditions is not fulfilled, apparent domestic demand will not increase to a corresponding extent, and the difference between former and current demand for “competitive” imports will seemingly disappear from the domestic market. It will first try to convert itself into foreign currencies, and then either be transformed into temporarily forced savings (to become “unbound” whenever the constraints on imports are relaxed), or appear abroad as demand for purchases in foreign currency to be imported by tourists.

This set of conditions puts a serious constraint on the beneficial effects on “competitive” imports to be expected from real devaluations. On the other hand, more expensive “complementary” imports (of mostly semi-finished or investment goods and energy not available from domestic suppliers) will directly harm the competitiveness of domestic producers using them. The higher the share of such imports in all Hungarian imports and in the inputs of individual exporters the more any real devaluation will kill the price-based competitiveness of all Hungarian exports and the exports of low domestic value added products.

It has to be noted that the above arguments did not refer to the inflationary impacts of real devaluations and/or to their indirect (secondary) competitiveness-eroding effects.

2. *Labor costs*. The impossibility of making trustworthy regional comparisons of unit labor costs is demonstrated by the fact that the United Nations' recent Economic Survey of Europe (1992-1993) publishes [cf. pp. 107-108.] average national labor costs of European transition economies only in domestic currencies.

Several comparisons known from the press (but with unclear methodological backgrounds) put Hungarian unit labor costs generally at a level second only to Slovenia and significantly higher than the Czech or the Polish figures. According to one comparison, for example, average hourly labor costs are USD 1.82 in Hungary as compared to USD 24.87 in Western Germany, USD 19.26 in Austria and USD 17.30 in Eastern Germany on the one hand, and USD 1.40 in Poland, USD 1.14 in the Czech Republic and USD 0.71 in Thailand on the other [HVG, August 21, 1993. p.79.].

Our enterprise-level inquiries seem to confirm, however, that unit labor costs tend to lose their role as a primary source of comparative advantage for Hungarian manufacturing firms. Wage costs carry – independently from personal income taxes – an extra 58% cost burden consisting of social security contributions and so-called “solidarity” payments to finance unemployment benefits. *The relative level of non-wage type labor costs to be paid by the employer is the highest in Hungary among the countries of the region* [HVG, August 21, 1993. p.79.]. The share of employer-paid social security contributions within gross wages is above 50% only in Hungary, between 40% and 50% only in Poland, while the figures for Slovenia, Austria and Germany are below 25%. The Russian, Czech, Slovak and Romanian figures are between 25% and 40%.

The wide gap between wages paid to employees and labor costs for employers is becoming an important factor against FDI in Hungary, because wage-related incentives to employees tend to cost abnormally much to firms, and some foreign investors are not eager to finance the very inefficient Hungarian social security system. *This is not a dissuasive factor yet*, but the Hungarian government has to understand its influence on the competitiveness of

- a) Hungarian exports of commodities and services:
- b) Hungary as a target country for FDI.

The negative influence of high labor costs as compared to low wages (or the low wage content of labor costs) is made still worse by the strength of the Hungarian currency. It has to be seen as well that current industrial policy has very little influence on these factors of competitiveness. In fact, *Hungarian industrial policy has at its disposal very few tools for directly improving firm-level competitiveness*. It can introduce several policy tools helping the adjustment of the firms, but it has no practical influence on monetary, exchange rate policy or fiscal policy considerations all of which treat firm-level competitiveness as a macroeconomic variable with, at best, only a secondary importance.

3. *Competition policy*. Hungarian competition policy has become considerably more active in the last three to four years. The main role in carrying out competition policy belongs to the Office of Competition ⁹.

There are several points of more or less overt conflict of interest between the Office of Competition, the Ministry of Industry and Trade and the governmental institutions responsible for privatization. The main reason behind these problems is the lack of coordination between the strategic targets of different policies. The three policies in

⁹ This agency is responsible for the freedom of competition, and it has to enforce competition legislation. It can initiate lawsuits against dumping or other unfair trade practices, and it is expected to give strategic support to the Ministry of International Economic Relations when the latter cannot use its limited set of tools to protect the domestic market from “hit-and-run” type entry to the market.

question are *competition policy*, *import policy* and *privatization policy*. We are going to show that it is necessary that conflicts almost inevitably arise between one of them on the one hand and the two others on the other in case all the three policies are aimed at “mainstream” targets usual in transition economies. These “mainstream” targets are a far-reaching de-monopolization for competition policy, an almost complete liberalization of imports for trade policy and the substantial lowering of the state’s ownership share within the capital stock of the economy for privatization policy.

a) Competition policy might face a serious challenge if a foreign investor acquires a domestic manufacturer in a monopolistic position. This could be the case also if several subsidiaries of the same foreign holding (seemingly different firms) acquire different Hungarian competitors on the same market. If this occurs a *de facto* monopoly will be created on a hitherto competitive market. The foreign investor(s) will then be interested in maintaining its (their) monopolistic position also by trying to get a “waiver” from import liberalization for its products. Therefore the result of a seemingly successful privatization transaction might be an increasing pressure on competition policy and trade policy.

b) *Trade policy* (in the import field) could get entangled in conflict with the two other policies if privatization in a given sector or commodity group (e.g. consumer electronics) comprises sales channels rather than production capacities. In such cases liberalized imports might drive out domestic production from the market, and the combined effect of privatization and import liberalization could be very counterproductive in terms of the de-monopolization efforts of competition policy.

c) The objectives of *privatization policy* would be more difficult to achieve if antitrust regulation did not permit to sell an entire large firm in monopolistic control of the domestic market to a foreign investor, and trade policy did not provide protection from competitive imports. In such cases it may well happen that a domestic monopoly cannot be privatized, and liberalized imports might gradually erode the privatization value of the monopolistic firm.

The three cases can be summarized in the following way. A foreign firm exporting to Hungary is interested in a *weak trade policy protection* of the Hungarian market (low barriers to entry) and a *strong anti-monopoly policy*, mainly if there is already at least one incumbent and strong competitor on the market. If this foreign firm intends to participate or becomes interested in Hungarian privatization it might well try to acquire its strong incumbent competitor. In this case its pattern of interests will become diametrically opposed to the former one. The company will probably lobby for a *strong protection of domestic industry* and a *weaker antitrust regulation*.

2.3. Current industrial policy in Hungary

The second industrial strategy was presented in late 1992 by the then Minister of Industry and Trade Iván Szabó¹⁰. We consider this document our main source for giving a

¹⁰ One of the authors of this strategy, János Latorcai, became his successor in early 1993 when Mr. Szabó was appointed the Minister of Finance.

critical assessment of the targets and tools of the current industrial policy approach of the Hungarian government¹¹.

This strategy document is aimed at identifying the main trends of industrial development to be supported by industrial policy and the ones to be eventually changed by the government. The industrial strategy and industrial policy of the government are based on three sets of exogenous variables:

1. the trends of development for the main branches and subsectors by the year 2000;
2. the international background of Hungarian industrial development by the year 2000;
3. the Hungarian technology and R&D policy¹².

The rapid opening of Hungarian markets to imports, the reorientation of foreign trade and the complete phasing out of subsidies to enterprises made substantial enterprise-level adjustment unavoidable in the short period between 1989 and 1992.

An array of enterprises could not respond to this challenge. This is why the "negative" aspect of structural change has dominated so far. Industrial policy has to react to such unexpected changes as a loss of 45% of industrial output between 1985 and 1992 or that about; 20% of state-owned industrial firms had to declare bankruptcy only in 1992.

These changes make a completely neutral industrial policy stance inadmissible and they call for a more active policy approach.

The basic scenario for *Hungarian industrial growth* consists of two periods. Period I (1993-1995) would be that of "*positive stagnation*" (i.e. a trend oscillating between stagnation and weak growth)¹³ following the first major steps of restructuring. The average annual growth rate of GDP from industry would be between 0 and 3% in this period.

The share of industry within the GDP of Hungary is expected to decrease further due to several factors. These factors include:

- the need for a definite and complete phasing out of capacities that became superfluous owing to the collapse of intra-COMECON trade,
- the shrinking of traditional sectors such as mining, metallurgy, textile, clothing, shoe industry as a result of increasing import competition, and
- the growth of services at a rate above industrial growth.

Period II (1996-2000, with annual growth rates between 4% and 5%) would be that of "*accelerated adjustment*". A massive qualitative change in the structure and the corporate behaviour of Hungarian industrial firms will expectedly take place only during the years 2000-2010. This will make necessary several major changes on the policy and the enterprise level as well. These changes should include:

1. the raising of the adaptability and the flexibility of Hungarian companies and entrepreneurs to international levels;

¹¹ This policy document is analysed from its official concise version published by the Ministry of Industry and Trade [*Ipari Szemle*, 1992 6. pp. 3-7.].

¹² This is treated as an exogenous variable in the strategy document. The reason is as follows. The elaboration of the Hungarian technology and R&D policy depends first of all not from the Ministry of Industry and Trade, but from the National Commission of Technical Development directed by a minister without portfolio.

¹³ The two terms used to characterize the two periods were coined by us. They were not used in this form by the authors of the document.

2. the clear definition of the structural and industrial policy related competences and obligations of the Hungarian government;

3. the substantial speeding up of the preparation for Hungary's EC membership both on the governmental (macro), and the enterprise (micro) level;

4. such an amount of foreign direct investment in the country which would give foreign capital a major role in helping the modernization of industry and easing the country's serious foreign debt constraint. The latter would help eliminate the serious bottlenecks in financing investment projects.

The *set of industrial policy objectives* as defined by the strategy document is three-fold in a time perspective. These objectives are practically identical with the objectives of the long-term structural policy of the Hungarian government.

Short-term objectives: the carrying out of a widespread and successful enterprise-level crisis management and restructuring effort across the Hungarian industry. As a result of this, the weakest points of the industrial structure would have to be eliminated.

Medium-term objectives: the stopping of "destruction without replacement" of industrial capacities and the putting of Hungarian industry on a growth path.

Long-term objectives: the elimination of the development gap between Western Europe and Hungary, a complete integration of the country and its industry in the international economy.

The major point of linkage between these different time horizons of industrial and structural policy is the role of the government in *fostering structural change*. This is an element of linkage between the strategic vision of the document formulated in a rather general manner, its more precisely defined sectoral view and the set of still not quite concrete policy tools it proposes.

2.4. Restructuring: general and sectoral aspects

The strategy document uses both a descriptive and a normative approach to assess the "structural future" of Hungarian industry. For a start, it gives a general outline of "promising" industries. In the next step, the document precises the expected role of these industries in the process of structural adjustment. The problem of policy tools enters the picture at this point.

The "promising" industries can be pinpointed, on the one hand, from the traditional (Heckscher-Ohlin-Samuelson-type) factor endowments of the economy. On the other hand, former or recent export success stemming from specific skills, natural conditions or other factors of production can help identify "strategic" competitive advantages as well [cf. Porter, 1990].

All these advantages, be they comparative or competitive, also have a decisive importance for the choice of Hungary as a target by major domestic investors. It has to be stressed, however, that cost-based comparative advantages seem to have more importance for "efficiency-seeking" investors whereas "market-seeking" investors would be probably more interested in much more broadly defined competitive advantages.

“Promising” industries include:

- industries and/or technologies using the high-quality agricultural basis of the country: biotechnology, industries offering high value-added food or nutritional products, the deep-freezing industry, the manufacturing of agricultural and food industry equipment;

- health-related industries and/or technologies including as the pharmaceutical industry, the medical equipment industry, the production of integrated health care systems, the manufacturing of non-synthetic drugs;

- the aluminium industry based on the domestic availability of bauxite;

- several “upstream” activities of the motor vehicles industry: electronics for cars, the manufacturing of leather and artificial leather products, the production of paints, the manufacturing of plastics, eventually the glass and the rubber industry;

- the furniture industry, first of all in its niches to be exploited with a high intensity of skilled labor;

- the clothing industry (costumes, designer or customer-tailored products).

The sectoral picture drawn by the document presents probable “success” and “failure” industries on different time horizons. *The strategy has an undoubtedly strong sectoral bias which seems to introduce some inconsistency into it.* The document repeatedly stresses its commitment to avoid sectoral policies, but its still quite sector-oriented approach still provoked quite much criticism.

The sectoral approach can be only limitedly accepted as a framework for forecasting. The marking of some sectors as “success” ones, for example, cannot mean that all or most enterprises in these industries are necessarily likely to succeed. The reverse is true for the “failure” industries as well.

“Success industries” include the following sectors for the different time horizons of the strategy.

For 1995:

- agriculture-related industries;

- the pharmaceuticals industry;

- the manufacturing of plastics;

- the printing industry.

For 2000:

- agriculture-related industries;

- engineering subsectors including the agricultural machinery industry, the electric appliances industry, the household appliances industry, the “upstream” industries (backward linkages) of car manufacturing;

- the pharmaceuticals industry;

- the fine chemistry industry;

- the clothing (confection) industry;

- non-consumer electronics;

- the construction and the building materials industry.

For 2010:

- the food industry (biotechnology);

- the pharmaceuticals industry;

- the clothing (confection) industry;

- the agricultural machinery industry;

- the construction industry;
- the non-consumer (professional) electronics;
- the fine chemistry (with special respect to cosmetics);
- the environmental industries.

Only two "temporary success industries", the printing and the plastics industry are supposed to leave the group of "top performers" by the year 2000. The prospective expects the creation of a more or less definite set of "success industries" by the year 2000.

The first rapid period of structural change is supposed to end by the late 1990s, at least in the approach of the industrial policy document. In the following decade, only "embryonic" industries such as biotechnology and environment-linked industries would be able to join them.

The emergence of several "high-speed" sectors in Hungarian industry between the years 1993 and 2000 would suppose not only a major reversal in the as yet very unfavorable rates and trends of investment, but also a continuing disappearance of crisis sectors. Some of the latter were also identified by the strategy document.

The "failure industries" are presented as follows:

For 1995:

- mining;
- metallurgy;
- the precision instruments industry;
- the building materials industry;
- the microelectronics sector.

For 2000:

- mining;
- the steel industry;
- the textile industry;
- the telecommunications industry.

For 2010:

- mining;
- the steel industry.

There is a remarkably fine distinction between "metallurgy" for 1995 and "steel industry" for the later years. The reason is the aluminium industry seems to have some chances of international adjustment. It can be added to this that a promising sign in this respect is the integration of part of the Hungarian aluminium industry into the Alcoa group, due to a USD 50 million worth FDI.

Only one industry (building materials) is supposed to move two categories (from the "failure" sectors to the "success" cases) in 15 years. The industries with formerly strongly COMECON-oriented market patterns are expected to accomplish their restructuring only after the year 2000.

Mining and steel are expected to stay partially alive as crisis sectors. This will probably be the case everywhere else in Europe, especially in the EC countries. The assumption that they would still exist in 2010 in Hungary seems to mean that the government will want to keep alive some mining and steel firms out of strategic considerations. If it does so, however, it will have to provide these sectors' with some resources for survival. This is one of the proofs why the idea of a completely "non-interventionistic" Hungarian industrial policy seems to be rather far from reality.

2.5. Instruments in the industrial policy's "toolkit"

The macro-level restructuring process is thought to be carried out mainly not by the government. The general (i.e. not industrial policy specific) set of tools to be used if this "moderately active" governmental approach to the microsphere is applied would consist of four broad categories:

1. the creation of a microeconomic environment with several incentives to innovation;
2. the financing of governmental programs of technology development;
3. the creation of a modern business infrastructure; and
4. the government's effort to set up a network of "background" services for firms in fields such as marketing, human resources management, finances, training etc.¹⁴

A much larger set of industrial and structural policy tools could be used by the government. The strategy document stresses that the use of some of them would go beyond the scope of industrial policy in the narrow sense. The industrial policy toolkit to be used by the Hungarian government would consist of three *specific* sets of tools:

1. "*transitional*" tools helping the adjustment of industry to the competitive ("market economy") environment. "Transitional" tools include, first of all, privatization and the management of productive assets to be held durably by the state. These tools are not analyzed here because they belong more to the scope of specifically privatization-related research. Moreover, their use is more and more confined to the State Property Agency and the State Assets Management Corporation.

2. "*strategic*" tools applied in order to fulfil longer term industrial policy objectives. "Strategic" tools do not exist for their major part yet, but their creation is envisaged by the strategy document. The "strategic" tools include 1. *investment incentives*; 2. *incentives to entrepreneurs*; 3. *technology policy*; 4. *export incentives*; 5. *the protection of the domestic market and producers*; 6. *employment policy*; 7. *regional policy*; and 8. *the development of infrastructure*.

3. "*regulatory*" tools at the disposal of the government for application in crisis ("emergency") situations and/or for maintaining the normal functioning of the market. These tools are linked to the Ministry's regulatory and supervisory functions much more than to its role in policymaking. Therefore we do not tackle these tools in this paper in detail.

The role in restructuring of each of these tools cannot be underestimated, but the policy aspects of their application are not always clear. For instance, fields 3 to 8 are regulated mainly by other governmental agencies, and the Ministry of Industry and Trade has first of all a consultative role concerning them.

It is clear that the so-called transitional tools will have the most direct impact on FDI in Hungary, but it has to be understood that an increasing part of industrial FDI will be "greenfield" type investment. This will be strongly influenced by the general *invest-*

¹⁴ The government is working on the concept of creating independent consulting services such as productivity, quality or logistics centers based on foreign models and partly financed from Japanese, Dutch, German etc. resources if these could be made available. These institutions would serve the enterprises on a non-profit basis, providing them with efficiency-increasing services in most fields of their activities.

ment climate in the country, and the “strategic tools” could be effective in improving this climate and making it increasingly lucrative for foreign and domestic investors.

In the field of *investment incentives*, fiscal measures have and will have the priority. New incentives would include

- changes in the depreciation system favorable for new fixed capital investment;
- tax incentives for some kinds of investment in line with general industrial policy and restructuring objectives;
- credit support schemes for certain types of investment.

This fiscal package will try to solve the rather *controversial issue* of the flow of funds for investment from household savings to the enterprises.

High banking costs and the banks’ growing reluctance to take credit related risks have created such a situation where interest rates for credits with one year maturities (or eventually, but very rarely more) are 2 or 3 percentage points above the rate of inflation (measured by the CPI), whereas interest rates for household deposits with similar maturities are 4 to 6 percentage points below the inflation rate.

In addition to this problem, several commercial banks are clearly not very interested in accepting household savings, because they cannot normally reinvest them owing to the frozen situation on credit markets. Some of the banks go on lowering interest rates for household savings, while there are no or only very little corresponding trends in interest rates for business credits.

Industrial policy should give some thought to the creation of investment institutions operating separately from banks. These specialized investment corporations would take deposits from or sell their shares to small investors (households), and use their capital for enterprise restructuring.

Investment incentives include a priority treatment of foreign direct investment. There is no proposal aimed at enlarging the preferences already offered to foreign investors¹⁵. On the contrary, the Hungarian government is examining the possibility of changing the system in order to make it more discretionary.

¹⁵ A joint venture (JV) is entitled to a tax allowance of

- a) 60% in the first 5 years and 40% in the second 5 years (between the beginning of the 6th year and the end of the 10th year) of the period when all the following conditions are united:
 - more than 50% of annual sales generate incomes from production;
 - the amount of equity capital is not less than HUF 50 million (approx. USD 0.6 million) with a foreign share of not less than 30%.
- b) 100% in the first 5 years and 60% in the second 5 years (between the beginning of the 6th year and the end of the 10th year) of the period when all the following conditions exist:
 - more than 50% of annual sales generate incomes from activities described in Annex 4 of this law;
 - the amount of equity capital is not less than HUF 50 million (approx. USD 0.6 million) with a foreign share of not less than 30%. [*Corporate Tax Law, LXXXVI./1991., Chapter III., Par.12.(1.)*].

The Annex 4 of the Corporate Tax Law lists 15 types of products or activities with all the codes of products or services whose suppliers are entitled to the favourable tax treatment. These 15 groups of products and services are: 1. electronics products; 2. vehicle components; 3. machine tools; 4. machinery and equipment for agriculture, forestry and the food industry; 5. mechanical components; 6. products used in packaging; 7. pharmaceuticals and agrochemical products; 8. protein-based feeding stuff; 9. special food products; 10. all items under headings 1 to 9 produced on a subcontracting basis; 11. genetic material or breeding stuff; 12. special agricultural products; 13. tourism; 14. special telecommunications services; 15. products and services for environment protection.

According to as yet unpublished concepts, the sectoral preferences would be abolished, and the minimum limit for FDI enabling the investor to apply for corporate tax preferences will be increased 2 or 2.5-fold. The government will have a right to take a case-by-case approach in decisions about corporate tax preferences to be offered to foreign investors.

The reason is the fiscal impacts of some excessive incentives for foreign direct investment were evidently negative. These preferences were probably not the main attractor of foreign direct investment to the country, since *multinational firms do not normally consider high-level exposure to corporate taxation an absolute behavioral priority*.

The new package would include, in the first place, the conclusion of investment protection (asset protection) agreements and agreements on avoiding double taxation with the highest possible number of countries with which such agreements are still missing.

In the field of *incentives to entrepreneurs*, the "strategic" tools include new support schemes for SMEs. They will be welcome by the Hungarian business community. Although there are already about 30 different preferential credit or support schemes in the country, most of them are practically inaccessible for smaller entrepreneurs.

Most of these schemes consist of refinancing credits with only limited use. These credits are offered by the National Bank of Hungary together with World Bank credits and foreign credits open only for imports from the creditor country.

As a fourth possibility, the Hungarian Foundation for Entrepreneurship Development also opened a preferential credit line of HUF 6 billion (USD 70 million) in 1990, but this was just one action. Finally, the so-called START credit line of HUF 3.5 billion (USD 40 million) was opened in 1991. Due to its favorable conditions, it was completely used within a few months.

The amount of preferential credits open to entrepreneurs in the years 1990 and 1991 was about HUF 30 billion (USD 400 million) altogether, and they used about half of it. These credits are managed by commercial banks, but they mostly do not commit their own funds to these credit lines. This fact already shows that the lack of resources for investment and entrepreneurship is only partly a real fact if the conditions of access to credits are far from lucrative.

There are two main reasons for the mismatch between the excess liquidity of banks and the excess demand for credits of the entrepreneurs. First, the banks charge very high rates of interest due to their high margins (operational costs). A not less important reason is that owing to the apparently high risk of credits to small entrepreneurs, collaterals requested by banks are enormously high.

If, for instance, they include real estate owned by the debtor, the nominal value of the collateral might be 1.5 to 2 times higher than the amount of credit. Such problems are behind the fact that several major entrepreneurial credit lines are very much underutilized. Best known examples are credits with National Bank refinancing, and the so-called Existence Credit.

Other schemes for supporting SMEs are outside the banking sphere, but the application of most of them is still at best in the initial phase. These schemes have been proposed by the Ministry of Industry and Trade and accepted by the government, but most of them have not been introduced. The reason is problems and conflicts of competence between the ministries, but also the lack of the necessary minimum of financing.

These schemes would include, similarly to British, Dutch, Finnish or Spanish examples from the 1980s

- preferential credits or credit guarantees for startup firms;
- the creation of the institutional background for the supply of venture capital;
- state participation in the raising of venture capital (e.g. through the purchase by state-owned investment corporations of special "venture capital" shares issued by new firms);
- the creation of special funds or support schemes for innovation and R&D;
- special support schemes for energy-saving investment;
- support for installing computerized accounting and management assistance systems at startup firms;
- the establishment of a banking network able to assist SMEs and specialized to help them.

The "strategic tools" related to *technology policy* have to be based on a consensus between the economic ministries of the government and the State Committee for Technology Development. The latter is a governmental agency in charge of coordinating and partly financing R&D in Hungary. An integrated national system of R&D has to be created out of the hitherto segmented university-based, academic and industrial networks.

The Ministry of Industry and Trade does not have significant resources for financing R&D, but it already has two specialized agencies for such a purpose. In any event, the competences of this ministry and the State Committee for Technology Development seem to be overlapping in R&D policy issues which makes it quite difficult to make R&D related policy tools a really integral part of industrial policy.

3. INDUSTRIAL POLICY AND FDI

3.1. Should FDI be a tool or a target for industrial policy?

The combined amount of FDI in the Hungarian economy seems, according to several estimates, to have reached USD 5 billion in mid-1992. Our estimate is that approximately 60% of this is in the Hungarian industry [the figure given by the SPA is 66%, *Figyelő*, September 16, 1993., p.9.], but with one important complementary remark. It seems that this share calculated on a *stock* basis conceals the fact that the share of industry in FDI *inflow* has significantly oscillated during recent years.

This share peaked, together with the amount of annual inflow of FDI into the Hungarian industry, in 1991 when it reached 70%, and the 1992 figure was already down to 48%. In the first half of 1993 this percentage share was only around 40%, so its trend seems to be a downward sloping one.

Table 3
**Inflow of FDI in the Hungarian industry by sectors
 (1990 - 1993 [I-VI.]), in million USD**

Sector	Year			
	1990	1991	1992	1993*/
Mining	3.2	9.6	2.4	1.1
Electricity	-	0.1	15.5	0.0
Metallurgy	31.6	31.6	25.8	5.1
Engineering	235.8	579.4	46.4	23.4
Building mat.	102.8	170.5	8.0	9.3
Chemicals	98.1	181.6	43.7	9.3
Light ind.	155.1	208.0	16.6	10.0
Other ind.	6.3	9.0	1.4	1.0
Food ind.	96.5	458.2	54.9	13.1
All industry	729.4	1641.5	236.2	72.8

* First half of the year.

Source: computations by Judit Zsarnay from Statisztikai Havi Közlemények, CSO of Hungary, 1991/10, 1992/12, 1993/7; *Gazdaságstatisztikai Évkönyv*, CSO of Hungary, 1993.

The table clearly shows that the engineering industry is the priority sectoral target for FDI in Hungary. The light industry has lost much of its attractiveness for foreign investors, whereas the most capital-intensive "smokestack" sectors have been practically neglected by foreign investors. The metallurgy industry seems to be an exception to this general statement, but it has to be borne in mind that two major FDI-related transactions in the most depressed steel industry areas of Northeastern Hungary have collapsed and most of the foreign capital invested there has been withdrawn.

The sectoral targets of FDI in Hungarian industry will have to be analysed on the enterprise level. The listing of some major FDIs in the Hungarian industry will make it possible to discern at least one major structural difference between the behavioral patterns of FDI in the Hungarian industry and other countries of the region.

It could be observed already in the 1970s that early FDIs in each East European country that authorized them were concentrated around only one major FDI in each target country. This focal point was the INA-Dow Chemical JV in former Yugoslavia and the Olcit JV in Romania. This tradition was continued in the early 1990s by the Czech Republic (Skoda-VW) and Poland (FSM-Fiat). Both of these countries still have more than the half of FDI in their industry just for one JV (both in the passenger car industry).

On the contrary, the Hungarian picture is much more dispersed. If we take the example of the passenger car industry again: the combined value of the four major FDIs by heavyweight multinationals (GM, Suzuki, VW-Audi and Ford) is USD 753 million. This is definitely less than the amount expected to be invested by VW in Skoda, and about 40% of the Fiat investment in FSM of Poland.

The picture from this methodologically not unquestionable table seems to be still quite convincing for our industrial policy oriented argumentation. As opposed to the already mentioned other East European cases where Citroën, Fiat and VW equally

Table 4
FDIs in the Hungarian industry
 (transactions amounting to more than USD 50 million)

Engineering	
Sector, Hungarian/foreign firm	Value of FDI, mn USD
Tungsram/GE	350
RÁBA/GM	250
Audi	200
Suzuki	180
Ford	123
Westel/US West	55
IKARUS/ATEX (Russia)	50
Lehel/Electrolux	50
Building materials	
Hunguard/Guardian Glass	120
Food industry	
NMV/Ferruzzi, Unilever	120
Debrecen Tobacco/Reemtsma	68
Szerencs/Nestl,	55
Sugar refineries/Ferruzzi	50
Veszpr,m Dairy/Unilever	50
Paper and packaging materials industry	
Paper mills/Prinzhorn	132
Compack/Sara Lee	100
Tetra Pak	50
Aluminium and chemical industry	
Chinoi/Sanofi	75
Oxig,n-Dissousg z/Hoechst	70
Köfém/ALCOA	50
TVK/Columbian Chemicals	50

Remark: most of these figures coincide with information from other sources, but their methodological consistency is not confirmed, and the source of the table as it is indicated below is not a statistical publication. It is therefore suggested to use these data only as background information.

Source: *Magyar Hirlap*, August 16, 1993, p. 13.

wanted to make their FDI in Eastern Europe a specialized part of their worldwide production network¹⁶, many FDIs in the Hungarian industry seem to have only a local or regional importance. According to our terminology, they can be considered much more “market” than “efficiency” oriented FDIs. For example, GM Hungary produces cars mostly for Hungary and the neighbouring countries, Philips Hungary (too small to be

¹⁶ The French firm used its JV plant in Romania in the early 1980s as the sole production base of its not successful Axel model, Fiat builds the Cinquecento cars only in Poland, and Skoda has replaced SEAT as the down-market end of the Audi-VW-SEAT product line.

included in the table) VCRs for the region, with Nestlé, Electrolux, Suzuki and Prinzhorn being also mostly regional or domestic market oriented JVs in Hungary.

But this approach is misleading, since it compares only downstream JVs with each other. Contrary examples abound in the Hungarian industry:

a) GM Hungary is much more important as an upstream firm (engine manufacturer) serving the group's several other European car plants;

b) Ford Hungary (and Audi Hungary) are upstream plants as well, selling fuel pumps (and engines) to car assembly plants in Western Europe;

c) GE Hungary (Tungstam), Nestlé or Lehel/Electrolux (and Opel Astra cars made by GM Hungary can also be added to them) produce goods for Western exports that are absolutely identical to the group's similar products made elsewhere in Europe.

Examples a. and b. represent cases where West European assembly plants of multinational manufacturing firms *established backward linkages in Hungary through an FDI*. On the contrary, the Czech and Polish examples mentioned¹⁷ have two different things in common:

1. Both the Fiat and the VW projects created only forward linkages for their groups in Central/Eastern Europe. Both the FSM and the Skoda plants use much more Italian or German parts than the value of parts they export to Fiat or VW.

2. These forward linkages took shape in *the most downmarket products* of both multinationals. Using industrial economics parlance: one of their major motives for these FDIs might have been *to gain control over or to reduce the degree of contestability of their European markets "from the bottom"*, i.e. Central/Eastern Europe.

While examples a. and b. as well as the two major Czech and Polish cases represent situations of *vertical product differentiation and/or vertical intra-group integration*, examples c. are markedly different. They have an evidently *horizontal* character in the sense that the function of these Hungarian JVs of multinationals cannot be defined by their backward or forward linkages within the European network of plants of the group. They sell (the case of Lehel is a certain exception to this assessment) products in Hungary and abroad that are *completely standardized within their multinational group*, and being therefore perfect substitutes (*and perfect competitors*) of the identical products of the other European plants of the group. This means a high level of intra-firm integration for these Hungarian subsidiaries of multinationals.

With all the tribute paid to such positive examples, these cases are still far from general in the Hungarian industry but they have appeared at least. This is why there is no simple answer to the question concerning the "tool" or "target" type role of FDIs for Hungarian industrial policy. However, the existence of a dozen or so Hungarian JVs really organically integrated in their European "mother" firms provides one part of the answer. *These "showroom" cases¹⁸ have to be understood as targets for an industrial policy having a feeler for FDIs.*

¹⁷ We are aware that these few examples aren't representative either for Polish or Czech industrial policy or for FDIs in those countries. Their "test pilot" role and structural importance is, however, undisputed for those countries as well as for potential foreign investors there. If not for other reasons, then due to the exceptional size of these FDIs.

¹⁸ It might be interesting to reflect upon the fact that out of about 22 thousand productive JVs in the Hungarian industry almost always the same half dozen or so (GM, Suzuki, Audi, GE, Sanofi, Electrolux) are referred to as "success stories" in the country. Are other positive cases not widely known or do they have much bigger components of failure?

They can be tools as well in the sense that they can generate a widely perceived demonstration effect. Suzuki Hungary is a good example in this respect: the tough on-the-job training practices and the excessive expectations of loyalty of the Japanese certainly generated a hostile attitude in Hungary. Interestingly, this was less the case among their own Hungarian employees than among Hungarian firms having some kind of “Japanese option” for their future. Hungarian employees rapidly learned about an important “tradeoff”: Japanese firms are tough employers but, as a rule, they offer a much higher degree of job security than their European or American counterparts.

Less successful (or less demonstratively successful) JVs can serve Hungarian industrial policy as “strategic tools”: they can bridge gaps of financing R&D or investment projects. *As a matter of fact, no sharp distinction can be made between FDI targets and as tools for industrial policy.* Attracting FDI should certainly be made one of the targets of industrial policy. It is interesting in this respect that the fiscal and the industrial policy approaches to FDI regularly clash with each other within the government¹⁹. The trend in 1991 and 1992 was the “phasing out” of fiscal incentives for FDI, but slow structural change and balance of payments problems have helped the “industrial policy approach”.

Bertalan Diczházy, the Vice Chairman of the Board of the SPA recently urged, for example, the re-introduction of extensive fiscal incentives for FDI in Hungary with these incentives covering privatisation transactions with foreign participation [*Figyelő*, September 16, 1993., p.9.]. His argument is based on the desire on increasing Hungary’s competitiveness on the demand side of the FDI “market” (where, for example, the better geographical location of the Czech Republic has to be offset), but he also made a concession to the fiscal approach with stressing the need for increasing revenues from privatization.

So *attracting* FDI should be considered as industrial policy tool, but FDI already present in the Hungarian economy can be used as *tools* for fostering industrial development. Our last subchapter tries to tackle the problem of how FDI can effectively help the restructuring process of the Hungarian industry in the present and in the medium-term future.

3.2. The role of FDI in Hungarian industrial restructuring – a strategic view

If we use a “black box” approach for industrial FDI in Hungary and understand a foreign majority owned industrial JV as one single unit, we have to treat it in a context of cooperative and competitive relationships. Its cooperative relationships are the ones described with the terms “backward and forward linkages” borrowed from Hirschman, whereas its competitive relationships can be called its “horizontal linkages”.

These relationships can be competitive in more than one sense: the company competes for market shares (in the field of its forward linkages) with its competitors, but it

¹⁹ With some simplification: the *fiscal policy approach* tries to treat fiscal revenues as a priority, and it is therefore against using strong fiscal incentives to attract FDI. The *industrial policy approach* considers structural change and competitiveness increase as priorities, and wants to use FDI as one of the main sources of capital supply serving these priorities. In the second approach, an extensive use of fiscal incentives is part of the package.

can also use its backward linkages as competitive tools. For example: a JV can be more successful on the domestic market than its domestic competitor if it makes better use of its backward linkages (or has better backward linkages) than its competitor.

The foreign investor will have no special interest in helping the restructuring of its "target" firm in Hungary unless it is stimulated to do so. The above mentioned investment or FDI incentives could have such a stimulative effect. It occurs, however, quite often that the so much expected restructuring of the Hungarian firm by the foreign investor creates *other restructuring tasks within the industry*. This is the case when one of the reasons why the Hungarian firm in its original, state-owned form was not competitive was its dependence on uncompetitive suppliers. This set of "unhealthy" backward linkages (since the suppliers were not forced to become more efficient) is replaced by the foreign investor by its own input channels. The result is an explosion of crisis among the former domestic suppliers.

Such examples abound in the former complex system of input-output links between the Hungarian metallurgy and engineering industry. No exact figure can be given, but several privatization deals of Hungarian engineering firms (Ganz Hunslet, Lehel, IKARUS, Láng, and more than one chemical engineering companies) consuming much steel show that privatization almost necessarily led to significant cuts in their input links to the Hungarian metallurgy industry. These cuts might have served the foreign investors even in two respects: 1. they could create favorable backward linkages with providing their former suppliers with new market shares (the "market-creating" effect); 2. they could increase the efficiency of their production in Hungary owing to cheaper supplies (the "efficiency-increasing" effect).

Contrary developments can take place if the FDI is aimed at using Hungary as a jump-off point for entering the EC market (Suzuki is a typical example), because in such cases supply channels within Hungary have to replace some of the foreign investor's former ones. The ensuing backward linkages can be very strong and mutually beneficial in such cases, because the foreign investor does not really have a choice: inputs (to a certain predetermined extent, of course) *have to come from Hungary*. Therefore it has to make concessions to domestic suppliers (not in issues of quality or price, of course, but in securing a better access to capital and/or technology for the Hungarian partner) or acquire a partially domestic input basis²⁰.

The role of FDI in restructuring can be, in general, twofold, depending on the level of the restructuring process. This role can be more indirect than direct in *macroeconomic restructuring*, because the relative share of FDI in the productive capital assets of the Hungarian economy would hardly be higher than 30%, or at the order of magnitude of USD 10-12 billion (depending on exchange rates) even by the year 2000. Furthermore, FDI will be concentrated in a few regions, industries and probably also in a limited number of bigger investment projects or firms.

²⁰ This has been done by Suzuki as well: the Japanese firm "persuaded" some of its Japanese suppliers to transfer technology under favorable terms to the would-be Hungarian suppliers. In most cases, "satellite" JVs were created around Suzuki Hungary by these Japanese and Hungarian suppliers. There were attempts to do the same in the food industry where one or two foreign investors got the idea of securing the Hungarian agricultural basis for their production in the country by acquisitions. They could not do so, however, due to the unclear legal situation in the field of the privatization of land.

These FDI's could generate substantial spillover effects, but Suzuki type far-reaching spillovers are not likely to become the rule. It could be expected that further major investment projects in the *car industry, consumer electronics industry and the fine chemistry industry* among others will take place in Hungary, but their industrial and regional spillover-generating effects will greatly vary (cf. the difference between the nearly zero direct spillover on domestic subcontractors of GM Hungary or Ford Hungary and the much stronger spillover effect of our favorite example, Suzuki). Moreover, these FDI's will mostly be *greenfield investments*. Therefore they could only promote *macro-level industrial restructuring*.

Industrial policy could help FDI's accelerate the macro-level restructuring process by offering FDI incentives on a non-sectoral basis, but progressively increasing with investment size. It would be a great mistake to think that the dominance of big enterprises in the "socialist" industry of Hungary was a symptom of serious structural deficiencies per se. The problem was rather based on the fact that most of these firms were "money-guzzlers" and had no chance at all to become efficient under state ownership.

If, however, industrial policy wants to generate substantial and positive employment, technological and subcontracting-based spillovers in Hungary due to FDI's, it has to promote first of all the creation of several big industrial firms with foreign ownership. These FDI's together with the creation of their network of subcontractors would certainly help the macro-level restructuring process.

Exceptionally strong spillovers can be expected from such FDI's which are able to directly attract other major FDI's to Hungary. Due to the small size of the domestic market of the country, it cannot normally be expected that direct competitors would attract each other. For example: the fact that GM established an engine plant and an assembly line for smaller passenger cars in Hungary could hardly persuade VW or Ford to do the same thing, as it is hardly imaginable that Siemens would follow Philips in building a VCR factory in Hungary.

FDI's could be attracted to Hungary by such other FDI's which could create substantial *positive externalities* for them. To present it in a simplified little model: in Step One the Hungarian government uses FDI incentives to get a major multinational investor into the country for improving its telecommunications network. This modernization offers substantial positive externalities to other foreign investors, e.g. in industry. FDI incentives for new investors still add up to these positive externalities. "Synergic" positive externalities could result from the combined effect of FDI incentives and improved infrastructures.

Thus, in fact, those foreign investors could benefit from "synergic" positive externalities more than the others in Hungarian industry which would invest in the country in *Step Two, after the modernization of its major infrastructural* (financial, telecommunications etc.) *networks*, when still the same FDI incentives are offered by the government.

This does not mean, of course, that only latecomers could reap the benefits of a more actively FDI-oriented industrial policy, but it is probable that they could gain more from positive externalities. On the contrary, the first foreign investors in Hungary could acquire market shares less expensively than the latecomers.

Micro-level (enterprise) restructuring can be accelerated with the contribution of FDI's only as part of the privatization process. *The evident slowdown in Hungarian pri-*

vation makes this task a rather daunting one for industrial policy. It would go much beyond the scope of this study to analyse the perspectives of Hungarian privatization and the restructuring role foreign investors could play in the Hungarian industrial firms still open for FDIs.

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Judit KARSAI

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MANAGEMENT BUYOUTS IN HUNGARY

ABSTRACT

In the absence of road markers, management buyouts (MBOs) are paving their own way in Hungary. For example, in practice employee ownership nearly always means management ownership. Hungarian MBOs are not based on the deliberate application of well-established Western methods. Instead, they utilize techniques that were credit burdens, and thus increased risk, due to the general lack of capital; certain rigidity, traceable to employee participation, when effecting changes adversely affecting employees; or the danger of a company being quickly plundered, as a result of the low level of personal risk-taking.

MANAGEMENT BUYOUTS IN HUNGARY

In practice, the peculiarly Hungarian version of the MBO is definitely beginning to gain ground, albeit indirectly and nearly independently of government intentions. MBOs have particularly facilitated the privatization of those smaller or mid-sized firms, as well as larger state-owned enterprises breaking up into smaller parts, where the liquid resources of the managers and cooperating employees, together with credits attained on concessionary terms, were adequate to execute the buyout.

MBOs comprise those buyouts initiated by managers who then attain a determining role among the new owners. Deals, wherein the buyer is an already functioning company or the new ownership proportion of the managers does not achieve a controlling interest¹, are not considered MBOs. Those deals in which the attainment of ownership rights is delayed, temporarily limiting the exercise of those rights, can only be considered potential management buyouts. (Such are leasing and holding constructions.)

¹ The size of the controlling interest depends on the ownership structure. Where ownership is widely distributed, controlling interest may be assured with as little as 25 percent.

UNDER THE COVER OF OTHER METHODS

To date no official statistics have been kept in Hungary on management buyouts. Indeed, until 1992 not a single MBO, as such, had taken place. The adversarial atmosphere surrounding those company directors who had retained their positions, charges related to their political past and their role in the previous regime, and the demands for their removal, allowed them to participate in privatization only under the cover of other methods. Management buyouts are not an officially declared method of privatization; no regulation has been passed to control the attainment of ownership by managers. Management buyouts, though widespread in Western countries, have been insufficiently studied in Hungary.

By the second half of 1993 we could already see a few management buyouts taking place "in the open", most often in conjunction with, and complementing, employee buyouts. This phenomenon is partly related to the changing privatization strategy, which now exhibits a preference for domestic ownership, and is concurrent with a rather large proportion of personnel changes at the management level² and the coming of the elections.

In principle, analysis of Hungarian deals should be relatively simple as up to now management buyouts have occurred strictly within the framework of privatization. The State Property Agency and the Hungarian State Holding Company are the two organizations responsible for executing and auditing the privatization process, while representing the interests of the seller – the state. Neither entity includes in its breakdowns of sales separate figures for managers as buyers. Nor does the registered data reveal the proportion of managers' participation in the new ownership structure emerging from the buyout. Lacking such statistics one can only estimate in a "round-about way" the number and importance of management buyouts. (So far there have been no management buyouts through the stock exchange.)

Due to the magnitude of capital required, most management buyouts probably (could have) occurred in the framework of the self-privatization program designed for the privatization of small and mid-sized firms, and of large state-owned enterprises breaking up into smaller units. Of the approximately 700 companies included in this program, around 200 were sold off by the summer of 1993.

In the opinion of consultants representing the SPA and executing transactions in its name, nearly half of the firms sold under this program ended up in employee ownership. Employee buyouts, however, were almost without exception management buyouts - as demonstrated by the research conducted by Éva Voszka.³ Thus, it can be concluded that in the sale of approximately 100 small and mid-sized firms managers gained control of the privatized company. As firms sold in this manner represented 36 percent of the total revenue received by the SPA under the self-privatization program, it can be deduced that managers attained ownership of slightly more than one-third of the total assets privatized through this program.⁴

² According to the minister responsible for privatization, over the last three years more than half of the old management guard have left their positions. (Szabó [1993])

³ Voszka [1993/a]

⁴ Zsubori [1993], N.I. [1993]

Another possible, though inevitably imprecise, approach is to equate management buyouts with employee buyouts. If we suppose that in every employee buyout management acquires the ownership necessary to control the firm, then the number of management buyouts equals the number of employee buyouts. Unfortunately, there is no exact data on employee buyouts either. Only data from deals carried out on the basis of the ESOP law adopted in the summer of 1992 is available.

According to analysts, SPA officials and directors of consultancies and foundations, the number of firms sold to employees prior to the passage of this law can be placed at around 30.⁵ Complementing these figures with data from the SPA—according to which through August, 1993, 65 firms were sold to employees under the framework of ESOP⁶—we arrive at the same figure of 100 employee buyouts. (Table 1)

Table 1
Number and value of ESOP buyouts

Period	BUYOUTS				TOTAL
	01-12/1992	01-05/1993	01-07/1993	01-08/1993	01/92-08/93
Number	7	6	17	58	65
Value (HUF bn.)	2.13	1.12	7.52	12.91	15.04

Source: Szabó [1993] p. 52
Tények... [1993/a] p. 13
Tények... [1993/b] p. 35

Even today the aggregate ownership proportion held by employees within firms managed or wholly or partially sold by the SPA is quite small, just 3.4 percent. However, this proportion has been growing extremely dynamically in the past several months, tripling between May and August, 1993.⁷

Statements of leading SPA officials also indicate that ESOPs are beginning to proliferate. In recent months purchases by foreign interests have declined dramatically, while the number of those taking advantage of preferential payment terms has jumped substantially. ESOP has become the most common tool of privatization.⁸

According to projections, there is considerable demand for the application of the majority employee share ownership program in the privatization of mid- and large-sized firms - thus no longer just among small and mid-sized firms.⁹ The vice-chairman of the board of directors of the SPA stated that some of the underlying motivations for the attitude of the SPA towards ESOPs are "important political forces and recommendations by parliamentary representatives."¹⁰

⁵ Voszka [1992/a], N.G. [1993/a], N.G. [1993/b]

⁶ Tények... [1993/a] p. 13.

⁷ Tények... [1993/a] p. 13.

⁸ Cz.V. [1993/a]

⁹ Between 50 and 100 registration applications have been submitted, and the establishment of ESOP organizations is under way at many more firms. (Nagy [1993])

¹⁰ K.G. [1993]

We can get a picture of some of the estimated 100 individual employee buyouts by relying on case studies,¹¹ news pieces, interviews with company directors and information gained from consultants participating in the deals. Through a combination of these sources, 17 individual buyouts can be studied in detail, though not at the same depth. Within this statistical "sample" there were roughly similar numbers of producers, traders and companies with other profiles (shipping, planning, market research). The balance of this paper will concern itself with an introduction of the characteristics of employee/management buyouts based on the privatization of these firms.

SPA CRITERIA

Managers of over two-thirds of the firms in this sample of employee/management buyouts originally made plans to privatize their companies through a buyout. That is, they intended in any case to turn over ownership of the firm to the employees. The rest believed that their company would need a considerable injection of new capital to assure further development, and that the company's employees would not have enough financial resources to purchase the firm.

Of the seventeen cases considered, nine of the buyouts were completed prior to the passage of the ESOP law (of these, six took place in 1991). Six occurred between September, 1992, and the end of the year. In the remaining two cases the process was only completed in 1993.

As we can see from Table 2, in those cases where the buyout occurred after the transformation¹², the ownership proportion of employees was higher than when the buyout took place at the same time. The buyout groups chiefly had to share ownership with the SPA, the Hungarian State Holding Company, local governments, commercial banks, and on occasion, with outside investors who retained a very small ownership proportion generally left over from the period of transformation.

At most of these companies the only significant minority shareholder was the SPA, mainly due to the prescription that 10 to 20 percent of shares be set aside for holders of compensation certificates. At more than a few firms employees purchased these shares in whole or in part, and at other firms short-term plans included their acquisition. (Presently, compensation certificates may be used to purchase ownership, a transaction enjoying substantial preferences.)

In the cases surveyed buyouts essentially led to exclusive employee/management ownership, without the participation of outside investors. Thus ownership in the long run is shared between management and employees.

The value of firms sold to employees did not show any correlation with the size of the firm nor with the timing of the sale. Table 3 indicates the relationship between the sale price and the nominal value of state assets offered for sale.

¹¹ Financing for this research was provided by National Scientific and Research Foundation grant no. T 4583, "Domestic and foreign experience in management buyouts."

¹² Transformation - making the state-owned enterprise a company under the procedures of the Transformation Act without having yet changed the ownership - itself is not privatization.

Table 2
Ownership structure of companies bought out by employees/management simultaneously with or following transformation

Timing of purchase	Number of firm	Ownership proportion of employees and management (%)	Ownership proportion of other owners (%)
Simultaneously with transformation	1	22 (+29 options)	49
	2	46	54
	3	64	36
	4	56 (+7 options)	37
Following transformation	5	90	10
	6	75	25
	7	80	20
	8	82	18
	9	100	–
	10	90	10
	11	80	20
	12	88	12
	13	90	10
	14	100	–
	15	75	25
	16	68	32
	16	89	31

Source: calculations based on data derived from case studies

Table 3
Sale price of companies privatized through majority employee/management buyouts

	Sale price as a percentage of the nominal value of state assets offered for sale				Total
	0-50	51-75	76-100	100 and above	
Number of companies	2	5	6	4	17

Source: calculations based on data derived from case studies

When establishing the sale price during the buyout, the SPA as a rule was very generous towards employees, granting without exception all the preferences available to workers in the Assets Policy Guidelines. So when it approved this privatization solution, the Agency made possible the maximum utilization of the preferences.

Thus generally "the sale price" was a composition of different prices for different assets. In the case of workers' shares the discount could reach as high as 90%, while employees were generally entitled to a 50% discount, with the remaining portion of the assets normally offered at 100% of the nominal price. Taken together these prices made up the "total" sale price.

The scale of the preference, as prescribed by the Assets Policy Guidelines, was determined according to the value of the equity of the company being sold and the proportion of the annual gross basic pay accounted for by the purchasing collective. (The SPA often allowed the preference to reach even 15% of the nominal, or share, equity when the total value of the annual wages made this possible.) In conclusion, the State Property Agency, acting in the spirit of the Assets Policy Guidelines, sold companies in its portfolio to employees on quite favorable terms.

At one or two of the companies the preferences offered include options for purchase of additional shares with the price set at the nominal value at the time of the original sale.

In not a single buyout leading to employee ownership did the SPA attach conditions on the buyout price connected to the future performance of the company. That is, besides the base price the sales contracts never contained stipulations according to which the SPA would receive additional revenue in the future arising from the firm's profits or its sale of assets.

Such a procedure would not have been in the interest of the SPA in any case, as every year it had to meet a revenue target. Furthermore, it did not have the manpower to keep track of these kind of long-term revenue flows.

At any one time the SPA represented the state's ownership rights in more than one and a half thousand firms, meaning that it had to manage simultaneously a tremendous amount of sell-offs. Due to the great number of firms under its purview the SPA—as owner—did not, and could not, know the essentials of the companies belonging to it.

The Agency could only base its estimation of a firm's value on the results of appraisals carried out by independent experts. The SPA was in no position to check the market value of the firms over which it practiced ownership or holding rights, as in Hungary a market for the purchase and sale of companies for the most part still does not exist due to the insufficient development of capital markets.

This superficial acquaintance with the firms belonging to it prevented the SPA from examining the practicality of the business plans outlined by the different bidders, when that should have been one of the most important factors in distinguishing between possible buyers. In the case of those employee groups attempting a buyout with the aid of loans, the SPA took the position that the bank granting the credits was much better able to judge these matters. Thus, if the bidder possessed a promise of credit from a bank, the SPA did not question the practicality of its business plan.

The SPA wanted in part to balance its "weak spot" arising from a lack of knowledge regarding the firms with the doctrine of competition¹³, prescribed anyway by law. In this way the Agency also sought to defend itself against those who might question the professionalism of its work or the correctness of its procedures.

Fearing bids by "outsiders" speculating on the company's real estate and probably aiming to eliminate the company's profile, those submitting bids for majority employee buyouts asked the SPA to waive the competition requirement. In many cases the SPA accepted this argument, announcing a closed tender instead of open bidding, thus restricting the circle of prospective buyers and at the same time limiting the control coming from choice.

Just one-quarter of the firms in our sample were sold through open bidding. In the remaining cases the tender was either closed or not even announced. The latter occurred when the winner of a previous tender was unable to meet the conditions and had to renounce the purchase, or when the State Property Agency did not wish to announce a tender because of the special nature of the given company's activities.

In some cases the number of prospective buyers was not limited merely by the "invitation" system of closed tenders. Interviews with directors of the firms examined clearly revealed that the firms tried to scare off potential competitors by leaking out misleading information concerning their company.

Besides limitations presented by this monopoly on information, the SPA was further hindered by the murkiness of the system of conditions by which they had to evaluate offers. Expectations placed on the Agency changed from time to time leaving the SPA to decide in each case which factors would receive priority.

When drafting their bids, prospective buyers had to account for a number of conflicting criteria, for example, the number of companies already sold; the magnitude of the privatization proceeds; the nationality of the buyers; the prospects of the company; strengthening market competition; or other macro-economic objectives, such as the creation of jobs. Thus, it is no accident that bids emphasizing employee participation enjoyed wildly varying chances of success.

Analyzing the first few buyouts, the economic director of the SPA came to the conclusion that in nearly every case examined the SPA was compelled to depart from the prescribed norms. Namely, the Agency considered business-based valuations in place of assets-based ones, allowed experimental methods, and approved lower levels of contributions demanded from employees.¹⁴

After a period in the beginning when the SPA managed each company "individually", a longer period followed in which the Agency handled employee buyouts with caution and great circumspection. ESOP-like bidders, as well as later groups openly acknowledged as ESOP-bidders, could only win the tender if they were truly the best candidate, or if they presented the only valid and acceptable offer.¹⁵

¹³ In the case of ESOPs, regulations do not require competition, but neither do they prohibit it. In practice, the SPA generally opened up to competition these types of collective bids, though most often through a closed tender.

¹⁴ Jelentés a magyar... [1993], p. 120. and Lajtai [1993]

¹⁵ A részvétel... [1993]

Introduction of a new privatization strategy breaking with the previous revenue-centered policy and aiming at greater participation by domestic buyers behooved the SPA to change its official attitude. For several firms in our study this resulted in "positive discrimination".

Following the change in the direction of privatization, the SPA, which had until then concentrated on revenues and approved buyouts only of profitable firms, broke with its past practices.

It was said that the reason for the new privatization policy was the large number of firms remaining on the SPA's docket and the relatively slow increase in foreign interest compared to the rise in the number of companies on offer. In fact, however, political considerations played a greater part.

The advantage enjoyed by domestic bidders, including employees of the affected companies, could only be detected in the wake of SPA decisions arrived at not via open bidding but in closed tenders through the application of murky criteria.

EMPLOYEES AND MANAGEMENT

Compared to similar Western deals, the main players in Hungarian MBOs were much more often the employees of firms being bought-out.

At most companies the management employed a propaganda campaign to spur worker participation in the buyout. In the course of this "education" management spoke of the opportunity represented by the buyout and about methods of payment, mentioning as well that attainment of ownership rights did not automatically guarantee employees' jobs. As a result of these propaganda campaigns an average of 70-80 percent of employees took part in privatization.

As at many firms share subscription meant the distribution of shares of various types and degrees of preference, the opportunity to subscribe was in most cases limited by a set of rules. The subscription quota for individual workers was determined by a system of points reflecting the number of years at the company, position and income.

This preference based on length of employment, average salary and position—all reinforcing each other—resulted in a higher level of subscription for managers. Among the other workers, members of the old guard had the advantage.

Where a set of rules was not used to regulate share subscription, the inner ownership structure of the buyout group was determined on the basis of individual monetary contribution. As in most cases higher level employees had more income and savings available for investment purposes, unregulated subscription also led to a dominant role for management.

In general, in early buyouts effected by ESOP groups the size of the monetary contribution determined the ownership structure of the newly privatized company. Later, because of the SPA's "disapproval", the principle of monetary contribution was replaced by the principle of allocating subscription according to contribution to the firm's profits. However, as contribution to the firm's profits was measured by personal salary, this approach also led to higher ownership proportion for management.¹⁶

Those workers devoted to their jobs, and willing to make sacrifices to preserve them, on average contributed the equivalent of one-two months' wages to the buyout. At the highest levels of management contributions to the tune of hundreds of thousands of forints, and in some cases millions of forints, were not uncommon. Among the employees, payments ranging between 20 and 50 thousand forints were typical, while among managers sums between 100 and 700 thousand forints were the norm. The value of individual contributions varied quite widely, always depending primarily on the position held at the company.

Though data is unavailable on many firms, usually there were 15-25 managers who gained a particularly large ownership proportion on the basis of their contribution, giving them a controlling interest. In two cases a wide circle of employees attained a controlling ownership proportion thanks to special subscription rules, while in two other cases the managers were capable of independently purchasing additional shares.

It is quite difficult to get a clear picture of the resulting ownership structures. The available data is insufficient to determine the aggregate ownership for management and other groups of employees resulting from trading in property certificates, subscribing to preferential or "normal" shares, and buying out the ownership proportion originally set aside for compensation purposes. Table 4, prepared on the basis of available data, shows the ownership proportion following the buyout for some of the firms in our sample.

Management's majority ownership within the buyout group or, in other cases, an ownership proportion in excess of 25 percent ensuring its power to veto, shows that the bulk of majority employee buyouts were in reality management buyouts. This claim is reinforced by the fact not displayed in the table that management's ownership proportion attained simultaneously in various frameworks was combined while the equity stake of employees remained scattered.

As the statutes of buyout groups almost always included the right of preemption or compulsory sale of shares at a predetermined price with regard to the shares or business quotas of those leaving the company, the ownership proportion of management will most likely rise.

At some companies the controlling role of management arising from their ownership participation was further reinforced by special regulation of the voting rights. While in some places the voting rights accrued to all shares bought on credit, in other instances they could only be enjoyed after the shares had been paid for in full. And at still other firms a portion of the shares (20-25 percent) together with their attendant voting rights were not distributed at all.

In the case of employees the exercise of the rights accruing to their shares was significantly suppressed as the bodies elected to represent those rights were made up almost entirely of the firm's managers, thus inevitably ensuring that the latter's interests would dominate. Quite often the leaders of the ESOP group emerged from the highest

¹⁶ When the SPA began to experience more and more often extremely large differentials between the largest and the smallest ownership proportions in ownership structures based on the magnitude of monetary contribution, the Agency issued a warning that, "in the case of disproportionate distribution the ESOP group would be treated on the same terms as other investors and would not receive the tax preference." (Mészáros [1993] p. 35.)

Table 4
Internal distribution of ownership at the time of buyout within some firms ending up in majority employee ownership

Number of company	Ownership proportion of middle and high level management (%)	Ownership proportion of workers (%)
1	54	46
2	25	75
3	45	55
4	71	29
5	36*	64
6	40	60
7	51	49
8	60	40
9	37*	63

*Note: not including ownership proportion attained through ESOP groups

Source: calculations based on data derived from case studies

echelons of the firm's management. Thus at general meetings little was heard beyond the "voice" of management.

Thus management, in its dual roles of owner and director and as representative of the employees, in practice was unfettered in making all sorts of strategic decisions. Employee-owners could express their opinion about their own narrow field, but had no say in strategic decisions.

Managers of the firms in our sample did not mention any problems in decision-making arising from the wide ownership structure. Generally, it was no problem to get decisions sanctioned; indeed, as one manager noted, they "had to go to great lengths just to get enough of the general assembly to come together to constitute a quorum."

Supervision of managers having controlling ownership interest in the newly privatized firm in most cases was rendered impossible by the composition of representative bodies and management's accumulation of functions. Employees, as a "special" ownership partner, were thus hardly able to fulfill the supervisory role played by Western investors wielding venture capital. Employees' capital and often expertise were insufficient for this task. No mechanism emerged which could effectively ensure some measure of control - neither proper representation nor a system of weekly and monthly reports. Feasibility studies and business plans were neither detailed nor concrete enough to make these documents suitable for exerting some sort of external control.

Lack of proper supervision obstructed even necessary changes within management. Thus, during the buyout, managers "purchased" not only ownership but their positions as well.¹⁷ "Locking" managers into their positions could prove extremely

¹⁷ Vanicsek [1993]

dangerous to a newly privatized firm, especially if the managers chose to enhance their own income at the expense of the company thereby driving it into the ground - a phenomenon not yet experienced among the firms in our sample, though certainly not inconceivable.¹⁸

Not only was a mechanism, an institutional structure and expertise lacking for the proper exercise of a controlling role by employees as ownership partners, but also any consciousness on the part of employees of their status as owners. This "sham ownership" achieved through "sham investments" did not make this class truly interested in growing wealth. The proportion of their income made up by dividends was so insignificant that it could not compete with their consciousness as "wage workers", intent solely on receiving higher wages and keeping their jobs.

These two types of consciousness came into conflict chiefly when decisions needed to be made on the utilization of excess funds for development, on the order of wage increases, as well as on employment streamlining. However, as these firms, burdened as they were with huge debts, did not often have excess funds, and as in any case the ESOP groups had to devote dividends towards repayment, there were no real debates on these questions. Generally the workers accepted the relatively low wage increases, and management did not really attempt to carry out large-scale dismissals.

At two of the companies in our sample, where the financial situation deteriorated to such a degree that large-scale dismissals became unavoidable, management kept the employee-owners on the payroll as long as possible.

In the conflict between economic rationality and employees' interests, the latter held the upper hand—right up to the collapse of the company. It is no surprise that it is especially in such a difficult time as reorganization that employee-owners possessing numerous small shares are least able to behave as owners.

Extraordinary credit burdens made it especially difficult for newly privatized firms with capital-poor owners to find their feet. Inclusion of employee-owners, who though bringing hardly any fresh capital into the venture made possible by their very participation the drawing of enormous amounts of credit, greatly increased the risk of these buyouts. (At the same time, however, their participation undoubtedly ensured the buyout's political acceptability, as well as its acceptability within the firm.)

Participation of employees could enable up to 98 percent of the deal to be financed by loans. In such cases, however, the obligation to repay these loans probably has not served as an incentive, but rather has exerted a shackling effect, even if the credit conditions are more favorable than those generally granted.

The participation of employees as co-owners in the buyouts meant that, lacking capital, buyouts were financed through credit to such an extent that the newly privatized firm assumed extraordinary burdens. Because of this credit burden, these firms could not apply for new loans for improving competitiveness, for development or for market expansion. (Thus it is not the restructuring of the firm, but the change in ownership, which exhausts the firm's creditworthiness.)

Due to this enormous amount of credit, the newly minted owners were very restricted in exercising their rights over the assets. At these heavily mortgaged firms

¹⁸ Voszka [1992/a]

there was little opportunity to take necessary steps towards reorganization, such as the sale of superfluous assets, and the closure or sale of loss-making units. Dismissals, on the other hand, would have run up against the opposition of employee-owners. Management, which had acquired ownership with the assistance of employees, refrained as long as possible from taking reorganization steps which would harm the interests of their "co-owners" in their capacity as employees.

An additional risk in majority employee/management buyouts was presented by the financial assistance rendered by the firm being bought-out.

The buyers' intention to pay off the debts incurred during the buyout from the firm's future revenues was in essence in line with the expectations of Western investors. Peculiar to Hungary was the practice of having the company targeted for purchase contribute to the down-payment necessary for the loan. Among the companies in our sample it was quite common for the workers to pay the down-payment on the purchase out of excess wages, bonuses, or loans granted by the company, all drawn from the firm's profits. These resources originated from the firm's earlier profits, from the sale of some assets, from the utilization of idle rental properties, or from the 20 percent of the purchase price refunded on the basis of the transformation law.

At the time of share subscription or credit application, two companies even attempted to stimulate their employees to even greater levels of risk by rewarding larger subscriptions with larger bonuses.

The management of firms destined for sale also tried to assist the employee buyout by signing off on the feasibility study required for the ESOP group's credit application submitted by the employees—which naturally included the managers. The firm's directors provided collateral security for the credit application submitted by employees/management, and allowed the firm's assets and its order-book to serve as collateral for buy-out credits.

The greatest help, however, for these firms came from a preference by law available only to ESOP groups. According to this preference, the firm to be bought out may turn over 20 percent of its pre-tax profits to the participating employees as an extraordinary outlay. (Thus the repayment of the credits was financed from this tax-free source and dividends taken together.)

Through these various forms of assistance granted to employees buying out their company, in reality the former owner—i.e. the state—contributed to the purchase. If a company goes bankrupt, the capital granted for its purchase is also lost. Thus the state, to the extent of this assistance, shoulders risk instead of the new owners.

THE ROLE OF BANKS

The firms almost exclusively approached commercial banks for credits. In the search for partners, which at some firms took several months, each manager personally visited at least two-four commercial banks. Among the financial institutions the managers experienced widely differing attitudes and expertise as regards buyouts.

The firms generally chose that bank which offered the lowest rates and the longest term and accepted the collateral that the firm was able to provide. Of the 17 firms in our sample two did not have to resort to outside resources to finance the purchase. The other

firms generally covered a significant portion of the purchase price through loans; indeed, 11 of the 15 firms which received credits, financed more than 70 percent of the purchase from loans.

Following the introduction of the preferential Existence Credit (E-Credit)¹⁹ for privatizations, the only difference remaining between the banks was in their acceptance of collateral, as the law mandated uniform interest rates, service charges, the necessary down-payment and the maximum term and grace period. With the passage of the ESOP law the collateral also became more regulated, as it contained detailed rules concerning the bank lien over property of ESOP groups, the compulsory utilization of dividends for loan repayment, and responsibility for the management of the firm's assets.

E-Credit, which became more and more favorable in the name of stimulating domestic privatization demand, "whetted the appetite" of ever more employee collectives (management) for their own companies. In essence the only control over these plans was that exerted by the bank's credit assessment, which weighed the risk represented by the given company against the collateral the firm was able to offer to mitigate this risk. This meant that in reality the banks did the primary screening of these offers, while the State Property Agency conducted a secondary screening.

Though the vast majority of the firms in our sample were profitable at the time of privatization, of the deals approved by the SPA "which utilized ESOP as a privatization technique, 90 percent were barely profitable."²⁰ Most publications dealing with this topic²¹ considered an 18-20 percent rate of profitability sufficient for a privatized firm to repay credits. Thus, it can be expected that after the three-year grace period the buy-out groups will face serious difficulties.

The banks used every possible method to protect themselves against the possibility of non-performance, though in some cases the decision to grant credit was not made primarily on business grounds.

As the feasibility studies prepared by firms contained many uncertainties, and in many cases the banks had neither the manpower nor the expertise to make a professional appraisal of the venture's future, the banks concentrated on the examination of property guarantees and coverage available when the credit was being granted. The value of the security demanded usually amounted to one and a half times the total value of the loan. In addition, the bank occasionally had the shares placed into trusts or ordered spot collections on current accounts. Sometimes it even demanded share options at the original purchase price.²² The requirement for the bought-out firm to present a guarantor was a part of the credit contract even before it was mandated by the ESOP law.

Every single bank granting credits insisted that the firm in question bank exclusively with them, thus enabling the bank to observe the financial workings of the firm. In addition, they gained a long-term client who would utilize their services for all future banking needs. Banks exercised control not only through examining accounts of the

¹⁹ In Hungary it is possible to obtain loans for buyouts on favourable terms, as a special loan facility is available exclusively to Hungarian investors. The interest rate on these loans is 75% of the central bank base rate. Commercial banks are allowed to add up to 4% as commission.

²⁰ *Félreértések...* [1992] p. 5.

²¹ *Jelentés a magyar...* [1993] p. 119., *Vanicsek* [1993], *Borbély* [1993] p. 25., *Boros* [1993] p. 25.

²² *Réti* [1992], *Nagy* [1993], *Rajna* [1993]

given firm. Credit contracts usually stipulated "information and control rights" concerning the firm's operation and financial affairs.

In practice this was achieved in different ways. At one firm, for example, the bank inspected the company's books and examined semi-annually the profits. In one case a representative of the bank even claimed a seat on the privatized company's board of directors, thus gaining access to the organization's operations.²³

Though it did not affect the firms in our sample, a new institution began operations in early 1993. It was established to offer guarantees for ventures which though promising could not provide the necessary guarantees. The Credit Guarantee Co. Ltd. was authorized to assume risk up to HUF 100 million and up to 80 percent of the required collateral. Since this institution became involved, the level of collateral has dropped from one and a half times the size of the loan to just 70 percent. Thus, it is no accident that most of this new institution's clients were employee groups.²⁴

With the assumption of partial guarantee the largest obstacle to credit applications for buyouts was eliminated, thus almost ensuring a massive increase in the demand for credit. With a little exaggeration it can be said that due to this new opportunity neither the firm's nor its ability to provide property guarantees would have a real impact on the decision to grant credit for buyouts. In this manner, at the mainly state-owned banks, political criteria could gain a voice in the selection process. The Financial Research Ltd.'s report²⁵ on privatization reinforces this statement: "... the willingness of banks to grant credit is often influenced by factors outside business considerations, such as personal contacts and, occasionally, the exercise of political will."²⁶

Banks also try to reduce risk in these privatization loans by requesting the personal participation of the bought-out firm's managers in the deal. At one company the "bank would only offer credit to the managers, or to the workers, on the condition that the other group also invest in the firm."²⁷

Thus, the banks prefer that management occupy a dominant position in the buyout group, as this way they bear personal risk. According to the banks, the contribution of managers to the purchase is a sign of their motivation and seriousness of purpose. It is no accident that the banks always inspected the statutes of the buyout group giving them information on the breakdown of ownership proportions. This position of the banks was not in total harmony with SPA practice, which attempted to screen out those ESOP buyouts which were actually management buyouts.²⁸

The desire to divide and decrease risks and the commercial banks' decisive refusal to back promising deals lacking proper guarantees showed that the banks, essentially

²³ Boda-Karsai [1993] p.8.

²⁴ H.L. [1993.]

²⁵ Jelentés gazdaságunk... [1993] p. 150.

²⁶ "Day after day we hear reports that as regards the distribution of Existence Credits necessary to carry out employee-management buyouts, the old guard of politically compromised company managers are not even attempting to secure such loans. Members of a new guard possessing local influence and close to the parties of the ruling coalition have a much better chance in the competition for credits." Voszka [1992/b]

²⁷ Réti [1992]

²⁸ Recently the SPA has begun to consider joint ESOP and MBO deals felicitous, as this makes it possible to avoid granting employee preferences to manager-led groups.

the only source of financing for buyouts, neither wanted to nor were able to assume risks for deals with uncertain returns.

"It is not for commercial banks to finance risky deals," they say. And they are right. Credit is not the most appropriate form for financing these types of ventures, as capital contributions would entail a much smaller initial burden. These deals would ideally be financed by the inclusion of co-owners subscribing to normal shares which could be traded.

Co-owners willing to provide financing, though they receive a share of the profits through dividends, are not motivated solely by dividends. They play the market, hoping to sell their shares later at a profit. (Their experience and expertise, gained during prior investments, enable them to enhance the buyout's chances for success.)

Financiers—venture capital and entrepreneurial stock corporations—willing and capable of assuming the risks associated with buyouts can only operate through well-developed money and capital markets. It is too soon to expect the establishment of such corporations given the present underdeveloped state of Hungarian money and capital markets. "The great majority of savings are for the short term and thus unsuitable for long-term capital investments, and furthermore the growth- and long-term-investment-oriented, serious entrepreneurial stratum willing to place their own capital (assets) at risk is quite narrow."²⁹

Thus, in Hungary majority employee/management buyouts are financed by commercial banks, though this is not one of their intended functions. As there are few trustworthy, good debtors among credit applicants, and only very few investments prove worthwhile, the majority of these deals are very risky. Furthermore, this risk is exacerbated by the magnitude of the credit burden assumed during buyout. This is why commercial banks try to distribute their risk. They compensate themselves by acquiring ownership. They pass on part of the risk to a state institution established to grant guarantees, part to a central bank offering discount rates, and part to the members of the buyout group. This latter group bears only a tiny proportion of the risk as their own contribution to the financing of the deal is extraordinarily small. In reality, it is the state who bears their risk as well, to the extent that they complement their own capital contribution with capital drawn from the firm to be bought out. It is obvious then that the distribution of risk is equivalent to passing it on to the state. For as the owner of the commercial banks, the National Bank of Hungary, the Credit Guarantee Co. Ltd. and the bought-out firm the state bears the risk.³⁰ (The situation is the same in the cases of leasing, installment payments or property management. Here the state bears the risk not as the majority owner of a commercial bank, but through the State Property Agency, a state institution.)

* * *

Summing up the characteristics of Hungarian MBOs, we can state that in comparison with Western constructions, the players are quite different and risk-takers are especially missing.

²⁹ Varga [1993], and see also, László [1993]

³⁰ Voszka [1992/b], [1993/b], [1993/c]

MBOs are financed primarily by credit which—in the absence of partners willing to invest—makes these deals extremely expensive and risky. Due to the underdevelopment of the financial infrastructure, i.e. the stock market, not only it is hard to locate willing investors, but even when they are present their interest is dampened by the difficulty of getting out of deals.

The fundamental economic conditions for the proliferation of MBOs include the improvement of the Hungarian economic situation, economic growth, drop in inflation and a concurrent decrease in interest rates. These conditions are important for all new ventures and are indispensable for deals financed in large part by credit. The number of ventures offering a favorable opportunity for management buyouts will probably only increase noticeably when the buying and selling of shares and quotas becomes itself an attractive investment form in Hungary.

However, a straightforward political decision is also required if economic considerations are to be emphasized in the participation of management in privatization. In this case the otherwise natural process by which management breaks into the ranks of ownership thanks to its expertise and personal contacts could take place in the open. Following this decision, it would become possible for managers, possessing the professional and entrepreneurial expertise, as well as the capital, necessary to take risks, to purchase companies. This would be one way for companies to be transferred to profit-oriented owners capable of attracting capital, in contrast to the present situation in which workers lacking sufficient capital become owners.

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Gábor HOVÁNYI

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Corporate management concepts and methods in a multidimensional crisis situation

INTRODUCTION: THE THREE TYPES OF CRISES

In happy market economies there are two main types of crises distinguished. The *partial* crisis develops in a particular area (plant, factory, etc.), or function (as problem of production, labour management, liquidity, etc.) of the corporation. In this case, the main task is: isolation and solution of the crisis, then incorporation of the cured unit, or function into the activity of the entire company. (I call this as “soft landing” crisis management [Hov nyi, 1992]). Generally, in market economies there is a special crisis management “team” established to eliminate the partial crisis.

The second type of crisis is the *total corporate* crisis. In this case, the whole company is in a crisis situation which endangers the firm’s survival. At that time, there is nothing to isolate with mostly heavy casualties (drastic lay-offs, withdrawal from markets, perhaps selling-off parts of the company, etc.) the remaining parts of the company should be set afloat. (I name this as “quick take off” crisis management [Hov nyi, 1992]). Generally, in total crisis, new corporate management or a professional crisis management team takes over the firm’s control.

In the past decades, both types of crises reached the companies of developed market economies, in more or less stable economic environment, under the conditions of a growing economy, sometimes of stagnation or mild recession. Neither new economic policies nor new economic regulations of a government coming into office caused staggering changes in the economic environment of the companies. At most, companies of crisis industries might have complained about the general crisis of their close surroundings, but despite that, their wider environment—the national and regional economic environment—remained more or less stable, which gave an important basis for recovery.

Crisis situation of the Hungarian companies—first of all, of the large industrial corporations—can be listed in a third-type one. The total corporate crisis hit them in “unstable” economic environment, more precisely under environmental conditions of deep national economic and also regional crisis. These “unfortunate events” are well-known: national economy touched by recession, high inflation rate, low level infrastructure; inconsistencies of economic policy on government level, its “overdeveloped” institu-

tional structure; low efficiency of the welfare system, huge deficit, big government centralization of profits with re-distributions; mostly obsolete technology in many companies and lack of financial resources; "softening quality" of human resources, decline of quality discipline, of performance inclination, of creative entrepreneurial view and attitude (not once, which were induced by environmental conditions); finally, regionally, collapse of the corporations' ex-COMECON markets and insolvency of traditional business partners on these markets. Characteristics of this third-type crisis situation is that the crisis does not only appear on company level, sometimes in an industrial branch, but 1) on higher levels: in the entire national economy, in certain cases, in economic regions representing significant parts of the import and export market – and 2) on lower levels: also in the human resources, including both the managers and their subordinates. Therefore, I call this the multi-dimensional crisis of the companies.

In view of the recovery, the basic question is in a multidimensional crisis: will the company find new markets where it could sell making profits—moreover, with such result that ensures not only its liquidity but also the necessary technical and economic developments, that is, its long term survival. And the acquisition of a new market requires new products mostly a new product line, in order to have those, new technology, huge investments, higher productivity, renewed organization and management are necessary. In case of such crisis, the question also should be answered: if the adverse domestic environment remains unchanged, under what particular conditions can a Hungarian corporation be successful in a new external market? I call the solution of this third type crisis situation as "emergency take-off" [Hoványi, 1992].

The big question of Hungarian companies—primarily, of the large industrial corporations—is the following: in what way can this third type, multi-dimensional crisis situation be resolved? what kind of corporation concepts and management methods may help the recovery? in given cases, what kind of government actions are required to stimulate the recovery?

HUNGARIAN CRISIS MANAGEMENT ATTITUDES

Loosing markets is the characteristics of the majority of Hungarian industrial corporations, and the 40-50% drop in production coming with it, drastically reduced their incomes and increased their unit costs. That is why companies are squeezed by every day worries of insolvency. Moreover, the high interest rates on loans taken to maintain liquidity (the rates follow the up-swinging inflation) put further financial burden on companies. As a result, fewer and fewer companies are able to pay their suppliers the equivalent for delivered materials, components, sub-assemblies, etc. Thus was born the "company debt-circle" which further worsened the financial situation of those who were in it. Living in this series of events, one group of the Hungarian crisis managers see this as *liquidity crisis*, and fight for individual tax reduction, debt conversion to equity, more favorable loans. This "survival strategy" was followed, for example, by the management of Precision Mechanics Corporation. In the background of its thinking, the hope was hidden that the lost COMECON external markets will reopen again relatively soon, and growth in the Hungarian economy would take off significantly, increasing both foreign and home demand.

The other group of Hungarian crisis managers responded to the challenge with re-organization. This was the *re-organizational crisis management*. Mostly big corporations—i.e. Dunaferr, Taurus—have chosen this road establishing profitcenters, divisions, smaller but independent business units within their organization. These mostly LLC form units were expected to help the company's recovery with flexible business policy and financing, quick adaptation to market opportunities, afficiant profit orientation. But re-organization rarely reached its objective: the market adaptation, flexible business policy, etc. should have needed investments, and the LLCs had neither capital nor credibility—and their new independent units only increased the number of employees within the company's decentralized functional organizations (marketing, accountancy)—what was not compensated by the increase of productivity. Because of all that the re-organizational crisis management did not prove itself as the way out...

The sell-off of company units, and the use of the income derived from that to set afloat the company, is a well-known and sound method of crisis management in market economies. The Hungarian crisis managers also tried to sell-off some parts of their company but the result has been far behind the usual that could be reached with this method in market economies. There are more reasons for that. The Hungarian crisis managers wished to get rid of loosing company units in a tight squeeze situation which kept offered prices low. In a stagnating economy there were no investors lining up and this lack of competition pushed prices further below. The modest income of sold company units was simply swallowed by the debt stock of the remaining ones thus, practically, there were no significant resources left for setting afloat the company. This is well demonstrated in the example of Gamma Works. In multi-dimensional crisis situation, therefore, in case of a fairly indebted company, its chances for constructive recovery by *sale of company units* are not rosy (Török, 1993).

A new group of crisis managers—conforming to modern views—believed that acquisition of new markets is the key in resolving the crisis. This is possible if there are competitive products and intention to acquire markets is paired with efficient marketing concepts and actions. Although, this type of *marketing-view crisis* management was rare, mostly because a large part of the companies did not have competitive products or available resources for establishing such products; market acquisition was made difficult because of lack of their knowledge of the competitive markets, their vague marketing concepts, their enervate marketing actions, and as a conclusion of all these that they could break into the competitive markets with heavy price sacrifices only. (Mostly, that is why the few “successful” financial results of marketing-view crisis management lag far behind the theoretically possible ones.)

As we've seen, after the described, rather doubtfully successful crisis management concepts, the question arises: What are the roots of Hungarian crisis management problems, where should start, in majority of the cases, the crises management concepts from? I see this startpoint in *technology orientation*: in majority of the crisis situations, crisis managers have to create and realize the recovery plan by analyzing the given facts and possibilities of the state and development of the company's technology. The fundamental facts and possibilities are demonstrated and amalgamated into series of steps in the 1st table. The start is dual:

1. Assessing whether the company has modern technology, can its technology be modernized with small investment, or it is mostly obsolete, therefore, may be modernized with very big investment only.

2. Assessing whether the company's technology may be divided into individually useful parts according to different businesses, or the technology can function only as integrated unit in a closed system. (Example for the latter is the technology of an oil refinery).

After this starting point follows the definition of the required steps in areas of investment requirement, organization structure, privatisation (taking into account also the possible new owners), expected technology level, product development, marketing, human resource management and company management. Characteristics of this technology oriented crisis management method is partly the complex problem appreciation, partly that it shows a clear direction for the crisis managers in modifications of the company's organization, the ways of privatisation, the targets of HRM, etc.

The situation is different if the company has a well developed new product idea which promises a break through in the markets and the company's recovery may be realized with it. In this case the *crisis management built on innovative product idea* comes to forefront. The innovative characteristics may derive from technical novelty, cost and price advantage, breaking into new areas of consumptions, product developments satisfying entirely new users, etc. Establishing such concepts have their partial tasks and one by one steps. Such series of steps are shown in figure 1. presenting at each step also the possible variants of technology modernisation and privatisation. This concept with the steps also covers the entire action of crisis management from gathering the new product ideas to the realization of the marketing plan, the selling of the produced goods.

A big possibility of Hungarian crisis management is *privatisation of the company* in crisis. Though, it must be known that only such an investor is willing to buy a corporation in crisis who has a clear idea how to recover the company, or—in case of a professional investor—who wants to eliminate its competitor and win its markets. If he wishes to recover the company and provides the necessary capital, in most cases, new products and (in part) new technology are linked to the capital, also productivity will be tailored to international standards, the investor's existing marketing practices and selling expertise gained on world market, will be transferred—and to all these contributions one more factor will be added: its own CEO or topmanagers. Apparently, this is proven by Tungstram's example after the takeover by GE (*Thurow*, 1991). The company can well escape from the crisis with this type of privatisation, though, probably there are just a few Hungarian crisis manager—unless close to retirement, or able to convince the professional investor about their suitability, or counting on other type of advantages from the investor, who are—for the chance of the company's recovery—willing to put their neck under the hatchet of an executor...

Particular privatisation method of crisis management is the *management buy-out*. A prepared crisis manager intends to do that if he/she has a very clear concept for eliminating the crisis—but is not able to realize it under the present ownership conditions. Management buy-out can be useful also in the frame of a general privatisation process, when the crisis manager can buy only some of the company's assets what happens not once in Hungary. Of course, the crisis manager needs also capital and entrepreneurial

ability besides the buy-out concept. But if these are there, then it is less risky sometimes to start a brand new enterprise than to set afloat a bankrupt one. The crisis manager may decide nevertheless for a buy-out because he does not have enough capital for an independent enterprise, or the company's (partial) assets may be bought under quite favorable conditions. Many examples are known in Hungary about artificial devaluation of company assets and this way acquired unfair wealth—but this does not bring us to the conclusion that there would be an obvious correlation between the real value of buy-out price and the chance of recovery. A new resale of the company on a value which is closer to its real value than the one that was paid before—which may bring “MBO extra profit” to the crisis manager—slows down the recovery by all means.

NATIONAL ECONOMIC DIMENSION OF THE CRISIS SITUATION

The crisis manager of a Hungarian company senses the national economic crisis day by day: decreasing demand on domestic market, business partners equalize their bill late, the government is trying to balance its budget with larger tax burdens, new credit (which would be necessary to maintain solvency and finance developments of the company) becomes more difficult to get and it is more and more difficult to pay back the acquired credits and its interests because sales volume is decreasing, this way price income is less and less but interests are increasing because of inflation which follows the economic recession, etc. Theoretically, in a multi-dimensional crisis situation, mainly those Hungarian companies keep their viability which can profitably sell their whole production, or most of it, on external competitive markets. (In practice, however, the problem is not so simple: most industrial corporations are linked to the participants of the domestic economy with numerous purchases and co-operative connections, its activity has to follow the Hungarian regulations and its financial management is built into the Hungarian financial system, etc. Because of that even selling its whole output on Western markets wouldn't be an insurance to defend the company against the crisis.)

The companies, that also sell on internal markets in big proportion, are *not able to overcome* the multi-dimensional crisis by themselves: they expect overall provisions from the government to help induce the growth of the national economy thus creating favorable environmental conditions for recovery. This expectation is very strong and has the disadvantage that some crisis managers do less than what would be possible in order to get out of the crisis because they are waiting for “helping” government regulations.

Initiating economic growth is a very difficult operation though, which can happen in a complicated *power field where contradictory factors have effects on each other*. The effects of government regulations—according to classical perception—condense on four key areas: economic growth, inflation, unemployment and financial position of the national economy (state budget deficit, foreign-trade balance, size of foreign liabilities, etc.) In case of the latter three favorable changes may take place which can help economic growth. For example, decreasing unemployment increases buying power, moderation of budget deficit may reduce levy and with it may stimulate entrepreneurship, investments, etc. But economic growth may come with unfavorable changes on the latter three. For example more advanced technology and higher productivity may result in

lower prices, therefore production and sale may grow—but in consequence of automation, the number of lay-offs and thus unemployment may grow too, the government can help economic growth with the development of infrastructure, and may widen employment thus buying power—but development can cause large deficit in the state budget, etc. That is why the government must consider whether the disadvantages coming with the obtainable (hoped) advantages on the latter three key areas will remain within acceptable range?

In case of a multi-dimensional crisis, the crisis managers should not just wait for such government regulations (which are based hopefully on a complex efficiency analysis) but should forecast also their expected consequences. Only this way can the manager work out a real crisis plan. He can prepare this quite complicated and, obviously, multi-variant forecast by following a *general model*, “corner points” of which are created by figures of expected economic growth, inflation, unemployment and characteristic financial balance of the economy. Based on these he can reckon with the most significant economic tasks of the government—then from effect analysis of measure variations to realize these—he may establish his own macro-economic scenarios, that is his own, complex forecast variations [Hoványi, 1993]. Such general model has been shown in figure 2. The crisis manager has to consider three types of effects in the model:

1. Measures brought to solve particular government tasks influence other government tasks and may modify their challenge.
2. Government measures effect the value, of the four “corner points”.
3. The value of each “corner point” has an effect on the other ones, too.

It is worth to make some remarks in connection with the macro-economic dimension from the point of view of the crisis manager.

– The pull out force of economic growth in a multi-dimensional crisis is the Hungarian corporations’ technical-technological modernisation (which requires significant investments, i.e. mainly foreign capital), and the abrupt increase in numbers of the SMEs. Because of lack of capital at home and decreasing willingness of foreign investors to invest, the main driving force of economic growth in Hungary can be the area of small and medium size companies: this should have been recognized by the government in time (2-3 years ago). The economic growth started by the SMEs may create favorable conditions also for the recovery of big corporations—which then may speed up both the small and mid-size sphere’s development and the growth of national economy by a sort of multiplying effect.

– The widening export and its contribution to the growth of GDP is very important. But the start of economic growth *without the quickening of internal markets* is not enough for the recovery of a wider circle of big corporations in a multi-dimensional crisis. Similarly, without significant and lasting growth of export for competitive markets, big corporations can not or can only temporarily stand up. Therefore, widening of internal markets and growing export for competitive markets are both necessary requirements of lasting economic growth.

– It makes the forecasting of the macro-economic dimension of the crisis easier for the crisis manager if *the government makes effect studies* for establishing its own concepts and regulations, and also publicizes the findings of those studies. (Modern government work requires these publicized studies, primarily in the economic field—which

comes together with the risk that by the gap of the calculated and ensued effect, Parliament, press and society alike may better check the government's ability.)

– The effect study of planned government concepts and regulations has to be made by the government also to make it able to bring decisions based on strictly economic facts and connections instead of preconceptions or ideological convictions. One lesson of the Hungarian crisis situations is that ideologies never make forget—at least on long term—the absence of economic results but economic results make forget the lack of ideologies on long term as well...

HUMAN RESOURCES IN THE MULTI-DIMENSIONAL CRISIS

According to the well known motivation system of Maslow, one strive for security after satisfying its physiological needs then wishes to be member of a society; after that wants to have its environment's acknowledgement and, if getting all that, tries to perform and realize itself in every day work (*Maslow, 1954*). Today in the Hungarian multi-dimensional crisis, living standards worsened, unemployment has grown and threatens more and more people. In this double squeeze people are less motivated for their environment's acknowledgement or for realizing themselves in their every day work; the basic interests have been keeping the job (i.e. security) and at least *the approximate maintenance* of earlier established living standards (many times with overtime, a second job etc.). However, in particular layers of society—consisting mostly of retired people and of big families having many children—the attention already concentrates on physiological needs.

Because of worsening living standards, the role of income creation among motivations, therefore, increases and of non-financial motivations (acknowledgement, professional career, self realization, etc.) decreases. Consequently, in multi-dimensional crisis situations, *financial incentives are the most important motivatig tools* for performance growth, for avoiding the crisis or for the recovery from it. Of course, a company hit by the crisis does not have plenty of financial resources. *This internal contradiction* of the need and the possibility of motivation may be softened, though not dissolved for the employees by the fear of the company's liquidation and unemployment which follows that. Though, this fear will not urge for what there is utmost necessity in a crisis: innovation and creativity.

In a multi-dimensional crisis situation not only the mentioned internal contradiction curbs the contribution of human resources to solve the crisis. Obstacles of the solution are *loose work and quality disciplines and low level of work intensity*. All these have historical reasons—as well as the development of multi-dimensional crisis situation itself. Work and quality disciplines got loose, primarily, because the measure of achievements had not (or rarely) been the individual or teamwork: many times political attitude or political or economic relations counted more. Low wage levels did not stimulate intensive work either. Calling to account for violation of work and quality rules were not frequent because in most of such cases superiors themselves had a finger in the pie. Workers did not have to worry about lay-off either: employment was constitutionally guaranteed, and the change of job came with rather increased than decreased income. The twisted wage and income control of the companies did not inspire for liq-

uidation of the so called “within doors unemployment”, and it is well known that redundant number of employees holds back all performance. Poor organisation, the lack of materials and tools creating stand stills should be taken into account as attenuating circumstance, or rather elicit cause; intensive work can not be expected if employees, through no fault of their own, had to wonder around their workplace for hours.

All these soaked into the employees. That is why, if a Hungarian crisis manager—using an exceptional possibility—wants to pay well the work and quality disciplines and the growth of productivity, the workers, even though they set this object, were *sometimes not able to do it physically*. (A good example of it was the objection of Hungarian skilled workers during their training program in the Suzuki factory in Japan).

Quick and effective “deployment” of human resources to resolve the company crisis is many times curbed by lack of the needed *professional expertise*. Though, the professional knowledge of Hungarian skilled workers is generally good, the most recent or near to that technology would require continuation courses of the trade. There is rarely time and energy for that in a multi-dimensional crisis where the company struggles for mere existence and survival. And such course of professional development can only be started if the company’s management clearly sees the major tasks of recovery, including the main requirements of the renewal of the technology. Without these, training and development is only blind men’s target practice...

At last, not once insufficiencies of way of thinking block the key role of human resources in getting out of the crisis. *Individual initiatives, entrepreneurship, innovative view and attitude* breaking through walls of backwardness have been forced into the background on the last decades’ social scale of values. Work culture declined, the level of its base, *general culture* also did. Nevertheless, the company that has worn out of competitive markets or has not even reached them, can only be successful on these if an overall innovative atmosphere is created by the management and the company’s products can prove the high work culture of its employees. All these are almost impossible to develop during the few months of crisis management, especially if generations grew up guided by requirements for carelessness contradictory to these ones. It is true that a number of Hungarian employees’ inherited frame of mind make the innovative view and attitude succeed easier, makes the work culture take form in technical development, production and marketing, etc. Also there are characters “built” for a competitive market, in those real entrepreneurs the change of values and attitude happened nearly overnight. But at wide layers of the employees can be felt that education of an innovative view and attitude, a really high work culture will better be started in the future in kindergartens. Certainly, this reaches beyond a crisis management’s time horizon: this is the task of crisis management on the national level.

SPECIAL GROUPS OF PROCEDURES IN CRISIS MANAGEMENT

The success of multi-dimensional crisis management depends mainly on the recovery *concept*. For the right concept, the causes, particularities and cross effects of the crisis has to be seen clearly in all dimensions; then the way out of the crisis has to be found. The crisis manager needs sharp critical sight and a creating mind for developing the concept.

The good concept must also be realized that requires *organisation, management* and continuous *control*. By organisation, the manager creates a concept-realizing new company organization; by management, he regulates and stimulates the functioning of the organization to realize the goals of the concept; by control, he not only monitors the degree of realization but also decides if the recovery's original concept needs modifications in consequence of the, mostly, fast changing environment.

By our days, number of managerial procedures (methods) have been developed for the more efficient execution of management tasks and activities. Some of the procedures have been used also by crisis managers. But professionals of management theory have not looked over whether the modern managerial theories can be applied in special groups to crisis management; if yes, then what grouping procedures may be recommended mostly; and with how much synergy effect will the co-ordinated procedure groups increase the success of crisis management.

I am seeking the answer for the management procedure groups' application in multi-dimensional crisis situation by introducing a "composed" group in the following. During that I'll shortly refer to the essence of certain procedures drawn into the group: I assume that all these are well known—with the exception of the only new one which is shown in figure 4. (Hoványi, 1993)—by managers and theoretical professionals.

The crisis management should start with a precise *situation audit*. In this, the SWOT matrix technique may provide help for the crisis manager. (The matrix takes the company's weaknesses and strengths one by one and also threats and opportunities of its environment.) In a multi-dimensional crisis situation threats of non-microeconomic environment increase, opportunities diminish and insecurity of every environmental condition grows. That is why the development of the "classic" SWOT matrix may be recommended: which analyzes not only the company's weak and strong points but also, those of its environment.

The second task of crisis management is a detailed description of the crisis management concept. This is a very complex task which, ending in the setting of strategic objectives, but taking into account all company resources, and their contribution to the realization of the strategic' objectives. Such complex strategy-forming procedure is the "7S" method: this forms its strategic goals—as it is well known—with the contributions of resources in a broad meaning, therefore, technical structure, organization, functional (information, financial etc.) systems, human resources and professional skills, common values of the company and leadership style. It is very important in the view of crisis management that this procedure puts great emphasis on labour skill and motivation, common values of the company and leadership style—which all have to be renewed for the recovery.

Next task is—in case of an industrial corporation—the *renewal of the product line*. This requires the evaluation of existing and future products, generally, according to their marketability and profitability in their expected market life cycle. The portfolio method has been developed for such an analysis scrutinizing the marketability and profitability of particular product- and structure-variants in comparison with competitive products in the expected life cycle. But in multi-dimensional crisis situation, limits rising from non-competitive market factors get more than usual role and—because of lower sales volume, more expensive credits, and inflationary price losses—profitability conditions also harden. Those are new elements in the procedure.

The good crisis management builds on innovation, creativity and exploitation of opportunities. In case of industrial corporations everything has great significance, especially in the area of R+D: the recovery can be best funded this way. The efficiency of developments—size of reached result, keeping costs in tight hand, reducing realization time—has been well served by the, so called, intrapreneur method which operates on having in-company R+D groups in competition, and liquidating step by step those left behind. The main virtue of this method is speeding up development processes by internal competition and in crisis situations there is always a shortage of time.

Realization of the crisis management concept needs *action plans*. The efficiency of these short term plans, focusing on a particular market, location or function of the company may be significantly increased by the MBO (management by objectives) method: using this, managers of different levels set only objectives for their subordinates who plan themselves how to realize the targets. The method brings into the planning process a large number of innovative ideas; strongly motivates the implementation of the plans—all these are big advantages in a crisis situation. The only disadvantage of MBO is that the planning process on different levels of the implementation is time consuming. For this reason the crisis manager should try to accelerate the planning process of the involved hierarchical levels.

The multi-dimensional crisis management requires structural changes of the company almost without exception. Decentralization mostly increases flexibility and effectiveness. Because of that the establishment of profit centers or the development of divisions may be recommended. But for an efficient functioning of the profit centres or divisions it is necessary to delimit unambiguously their resources (this way, their cost accounting) and their marketing goals, actions and achievements from the resources and market activities of other units. Independent management of the profit centres or divisions may also bring some risk in a crisis situation, the crisis manager's unified recovery concept worked out for the whole company may succeed decreasingly in the decentralized units. The crisis manager can at least moderate this contradiction, if he unambiguously determines the central requirements facing the units at the moment of the establishment of the profit center or divisions.

Human resources have an enormous role in resolving crisis situations. Creativity, identification of the individual with company objectives are such powerful resources which, not once, countervail the lack of "hard resources", namely this capital or technology. Therefore, one of the most important tasks of every crisis manager is to win and motivate middle managers and employees. The comprehension of X and Y theory can be well used for this because it does not look at employees as a "foolish and lazy mass" but as colleagues filled with bright ideas, ready to act who are willing to bring great sacrifices for the success of the company. In crisis management, the least formal methods, such as "walk around management" or "open doors policy" can be well used. Crisis managers can not give up applications of these methods, not even when almost every minute of their schedule is full with oppressive cares: the problems of the non-competitive product line, the obsolete technology, the lack of external financial resources, etc.

The change of *the management system* itself is not a neglectable problem in a multi-dimensional crisis situation. Generally, crisis management requires tightened work from top managers. Therefore, it is useful to introduce leadership techniques which decentralize the management system (but do not take away the basic decisions

and control from the crisis manager) which are time saving, and therefore enable him to focus his attention on crucial activities. The already mentioned divisional structures and profit centers also serve the decentralization of management systems. A good example for time saving is the "management by exceptions". In this case, information about events, processes reach the manager only if their value is above or below of a predetermined limit. (Consequently, this method can be applied to, primarily, quantitative events and processes.) Though, in a multi-dimensional crisis situation where company environment is not at all stable, the limits can't be fixed for longer time: the crisis manager has to monitor these—in a given case also with the help of the "management by exceptions" method, namely tailoring, in time, the limits of company events and processes to the new environmental opportunities and restrictions.

The *privatisation with foreign investment* is a special way of multi-dimensional crisis management. Its place and role within the recovery concepts is shown in figure 1. There are special managerial procedures to realize such privatisation concepts. One of these procedures, satisfying the domestic requirements, is the "privatisation partner seeking" (PPS). The series of steps of the PPS method are demonstrated in figure 4 (Hoványi, 1993). The connections of the steps demonstrate that seeking of a privatisation partner with foreign investment is not a random but a systematic process which therefore can be planned with good care.

The listed procedures (methods) of crisis management can, unambiguously, be separated from each other; at the same time they create consistent concepts and series of activities. This is supporting the conclusion that one or more management procedures (methods) can be linked to the different functions of management—and neither one excludes the application of the others to other managerial functions. Therefore, the *managerial procedures (methods)* can be included in *consistent groups*.

According to leadership theory, every listed procedure increases the efficiency of management if it is applied to a suitable task (function). Though, it has not been proved yet whether the application of a particular group of procedures has a synergy effect, especially, in a crisis situation. Quantitative justification of this would be, of course, a vain undertaking. However, *synergy* can be seen as *evidence* because neither the objective nor the functioning of the presented procedures (methods), increasing the efficiency of crisis management, doesn't clash with the other's objectives or functioning.

Based on Hungarian crisis management experiences of the last three years it can be stressed that in the multi-dimensional crisis situation of Hungarian companies there would be need for a much more established, more innovative and consistent concept than the existing one; also the introduction of "more formal" procedures of many proved methods of the crisis management's practice should be necessary to solve the problems of the future quicker and with higher efficiency.

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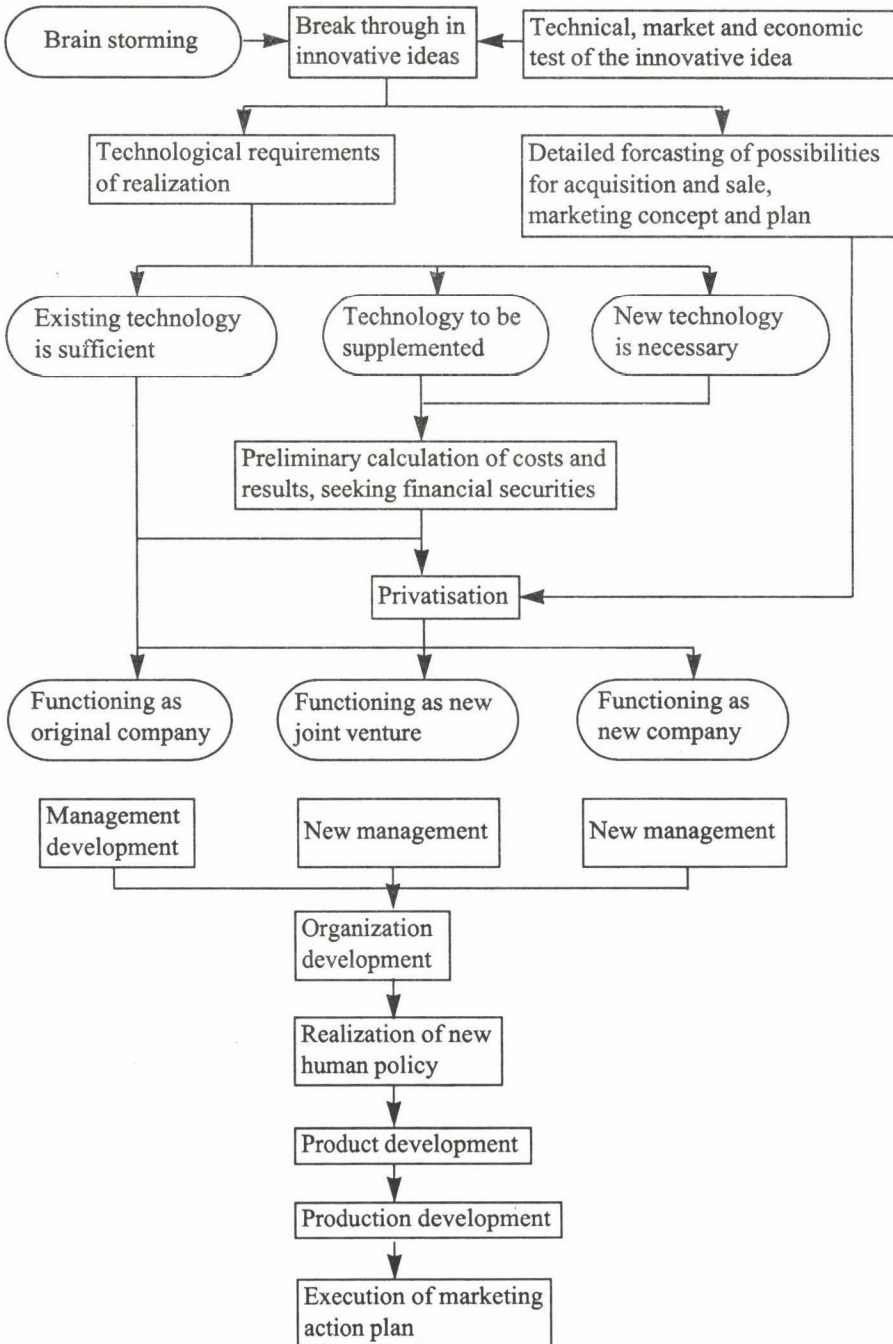
Table 1
**Development of crisis management concepts directed to
 company technology with variants tailored to fundamentals**

VIEW-POINTS	CHARACTERISTICS				
EXISTING TECHNOLOGY	Modern	Partially modern		Obsolete	
		Segmentable	Integrated (closed)	Segmentable	Integrated (closed)
INVESTMENT REQUIREMENTS OF COMPETITIVENESS	Small	Average, divided	Average, in one "package"	Large, divided	Large, in one "package"
ORGANIZATIONAL STRUCTURE	Existing (one company)	A number of new, smaller companies	Existing but renewing (one company)	A number of new, smaller companies	Fundamentally re-organized company
PRIVATISATION	Sale ensuring one "controlling" owner	Sale part by part for different owners	Sale ensuring one "controlling"	Sale part by part for different owners owner	Sale ensuring one "controlling" owner
TECHNOLOGICAL REQUIREMENTS	Continuously keeping step	Closing up by sale of parts of the company	Closing up by investments of the new owner	Renewal by sale of parts of the company	Renewal by foreign investor having large investment capital

1st table continued

VIEW-POINTS	CHARACTERISTICS				
	Modern	Partially modern		Obsolete	
EXISTING TECHNOLOGY		Segmentable	Integrated (closed)	Segmentable	Integrated (closed)
NEW OWNERS TAKEN INTO CONSIDERATION AT FIRST PLACE	Mostly domestic with average or large capital	Mostly domestic, possibly foreign with smaller capital	Mostly foreign, possibly domestic with average capital	Domestic and foreign with average capital	Mostly foreign with large capital
PRODUCT DEVELOPMENTS FOR COMPETITIVENESS	New or old products	Mainly new, less old products	Mainly new, less old products	New products	New products
MARKET POLICY, MARKETING	Conventional and new markets	Conventional and new markets, new marketing	Conventional and new markets, new marketing	New markets, new marketing	New markets, new marketing
HUMAN POLICY	Without lay-off, continuously keeping step with professional skills	Less lay-off, quick closing up of professional skills	Average lay-off, quick closing up of professional skills	Average lay-off, quick closing up of professional skills	Large lay-off, quick closing up of professional skills
CORPORATE MANAGEMENT	Existing but mostly renewing	More new company managers, possibly from internal resources	One new company manager, possibly from internal resources	More new company managers, mainly from external resources	One new company manager, possibly from external resources

Figure 1
Development of crisis management concept built on an innovative idea



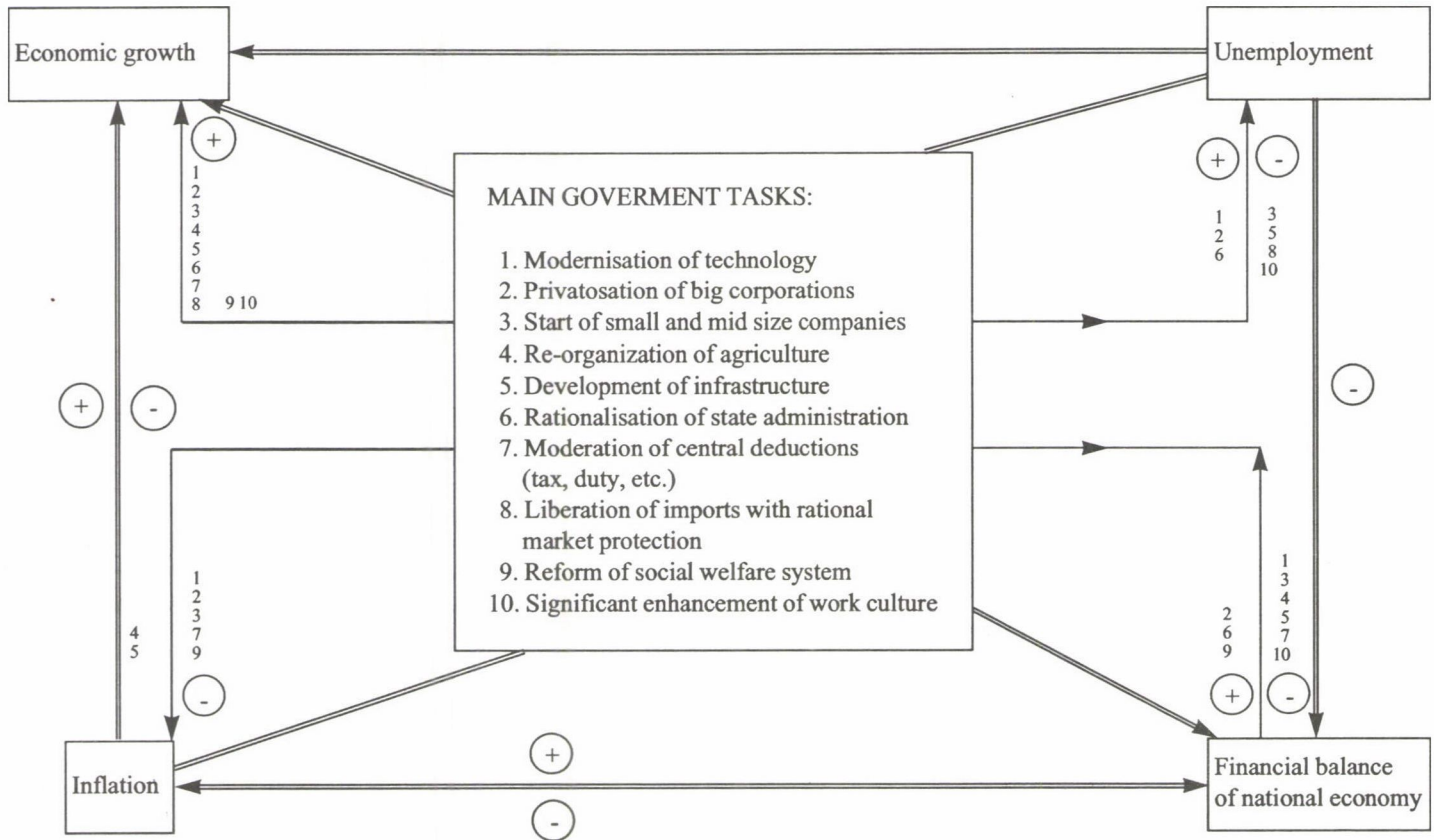


Figure 2 General forecast model of the Hungarian macro-economic environment

Figure 3
Change of significance in Maslow's motivations in case of falling living standards
(Tendencies)

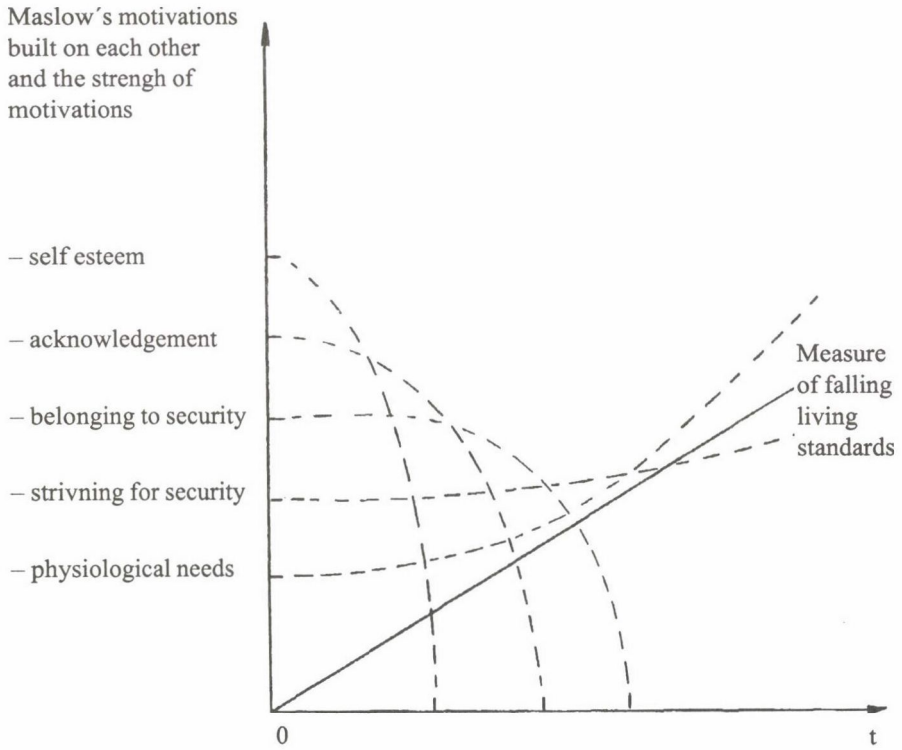


Figure 4

The PPS method: steps of partner seeking, contract preparation and conclusion for realizing privatisation and working capital involvement

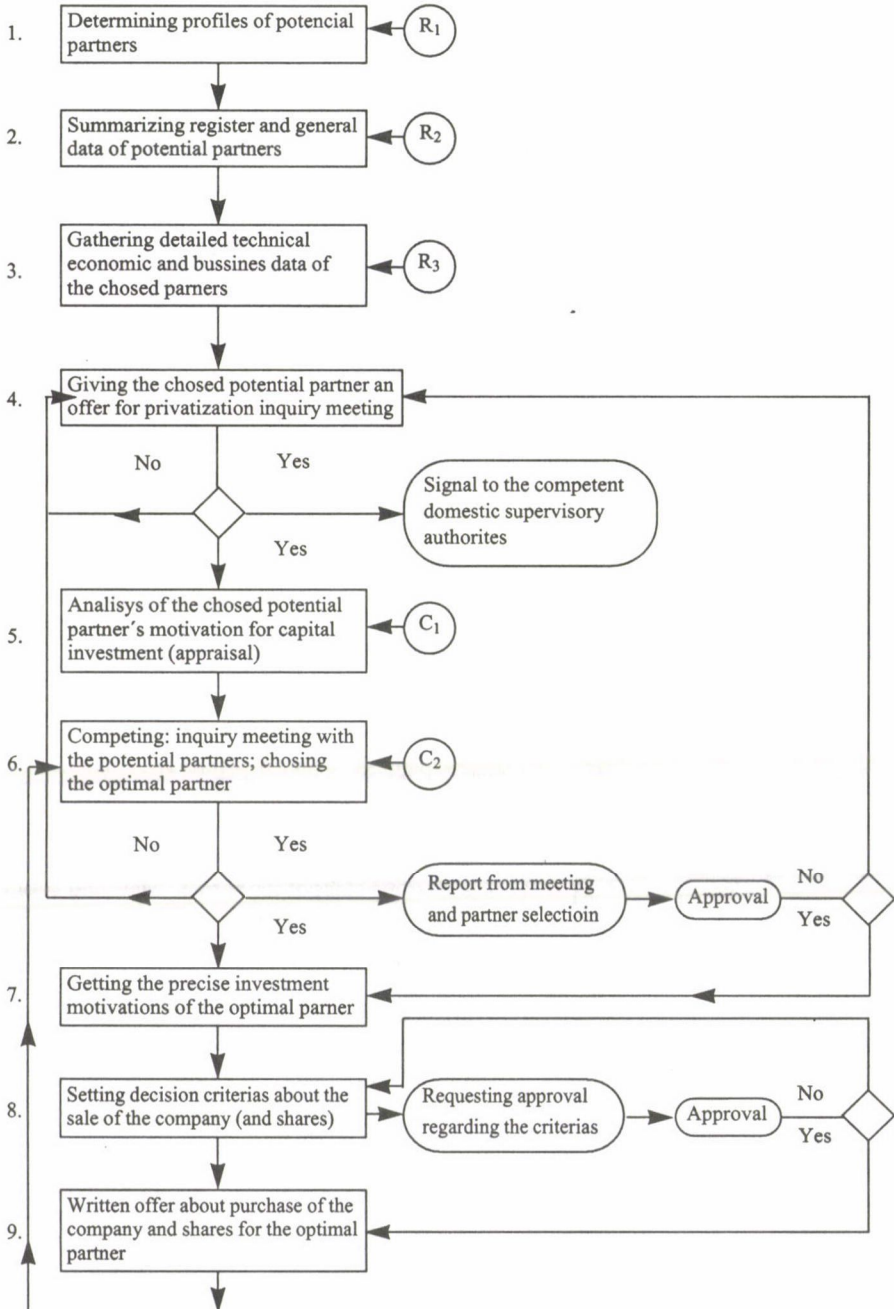
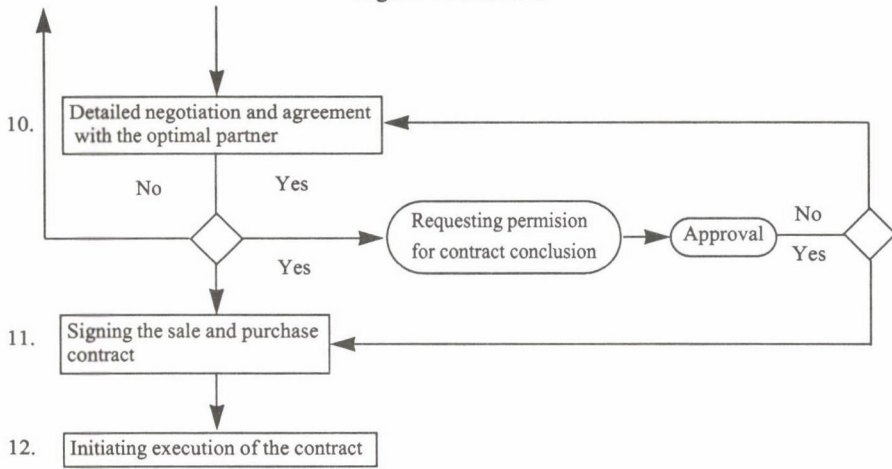


Figure 4 continued



- Signs: Resources
- R_1 = Technical literatures, economic magazines, "who produces what" publications, specialist's opinions, Chamber inquiries.
 - R_2 = As above, supplemented with data storages of industrial and commercial Chambers, data-bank informations, daily and weekly newspapers.
 - R_3 = As above, supplemented with company publications/newspapers, data of released balance/patent/etc. reports, bank informations, professional opinions, exhibition evaluations etc.
- Contents
- C_1 = Weak and strong sides of the partner, weak and strong sides of the domestic company from the partners' viewpoint, expected contact advances for the partners, obtaining references, evaluation of the multi-dimensional crisis situation through the partners' eye.
 - C_2 = Exchange of documents regarding the position of companies, negotiations about purchase price, employment, short term results and management.

Erzsébet VISZT

The evolution of crisis management in steel regions

Iron and steel industry fell in crisis in the last decades in several countries of Western Europe, resulting in unemployment and some other regional crisis phenomena. In these countries there is ample experience about the handling of industrial and regional crises. The purpose of the research was to evaluate from a Hungarian point of view the similarities and dissimilarities of crisis management in individual West-European countries, particularly at a regional level. As an example we took the case of Charleroi (Belgium), Lorraine (France) and Saarland (Germany) because a large part of the steel industry of Western Europe is concentrated in these regions. It was obvious that the county Borsod-Abaúj-Zemplén was the Hungarian case to study. *

1. REGIONAL CRISIS MANAGEMENT IN BELGIUM, FRANCE AND GERMANY

1.1. Main features of Saarland, Lorraine and Charleroi

The dominating role of iron and steel industry in the *Saarland* (with a population more than 1 million) is shown by the fact that in 1974 about 26 per cent of all industrial employees worked in this industry. By 1990 this value had more than halved due to the steel crisis. The rough steel production in the Saarland fell from 6.1 to 4.4 million tons. The main social consequence of the steel crisis was the *significant increase in unemployment* in the region mainly caused by reduced employment in iron and steel industry and connected basic industries. The unemployment rate increased from 4.4 per cent in 1974 to 7.7 per cent in 1977. Consequently the steel crisis, beginning in 1975, caused

*This article is based on a research completed in the framework of the ACE project of the European Community and an international team coordinated by the author of this article. Michel Capron (the FOPES Institute of the Catholic University of Louvain) completed a case study on Charleroi, Régis Larue de Tournemine and Francis Kern (Louis Pasteur University, Strassbourg) on Lorraine and Barbara Schlomann and Wilhelm Mannsbart (Fraunhofer Institute, Karlsruhe) on the Saarland.

fundamental economic, social and also political problems in the Saarland in the following years.

The effects were aggravated by the specific historical development of Saarland after the second world war (integrated into West-Germany only in 1957 after a referendum) and the complicated ownership structure of the steel making companies (partly private German ownership, partly French and Luxembourgian capital). For these reasons, investments in modernization and rationalization of steel plants carried out in other steel making regions of Germany were not undertaken here. This is a handicap which could not be counterbalanced even in the years to come. (Hartz, 1990) This is especially true for two of the three remaining steel companies of the region, the "Stahlwerke Röchling-Burbach" and the "Neuenkirchener Eisenwerke AG", strongly hit by the steel crisis. Only the "Dillinger Hüttenwerke", mainly owned by the French steel company Sacilor-Usinor, was less affected by the European steel crisis. This was mainly due to a fundamental modernization of their steel plants in the 1960s, the specialization in flat steel products, and — in contrast to the two other steel companies — a consistent policy over the years to have the possibly lowest level of employment at the firm.

In France the region *Lorraine* was also suffering from the decline of the steel industry. Of the 110.000 jobs lost by the French iron and steel industry in 1974, 65.000 were located in *Lorraine*. The steel makers of this region employed 95.000 persons in 1964 and still 80.000 in 1974 just before the crisis broke out. The number of those employed, however, was 30.000 in 1985 and only 15.840 in 1990, i.e. less than 20 per cent of the labour force before the crisis.

In Belgium the *Charleroi* basin is, with *Liege*, one of the two major subregions of *Wallonia* affected by the steel crisis. *Charleroi* is a medium-sized town with some 206 thousand inhabitants at the end of 1990. The economic activities of *Charleroi* were, since the 1950s, essentially concentrated on heavy industries: coal mining (the last pit was closed in 1984), steel industry, glass products and chemical industry. With the exception of the chemical industry, all these activities were affected by the crisis in the 1970s and 1980s. The coal pits were closed, the steel industry lost over 9.000 jobs between 1975 and 1984, the metallurgical and glass industry lost about 4.000 jobs, due to heavy restructuring which affected labour-intensive firms like ACEC, Glaverbel, Verlipack, Fairey-Sonaca (aeronautics). The Caterpillar plant (created in the early seventies) lost about 1.000 jobs (from a total manpower of 5.500 persons). In *Charleroi* the unemployment rate reached 18 per cent in 1990.

1.2. Active participation of different actors involved

Analysing the attitude of the different actors (state, regional and local organizations of public administration and enterprises) one of our main conclusions is that they are in each case *actively committed to regional crisis management*. Their activities include the solving of the social problems, as well as the revitalization of the region's economy while the enterprises, generally, take less responsibilities in tackling these two principal problems.

The *active participation of the state* (Government) in the regional crisis management is markedly indicated by the very fact that in the three countries these activities have been pursued in comprehensive programmes (plans) of the central government. Co-ordinated actions of the government are especially well illustrated in the case of *Germany*. The policy of regional restructuring has been an important part of economic policy of the country supplemented by independent development concepts of the federal states.

Because of the decreasing demand for manpower, the promotion of employment has been the central issue of the measures related to social policy. *The support of employment, however, is not reduced merely to the creation of jobs, it is always associated to different objectives of economic policy.*

The crisis-stricken regions are of particular attention in economic and employment policy. Several types of subsidies have been provided for these regions also within the framework of employment and structural transformation programmes. In addition, special programmes of regional development were elaborated for crisis regions. The government provides several types of support for the consolidation of the enterprises and by encouraging mergers. The programmes of technological development serve this renewal as well. At the same time *EC programmes*, not limited by state boundaries, have been elaborated in order to cope with the disadvantages. (Looking at the map we understand immediately why these programmes are so important in case of the Saarland and the two other steel regions.)

In *France* spectacular programmes of revitalization of the regions with declining industries followed each other. In 1977 *the General Agreement for Social Welfare (CGPS)* proposed by the government was signed by the social partners and renewed in 1979, 1983 and 1989.

In *Belgium* the *FRI (Le Fonds de Rénovation Industrielle)* as a national financing instrument created in 1978 is to promote industrial revival and restructuring projects in the regions affected by the crisis of the steel- and the textile industry and the shipbuilding. The FRI associates the state and the regions in making concepts, financing and achieving industrial projects.

According to the experience of the three countries *regional (province-level) and local (district, town) organs play a considerable role in regional crisis management and a close partnership has been established between governments and regional authorities.* This co-operation includes both the formulation of the concepts and their implementation. In the light of the experiences, local authorities work hard in order to identify their development possibilities and they anticipate organizational and financial help from the central authorities. Since the majority of the industries which were characteristic to the region belong to the so-called crisis industries, *crisis management programmes* were elaborated for several sub-regions. Among the regions to be rescued and developed were, for instance, the following areas: the handicapped agricultural regions of the Northern part of Meuse county; those of the mountain areas of the Vosges; the backward farms of the neighbourhood of Dieuze and Chateau-Salins; the coal basin of Forbach; the textile basin of Epinal; the region of Nancy, Luneville, Longwy and Villerupt suffering from grave unemployment.

There are interesting new elements of *enterprise behaviour* in a regional crisis situation. The firms in difficult situation often try to consolidate their position through

mergers carried out, sometimes with state support. In the *Saarland*, for instance, in 1978 the first reaction to the deteriorated situation of two of the three steel companies (Stahlwerke Röchling-Burbach and Neuenkirchner Eisenwerke AG) was their consolidation under a parent company, the ARBED S.A. Luxembourg. The government gave financial support to this transaction.

In addition to government support for the merger taking the form of a financial aid, a *social plan* was negotiated between the trade unions and ARBED, in order to alleviate the social consequences of the planned layoff of about one third of the staff. This agreement, containing rather generous regulations for the affected workers, became known and often referred to as the "*Steel Model of the Saarland*".

1.3. Measures implemented for restructuring the regions

Among the numerous measures implemented in the almost two decades in Western European countries since the steel crisis appeared the following types of measures have been widely used:

- measures related to job creation,
- incentives for technological development and
- measures related to transborder cooperation.

A closer look at the cases shows how the set of measures serving regional adjustment became more and more complex in each country.

1.3.1. Saarland

Because of the critical employment situation stemming from the steel crisis one of the most important group of measures related to *supporting redundant employees* of the steel industry by social plans, qualification programmes as the "Stahlstiftung Saarland" created in 1987 in Germany, the General Agreement for Social Welfare (CGPS) or the Leaves for Training (CFC) in France.

Important regional policy goal has been the replacement of the ceased jobs of steel industry by creating new ones through investments in other sectors. As a consequence of it the employment structure of the steel regions has changed. As a result, the share of the industrial sector decreased and the share of service sector increased. As to the ownership structure the private sector gained importance.

The financial means of the government for maintaining labour market equilibrium were directed partly towards the steel industry itself. As an example we can take the Stahlwerke Röchling-Burbach and the Neuenkircher Eisenwerke AG consolidated under the parent company, the ARBED S.A. in 1978. This transaction was financially supported by the Federal Government and the Saarland Government.

Nevertheless attempts at restructuring the steel industry in the Saarland did not prove very successful during the years to come. There was a further increase in unemployment to 10.5 % in 1982 and in 1984 it reached its peak at 14.5 %. The political consequence of this unsatisfactory economic development in the Saarland mainly due to the steel crisis still not being solved despite the considerable aid of the government

resulted in a change of government from Christian Democrats and Liberals to Social Democrats in the 1985 election. The breakthrough in solving the continuing economic problems of ARBED Saarstahl finally came in 1989 by consolidation of the only flourishing steel plant in the Saarland, the "Dillinger Hüttenwerke" owned by the French government which is specialized in flat products. This solution was favoured by the boom in the steel industry beginning in 1988 with a considerable increase in steel production. Nevertheless, the number of people employed in the iron and steel industry went down by half during the years of the steel crisis. Therefore, besides trying to rescue the remaining steel plants and finding socially acceptable solutions such as social plans or foundations for redundant employees, structural changes within the economy of Saarland became necessary as a result of the diminishing importance of the steel (and coal) industry. This is why from 1989 on a more pronounced adjustment process was promoted by the government of the Saarland and the public administration of the towns most affected by the steel crisis. Important measures were (see *Hartz*, 1990):

- the promotion of technology parks and other trades or services in former steel plant areas (e.g. opening of the "Saarpark-Center" in Neunkirchen in 1989, establishing of small and medium sized new industries in the former steel plant areas in Völklingen and foundation of the "Saarbrücker Innovations- and Technologiezentrum" in 1991 comprising more than 30 innovative firms);

- support for establishing research institutes especially in the fields of environment, energy, computer sciences and electronic engineering (e.g. Deutsches Zentrum für Künstliche Intelligenz, Max-Planck Institut für Innovationswissenschaften, Internationales Begegnungs- und Forschungszentrum für Informatik, Institut für neue Materialien, Institut für industrielle Reststoff- und Abfallwirtschaft);

- support for cooperation with Luxembourg and the French border regions ("Saar-Lor-Lux region") in the fields of telecommunication, transport and joint advertising for the region.

1.3.2. Charleroi

Despite the crisis of coal mining beginning in the 60s and the steel industry in the 70s in Charleroi and in the larger Wallon region a real break-through concerning structural adjustment started only in 1983. The reason behind the slowness of the process was that most of the industrial branches represented in the region were affected by the steel crisis. Several attempts mainly in the subregion have been made to promote a new development (by infrastructural projects, foundation of high-tech firms) but their impact was weak in compensating the numerous job losses since the 60s. It seems that the efforts of the new major of Charleroi in 1983 were rather important in giving a boost to regional development. The different interest groups have been put together (including the Charleroi members of the national government, representatives of the political parties, the local authorities, the trade unions and the private sector). The aims became clear and more precise: the diversification of the existing industries, product innovation of the glass industry, the development of aeronautical products, the support of high technology firms (IRE producing radio-components, microelectronics), the development of new industrial network (food products, electronics, telecommunication, audio-visual tech-

tics), the establishment of new public services and a more efficient communication infrastructure.

Due to three major factors during the last decade Charleroi succeeded to change its economic structure: the action of the local authorities and of the Intercommunal Committee ADEC-Igretec in the field of the urban renewal since 1984, the creation of Sambrinvest in 1985 with the purpose of financially supporting the creation and development of small and medium-sized companies and the long-term action of higher and continuing education institutions.

The contribution of the Intercommunal ADEC-Igretec Committee was very important from the point of view of a new image of Charleroi: the city is no more coal- or steel-based but it became the city of the aeronautics and strip cartoon industry. Important changes have been in infrastructure, too: commercial centres were built instead of the former industrial areas. The Brussels South Charleroi Airport is a new aeropole near to Beecham (pharmaceuticals), Caterpillar and aeronautic plants (Sabca, Soneca, Dassault). It is becoming an attractive zone for new firms linked with the airport activities. The industrial areas of Gosselies, Jumet, Farciennes and Fleurus attracted many medium-sized firms, creating 1.200 jobs between 1986-1991 and—finally—a large business park was built south of Charleroi.

On the field of education the university centre of Charleroi CUNIC and its institutions (the Institute of Public Affairs, a small- and medium-sized business center, the CIFOP continuing education center and the FUNOC for adult education) organize university-level courses. In addition, the educational action of the high-skilled technical education centers, existing for many decades, but aiming now more modern technologies (and remaining under the constraint of the adjustment to the high tech activities), as the University of Labour (Universit, du Travail) and the Labour Chaplains (Aumoniers du Travail) should be emphasized.

Charleroi's image is now much more attractive and many initiatives are undertaken to prepare this medium-sized European city to become a more attractive industrial and service center not only for its direct environment but also linked with the North-East region of France. However, the results may not be evaluated just in several years. With a modernized Cockerill-Sambre (steel plant), new investments of Glaverbel (glass products), a renewal of the graphic and printing industries, the aeronautics pole, several chemical and pharmaceutical plants Charleroi becomes an important industrial pole despite the present lack of major investments in high tech industries.

1.3.3. Lorraine

The case of Lorraine also shows an evolution of regional crisis management. In the first phase—in the 70s—mainly the measures related to social welfare were in forefront. Later parallel with the changing demand of big industrial firms for labour, retraining schemes were offered for the least qualified workers in order to give them a better chance to re-enter to the labour market.

The most global and ambitious project concerns the Longwy employment area with the constitution of a "Pole European de Developpement" (PED=European Development Pole). The PED is transnational since it also covers the Athus basin in Belgium

and the Rodange basin in Luxembourg which experience similar crisis and implies financial help from the EC.

The PED is one of the main projects of the "Action plan of the integrated operation for the development of the iron and steel basin of North Lorraine" presented to the EC by the French state and financed by the EC. The following measures can be identified in the action programme:

- the creation of an innovation park on the border region of three countries with 150 hectare in Belgium, 150 hectare in France and 100 hectare in Luxembourg;
- a specific system of direct investment subsidies exceeding the maximum levels allowed in the three countries (up to 40 per cent of equivalent net subsidy), granted on a long enough term to be significant, with the aim to create 8.000 jobs over ten years in the whole area (1.500 in Belgium, 5.500 in France and 1.000 in Luxembourg);
- co-ordinated fiscal systems of the three countries on the territory of the park;
- common services to improve the environment of the firms establishing plants in the park;
- training in the field of new technologies by way of promoting economic activities in hi-tech sectors. In addition to the existing institutions of higher and technological education on the PED, these new activities should lead to the creation of a common "college universitaire" (college) with a strong technological orientation, given an experimental status concentrating on initial and continuing education and applied research;
- in the field of transport and communication the three countries should join forces;
- to speed up the opening up programme by roads and motor ways for the connection with the outside world and improve internal transports;
- to improve and connect the railway transport system of PED to Paris/Brussels/Luxembourg and Metz;
- to offer a high level of telecommunication services to potential investors;
- the special services in the park and around it in order to offer advantageous working conditions for the firms to make the environment more attractive.

1.4. Moderate results of regional crisis management

Beside the numerous positive impact of strategies and means applied, regional crisis management show up to this time moderate results in certain aspects.

Despite the attempts to restructure steel industry in the *Saarland*, the employment situation did not improve during the years following 1975. There was a further increase in unemployment to 10.5 per cent, reaching its peak in 1984 with 14.5 per cent. The political consequence of this unsatisfactory economic development in the Saarland, mainly due to the steel crisis, still unsolved despite the large government aid, resulted in a change in government: as a result of the 1985 elections the Christian Democrats and Liberals had to resign and the Social Democrats came to power.

Within the framework of the PED, on the French side, 2.500 jobs were negotiated in May 1992 and 1.100 were created. But as is often the case in situations where subsidies are at stake, some firms consider the financial incentive by public authorities as an

aim in itself and go "*hunting for subsidies*". Among the job creating firms it is necessary to distinguish between subsidiaries of foreign firms and local SME. Foreign firms are looking for a site in the Unified European Market and direct supports for investment activities in their case have been a real incentive. This holds for Korean, Japanese, Norwegian and American firms. New jobs are part of a reallocation strategy of industrial units doing assembly work but they fit to low qualified women and not to former iron and steel workers. For instance in the case of Allied Signals, the leading firm in the PED, producing industrial fibres for tyres created 300 jobs in three years, of the 45 persons who were last hired 10 came from Longwy and 3 of them were former iron and steel workers.

Despite the measures targeted diversification the local industry the rate of newly created firms is lower than the regional average. The income from business licences went down from 6.7 per cent in the Longwy district, on the other hand it enhanced by 20 per cent in the Briey district, and by 61 per cent in the Nancy area. The average per capita taxable income in 1991 was 26.000 FF in Longwy and 34.000 FF in Nancy (31.230 FF in the Meurthe et Moselle d,partement).

Beyond the rhythm of job creations and income differences between Longwy and Nancy, the most worrying feature is the *demographic* crisis.. The age pyramid is about to be turned upside down: the surplus of birth over deaths went down to 150 in 1991 and the fertility rate amounts to 1.5 in Longwy as opposed to 1.7 in Meurthe and Moselle in general. From 1975 to 1990 the population of the basin diminished from 105 thousand inhabitants to 83 thousand i.e. a decrease of 20 per cent in 15 years. In 1991 the basin lost another 1.500 inhabitants. *As a consequence: the region seems to be adapted to the crisis but at the cost of increased intra-regional differences.* The Nancy urban area has recovered its industrial dynamism by strengthening the tertiary sector, and thus the disappearance of industrial centres such as Pompey and Neuves-Maisons has only a limited impact on the general activity level and on the rate of unemployment.

More isolated basins of an accentuated mono-industrial character, on the other hand, have to cope with a crisis which threatens their economic survival, notwithstanding the number of measures being implemented. The French case also points out that the transition period could have been better handled by the acceptance of the fact that *the problem of former iron and steel workers could not be solved by strongly individualized mechanisms.* The possibilities of re-activizing early retired people over 50 years of age and the further employment of people between 45 and 50 on projects aiming at rehabilitating some industrial sites with cultural activities or at facilitating and the retraining of the younger, could have maintained a social life in these basins, preserved a socio-professional identity which would have made it easier to transform some of the basins.

The case of *Charleroi* proves that a political determination is very important to concentrate human, financial, industrial, social and economic resources for a coherent project. It needs thus a *political consensus between employers, trade unions, political parties and local authorities to act together* in promoting the same, often very difficult, case. Secondly, once such an agreement is reached, *relevant and job-creating projects must be found and developed, often requiring significant, and not always available financial means.* This financial constraint explains the long term character of the

restructuring process. The attraction of new investors depends on the success of the first reconversion projects requiring themselves considerable investments.

Another problem is raised by the qualification level of the labour force: the job cuts during the crisis years have affected mostly low-qualified jobs. It is therefore *urgent to develop a technical education system which prepares the entrants to the labour market for higher qualified jobs, especially for the hi-tech industries*. In the Charleroi case, the financial means remain still too limited. There is a lack of major high technology activities and the education system (this being a general Walloon problem) remains insufficient and inadequate. Globally, even though many efforts were made to restructuring the Charleroi sub region, they were not able to fight efficiently against unemployment and the jobs created are far from compensating the lost jobs. Nevertheless, the Charleroi basin has been emerging slowly out of a period when the city was essentially based on heavy industries and turning to more diversified economic activities.

At the national level, it was intricate to obtain a coherent development policy: regional conflicts, lack of political will and coherent projects, irresolution of the national government have, over the years, disorganized any attempt to implement an industrial policy. Since 1989, the SRIW and the Investis, in the frame of restricted financial means, have the opportunity of initiating a *coherent industrial and economic redevelopment policy for the Walloon region*. Moreover, the holding companies and the potential Walloon investors have to make efforts to develop industrial projects and to invest in the Walloon region.

However, since the beginning of the steel crisis, many years have been lost and the backwardness of the level of education, research, industrial projects and infrastructure improvement will be very difficult to recover. Politicians, holding companies, economic, industrial and technological research institutes have to conceive and apply a dynamic development policy which will give back to the Walloon region its former economic and industrial capacity.

2. REGIONAL CRISIS MANAGEMENT IN HUNGARY

The way the industrial recession spread over in Hungary is also diversified across regions. Counties like Borsod-Abaúj-Zemplén and Nógrád where the basic material industry has been dominant have been most affected: they record industrial output about 40 per cent lower at the end of 1991 than in 1988 (compared to a decline in overall industrial production of 29 per cent during this period). Just for comparison, industrial output has declined by less than 20 per cent in counties having a more diversified manufacturing industry, such like Zala and Tolna.

2.1. Main Features of Borsod County

Borsod-Abaúj-Zemplén is, with its about 760 thousand inhabitants, the second greatest county of Hungary. Its area is 7247 square kilometres (about the same as the area of the Saarland steel region). The population density here is higher than the average of the

country (105 persons per square kilometres). 40 per cent of the population lives in Miskolc, the county town, itself. 75 per cent of the inhabitants of the county are concentrated in the towns of the industrial area (including Miskolc itself). Due to the migration from the county the decline of population has been even faster than the Hungarian average. During the last decade the population of Borsod decreased from 810 thousand to 760 thousand inhabitants. In the county the *negative balance of migration is the highest in Hungary* (followed by Szabolcs-Szatmár-Bereg, one of its neighbouring county). Borsod is the only county where the *decline of the population is even higher in the towns than in the villages*: -7.5 and -2.5 per cent in the period of 1986-1990, respectively.

Speaking in terms of regions, the crisis of the iron and steel industry means unequivocally the crisis of Borsod county and within this county the districts of Miskolc and Ozd. This region is a part of the Borsod Industrial Region and the valley of the Sajó river and includes Kazincbarcika and Tiszaéjv ros. Within this region the city of Ozd and its neighbourhood of 27 settlements is of paramount importance. This region is the most closely tied to iron and steel making (see *Table 1*).

For the employment structure of Borsod county see *Tables 2. and 3.* The Borsod Industrial Region was developed from the fifties on as the centre of the heavy industries in Hungary. Even in course of the seventies and eighties coal mining and iron and steel industry played the dominant role in employment.

In the context of regional crisis management of Borsod it should be taken into account that besides iron and steel making there are here other industries in a poor condition. One could mention here the engineering industry in *Borsodnádasd*, the coal mining and construction at *Putnok*, the chemical industry in *Kazincbarcika* and nevertheless, besides steel making the engineering industry in *Miskolc*.

It would be reasonable to seek the ways of crisis management and structural compliance over the county borders too but, for those circumstances mentioned above, it is easy to see the obstacles to be faced with.

The eastern neighbour *Szabolcs* county is of low industrialization level with a weak agriculture. At the same time, this county has the most rapid population growth in Hungary and till now the commuting to Borsod could mitigate the employment problems of county Szabolcs. It cannot be expected in the near future that this county (one of the most backward ones in Hungary) could absorb the redundant labour force of Borsod. It should be taken into account that a part of the Szabolcs industrial plants have been closed down and the great majority of the rest have very inappropriate equipment and are faced with market problems. The industrial enterprises of this county have been plants, deployed to up-country, of former countrywide operating big companies (*Tungsram, Taurus, Metripond, Magyar Gyapjufonó*).

In *Heves* county on the parts bordering Borsod there is a tourism belt with small villages (*Bükkszentmárton, Szilvásvár* and, a bit farther away *Parád, Mátraháza and Mátrafüred*). Manufacturing industry could be found in the central parts of the county around *Gyöngyös* far from Borsod. For the well known market problems the position of the formerly decisive engineering industry has become uncertain here. This situation, accompanied by the crisis of coal mining, has contributed to the high unemployment in Heves.

Borsod has a border of two hundred km with *Slovakia*. This neighbourhood, however, is utilized neither from economic nor from tourism or cultural points of view. In

course of this research no development has been found in the county which could be taken as a promising one with regard of an over the border co-operation.

2.2. Crisis Symptoms in Borsod

From 1980 to 1990, mainly after 1988, some 26.000 industrial jobs ceased to exist in the county. In other primary and secondary branches the employment decreased by about 25.000 persons. (The figure was in case of construction 7.000, agriculture 8.000, public transport 3.000 and trade 7.000.) Even though the employment in tertiary sectors has slightly increased, this was far from enough to counterbalance the indicated employment reduction. While the number of those employed was reduced in the primary and secondary branches by 51.000 persons, the increase in the tertiary sectors was only of 7.000.

The redundant manpower on the local labour market is increasing. This can be illustrated by the number of *registered unemployed* persons. By way of comparing this number with the value of the registered vacant working places, it is almost month by month perceivable that the gap is getting wider and wider since the end of 1990. *Table 4* presents the trend and rate of unemployment pointing out the unfavorable situation in Borsod in comparison with the Hungarian average.

The regional crisis ensuing from the cutting down the steel making industry took the greatest tolls till now in *Ózd and its vicinity*. The dependence of this area on steel making are reflected by the data of the census of 1980. According to these data 51.3% of the active earners in Ózd were employed in the steel industry and 62.4 % of the dependent persons lived on their salaries. The unemployment rate in Ózd is today the highest in the county and even in Hungary as a whole.

The number of registered vacant jobs in the region is eliminable: in March of 1992 there were 7 vacant jobs per 1.000 unemployed persons, the situation being hardly better in the neighbouring towns. Every third unemployed, about 2800 person in Ózd are without any registered income.

The situation of *young people* (seeking for their first employment) is almost completely desperate. The number of students in higher education is decreasing, since families cannot cover the increasing costs. This trend accompanied by brain drain has started a process of a "mental atrophy" of the region. All these phenomena are necessarily accompanied by some other social problems as well, e.g. the atrophy of community life, passive resistance of the people, and negative social phenomena of other kind (e.g. excessive drinking, increasing trend of divorces). These phenomena are experienced also in the crisis regions of other countries'.

The environmental situation of the county is also critical. This holds true either for housing and jobs or in the aspect of pollution. Even though the "towns of heavy industry" had received sizeable development funds, a bleak and environmentally unacceptable type of housing was created. The small communities, which had far more pleasant life conditions, vanished at the same time because of the lack of jobs and the disadvantageous position with regard for infrastructural development. Even the mere listing of these environmental problems can direct the attention to the fact: *in this region a far more complex set of problems has pvtto be faced with than the crisis of iron and steel*

industry. The core of the problem is the complete failure of the industrialization policy of the past decades, its impacts can be experienced by the inhabitants of the county.

2.3. Regional Crisis Management in Borsod

The attitudes of the agents and the strategies applied in the Borsod crisis management are influenced by the general conditions in Hungary and in the countries of the eastern part of Central- Europe. It cannot be left out of consideration that

– *the agents (the Government, the local authorities and the enterprises) have not publicly considered the crisis and the unemployment before the change of regime in 1990;*

– *the structure of the economy, the relative importance of the three sectors (industry, agriculture and services) is quite different here from that of the more developed countries. Agriculture and industry have a greater and, in turn, services have a smaller relative importance than in the more developed economies;*

– *regional crisis management has been hindered by the general crisis of the economy of the country, by the lack of government funds, and by the low level of the population's economic forbearance caused by the continual decrease of (low even before) incomes.*

Before 1989 government measures were predominantly used for *preserving the existing industrial structure* (e.g. repeated subventions for steel industry.) Measures of employment policy funded from state budget were applied since 1988 when the *Employment Fund* was created to absorb redundant manpower. Within this framework the government intended to introduce incentives for *job-creation*. In order to promote this goal, preferential credits were available through tenders. By these measures the government contributed to the creation of several thousand jobs in the county. In course of the evaluations, however, this approach received considerable criticism. (Kovács-Nagy, 1988.) The critics argued that

- the jobs created (a part of them would be created without the assistance provided by the fund) do not serve the objective of the programme "to create new and prospective jobs offering possibilities for individual development";

- since the job-creating project was established in a time with no redundant labour force, the programme could not contribute to the absorption of this latter.

The assessment of this means of labour market is recently more positive than before, and also the functioning of the fund could be improved. Say, local authorities want to have a more substantial role in assessing the applications representing the regional points of view.

The preferential *start up loan* encourages small entrepreneurship in order to offset layoffs in the region. Support for retraining, public constructions and re employment assistance are the most well-known means of employment policy implemented to a great extent in the county.

A new device among the means of employment policy is *Employment Association* created specifically to stop the further spreading of unemployment around Ózd. The association offers the most different ways of employment for those 1.800 persons becoming redundant at the steel makers after the first of March 1992. (They are

employed at the demolition or restructuring of unused buildings, landscaping, etc.) Members of the association are encouraged also to take part in retraining programmes. In Ozd 1380 from the 1880 persons laid off joined the association. For the time being they could offer jobs only for 150 of them. This state of affairs could be improved by the launching projects to road building and a hospital reconstruction financed by central resources.

Within the training activities the development of *retraining* is of special importance especially in areas of redundant labour force and of low training level being low with hardly convertible skills (which is the case in the regions affected by the steel crisis). The establishment of the *Retraining Centre of Northern Hungary* and its Office in Ozd reflects that this aspect have been given the appropriate priority in the region. *The Centre was built within the framework of the Phare-programme, and, the training methods are based on the experiences of the EC-countries (first of all on the methods used in the Republic of Ireland).* According to the experience accumulated so far, the participants of retraining courses have better chances to find a job. Sounder assessment will be possible only after a longer period of operation when participation would not be reduced to the most motivated persons.

The crisis has directed the attention to the *entrepreneurship boosting devices*. However the use of these devices is more general and goes far beyond crisis management in Borsod the following ones are in the foreground of the attention:

- innovation parks providing area with public utilities to entrepreneurs,
- retraining centres in Miskolc and, to lesser extent, in Ozd,
- entrepreneurs' training centres,
- incubator houses,
- managerial office buildings,
- local product exhibitions and fairs,
- regional financial institutes,
- programmes to encourage over the border relations.

The *Hungarian Entrepreneurship Development Foundation* took an active part in the creation of the above mentioned devices. The Foundation pays special consideration to small entrepreneurs and starting enterprises and assists them by providing consultation, information and credits and helping them in establishing business contacts.

However, there are some negative experience in the *business services sector*. While this sector is a more organic part of the regional economy in developed market economies, due to the overall recession and to the immature character of the market economy this sector is facing serious difficulties here.

2.4. Failures of Crisis Management

If the crisis management in the developed countries has yielded only moderate results, the crisis management in the Borsod region should be considered far less efficient.

In spite of the substantial funds provided by the government to the Borsod region there is *no significant progress in the mitigation of the unemployment*.

From 1988 to 1990 almost 4.000 jobs were created from the contribution of the Employment Fund. However, short-term perspectives and lack of resources are reflect-

ed by the fact that these jobs were of low technological standards and they have been created in firms of low competitiveness. This is why despite the significant resources invested in job creation their impact hasn't been perceptible.

Similarly unconcentrated is in the county the central fund named *Resumption Loan* created for jobless persons. It would not be easy to evaluate its effect because in course of 1988 -90 some 5.000 people made use of this facility. Some small-scale enterprises could be launched thereby but their regionwide effect is neglectable.

In the most severely struck region of the county, in the Ózd area – where the concerned agents tried to implement the available means of employment policy and territory development as early as possible – the rate of unemployment is almost three times higher (above 30 per cent) than the national average, and it exceeds two times the average of Borsod county itself.

The majority of the government measures only helped to postpone the restructuring the region. Delays in starting structural adjustment have led to the *coincidence of the reduction of steel production with an overall regional crisis, and there remained no alternative way to employ redundant labour force of the iron and steel industry.*

Failures at Diósgyőr and Ózd in the involvement of foreign capital direct attention to *contradictory features of privatization* of the two big metallurgical enterprises. (Notably to unfavourable agreements, cash flow problems resulting from insufficient registered capital, speculative intentions, misuse of preferential tax and wage regulations etc.)

It follows that *few if any structural changes* could be observed in the region so far. For the crisis there is a continuous decline regarding both production and employment. Having followed the iron and steel industry *other crisis industries appeared* (mining, chemical industry, engineering, food processing, agriculture). Privatization is of slow pace, the *inflow of foreign capital is lower* than in the rest of the country. In this region of the tradition of large enterprises *small companies are spreading much slower* than in other regions.

The uncertainties in the trends of industrial development and restructuring of the region have their marks on retraining policies as well. Retraining therefore is directed to provide general knowledge and, on the other hand, to profiles applied widely in developed countries (computer skills, managerial knowledge, foreign languages etc.). This might be *advantageous for those starting entrepreneurial activities or seeking a job at a joint venture company.* There are, of course, no guarantees whether the persons having acquired up-to-date skills will work within the region itself.

The local authorities of the regions struck by the crisis of the steel industry cannot play a more significant role in compensating the lost jobs, even if they perceive the problem itself with all its severity. There are no sufficient financial resources to secure even the former standards of the institutions under their responsibilities either. (Their revenues from personal income taxes decreased, the entrepreneurs of the region pay rents for estates and buildings with delays.) At the same time, for the lack of solvent demand, the value of the real estates is diminishing.

It could be seen even now that the institutions responsible for regional development do not take the structural adjustment of the region as their principal problem but concentrate on *"first aid" measures* to mitigate the acute tensions of unemployment. This is of course a very important item from the aspect of relieving acute social tensions

of the region but it hasn't contribute to solve the structural problems of the region's economy—as it have been experienced in Belgium, France and Germany, too.

In the sub regions outside the industrial centres any kind of economic development depends to a high degree on the development of infrastructure (roads, public facilities and telecommunication). However, because of the high unemployment of the Borsod industrial region the development of these underdeveloped regions—at least from governmental resources—has been pushed into the background.

3. CONCLUSIONS

The comparative experience of crisis management of the three EC-countries and Hungary underlines that the *regional crisis management makes imperative a more sophisticated and complex system of tools. In the light of foreign experience, it seems that the Hungarian practice of handling regional problems has simplified the issue by concentrating on labour market equilibrium and paying few if any attention to a long lasting stability. In addition to this, the development of small-scale enterprises is strongly accentuated—mere in communication than in action—while the promotion of larger investments and the development of the regional and country wide preconditions of their functioning remained far behind.*

Another conclusion could be drawn in respect of *job creation and labour supply*. The assistance given for job creation to investors in Western countries has generally been successful but according to the experience these *new jobs were not fit for redundant steel workers and absorbed mainly new entrants to the labour* (young people and women). The regional programmes applied in Hungary put also their preferences on sectors like food processing, light industry, tourism etc. At the same time these programmes haven't faced the long-lasting unemployment resulting from the crisis of the iron and steel industry. This is reflected in many unsolved and growing social tensions caused by the high rate of unemployment in the regions effected by the steel crisis.

It can be taken as an overall international experience that the intention of *re-training could often bring moderate results only*. In Hungary the re-training is very important, due to the low level of present knowledge and skills, but a serious problem is represented by re-trainability. However, there is a danger that while re-training those who are able to find a job without re-training, the less mobile people who are unable to keep up with re-training programmes could drop out or be left behind. (People with low skills, elderly persons and those accustomed themselves to hard manual labour). In regions of iron and steel industry the share of this type of people is higher than in the rest of the country and even higher than in the average of the county.

In any country affected by the steel crisis the government has taken an active part in crisis management. *The first phase of crisis management—the seventies—was predominated by defensive types of strategies (import restrictions, quotas, measures of price policy, antidumping proceedings), the second phase was, principally, that of the technological development and reorganization. All governments have undertaken the task of active contribution to the mitigation of the tensions in employment.*

In Hungary the government's role in crisis management was quite different. It could be related also to the fact that the government was the owner of the enterprises

concerned that instead of phasing back strategies a protectionist strategy was followed in the eighties. The government participated not only in financing technological development, R & D and in development of infrastructural and human resources, like in more developed countries, but took a part in financing several huge investments of the iron and steel industry. This sort of government participation, however, could not bring results. The technological development of the seventies and eighties and the equipment installed did not go together with a significant improvement of competitiveness. On the contrary, the loans taken for the investments led to an excessive indebtedness of the enterprises.

Another remarkable difference is that state intervention of this kind became weaker in the 1990s. Government concern is focused recently on the mitigation of those tensions in employment resulted from the production cuts. *The efficiency of the implemented government measures have largely diminished because the retarded steel crisis came to its full extent in a period of an overall recession when the government's means available for crisis management are very limited and dispersed among too many objectives.*

Crisis management has been a time consuming process with no *satisfactory arrangement of the problems of the social groups concerned*. The discontent could be explained also by the fact that all implements of a complex and manifold crisis management could not be of the same efficiency. While certain large enterprises adjusted themselves successfully to changed economic conditions, there remained a number of unsolved regional problems. (A continual high unemployment and exodus of the population from the region, the increase of the average age and the disagreeable environmental conditions, the inefficiency in re-training should be mentioned here.)

The fact that the most grave social and employment problems remained unresolved, is closely related to the inefficiency of crisis management:

(i) In the crisis regions the state subsidies for job-creation led to an increase of jobs but the attention of the enterprises turned to obtaining state subsidies the improvement of competitiveness have been neglected—as it was shown in the case of Lorraine.

(ii) The means and devices implemented helped only to a limited extent to modify the elasticity of the distribution of the active labour force by industries. The transformation of the regional structure of production was limited either to modify the structure of labour force, or to create new jobs. In the majority of the cases the harmony of these two types of activities could have not been achieved.

(iii) As international experience shows, the improvement of the structure of manpower in the regions of steel crisis is hindered by the low level of education and training. It follows that education and training have a role in the regional restructuring. Progress in this respect was slower than necessary.

(iv) The structural adjustment of the regional economy was also hindered by the fact that there were no investors for job creating projects or they were found late.

Therefore a new (third) phase of steel crisis management has been taking shape in the West-European countries in the last years, mainly for handling the unresolved social problems. *In this phase the deficiencies of crisis management should be corrected and there is a need for wide range application of new devices* as the Foundation of the Saarland Steel Industry established in the late eighties. The foundation serves the

support of those former steel workers being redundant as a consequence of the structural crisis.

The tasks to be solved in the third phase of crisis management are, of course, examples to be followed also in the Hungarian practice. It is particularly important to elaborate and more efficiently co-ordinate a sophisticated set of strategies and means.

In widening the spectrum of the means applied it is imperative to *improve the institutional conditions of investments in order to create incentives to investors and make them interested in job creation*. It is worth drawing attention to the Belgian practice in crisis management. From 1980 on several efforts have been achieved to set up initiatives boosting an inchoative industrial policy in the Walloon region, severely affected by industrial decline. There were determined the crisis struck regions of Belgium and in course of 1982-83 several government organizations were established, including holdings of both government and private capital, for the regional restructuring. A part of them had been created as a result of the restructuring of steel companies while other industrial holdings of the later phase of 1985-87 promoted the creation of non-steel-making enterprises and job creation by financial means. Then—as third phase—from 1988 on, the SRIW, acting as a public Walloon holding, became gradually the major instrument organizing and impulsing the activities of the investment companies for the promotion of small enterprises. These companies appeared, until now, as the most important means of assistance and incentives—nevertheless on a still modest scale—in the Walloon region.

In order to restore the business situation in a crisis-ridden area it proved to be useful—beyond giving incentives to investment—to rely on *transborder cooperation* (experiences with the European Development Pole). Such a development strategy would be feasible in the case of the Borsod area and the nearby Slovak industrial area (Kosice, Banska Bistrica etc.), since cutting down on heavy industry raises similar problems in this larger area.

Our research demonstrated that in Western Europe regional structural adjustment pursued other goals too, beyond employment creation (e.g. environment protection, technical development). This was the philosophy of innovation centers created in the Saarland.

A lesson drawn from these experience is that the *science and industrial park concept should be as much as possible transferred* to Hungary, to the Borsod region, in particular. The parks seem to be indispensable for the development of new economic activities in the region through helping the implementation of those results already existing in accordance with the “follower type” innovation and for attracting investors. Because the lack of experience and financial resources needed for setting up such parks an extended preparatory work might be suggested with the participation of foreign experts and investors.

Even in the case of using an adequate set of policy instruments in crisis management the *successful regional adaptation appears to be a long-term task*, it needs more time than the stabilization of the steel industry. Also it should be taken from the West-European experience that the suggested *policy actions (measures) should not be narrowed to the so-called “steel-basins” but be extended for the neighbouring regions*, as well. Consequently, the crisis management of Ozd region needs such an extended approach in the context of Borsod county, at least.

Finally, almost all studied cases of crisis management demonstrated that both the goal-setting and the planning of policy instruments as parts of *regional development programmes should be elaborated in an interdisciplinary way and in detail* providing a much better basis for implementation than the Hungarian programmes have done so far. To do so, there is need for new institutional arrangements for co-ordination among the government, municipalities, firms and pressure groups as suggested by our analysis.

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Judit VÁNYAI:

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ADJUSTMENT PROCESSES AND THE LABOUR MARKET: A REGIONAL APPROACH

Scientific and governmental interest in the problems of regional development projects in backward rural areas dates back to the mid seventies in Hungary. By the mid eighties however the signs of a crisis in regions dominated by the heavy industries had to be dealt with as well. The disruption of Eastern Europe as an economic system has further accelerated this trend. Structural problems also made their regional impact. While a remarkable number of projects and government decisions tried to solve structural problems, the elaboration of regional development strategies was mostly neglected.¹

A SHORT INTRODUCTION OF THE REGION UNDER REVIEW: THE COUNTY OF BARANYA

Some 4 per cent of Hungary's population lived in the county of Baranya in 1991, and the density of population was 93/km². Both by size and population the county occupies the 9th place among the 19 counties in the country. Population has slightly been diminishing, with a loss of 1.4 % over the past five years.

The existence of 296 villages -2/3 of them with a population under 500 beside the five cities (Pécs, Koml6, Mohács, Sikl6s, Szigetvár)—can be pointed out as the determining feature of the structure of communities in the county. 40% of population resides in the county's center (Pécs), 20% in the other four cities, the remaining 40% in the small villages. This makes infrastructural development rather difficult especially with regard to transport and telecommunication. The first Hungarian case of a total desola-

¹ The research has been sponsored by the ACE program of the EC, drawing in research workers from the Deutsches Institut für Wirtschaftsforschung (Karl Brenke) and the Université Rennes II. Haute Bretagne (Joëlle Barreau, Alain Even, Xavier Richet, Nadine Souchard and François Vatin). The German partner summarized the readjustment policy of a region situated in the former GDR—the present federal state of Mecklenburg-Vorpommern. The French researchers presented how the economic structures have changed in Brittany. The present article contains the main elements of the Hungarian study and the conclusions based on the French and German experience as well.

tion of a settlement, which caused a great stir through the whole country, occurred here (the village of Gyúrúfü).

The *econo-geographical and geopolitical conditions* of the county are favourable. Extending in the country's southernmost part closed down by the rivers Danube and Dráva climate here has got a Mediterranean character. The proximity of the former Yugoslavia stimulated business and tourism until the outbreak of the present war.

The relative share of *national minorities* in the county (Germans, Serbs and Croats) exceeds the national average.² One third of the Germans and one fifth of the Croats minorities live here. The economic consequences of this phenomena are not negligible. The professional distribution of Germans is the same as that of Hungarians, while the representation of Slavs is significantly higher in agriculture.

Almost all settlements located close to the border suffered from the creation of the so-called *border-zone*. These settlements deteriorated, the young and well-educated inhabitants moved to other places. In the 1970's their abandoned houses were sold to the Gipsy population by the municipalities at very low prices, eg. in the micro region Ormánság. Despite the government effort to release tension resulting from the cultural differences, many problems remained unsolved. There are no official data showing the share of unemployed by nationalities but probably the first victims of job cuts are the Gipsies. The increasing unemployment leads to worsening living conditions and whole settlements become even more backward.

Baranya is one among the *industrialized* counties of Hungary. In 1991 44.0% of employees of material branches is in industry, just like the national average. The only Hungarian mines of black coal and of uranium ore can be found here, and the production of china insulators, concrete, wood-fibre panels, leather gloves, tanned leather and cigarettes is significant. However, the dominance of mining is well shown by the data that 26% of all industrial employees was working here in 1990 and 20.1% in 1991. Light industries and the food sector point out the traditions providing a source of possible growth to counter the crisis due to the slump in mining. The deterioration of the market environment both in the country and abroad has not left these branches undamaged, either. The crisis is well shown by the 14.5% decrease in the number of industrial employees in 1991 comparing the previous year as against 11% at the national level.

The county's center Pécs has a sometimes excessively dominant role in the region, and also in some local industries. Concentration of industry, infrastructure, service sector and population can be seen with the difference that due to a paralytic and obsolete economic structure this over-developed center itself is in a critical situation. The county's being centered at Pécs is a fact to be considered with regard to the resulting "operational dependence" of the whole region on the city.

The city of Komló is the other center of industrial potentials in the county. This is the reason for the frequent occurrence of the concept of the Pécs-Komló area including some fifty adjacent villages as an industrial sub-region. This is the area we can regard as

² Estimates can only be based on voluntary declarations. Due to possible consequences depending on political situation, a strong bias is present, necessarily. The weight of the German component was 36 % by the census in 1941. The declaration of German identity has been influenced by the deportation after World War II. under the Potsdam decision and special factors have exerted an influence on declarations made by the Slavs, too. (Hooz-Kepecs-Klinger, 1985)

definitely depressed today. 80% of industrial employees and of gross fixed assets and 79% of net values are concentrated here. The chances of a restructuring seem to be much better in Pécs than in Komló, where the exclusive reliance on mining and the lack of any other industrial traditions make prospects gloomy.

Baranya is one out of the five best *agricultural* counties in Hungary, 19.8% of employment of material branches is in this sector, by 2% more than the national average. Similarly to the country as a whole, unfavorable trends seem to emerge in Baranya's agriculture, too. The decreasing price of farm products, the cut-back in stock-breeding and the decreasing demand on the output of attached industrial activities and services have together led to a radical decrease of incomes. 81 out of the 134 units of production reviewed by the Institute of Agricultural Research and Informatics became a loss-maker by the end of the year 1991 (60.4%), and bankruptcy proceedings are on against 16 farming co-operatives and two state-farms. (*Kapronczai-Tomka-Udovecz*, 1992).

The Mediterranean-like climate and a unique flora offer good conditions for *tourism* in all seasons. Sulfuric thermal springs are of extreme importance for establishing spa-tourism. Historical and architectural heritage is rich, too. The main difficulty of tourism development is the lack of environmental culture and sufficient infrastructure. An improvement can only be achieved by relying on private investors, both domestic and foreign. The outstanding qualities of the Mecsek-Villány resort area deserve particular attention from this point of view.

Poor *infrastructure* in itself can be regarded as one out of the many reasons driving the region into a crisis. The area is far from the axis of East-West trade routes and the roads joining in from southern direction tend to by-pass it similarly. The road to Budapest with its two narrow lanes allows only clumsy and slow transportation. With the radial structure of local road networks, the costs of transport and telecommunication are high. Roads to 108 communities are dead-ended, requiring the construction of main cross roads. Telecommunication infrastructure—similarly to any other region in Hungary—is underdeveloped and overburdened. Despite recent development of the telecommunication system regional disproportionalities and worn-out networks are among the gravest problems. Hand-operated exchanges and a lack of trunk-call possibilities still can be seen at some places.

MAIN ECONOMIC FEATURES OF THE CRISIS

The case of industry

Between 1980-1990 the employment structure in the industry changed very slowly, but in 1991 a more rapid transformation can be noticed. This is reflected by the following data: the number of industrial employees decreased between 1980-1990 by about 15 thousand, during a single year, in 1991 the size of decreasing reached 6.5 thousand. The share of persons employed in mining decreased 5 per cent during the former decade and by 5.8 in 1991. In spite of these facts the branch structure of the county's industry is *one-sided and rigid*, the *mining and light industry* have a dominant position even today in industrial employment, though employment rates decrease in both branches. This

decline could not be offset by other branches, the structure of industry has been conserved in a state which reflects tendencies less favourable than the typical trends in the country.

Both production and use of this coal is unprofitable, and the *level of productivity is very low in an international comparison*. This is mainly a *consequence of the natural conditions*, i.e. low caloric content, unfavourable geographical circumstances and deep working. It is on the other hand a problem to be solved by economic policy whether coal should play a significant role in the energy supply of the country or not. An important factor of this choice will be that the costs of production are higher than the substitutive imports (costs of transportation included). The commitments of uneconomic coal production—in consequence of the particular Hungarian cost and price conditions—fell upon some other branches, which had to utilize domestically produced coal not only because of the country's isolation from the world economy and the political slogan of "the security of domestic supply", but also owing to the fact that the coal based power stations were planned for the coal of this quality and their technical transformation would have needed some more time. Of course, one may not neglect the role played by the strong mining pressure group defending and maintaining mining industry either. If *Komló's* mining and coal pre-processing plant was closed down abruptly or in the short run, such a change would induce *unmanageable social, economic and political tensions and problems in the town*.³ The closing down of the Works would very negatively influence almost one half of other industrial firms and plants based in the town owing to their close economic linkages with coal mining. Closing down *uranium mining* would cause similarly serious problems at Pécs. The decrease of uranium ore's price on the world market (owing to the diminishing military demand and the decline of building of atomic power stations) and the increasing production costs here made this economic activity successively less and less profitable. *Deficits were compensated by the state* in the form of subsidies. The price is considerably higher (60 USD/kg) than the price on the world market (40 USD/kg). Today it is not easy to anticipate future developments for the key element is the governmental guarantee which forces the Paks Nuclear Power Station to purchase the output of the Enterprise.

While the problems of decrease in mining have a privileged place on the agenda of the country's economic policy—owing to the intensive activities of the colliers' trade union and their political weight -, light industry's production and employment rate decreased in an almost unnoticed way. The decline of the light industry is a consequence of three factors: not only *domestic consumption went down, but also the Yugoslav tourists' shopping and the exports to former CMEA partners were seriously reduced*.

Parallel with the shrinking of markets the majority of the firms in food processing industry fell also into a crisis situation. The fact that they had to reduce considerably their output influenced unfavourably the production in agriculture, especially in 1991-

³ Komló is a symbol of socialist mining towns, a "town based on coal". It began to be quickly developed in 1953, first of all to supply with coke the "fortress" of domestic heavy industry, Sztalinvaros. The former greater village was transformed into a town parallel with the development of the mining plants. Its inhabitants are of different background: in part descendants of workers settled down in the village due to the establishment of mining here at the turn of the century, and the "newcomers".

92. Today it is yet difficult foresee what consequences would be induced if the majority of the county's food processing firms fell completely under foreign ownership.

The fact that there was no cold storage facility of great capacity in the county has always restrained the development of its agriculture. This exerted a negative influence and is today also of unfavourable impact on meat industry, as well as on cultivation of vegetables and fruits. A further problem is the great distance of sugar producing factories—the plants situated in the vicinity were detached from the county as a consequence of the Versailles Treaties of 1920.⁴

From the beginning of the eighties several firms made serious efforts to extend their economic activities: wood and poultry processing as well crisps producing plants were created, additional meat processing works were established. Six agricultural cooperatives, engaged in grape cultivation, brought about considerable wine processing capacities.

The decrease of certain branches, reduction of firms' staffs and decreasing production runs parallel with the transformation of *industry's concentration*. The industry was here characterized by a very high level of organisational concentration, which nowadays begins to lose its rigidity. The number of industrial plants in Baranya was 335 in 1980, increased to 411 in 1990 and to 591 till the end of 1991. The newest data indicate that in the county (as in the whole country) from the beginning of the nineties a process of decentralisation began to take its course, increasing the number of economic organisations and industrial plants. A parallel unfavourable development is, on the other hand, the decrease of industrial plants in Baranya having their headquarters situated in other counties. (Out of the 77 plants only 50 remained functioning during the past decade.) These plants were created in the sixties and seventies due to "directives from the top" so as to promote diversification mainly in engineering, light industry and building material industry.

In one of the research projects carried out in the Research Institute of the Industrial Economics of the HAS the hypothesis was put forward that those plants—their staffs included—are in a "cumulatively unfavourable" and threatened position which belong to a firm whose headquarter is situated in an other county and is coping with financial problems. The present research confirmed this assumption. It is namely a more and more usual procedure that firms try to get rid of their financial difficulties by selling out single plants. In such cases distant plants are chosen with greater probability for they were under administrative pressure created in the course of a campaign to establish industrial plants in the provinces and therefore they do not always fit organically into the functioning of the whole firm. (Viszt, 1989)

Our analyses documents also that—even if the level of unemployment rate compared to other counties of the country is not yet conspicuously high (it was in April 1993 13.8%)—the region is facing difficulties in carrying out economic renewal, first of all because of the distorted sectorial structure of industry, and also as a consequence of the recession in mining and the light industry. In the counties' "rank order" of unem-

⁴ The peace treaty signed in Versailles after WW I seriously effected Hungary. It lost 70 % of its pre war territory and 60 % of its population. Large areas which were mainly inhabited by Hungarians were attached to the newly established states of Czechoslovakia, Rumania and Yugoslavia. For Hungary revision of the Versailles Treaty became the paramount political issue of the interwar years.

ployment rate nine counties have worse values than Baranya, but the closing down of mines planned by the government will drastically deteriorate the situation of the county.

THE CASE OF AGRICULTURE

The *decline of demand* for agricultural products which after the collapse of the East European markets influenced very disadvantageously the cultivation of vegetables, fruits and grape, as well as the breeding of pigs and poultry, by the same token canning industry, and wine, poultry and meat processing industries. Every branch of agriculture was influenced further by a decrease of about 30% in domestic demand. The decrease of demand was so critical for the producers because it had an abrupt and shocklike character. At the same time the state *moved out from market regulation*, the radical *reduction of export subsidies* further deteriorated the marketing possibilities. While the prices of agricultural products fell due to their oversupply, the interest rates of credits for financing production were raised so much (up to 38-40%) that their profitable use in agriculture was excluded from the outset. Farms, having no other possibilities, eliminated unprofitable branches, dismissed redundant labour force and radically diminished the use of fertilizers, plant protecting sprays and quality seed-corns. In the emergence of the crisis those elements of uncertainty accompanying *the transformation of organisational and property structures* in agriculture were not any less important either.

An overwhelming part of the county's agricultural employment has been absorbed by *cooperatives and state farms*, for private agricultural activities -as also in other parts of the country- have normally served only as supplementary source of income. From the cultivated lands only 9.9% were used by private producers.

The transformation of the economic conditions is reflected by the changes in the techniques of cultivation. The unfavourable market trends of 1991 (for example the weak demand for wheat), the dissolution of former chains of cooperation (the impossibility of outward processing of sugar beet in Yugoslavia), the losses of market shares of processing branches (say of canning industry) radically transformed the county's structure of sowing. The sowing area of corn and therein wheat diminished to an extent which formerly would have been quite unimaginable; this could not be offset even by the forced increase of the sowing area for autumn and spring barley. This decline of plant cultivation and stock breeding went parallel with the decrease of investments and the suspension of development decisions. In 1991 48 out of the 58 cooperatives in the county turned out to be unprofitable, the value of their production and their income was 15% less than in the year before. The subsidiary activities were also reduced, first of all in industrial activities and their commitments in the building industry. These crisis phenomena exert their impacts certainly also upon employment. While the big farms in 1980 employed 30.997 persons, in 1990 this number was 21.482, i.e. by 30% less than before, in 1991 December only 12.941.

According to the data gained in a general statistical investigation of agriculture (March 31, 1991) there are 54.010 *small scale farms* in the county, and 2.780 stock breeder (these latter, for the number of their stock does not exceed a certain limit, are not to be considered as farmers). That is to say 38% of the households are engaged in small scale production.

The ratio of small and large scale farms is in the different regions by and large the same, with the exception of the Ormánság and Baranya's loess island: the number of the small scale farms is in the former higher, in the latter lower than the average. The weight of small scale farms is greater in the Ormánság because the region is poor, lands are of low quality, working opportunities are unattractive, and the region has hardly any towns. The ratio of small farms in Baranya's loess island is on the other hand smaller because big farms there offer better living conditions for the population.

According to this investigation, while 67.8% of small farms produce exclusively for the family's own subsistence, 32% produce for the market as well. (KSH 1991.) This sample has elucidated also some demographical features of small scale producers. 22.6% of the producers are over 65 years of age, those over 35 years make 87.8% per cent of small scale producers. The *high ratio of retired persons* is to be explained not only with reference to the low level of pensions, but also by the fact that this generation was born into farming.

The qualification "small scale production" refers first of all to the size of the cultivated land and the level of mechanisation, and not so much to the agricultural output of these farms. This is due to two factors. There is on the one hand the cooperation of large and small scale farms. The production of fodder and the more significant works on the small scale farms were accomplished with the machines of the cooperatives and state farms. The people in small farms used to work on the other hand with very great diligence and well-established know-how notwithstanding the low profitability of their output.

MAIN SOCIAL FEATURES OF THE CRISIS

While quantitative indices mostly provide a good basis to evaluate an economic crisis, the interpretation of resulting social phenomena is more difficult. *Unemployment, migration and the worsening of earning conditions are increasingly used as complex indicators.* The worsening of public security, more frequent strikes, the spreading of political and social extremism, a higher share of population under disadvantageous conditions, the marginalization of groups, the decrease in educational level due to migration, the narrowing and deterioration of the tertiary sector present a set of factors where the possibilities of an unbiased evaluation are even more scarce. This is the field where the shortcomings of regional statistics and the lack of relevant sociological surveys strongly limit any research.

INCREASING UNEMPLOYMENT

The "unemployment spiral" started working in January, 1990 in the county. Employment agencies reported 960 unemployed at that time, while one year later this number increased to 5.780 and to 28.721 in April 1993. The number of unemployed in April 1993 increased by 37.2% compared to the previous year (country average is 36.4%), this shows that the frightening trend of size in unemployment has continuously been worsening. Unemployment rate has been increasing in the county ever since, showing

0.8% in June, 1990, while 4.2% one, and 10.2% two years later, 13.8% in April 1993 (the corresponding national figures are 0.9, 3.9, 10.1, 13.2%). The higher weight of males in unemployment (57% in April 1993) is explained by the excessive presence of the heavy industries in the area. In the meantime a *structural change of unemployment* took place characterized by the growing share of professionals (33% of the whole in April, 1992, 35% one year later). At the beginning the structure of unemployment by profession showed the dominance on unskilled and "commuting" labour—these two overlapping categories. An effort by companies to cut travel costs can well be seen in this case. Unskilled labor is certainly in the most serious situation with no more than 262 jobs offered for 7235 unskilled workers in April, 1992. An additional problem is the professional discrepancy between the supply of and the demand on labor, which shows the importance of training.

The number of vacancies can not follow the increasing unemployment. While in April 1992 the number of available jobs per one hundred of unemployed was 6.7, one year later only 5.03. The job opportunities uncovered by agencies, including *the expansion of moonlighting* (as an effort to tax evasion) should also be considered here. There is no expert estimate to rely on in this field. There is a general assumption that the size of this type of employment tends to slightly exceed the number of available jobs, as officially reported.

The overall picture shows a *divergence of unemployment growth by regions*. It should be noted that while the liquidation of jobs mainly takes place in the urban area, job-losers themselves are registered by residence, that is in villages. As a result, provincial or village unemployment shows a higher growth rate (19-17-14%) and the relatively good statistics on the county center, Pécs (6%) tend to conceal the weakening of the economic base. The exceedingly high share of Pécs and the area surrounding it in offering jobs through agencies has decreased recently, as compared with a weight of 63% at the end of April. *One out of six Pécs-registered unemployed is offered a job, while only one out of seventy seven in the case of Komló*. The favourable situation in Pécs (where the service activity and growth of private business is most pronounced) has a rather relative value. The excessive concentration of economic activities here is the main factor of this relatively good situation which cannot conceal the dynamism of unemployment. The group of major companies concentrated here has to face serious problems due to shrinking markets and poor liquidity. The negotiations with potential foreign investors show a limited success because of well-known difficulties, privatization is slow and sluggish.

These days besides mining, it is the light industries that face the danger of unemployment. The dominance of unskilled female labor is characteristic of the small plants and workshops of other low technological level, established in the region mostly as complementary parts of farming co-operatives. Being unprepared for an independent operation primarily with regard to sales and marketing the continued loss of former clients can easily put an end to activities in these small units. Privatization in agriculture is also becoming a source of unemployment and a drastic worsening of employment conditions can be expected as a joint effect. The subregions, recently presenting the above problems and the most intensive growth in unemployment, are primarily located in the area of Sellye, Siklós, Szigetvár and Komló.

Voluntary leaves, ageing and the lowering of the age-limits of retirement could be used by employers in many cases as a tool of staff-reduction in 1991. Doubts have how-

ever been expressed concerning the latter because of the fact that pensions have to be funded from company resources until normal age-limits are reached. Moreover, otherwise needed qualified labor was dismissed in some cases purely to solve industrial conflicts. (*Bánfalvi*, 1991) In 1992 the companies had no other choice than to apply the cruel and costly method of severance pay with respect to employees to be dismissed. Regional experience shows a 54% share of planned and pre-declared staff-reduction within total increase. This suggests that actual figures tend to well exceed forecasted ones. Recent forecasts for 1993 put registered unemployment at around 30-40 thousand as against 140 thousand at work, and a continued differentiation—both structural and regional—is expected.

The above facts unanimously suggest the conclusion that the *future will probably bring about a further increase in this high and socially critical unemployment*. Though crisis-generating factors (bankruptcies, the privatization of agriculture, the shrinking demand due to the ongoing recession) exert their effects in a way differing by regions, a sub-regional restructuring of unemployment is not expected by county forecasts. According to the experience *sub-regions continue to produce a higher increase than the cities dominating them*.

SOCIAL TENSIONS

The development of *incomes* of the population of Baranya provides one of the best tools to describe social conditions. Wealth and income statistics have traditionally shown the outstandingly good position of Baranya. Since 1990 data seem to indicate a change in this respect.

The estimated effect of progressive taxation is put at a 10 percentage-point decrease in wage differentials. It can be seen that under the conditions of a general decrease in real incomes the industrial employees of Baranya present a separate term of increased impoverishment (together with their colleagues in other crisis-regions). Statistics show a 156 thous. per capita annual taxable income as against 165 thous. as country average. (Relevant figures in Borsod and Nógrád—these two counties where crisis has become general by now—are 148 and 141 thous.) This lag has presumably increased in the meantime due to the contrast of excessive supply and the limitation of demands in the labor market.

Immigration can be a classical response to the challenge of a crisis. The potential for an increased immigration is rather limited in Hungary, because the swelling of urban population, inter-regional migration and the diminishing of the mobile part of provincial population were mostly over by the end of the eighties.

A drastic increase in the cost of removals and in the cost of housing, the general recession with decreasing real wages have made immobility an increasingly dominant factor preventing the interregional equalization of unemployment. The propensity to receive immigrants has also diminished primarily because of less job openings in urban regions. Though relevant statistics are not available it is generally agreed that *commuters are the ones who have been hit the hardest by dismissals*. All this can well explain that the deepening of the crisis does not lead to an acceleration of immigration from Baranya. A regional restructuring of the real estate market can be viewed, however, as an effect of the crisis.

Growing unemployment and the reduction of incomes have lead to an increase in the *number of groups and families living under conditions considered as socially handicapped*. Though reliable statistics are unavailable, the interviews made in Baranya seem to unanimously support this assumption. High wages in mining allowed miners for example to be single earners in their family. With husbands becoming unemployed, the financial security of whole families has been shaken.

A quite special problem is presented by job-losing commuters. Their network of social contacts suffers from their unemployment in this case, and their access to services and public utilities will be worse due to probable confinement to their permanent residence. They are confronted with poor infrastructure and increased local unemployment at their backward areas of residence, which even more increase the dismal consequences of their getting unemployed.

Though crisis does not necessarily lead to *strikes, demonstrations by miners* in the region can certainly be attributed to the concept of phasing out mining here. The fact that the primary reason of miners' strikes in almost each case requires a solution at government-level as branch problem can be pointed out to be a general feature (for example the taxation of loyalty bonuses, unfavorable retirement conditions). (Orolin, 1991)

The *deterioration of public security* has been added from the start of the nineties to impoverishment and the growth of unemployment as a factor of raising general social anxiety. *Criminality has been tripled from the early eighties both in the country and Baranya*. The research results point out the lack of any tight correlation between criminality and the level of unemployment within a given area.

OPPORTUNITIES FOR THE DEVELOPMENT OF THE REGION

In Hungary the government recognised the need for a more balanced development policy and created a slightly greater room for local and regional initiatives since 1982. The first regional development programs aimed at the bail-out of the state-owned enterprises facing the danger of bankruptcy and moderate support for the development of the infrastructure of underdeveloped areas. In 1986 the Parliament decided to speed up the development of such backward areas. The preferred group of communities included 573 towns and villages of seven counties out of the cca. 3000 Hungarian communities. The deepening of the crisis is shown by increasing number of backward communities: their number has doubled, while 1234 communities of 17 counties get support through development programs.

The criteria for selecting underdeveloped regions eligible for support have been made more elaborate during the past six years.⁵ The lack of efficient coordination between the activities of government agencies and funds was recognised soon, but the problem remained unsolved. This has resulted e.g. in the lack of differentiation in favour of underdeveloped regions when the distribution system, or the highway system was open for development. Those development projects were supported primarily which were aimed principally at increasing the number of industrial jobs (within industrial or agricultural firms). The infrastructural development projects were not promoted sufficiently. The regional development grants (non-refundable ones) were not used efficiently. *Some recipients considered it free money and used it to maintain loss-making*

activities thus conserving an outdated production structure from public money. The private sector was excluded from the recipients of the incentives, and the centrally distributed grants were offered mainly to ailing state owned companies. (Csernenszky, 1991)

During the functioning of the Regional Development Fund and the Employment Fund between 1986 and 1990 approximately thirty thousand new jobs were created. The government decided to amalgamate the regional job creating portion of the Employment Fund with the Regional Development Fund. This action was justified also by the shocking contraction of the available resources for this purpose (57 per cents of the 1990 year amount).

An analysis of the allocation of central funds can draw the attention to a few issues of a general nature. First: The projects promoted have in many cases been aimed at *establishing jobs of definitely low technological standards, an indication of short-run managerial thinking.* Second: The subsidies to support infrastructural investments in crisis zones include a discrimination against firms of small and medium-size by insisting on a minimum 50 million HUF book value of assets for applicants. This is totally incomprehensible and against internationally accepted practices. Third: Reduced taxes for business startups are widely applied in areas of crisis. Moreover, some experts are urging tax breaks for startups. Fourth: *The definition of crisis areas in terms of counties does not allow, to take the differences between micro-regions into account.* The recent introduction of the micro-regional approach can help to tackle related problems.

The Employment Fund—a source for financing new jobs for the unemployed is of major interest for designing a successful regional policy package. The net amount that can actually be spent in 1992 -after deducting the yet unpaid expenses of previous years—sums up to 11.8 billion HUF. 38% of Baranya's communities is in need of central aid. Business tends to avoid them, and limited own resources are insufficient to develop through self-reliance nor do they have an access to central funds. 14.5% of the communities in Baranya receive so-called complementary subsidies and 97.6% of these had a population below 1000 in 1991. The latter figure shows the regrettable fragmentation of financial support which necessarily leads to efficiency problems. The size of subsidies to communities handicapped for external reasons—seven in the county—was 10 million HUF in 1991, just 0.4% of the total amount allocated in the whole country under this heading.

⁵ Criteria of selecting backward communities (1986):

1. lack of local jobs, large labour surplus, high share of long distance commuters,
2. unfavourable agricultural conditions,
3. inefficient or loss-making local enterprises, low wages,
4. geographical periphery, bad telecommunication and transport system,
5. low-level productive infrastructure, low-grade manpower, scarcity of white-collar workers and managers
6. great migration, large proportion of elder generations,
7. poor living conditions, deviations.

Selecting criteria of depressed and/or underdeveloped areas (1991):

1. 9 demographic indicators—proportions of different age groups, migration, population dynamics
2. 5 indicators of economic structure and economic development (quality of lands, income tax/per inhabitant, industrial employment, age structure and value of industrial assets,...)
3. 23 social (quality of life) indicators—new flats/population, communal infrastructure, education, etc
4. unemployment ratio

Target-oriented subsidies show a more favorable picture. *Baranya ranks second* in the country by the per capita value of such subsidies as distributed in 1991. Though the money allocated makes up not more than 55% of the amount applied for (HUF 1503, as instead of 2850), this does not differ from the national average. A somewhat better trend is shown by the increase of over 100% in the funds allocated to new investment projects in this framework, reaching a 1090 HUF per capita value. (László, 1992) As to the disposable, decentralized part of the Employment Fund, Baranya could achieve a share of 4.4%.

As contrasted with past periods the recent system of allocating resources tends to take place on a competitive, country-wide basis. This has brought about the *increased role of regional municipal administrations*, putting higher demands on their lobbying efforts at central organizations. Traditional pressure grouping is in many cases replaced with more business-like attitudes and an active participation at tenders. The size of funds obtained through tenders shows a strong regional differentiation. Realizing the need for structural changes the county's administration has been trying for years to find the possibilities of promoting them. The establishment in 1988 of the "Forum of the Engineering Industries" obviously reflected the best intentions. The establishment of the "Forum for Regional Co-operation" in 1989 was a similarly proper step. Though setting up the achievement of a complex approach to regional problems—both social and economic—as its main target, the Forum's activities became limited to the distribution within the county of the 500 hundred thousand HUF obtained from the Employment Fund. Jobs for 835 persons could be created as a modest result—at least if compared with the founders' ambitions. Presenting a possible framework of approaching regional problems in their complexity and in a responsible way the disappearance of this body as a result of political transition is regrettable. The program of establishing the "Industrial Park" was another one among the more significant initiatives of the year 1989. Though this program was not carried out, the concept continues to survive under the heading of the "Pécs Industrial Zone". The Zone is destined to create a good climate and all the necessary conditions for new private small—and medium-size companies. The county's administration has concentrated available sources and established an Investment Fund to promote new projects. This was carried out by incorporating existing assets and real estates. 12 companies were founded in such a way with a share of the regional government in their capital. Three out of the 12 have been liquidated by now, and the conditions of five can be described as uncertain.

One of the most important preconditions of overcoming the region's crisis is the creation of an appropriate *infrastructure*. The *road network* of the county is not favourable. The county and the city of Pecs are not along the main arteries of the domestic and international road network. A special problem is the radial pattern of the county's roads (there are 108 "dead-end communities") and the fact that it has no free-ways with divided lanes.

The solution would be to build up the so-called *Transdanubian Motorway* which would connect Pecs and Budapest (218 kms). This conception is only a project for the time being, as also the old idea of the *Southern Motorway*. Both plans are supported by the municipal administrations, but their organizational and financial background is yet unclear. (A hindering factor in realization of the plans that giving *concession* for building the highway has not been applied in Hungary, therefore the methods have to be elaborated first.) Several people support the idea of building a *bicycle road*. The build-

ing programme would offer new jobs, and it could be eventually linked to "New Deal" type communal works helping to decrease unemployment.

The low level of the county's *telecommunication* infrastructure is a serious factor blocking economic development. This is demonstrated by the unequal territorial distribution of *telephone density* (the number of lines per 100 inhabitants) and its low technical quality: this indicator was 9.9, much *below the national average*.

The respective indicators are very different not only between towns and villages, but also between the different towns. The situation is the best in Pécs, where the density indicator is 12, the other extreme being Mohacs with 4.5. and Szigetvár with 5. There are still 300 manual switch board. It is characteristic for the dynamics of development that the parameters envisaged for 2000 in the development project a few years ago should be reached already in 1994: the density indicator would be 30.

Considering the above mentioned central sources and the plans concerning on the development of the infrastructure one has the impression that *Baranya has relatively better perspectives for overcoming the crisis* in comparison with other crisis stricken counties of Hungary. This optimism is motivated by the fact that several factors of the economic potential can be and are worth of being better utilised (eg. favourable climate for agriculture, possibilities for development of tourism, adventagous geopolitical situation, well educated population, the presence of Janus Pannonius University, etc.) as we have already mentioned previously.

THE PATTERNS OF INDUSTRIAL TRANSFORMATION

Changes in the subsectoral structure and the reorientation toward manufacturing

The most neuralgic point in the region is *the shrinking of mining*. There are many international experience about the way the restructuring took place in the mining regions of the countries of the European Community, from which Hungary can learn as well. The *common features* of the experience of these countries can be summarized as follows: the close cooperation of the state, local authorities and the mines; the preference of active tools of employment policy, the parallel, simultaneous elaboration of the development strategies and the closure of the mines, the establishment of institutions handling both the divestment process and job creation, significant financial support from the EEC, diversity of redundancy payments. All these can serve as a useful guide for the Hungarian restructuring process as a whole and for Baranya, too.

In all probability Hungarian coal mining cannot be restructured as a profitable branch either. Nevertheless this does not mean however, that coal mining could abruptly be closed down, since the technical modification of coal based power stations would require considerable time and outlay. (Illés, 1989.) Among the positive effects provided by the mining industry for the county so far are its job inducing effect in the infrastructure serving both the mining industry and the miners providing well-paid jobs. In addition, the flourishing mining enterprises contributed to the cultural development of the regions (building and partly financing cultural centres, sports stadiums, cinemas, health-care institutions). Therefore it is also important to consider besides the direct consequences of the decline of mining the *secondary* (indirect) regional effects too.

As a matter of fact the future prognosticated for the Mecsek coal mines are very contradictory. The government has taken the resolute decision to close mines down, there are interests against this which are probably able to delay the closing down—as we mentioned earlier. In an ideal case some 1.500 collier will be still employed. By the year 2000 due to the natural decrease in the number of employees (ie. early retirement and job-stop) the miner profession will be practically disappeared. In other words the staff will get old and so new labour force will not be employed. (In the case of the miners working underground only 25 years employment and 4000 shifts are necessary for retirement. The age-limits in Hungary for men is 60, but according to the existing law explained before a miner who starts working at the age of 18 can already be retired when 43 years old.)

According to some experts a few small scale mines will be able to do *self-financing*. It is unlikely however, that mining could “revive” and regain its former position in the economy of the county; since its greatest customer, the heavy industry have also been declining. The Mecsek Coal Mining Works attempts to attract foreign loans for a private development program of methane gas production (with the American firm ICF Resources Incorporated). It would have good prospects if it merged with the Pécs Power Station (Pécsi Hőerőmű), in a joint stock company.

The *manufacturing* based production pattern turns out to be gradually a “locus communis” of Hungarian economic policy, however the conditions for this in Baranya are quite favorable. At present *light industry and food processing* have a greater share in employment. In the light industry *outward processing* for foreign companies has a dominant role which according to some regional experts “does not mean a real economic potential”. On the other hand to ignore such type of cooperation would be a great mistake, since the Hungarian firms could utilize and apply the experience of their foreign partners and these connections could serve as references for the future, to build up a network of marketing, in particular. The well-known leather and glove factories could recover from the serious situation caused by the collapse of the Soviet market by the improvement of marketing, building up new relations have to be built separately with each of the recently formed independent states. The first step to overcome the difficulties in raw leather supply was taken by establishing a new joint venture in the Ukraine. In the food processing industry meat and dairy productions seem to offer the most promising competitive edges. *Tobacco industry* also plays a significant role in the region. The share of Pécs Tobacco Company established 80 years ago and privatized by the British American Tobacco is 50 per cent on the Hungarian tobacco market. The British American Tobacco decided to renew the obsolete machinery parallel with training. The leaders of the company count on governmental support, namely that 1% of the whole 30 billions Hungarian tobacco tax income be reinvested in the improvement of tobacco industry. This modernisation program would include not only the processing, but the production of tobacco as well. Another branch worth of interest could be the *ceramics industry* following the traditions of the famous *Zsolnay factory*. It is a pity that after the 1950s the factory was forced to produce mass products for the building industry (isolators, etc.) pushing the company’s unique profile and technical standard into the background. To combine the traditions with new technology is a challenge for the future. *Engineering* has also a good chance for investment, its further development could be based on the manufacturing of food-processing and packaging equipment

because of the great demand of the region. The revival of the so called "Regional Engineering Forum" would be useful for coordinating ideas and options for investment.

An increasing role for new forms of enterprise

The *private sector* of the economy, first of all *limited liability companies*, the most popular form of enterprise, continued to increase in number in 1992. Their current number of 270 has doubled compared to the last year. ("Új Dunántúli Napló", June 5, 1992.) The number of partnerships has also increased to a considerable extent. This is motivated perhaps not simply by the wish to launch an enterprise, but also by the fact that the establishment of such a new firm does not require major starting capital. As far as the number of limited liability companies is concerned, Baranya is one of the average regions in the country, similarly to those crisis-ridden counties which are characterised by the predominance of heavy industry (Borsod, Nógrád, Veszprém). The spread of enterprises within the county has a markedly manifold character: their presence is generally stronger in towns than in villages, and they predominate especially in the center of the county. Taking the gross number of the establishment of new economic partnerships per 10.000 inhabitants, with other words the *density indicator of enterprises*, its low value (27) causes special difficulties in the case of Komló, where unemployment is especially threatening because of the problems of the Coal Mining Enterprise and the structural transformation would be therefore most urgent on the level of individual communities. On December 31, 1991 Komló was ranking 39. among the 176 towns in Hungary with respect to population, and 140. as far as the density of limited liability companies was concerned. While in the other towns of the county the increase of limited liability companies compared to the state of the last year had by the end of 1991 a value of 138-145%, this development in Komló was more modest, of 86%.

Statistics don't give sufficient evidence to demonstrate the extent to which the new organisations are capable to survive and function efficiently, for their numerical increase by itself does not prove whether or not they really promote industrial development. Experts of the region just like those of the whole country are becoming more and more convinced that the economic impact of the widespread establishment of economic organisations is not perceivable in proportion with their number. (László, 1992.) In consequence of the increase of unemployment it is often an economic necessity for individuals to embark upon some entrepreneurial activities. In these enterprises, under the pressure of decreasing living standards, the basic objective turns out to be the short-term maximisation of household income, and therefore the entrepreneur is not interested in capital accumulation and technical development. In consequence there is *no basis for taking financial risks*, even "the entrepreneur's important role is to take risks through innovations" being an elementary truth.

Comparatively more reliable data are available as far as *the joint ventures* are concerned. In 1991 one fourth of the total investment in foreign currency went to the mining and manufacturing in the county. That time 82 joint ventures functioned in the industry of the county (of 2170 in Hungarian industry as a whole. We have to note that 55% of joint ventures are situated in Budapest). The joint ventures mainly—and similarly to the general tendencies in the country—concentrated to some branches of light

industry (leather, fur and shoes industry, textile and garment, as well as timber processing industry). All this indicates the survival of industrial tradition.

Foreign direct investment so far has been attracted by the larger enterprises. If we express the degree of concentration by means of the number of employees, we could say that, at the end of 1991, 68 per cent of those employed in joint venture companies worked at four firms employing more than 500 people. The major part, namely 57 per cent of companies established with the participation of foreign capital was created at the minimally authorized level of capital investment with one million HUF. *The impact of these firms in the county's economy is therefore minimal.* The tendency, which also causes troubles for the time being is, that these investments do not really bring about the inflow of high technology, since almost four-fifths of the foreign currency invested was cash, although *the domestic economy would have expected precisely high technology from foreign investors.*

It is well known that the most important precondition for attracting foreign capital is *political and economic stability*. Mostly for exogenous reasons, the county has been unable to improve the situation considerably in either respect. Furthermore, the inflow of foreign capital into the county was unfavourably influenced by the civil war beyond the Southern border of the county. Therefore it is increasingly more uneasy to attract foreign capital into the county. Those willing to invest choose *trade rather than industry*, establishing firms which bring more considerable profits faster (without, however, creating working places in production). Taking into account, however, the optimism of the joint stock companies and their integration in the domestic economic environment, we think that their economic potential will be further strengthened and that these firms will play a constructive role in the revival of the economy.

THE TRANSFORMATION OF AGRICULTURE

Crisis management can rely only upon *technological modernization* and the increase of productivity. Considering the fact that agricultural employment covers 3–5 per cent of the active labour force in the developed countries, and that this ratio in Hungary is 10–15 per cent, we can say that the level of agricultural employment (speaking about full-time jobs) will decline to one-third of today's level. Decrease in manpower caused by agriculture's increasing productivity thus can be compensated by the emergence of new jobs in industry, trade and services sector, even if generally not in villages, but at least in towns. *Considerable unemployment can not be avoided in the villages* either, for today the main sector offering jobs is not agriculture any more. Since the non-agricultural working population is involved in small scale agricultural production (for subsistence or market), agriculture will play a significant role as *an additional source of income*. (The production of 68 per cent of small scale farms serves the provision of the producers' own household.)

In smaller communities the crisis is aggravated by the consequences of the system of large farming cooperatives. The sustenance capacity of these communities was historically secured by the locally articulated network of smaller agricultural production units. For this system was artificially concentrated in the cooperative structure, significant part of the communities was separated from its immediate agricultural base. Their

inhabitants have to commute to and from the place of work, because they depend on the large farms because of services they need for their small scale production. In the county there are often *even 8—10 villages around a single cooperative farm*. After the dissolution of the system of large farming smaller villages can be revived. For the time being, however, numerous preconditions of this perspective are lacking (eg. infrastructure, jobs) due to the absence of financial sources. Taking the urban development tendencies of developed countries into account we see that the expansion of towns stops and the number and proportion of villages' population begins to increase. It is not the old village that revives, but, due to polarization, certain villages expand while others may even vanish. Probably the transformation of the Hungarian settlement network is reaching this stage nowadays.

Among the agricultural plants the *state owned farms*—except for the integrated farm of Boly—are planned to be completely privatized. These days the *agricultural cooperatives* live through the difficulties of the transformation process. As it was already proved by the experience, more significant separations may be awaited in the “rich” cooperative farms in the environs of Mohács, in other regions people are less interested concerning the farms' property burdened with serious debts.

In the transformation process much uncertainty is caused by the lands involved in the *financial rehabilitation*. Another open question is what the recipients will do with the lands now in their possession. The fact that the cooperative-farm members possess as proprietors only 18.5 per cent of the arable land in the county, creates a very contradictory situation and increases uncertainty in anticipating future developments.

The transformation of the economic structure in agriculture may mean the transition to plant cultures which require a *more intensive* use of land. This, parallel with the emergence of small private farms, decreases the size of profitable units, on the other hand it may increase the requirement of specific capital investment.

Nowadays two opinions prevail in evaluating the organizational forms in agriculture. On the one hand there are those who consider the land partitioning very irresponsible. Their opinion is that it is return to the past to reestablish the small farming structure which because of the lack of capital, instruments, sales network and information cannot be competitive for the time being. On the other hand we find those, first of all politicians, who give the absolute priority to the private farms based structure. One should, however, assess size and organizational form primary in each of the agricultural subsectors accordingly. Agriculture should be connected with the transformation chain of the food processing industry, in order to put an end to the separation between the different stages of the agricultural transformation chain. It is important that the producers also have their share from the profits which arise from food processing. In the county people follow with *extraordinary anxiety the privatization of the food processing industry and the fact that foreign investors acquire the plants of this branch*.

Both representatives of large plants and farmers in small scale production evaluate the plans concerning Hungary's eventual *membership in the European Community with reserve*, as far as the development possibilities of agriculture are concerned. The perspectives they are afraid of are that the *standards will be made more rigorous and food imports will increase, while the Hungarian custom system leaves space for unfair competition* (eg. cheap coffee import on the one hand, and heavily taxed domestic sales rendered thereby uncompetitive on the other).

TOURISM—A CATALYZER OF STRUCTURAL TRANSFORMATION

From the different forms of tourism *thermal and therapeutic tourism* could have priority. In addition to the functioning public baths (in Harkány, Szigetvár, Sikonda, Magyarhertelend) there are numerous thermal sources temporarily closed and "awaiting better times". The local municipalities are very active in this respect, they are looking for foreign investors, mainly through the German relationships. Apart from the immediate use of the thermal water it would be necessary to create winter conditions of utilization and build hotels with facilities of medical treatment. A specific and considerable development possibility is offered by the so-called cave medical treatment. One could utilize the extensive forests of the county for "silvo-therapy" (promenades and relaxation in forests), practiced for example in France with great success.

The buildings, establishments and events which are the usual objectives of *cultural tourism* in the county are relatively strongly dispersed. This means at the same time that, except Pécs, the communities are with program unable to compete with "sojourning" tourism with independent program. The town Pécs, with its more and more beautiful old city center, remnants from the middle ages, more than 20 museums and exhibitions, events of fine arts, puppet-shows and theaters, is a deserving target settlement of travels with cultural motivation. In order that the visit to a sightseeing tour or a cultural event stimulates a stay as long as possible in the town -thereby bringing incomes as high as possible- further possibilities for recreation and money spending should be created. In creating the "tourism supply" of the county, the ethnographic features of the national minorities here should receive greater weight. In this respect Mohacs and its environs has a promising future, for there the Slavic "Sokac" and the German Swabian culture coexist in a very attractive way. To promote this development the city council of Pécs has several conceptions.

Religious tourism is a specific type of cultural tourism. In addition to Szigetvár, in the county Turbek and Magyaregregy attract several people once a year, at the time of the parish-feast, while Mariagyúd (a place of Maria worship beside Harkány) is visited by great masses several times a year including foreign tourists. A lucrative branch of tourism could be *conference tourism*, having in Pecs excellent conditions, for Pecs as a university town plays a significant role in the country's scientific life. The infrastructure needed for this purpose is lacking, a conference center and an adjacent modern hotel should be built, together with a professional office of conference and programme organization. A genuine renaissance of *village tourism* began recently. In the regions struggling with economic and employment problems and the settlement development zones several municipal administrations and communities began to deal with rural tourism as a source of additional income. Programs were designed together by the interested inhabitants of the villages, and they cherished tourism and tourists in a way unusual in modern times. The different sectors of *hobby and sporting tourism* (hunting on a huge area rented by hunting associations, with 11 hunting-houses, rod-fishing in the rivers and fish-ponds in 1154 hectares, riding on an excellent turf in Üszögpuszta, water tourism, hiking in Mecsek and Villány hills) all have excellent natural preconditions, they are awaiting their renewal in need of improvement and development.

The forecasts for the turn of the century expect an expansion in tourism of one and a half or double increase. This upward trend may match the dynamics of the expected

increase of consumer demand in the country's capital. (Sándor, 1989) Nevertheless this also depends on infrastructural development and the amount of support available from the private sector. The promotion of the envisaged possibilities would presuppose financial support from the government in addition to the resources provided by the local municipal administrations and the tourism organizations.

CONCLUSION ON THE BASIS OF THE GERMAN AND FRENCH STUDIES

In Hungary the government had concealed the emergence of crises for a long time, distracting the attention from the evident need of structural adjustment. By the time of realizing the situation at the end of the eighties with a significant delay additional factors made the picture even more gloomy, however. Food industry has joined mining and metallurgy in the queue and the collapse of traditional Eastern markets has staggered other branches, such as the textile industries, as well. All the above show the *multifactoral nature of regional crises* in Hungary, several out of these factors could have caused crisis even alone.

The situation of the Hungarian crisis regions, at least in some respects, is probably closer to the state of the East-German regions facing a serious crisis than to the situation of Brittany now free of such shocks. The parallels can be found in the level of unemployment, the speed of structural changes, the consequences of the transition in the ownership structure, and following from these in the application of numerous technically similar solutions.

In *Mecklenburg-Vorpommern* the ratio of industrial employment was approximating the same as in Baranya, but the decline in employment has been even more considerable than in our case. The causes are similar: the transformation of the organizational and property structure, the decline of production, the liquidation of the system of state subsidies, the difficult financial situation of the enterprises (aggravated in that case also by the currency reform and the introduction of the DEM). The perspectives of the region in question are influenced by the fact that the *reconstruction of the industry of the former East Germany could theoretically be even superfluous*. Owing to the small distances and the well-established transportation connections, the needs and demands in the East could eventually be met by the production of the Western part of the country. Notwithstanding this, investment activities have already started, following the practice of the developed countries according to which slumps should be utilized as times of preparation for business revival. *Common features* can also be found in the structure of industry: the leading branches of the regions (shipbuilding in the German region, coal mining in the Hungarian case) went through a very serious crisis causing a fall in employment, and the other branches are also confronted with adjustment problems. In Baranya the future of the food processing industry is perhaps more promising than that in the case of Mecklenburg, where the firms in retail trade hardly buy any food articles from East German enterprises. In Hungary the department stores and the shops are flooded by *imported commodities which are far more expensive, although they are more attractively packed*.

The *backwardness of infrastructure* is similar in both regions, and also is the priority of efforts to develop telecommunication networks. In the *transformation of organi-*

zational structure similar techniques were observed: the splitting of large integrated firms is a very frequent procedure, as well as the detachment of services and social functions. The process of transformation in the *service sector* is at a more advanced stage in Germany than in the Hungarian case, and the structure of the tertiary sector is similar to the cases of many modern economies. In their dynamics the banking and insurance services are the most conspicuous, while employment growth is the most accentuated in tourism and entertainment. (The increase of employment pertaining to tourism has been considerably slowed down by the low speed of land privatization, a problem often referred to also in Hungary.) In Baranya, and this is general all over Hungary, the sector mostly able to promote the growth of other underdeveloped areas in service sector is trade. Their backwardness is illustrated by the following: in the five Hungarian counties engaged in the Alps-Adriatic Labour Cooperation, jobs in the sector of personal and economic services are 1.7–3.3 per cent of the total number of labour, while in the case of the Austrian L„nder involved here only jobs in financial services constitute 6.2–13.2 per cent of the total. (Horváth, 1992.)

Similar solutions can be found with respect to *labour market policies*. Both countries extensively use early retirement schemes as the most human way of job cuts, but the retraining programs have more weight in the German region. Part time employment are far more frequent practice in Germany (even if with a decreasing trend). Shorter working hours mean as a rule in both countries maintaining hopelessly unprofitable jobs—the role of this system is therefore different from its application in developed regions. The pattern probably originated from the West German practice where the employer who offers a job for a continuously unemployed person receives subsidy. In Hungary the conditions unfortunately are already given for the application of this technique too.

The set of means serving economic revival should be analyzed in more detail in order to be able to judge which are the forms also applicable in Hungary. The fact that the publication describing the German Land's entrepreneurship support system enumerates over 230 pages with 50 different promotion tools documents a very considerable richness of patterns available. Notwithstanding this diversity, *the use and application of subsidy seems to be more coordinated than in Hungary*, though many enterprises, especially smaller and newly established ones can *hardly find their way in the "subsidy" jungle*. The most important *sets of economic policy devices* promoting the economic adjustment of the new L„nder are the following: 1) renewal and extension of infrastructural establishments; 2) direct support of the economy (privatization of formerly state-owned firms and real estate included); 3) schemes of support applied on the labour market. The decisions of the use of the above means are made on the level of central government, as also the tasks of Treuhandanstalt are regulated by federal law. The possibilities of taking economic policy initiatives on the level of Land governments -not least in consequence of the modest amount of financial means- are considerably limited. *The Land government is able to take only supplementary measures*: it can introduce further incentives, or it can change some aspects of the application of promotional tools.

From the point of view of local adjustment strategies, the case of *Brittany* is particularly interesting. Like many other French regions, it experienced a very strong rural migration as the population moved to the cities hoping to find a job and a standard of

living that the small farms could no longer offer there. Today Brittany is one of the most dynamic regions of France, with high-tech industries, a modern communication network, and one of the most developed university and research centers in the country. The French studies had a special meaning, namely that *being part of the modern economy is not a privilege of towns and their peripheries any more*. Industry practiced in rural circumstances can also be technologically advanced, rural conditions of life may also be attractive. The experience of Brittany offers some useful conclusions concerning the methods for mobilization of the existing resources at a local level and the definition of strategic actions for the reconversion of certain branches (eg. electronics industry) with aim of creating a spinoff effect. Just like in Brittany, the plans concerning the development of electronics industries were also welcome in Baranya due to the fact that it is a "clear branch" and does not therefore threaten tourism in the region.

The *richness of intervention* devices is very instructive also by means of which the state tried to stimulate change of plant location, applying subventions, decentralization preferences (offered for moving out from the capital), tax allowances etc. further schemes of support were added to the state subventions by the local authorities in the form of offering free access to several pieces of real estate, special loans, or even with covering the losses of certain airline connections, air routes (e.g. the one between Rennes and Paris). In the 1960s and 1970s, apart from the electronics industry, other large plants moved to Brittany. This was almost exclusively due to the different incentives, taking into account the considerable availability of somewhat skilled and not strongly unionized female labour ready to accept comparatively low wages as well. Brittany was confronted with the challenge of other regions, first of all South-East-Asia, from the mid 1970s, competing for such factories which use mainly unskilled labour. From this time on it had a special importance whether the scientific networks and industrial integrations have really "taken roots" here or not. The experience in this respect is diverse: the R&D activities have not reached their "takeoff speed", the diversification of the electronics industry -appropriate to be adjusted to other diverse industry activities and to serve diversified objectives of utilization- is lacking, and therefore the electronics industry here is also more sensitive to the fluctuations of demand. As far as the other side of the coin is concerned: where the research and educational activities were adequately integrated with each other (producing appropriate networks), there the productive and service units did not remain without orders either (production of prototypes, furnishing of models, production of limited series etc.) and also the highly qualified experts of electronics got appropriate professional tasks.

The example of Rennes may give ammunition to those efforts of the Hungarian towns which are directed at "retaining" their population, i.e. dissuade them from migration. Rennes deliberately endeavoured to modernize the manufacturing sector of the town, recognizing that *the presence of R&D centres and R&D-intensive branches* has far reaching positive consequences. In Rennes over the 1950s some large plants settled down (Citroen, SGS, CGCT, Eternit, Ricard), high schools on university level were opened (INSA, Supelec, a faculty of chemistry, another of military technology), as well as the School of Public Health, and significant research centres were established (Celar, CCETT). The local political and economic actors closely cooperated with the state in the interests of the establishment of research and educational centres, which stimulated the foundation of new industrial plants. The significant development of the food pro-

cessing industry, differing from the branches mentioned above, was not a result of a deliberate policy pursuing this objective. It was a result of the transformation of the local agriculture and the presence of the very dynamic private and cooperative firms instead.

Civil service employment is an important ingredient of urban development. One has to take not only the quantity of civil servant jobs ensuing from the functions of the "local capital" into consideration (one-third of the total number of employees is employed by the authorities!)—but the accumulating, "spreading over" effects may not be ignored either. ⁶ The further service activities (transportation, trade, banking etc.) have also played a remarkable role in creating and maintaining the present level of employment.

More significant measures taken by the local authorities *promoting regional development* can be summarized as follows: 1) development of research structures (development agency); 2) establishment of a committee (Codespar) involving local civil servants, employers and representatives of trade unions; 3) the creation of the Rennes-Atlantique technopolis which integrated several research centers (from the sector of telecommunications, food processing industry and medical technologies), university departments, special schools and enterprises; 4) elaboration and realization of a plan promoting local employment; 5) advertisement and marketing publications which help "sell" the region to the public; 6) proportional distribution of the local business taxes among the 28 local authorities of the agglomeration.

* * *

SUMMARIZING the experience of the three regional studies the most important conclusions are the following:

—*The maintenance of the unprofitable activities through low wages or subsidies is only a temporary and non-stimulate solution* and will not save the crisis branches from decline on the long run. These "solutions" prolongate the agony of those activities which do not have a future in order to release social tension.

—In regional studies greater attention has to be paid to exploring the possibilities of future development. *Decentralization of industry* led to a long-lasting development in Brittany which might be a good example for the Eastern European regional development because of general demand of job creation. The creation of R&D centres, the appearance of universities and scientific centres changed the situation in the region significantly. Creating *technology or industrial parks* (technopolis) might help to facilitate the *transfer of new technology towards small enterprises*. The *promising industrial branches* had to be selected, besides this perspectives in improving agriculture or services have to be integrated. Tourism serves as a field of major attention. Therefore the regional marketing ought to be introduced, in order to attract the tourists and potential investors, to identify the comparative economic advantages and undervalued local resources. It would be necessary to strengthen the cooperation between regions (trans-border regions), eg. in the field of infrastructure modernization.

⁶ According to an estimate the extension of the sector of civil servants created about 10.000 jobs in private economy. (The multiplier, according to this assessment, is 0.152.)

– Benefit of *retraining* in the crisis areas, *without any definite aim* of development, often leads to disappointment among the unemployed.

– The *privatization*, the withdrawal of the state as an owner, by itself and in the short term does not lead to the revival of economic life, on the other hand it causes a considerable increase in unemployment. The investments serving modernization of technology, sometimes expected from privatization, are postponed according to negative perspectives of demand.

– Statements are contradictory when it comes to the role of *government intervention* in order to push industrialization in rural areas.

– There is a *subsidy "jungle"* in Germany just like in Hungary. This greatly contributes to the present situation in which the municipalities and local firms are confused and poorly informed about the possibilities of applying for and receiving subsidies. It would be necessary to establish *consulting firms at regional level*, which are able to advise would-be entrepreneurs and already working (small size) enterprises to take benefit of public subsidies.

– There is *no uniform model* to describe regional development of market economies—similarly in the case of Hungary it is impossible to apply a universal scheme to the different regions. The regional strategy of the government should include general objectives besides promotion forms of regional policy; on the other hand the local authorities should be competent to decide about development directions and self-development strategy and also about the utilization of financial resources. *Regional planning* has to be introduced or strengthened, fighting the resistance in former socialist countries where during the former era the need and the quality of central planning was often questioned.

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Phone: (36-1) 185-3774 . Fax: (36-1) 185-3779**

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