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Case Study of Area Responses to Globalization: Foreign Direct Investment, Local Suppliers and Employment in Györ, Hungary

by

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Foreword

This study examines the success of one region in western Hungary to attract direct foreign investment in new manufacturing plants by large multinationals, particularly in the automotive industry. It attempts to separate out the role of favourable endowments in that success, such as proximity to Austria and advantageous transportation networks, from the role of local and national policy regarding physical and human capital investments, financial incentives, and efforts in other areas to recruit foreign investors. The report provides best estimates of the immediate contribution of the new plants in terms of direct job creation. But it also tries to assess the potential role of these global corporations in improving the area's ability to compete in the global economy, measuring, for example, the extent of local sub-contracting and supplier relationships, technology transfer, and worker training. In this evaluation, the extent to which foreign investment has become embedded in the local economy and the efforts that may be needed to leverage further local economic interactions feature strongly among the policy conclusions drawn by the authors from this case study.

Both Maarten Keune, European University Institute, Florence and András Toth, Institute for Political Science, Budapest, have published extensively on regional development and transition economics in Central East European countries. They collected first-hand information for this study by interviewing government officials, managers of foreign-owned and locally-owned manufactures, and representatives of local civil and representative groups. They also place the Györ experience in context by reviewing national policies on liberalization, foreign-investment promotion, and regional development.

This report is one in a series of studies on area-based responses to the challenges and opportunities posed by growing integration of the world's capital and product markets undertaken as part of the ILO's Action Programme on Globalization, Area-based Enterprise Development, and Employment in 1998/99. Work on this topic continues under the auspices of the InFocus Programme on Boosting Employment through Small Enterprise Development. The manuscript was prepared by Anne Drougard.

Christine Evans-Klock
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1. Introduction

The political and economic changes the countries of Central and Eastern Europe have experienced in the past decade initially led to a profound economic crisis as GDP plummeted and employment and income started to decline. Later, starting in Poland in 1992 and in the rest of East Central Europe around 1994, economic growth re-emerged while employment and income stabilised. One of the characteristics of this process of emerging crisis and recuperation is that it demonstrates strong intra-country regional differences (Keune, 1998a). On the one hand, in certain regions the crisis has been much deeper than in others and some continue to experience decline. On the other hand, recuperation is led by a group of thriving regions where growth is strong, unemployment hardly exists and wages and incomes are far above the national average (Fazekas and Ozsvald, 1998).

Regional differences existed before the start of transition as well, however, they have become more apparent and the pattern has changed since the end of the 1980s. Two changes are most notable. One is the profound crisis affecting socialist front-runner regions based on heavy industry. For example, in Hungary the seemingly most stable pillar of the regional economic structure for the past 40 years, the northeast-southwest industrial axis, has collapsed, showing only slow signs of recovery (Nemes-Nagy, 1997). For another the historic leaders have been joined by a number of "newcomers", typically regions bordering the European Union and regions with a strong tourism potential (Gorzelak, 1999).

The causes of differences in regional economic performance have been a subject of research for quite some time. The traditional approach to this issue started from a conception of capitalist growth as a process which tends to create core and peripheral regions, and built around the investigation of comparative advantage (based on pre-given endowments) (Storper and Scott, 1992). Later the focus shifted towards the analysis of the spatial and international division of labour, mediated by the multinational companies in which the various phases of the production process are allocated differently across space in relation to their varying technological and skill characteristics. These often drew heavily on Marxist political economy, seeking the causes of spatially uneven development in the structural contradictions of capitalist development (Hudson, 1998).

However, these two approaches only managed to partially explain the reasons for regional differences. Also, they had little to say about the decline of a range of core regions in the 1970s and 1980s, prompted by the crisis of Fordist-style production, and the emergence of new strongly competitive regions, often based on the flexible specialization paradigm (Piore and Sabel, 1984). The latter did not become successful because of advantageous factor endowments or locations, nor are they dominated by large multinationals. They rather form what are known as industrial districts, clusters of interrelated small and medium-sized firms and service agencies (Sengenberger, 1994).

As a consequence, recently research has been focusing more and more on internal and socially created characteristics of regions in seeking to explain differences in their economic performance (Hudson, 1998). As Hudson explains, there has been a convergence on the significance of such endogenously produced features as sources of competitive advantages. It is claimed that, at least in part, "successful" regional economies are dependent upon conditions and processes internal to the region and are not simply dependent upon external conditions and broader processes as the basis for their success. *This implies as well that the less successful regions can do* *something themselves to improve their economic fortune, that there is scope for regional action and initiatives within the parameters of a global political economy.*

Also Scott (1995) argues that regional development is - and to an ever-increasing degree - based on competitive advantages that are socially and politically created, and not simply given by nature. He points out that variations in institutional infrastructures from region to region can have important implications for differences in industrial performance.

As a result, a considerable body of literature has emerged over the last decade or so that emphasizes the critical role of regional institutional arrangements, social structures, cognitive assets and cultures in successfully negotiating relationships between the region and the globalizing economy, and in positioning the region so that it benefits from regional-global relationships (Hudson, 1998). Three sets of factors are typically emphasized: (i) the effective supply of collective goods, including vocational training and education, technology transfer, promotion of the region and its enterprises, or information on markets and investment opportunities (Cooke, 1995; Rehfeld, 1997; Scott, 1995); (ii) cooperation among firms through networks of small enterprises, or through cooperation between large (multinational) companies and their suppliers (Sengenberger, 1994; Cossentino et.al., 1996; Petrakos, 1995); and (iii) the success or failure of regional actors to develop a common development strategy and to mutually reinforce their actions (Pyke, 1998; Keune, 1998a; Scott, 1995).

In the transition countries little is known as yet about the exact causes of differences in regional economic performance. Clearly the traditional and the new leading regions have demonstrated a great capability for restructuring and adapting to new conditions. Little is known however concerning the exact sources of this high adaptability. So far, most analyses concerning differences in regional performance in transition countries have focused on historic characteristics like pre-1989 industrial structure, skill profiles, infrastructural development, or educational levels, or on geographical factors like proximity to the large urban centres or to the borders of the European Union (e.g. Fazekas and Ozsvald, 1998; UNDP, 1997; Scarpetta, 1995). Although they provide important insights on causes of regional disparities, their explanatory power remains limited. For example, they do not account for divergent performance among regions sharing similar pre-transition characteristics. Also, recent case studies increasingly underline the importance of complementary explanatory factors, in particular endogenous, socially produced factors, in understanding developments in the East Central European regions (e.g. Swain, 1998; Nesporova, 1998).

The present paper aims to contribute to the above outlined questions. It will analyse socio-economic development in the region of Györ, focusing on the city of Györ and surrounding municipalities. Györ is the third-largest city of Hungary, located in the northwest of the country and bordering on Austria and Slovakia. At present the city has some 130,000 inhabitants and it is developing a larger agglomeration including 19 dwellings and a total population of 185,300. The city of Györ is the capital of Györ-Moson-Sopron county, one of the 20 medium-level administrative units in the country.[1] The county had 425,470 inhabitants at the start of 1997, 4.2 per cent of the country's total population. In certain instances the unit of analysis will be the county, especially where we compare developments in Györ to the rest of the country.

[1] The medium level administrative structure consists of 19 counties and the capital Budapest.

Györ provides an interesting case of an area that has managed to be very successful compared to the rest of Central and Eastern Europe in adjusting to the challenges of transition and globalization. The area has in a way achieved what all transition countries try to achieve. It has managed to attract large amounts of foreign direct investment (FDI) and several local companies have developed rather prosperously, in some cases as suppliers to foreign companies. Also, the lion's share of Györ's industrial production is exported. As a result, Györ enjoys virtually full employment while wages are above the national average. Without a doubt, it is one of the most dynamic regions and one of the leaders in the economic recuperation of the country. Its success has been consistent as it has held this leading position since the beginning of the transition period (Fazekas and Ozsvald, 1998).

A first question the paper will discuss concerns the general development in the region, analysing its response to the challenges of transition and globalisation, what direction economic development is taking and why the area has been so successful in attracting investment and creating employment. Is this due only to the favourable national political and economic situation and Györ's advantageous geographical location, is it rather a result of a combination of low wages, weak unions and "flexible" labour standards or are there other, endogenous or institutional factors at play?

We will argue that the developments in Györ in the past decade are the result of a combination of these factors. The region has a comparatively advantageous location, it had a relatively advantageous industrial structure at the start of transition, it has its particular place in the international division of labour based mainly on low wages combined with high skilled labour, and it has been able to create its own competitive advantages through determined action of local players. This last factor will receive particular attention in this paper because of its potentially important policy implications.

A second question the paper will investigate is the effect of FDI on the regional economic structure. Has it had a stimulative effect on local enterprises through supplier or networking relationships? Has it affected the technological level of local industry, the skill and educational level of workers and labour standards? The paper will take a closer look at some large foreign investors in the area, particularly carmaker Audi, which has been investing heavily in the region. The motives of foreign companies to invest in the Györ region will be examined in the context of their global strategies, as well as their production chain relations and future plans. Third, attention will be given to some of the local, domestically owned companies and their development strategies, including the region's traditionally largest employer, RÁBA, and a few smaller local companies.

Finally, some thought will be given to the future of the region's development and the sustainability of the development path it is following. International experience shows that there are two principal policy approaches that have been adopted to attain competitiveness and employment of a region or local area.

The *Low Road Approach* advocates competitiveness through lowering production costs, especially wages and taxes. To permit downward-directed price competition to happen, markets need to be deregulated and “rigidities” in the labour market be removed. Employers enjoy “freedom from” rules and regulations. The expectation is that this will attract investment, lead to new dynamism, boost the entrepreneurial spirit, raise the level of profits, and enable companies and locations to compete successfully in the national and international markets. As a consequence, employment will increase.

In reality, however, the low road approach has rarely produced the expected dynamic outcome. In fact, downward adjustment of labour standards is risky because it can entail cumulative economic aggravation in the firms, industry and region. Such cumulative erosion often starts with concessions made in wage levels and social benefits, expecting that this would enable firms to weather an economic crisis with greater employment stability, or allow them to amass capital needed for rationalisation and modernisation. But this rarely materialises. The reason is that lower wage levels and reduced social obligations all by themselves produce little change. But they surely have the effect of removing incentives for management and workers of taking initiatives for greater efficiency and modernisation. Also, it has a negative effect on the local tax base, thereby diminishing the business volume of the local service sector and the potential for public investment into the local infrastructure.

The *High Road approach*, by contrast, attempts to set in motion a constructive, virtuous cycle of employment and development. It does not start from a downgrading of labour and social standards. Instead, it builds on a combination of wage improvement, consumption power and increased local demand, improved human resources, higher productivity, innovation, a wider range of options for adjustment, higher competitiveness, improved safety and health, and consequently more revenues available to be spent on productive investment rather than on expenditure for remedial measures.

The virtuous cycle depends on the efficient use of available resources and investing in new, competitive products and processes or upgrading the existing product programme, fostering technological innovation and the enhancement of skills and competence. Moreover, it entails the mobilisation and upgrading of local resources and the systematic exploitation of local strengths and advantages to produce sufficient economies to balance relatively higher wages and labour standards. A significant part of the region’s growth is “ endogenous”, i.e. it comes from within the region. Public investment in technical services, research and development, product design, marketing, and other producer services, and investment into the physical and social infrastructure will help to create vibrant local community and strong cultural life, which in turn boosts local absorption of idle resources and attracts inward investment. It is the local economic and social environment, and less the freedom of individual firms, which ultimately is the key to growth and employment.

Source: Sengenberger and Keune, 1996: ‘The Role of Proactive Policies for Employment Creation at the Industrial and Regional Level - International Experience’, in: *For More and Better Jobs in the Russian Federation.*

Comprehensive, balanced and sustained regional development needs to be based on endogenous resources and capabilities and should avoid externalising the costs and risks of restructuring on others. Economic history is replete with instances of spells of growth and prosperity founded largely on external funds, technology and other resources. When these resource flows ceased, the receiver countries found themselves ill-equipped to further develop their economies (Sengenberger, 1994 p.27). For the moment, in Györ revitalization has been based mainly on foreign direct investment and endogenous growth has been taking place to a much lesser extent. However, this may be understandable considering the relatively short period of time since the start of transition. As will be argued in this report, there are encouraging signs of the strengthening of local institutions and enterprises as well.

The paper is organized as follows: first, in section 2 an overview of the main features of transition in Hungary will be presented, together with an overview of regional disparities. Section 3 will discuss pre-transition developments in Györ and outline the endowments with which it entered the post-communist era. In section 4 foreign direct investment and its effect on the local economy will be discussed. Section 5 presents a case study of Audi, one of the main investors in the region.

Section 6 provides an overview of the labour market outcomes of the transition period in Györ and compares developments in the region to the rest of the country. Section 7 discusses the role of local actors and institutions in the promising development of Györ in the past decade while section 8 provides conclusions.

2. The transition period in Hungary

Hungary entered the transition period with a legacy somewhat different from most other Central and Eastern European countries, due to a process of reforms that started in the end of the 1960s. It already had a significant private sector, it had a more liberalized economy, it had a more varied pattern of foreign trade and it had close contacts with a number of western companies. But Hungary also had the heaviest *per capita* debt burden, some USD 2000 (ILO-CEET, 1997). The economy in the first half of the 1990s went through a transformation crisis which was deepened by the collapse of the COMECON and traditional Eastern markets of the state-socialist Hungarian industry and by the quick liberalization and opening up of the economy.

The first post-communist government based its economic policy on three main pillars: privatization, liberalization and stabilisation. Apart from this, it expressed a clear commitment to serving its debt. In this way, the country tried to gain the confidence of Western investors and to attract foreign capital to finance the restructuring and upgrading of it economy.

Privatization occurred in three main phases (ILO-CEET, 1997). In the period 1991-1992 a number of mostly well-functioning companies were sold to foreign investors. These firms generally had an interest in establishing their position in Hungary and the rest of Central and Eastern Europe, in order to capture new markets. Purchasing existing and productive enterprises was often the easiest way. Naturally, they were attracted as well by the low production costs, especially low wage costs.

After having been criticized for selling the country to foreigners, in 1992-1994 privatization focused on small and medium-sized companies and to Hungarian investors. The government created better conditions for employee share ownership constructions and provided preferential loans to domestic investors. In the third phase, from 1995 to the present, the main objects of privatization have been public utility companies. In this period it is again the foreign investors that play a dominant role. In this same period a number of small enterprises were sold to domestic investors, but on less preferential terms (ILO-CEET, 1997).[2] Due to the determined privatization policies of successive governments, privatization was basically completed within 10 years. Some 75 per cent of enterprise capital is now in the hand of private owners, split nearly evenly between domestic and foreign investors (38 per cent and 33 per cent, respectively) (Petsching, 1998, p. 162).

As far as liberalization is concerned, already by 1991 price and trade liberalization were very much advanced. The opening up of the economy, alongside the drastic cut of budgetary subsidies for domestic companies, created a very competitive open market. This led to an increase in inflation, but much lower than in most other countries in the region. Only in 1991 did inflation surpass the 30 per cent mark. Through restrictive monetary, fiscal and wage policy the government

[2] For the investors, an advantage compared to privatizations of smaller enterprises in the 1992-94 period was that owners were no longer obliged to maintain certain levels of employment.

tried to promote stabilisation of the economy. However, this also led to a decrease in domestic demand, aggravating the negative effects of the sudden decline in external demand caused by the break-up of the CMEA. As a result, GDP declined in the period 1990-1993 and only in 1994 was the first positive economic growth registered. Since then Hungary's economy has been growing slowly but steadily (see Table 1). However, despite the turnaround in the economy, GDP is still below its 1989 level.

Table 1: **Main economic indicators 1990-1997**

	1989	1990	1991	1992	1993	1994	1995	1996	1997
GDP (1989=100)	100	96.5	85.0	82.4	81.9	84.3	85.5	86.6	90.4
Real gross industrial output (1989=100)	100	90.7	74.1	66.9	69.6	76.3	79.8	82.5	91.7
Consumer prices*	17.0	28.9	35.0	23.0	22.6	19.1	28.5	23.6	18.4
Producer prices*	15.4	22.0	32.6	12.3	14.1	12.3	28.5	22.3	20.9
Merchandise export (billion dollars)	9.6	9.7	10.2	10.7	8.9	10.7	12.9	15.7	19.1
Merchandise import (billion dollars)	8.9	8.8	11.4	11.1	12.6	14.6	15.5	18.1	21.2

* Annual average, percentage change over preceding year.
Source: UN-ECE, 1998.

As can be seen from Table 1 as well, both exports and imports have more than doubled since 1989. The initial positive trade balance turned negative in 1991 and the trade deficit grew to USD 3.9 billion in 1994. Since then it has gradually been decreasing because exports have been growing somewhat faster than imports. A major shift occurred in the direction of export, away from the low quality product markets of Eastern Europe towards the more demanding markets of the EU, which forced companies to profound micro-economic restructuring.

One of the results of the process of economic reform has been that Hungary has received by far the largest recipient of foreign investment of all countries in the region, both in cumulative and *per capita* terms. By June 1998 cumulative FDI in Hungary totalled USD 16.4 billion or USD 1,653 *per capita* (UN-ECE, 1998). For comparison, by June 1998 total cumulative FDI amounted to USD 10.7 billion in Poland (USD 276 *per capita*), USD 9.4 billion in the Czech Republic (USD 915 *per capita*) and USD 1.2 billion in Estonia (USD 839 *per capita*) (UN-ECE, 1998). German TNCs have been the most important foreign investors in Hungary.

Despite the completion of privatization, FDI continues to arrive at about the same pace (Table 2). In 1995, 68 per cent of cash FDI was connected to privatization, compared to only 30 per cent in 1996 and 13 per cent in 1997. Since 1993 foreign investors have preferred to establish wholly-owned companies instead of joint ventures. There is palpable increase in capital endowments of foreign owned companies. On average, the newly established foreign-owned companies invested HUF 16 million in 1997, twice the average in 1996. [3]

Table 2: **Yearly inflow of foreign investment (millions of USD, direct and portfolio investments)**

	1991	1992	1993	1994	1995	1996	1997

[3] The exchange rate of the forint to the dollar has changed quite rapidly in the period 1992-1999. In October 1992 one US dollar was worth HUF 79.10. This changed to HUF 83.10 in January 1993, HUF 101.00 in January 1994, HUF 112.00 in January 1995, HUF 133.00 in January 1996, HUF 168.00 in February 1997, HUF 206.00 in February 1998 and HUF 218.54 in February 1999.

Amount of FDI	1,614	1,641	2,481	1,320	4,570	2,040	2,107

Source: Petsching, 1998, p.48.

As far as employment is concerned, the major characteristic of the transition period in Hungary is the enormous decrease of (formal) employment (Table 3). Between 1989 and 1997 formal employment decreased by 27.2 per cent. Employment losses more or less followed the same pattern as GDP decline in the first few years of transition. However, economic growth, starting in 1994, has not led to comparable growth in employment.

The employment losses have only partially been translated into open unemployment, which peaked at 13.6 per cent in February 1993. Since then registered unemployment has declined slowly to stabilise around 10.5 per cent. An important part of the decline in employment has been translated in declining economic activity of the working age population. Between 1990 and 1995 the number of inactive in this age group increased from 949,100 to 1,686,700, an increase of 77.7 per cent. Partly this is due to increasing participation in education of young people and partly to early retirements, frequently used as alternatives for lay-offs (ILO-CEET, 1997). Also, there has been an explosive growth in the informal sector, although it is hard to get reliable estimates on its size and impact. Still, many people just left the labour force and became inactive because of a lack of employment or clear alternative activity.

Table 3: **Employment and unemployment, 1990-1997**

	1990	1993	1994	1995	1996	1997
Total employment (1989=100)	96.9	75.6	73.9	72.6	72.6	72.8
Registered unemployment ('000)	101	632	520	496	479	464
Registered unemployment (%)	1.7	12.1	10.9	10.4	10.5	10.4

Source: UN-ECE, 1998.

The industrial structure of employment has been changing profoundly (see Table 4). In the context of the strongly declining total employment it is no surprise that in most sectors the absolute number of employed went down. Employment increased only in trade and in consumer and business services in the period 1989-1996, a clear indicator of the changing economy, characterised by the growing importance of the service sector. Agriculture and industry have been the sectors where the most employment has been lost. Over the 7 years employment declined by 652,100 in agriculture and by 718,300 in industry and together they account for almost all employment losses in the transition period (Keune, 1998b).

Table 4**: Hungary, structure of employment, 1989-1996 ***

	1989		1996	
	No. ('000)	Share (%)	No. ('000)	Share (%)
Industry	1661.7	30.2	943.4	23.7
Construction	364.6	6.6	218.3	5.5
Agriculture and forestry	986.1	17.9	334.0	8.4
Transport, telecommunication	433.0	7.9	334.0	8.4
Trade	622.7	11.3	695.0	17.4
Water Supply	88.3	1.6	40.3	1.0
Consumer and business services **	299.5	5.4	441.9	11.1
Health, social, cultural services	767.9	13.9	707.3	17.8
Public administration and other public services	281.2	5.2	267.6	6.7
Total	5505.0	100	3974.3	100

* The classification used in 1989 is used in this table for comparability. New categories are in use now in accordance with the European Classification of Activities.
** Including "other material activities".
Source: Labour Force Accounts.

When looking at the share of the different sectors in employment obviously the share of agriculture and industry declined strongly and trade and consumer and business services increased their participation. However, also the share of health, social and cultural services increased by almost 4 percentage points, and the share of public administration grew from 5.2 per cent to 6.7 per cent. As a result of all these changes the structure of Hungarian employment is very much approaching the structure common in OECD countries (Keune, 1998b).

During the course of transition, regional differences in the country have become clearly apparent. Since 1989, certain regions have profiled themselves as transition leaders, showing strong economic growth and creating new employment, while others have turned out to be the "losers" of economic change. The first group is headed by Budapest and includes several counties in the northwest of the country, among them the Györ region. The second group is concentrated in the East of the country. In section 6 regional differences in Hungary will be discussed in detail, particularly the position of Györ relative to the rest of the country.

3. Pre-transition development in Györ

The city of Györ is situated in the northwestern corner of the Carpathian Basin, in the centre of the Little Hungarian Plain (Kisalföld). It is in the northwestern edge of Hungary, close to Austria and Slovakia. At Györ the Danube, Rába and Rábca rivers meet and it is on the main route from Budapest to Vienna. Capitalist development in Györ was triggered by corn and cattle dealers making use of the advantageous location of the city connecting the Hungarian Plain to Vienna. Also the Roman Catholic church contributed importantly to the development of the city by building monasteries, hospitals and schools, helping the city became a cultural centre.

The first years of the 20th century saw the rapid industrialization of the city. In the first decades of this century it became one of the key industrial centres of Hungary, specializing in engeneering, textile and clothing and food-processing industries. This first industrialization wave of the turn of the century was mostly due to influx of FDI of Austrian companies and banks. Some 60 per cent of the capital of the Hungarian industrial enterprises in those days was completely or partly owned by foreign investors (Berend and Szuhay, 1989). Several of today's major firms in Györ were established by foreigners at that time. They include Graboplast, established in 1905 by the Grab brothers, who had businesses already in Prague, Vienna and Budapest, and Györi Keksz which was established by a German who moved to Györ from Bregenz in 1905 to produce sweets.

The Second World War brought controversial times to the city. On the one hand it became one of the major military equipment manufacturing centres, which benfited the local industry, especially the Ganz Mávag Works (Berend and Szuhay, 1989). On the other hand, the destruction of the local Jewish population by the holocaust destroyed much of the bourgeois middle class of the city. After the war, the repatriation of some of the ethnic-German population to Germany and the persecutions of the high-Stalinist period of the early fifties further weakened the the city's traditional population. The "Iron wall" between Hungary and its western neighbours severed earlier connections of the region towards the west and transformed it from a central communication point into a disadvantaged outpost. As a result, in 1955 its share in national industrial investments was only 2 per cent (Kulcsár and Laczkó, 1975. p. 268).

The development of the region and the city in the soviet type state-socialist regime was mostly dependent on the redistribution of investment and development funds by the central authorities. The revival of the city began in the late fifties and early sixties, propelled by the growing share of the city in the industrial investment funds (from 2 per cent in 1955 to 4.8 per cent in 1973(for GyörMoson-Sopron county; Kulcsár and Laczkó, 1975). The new industrial development appeared in the city when the extreme Cold War had ended, with the signing of the Austrian peace treaty in 1955, high-Stalinism defeated by the Krushovian reforms, and the 1956 Hungarian revolution. The new growth period coincided with a shift in central policies to develop manufacturing industry instead of creating new heavy industry centres. In Györ the sizeable increase of central funding to industrial development mostly benefited traditional manufacturing industries and existing companies.

In the 1970s, as a consequence of further changes in central development policies[4], decentralization of industrial production from existing industrial centres towards smaller countryside dwellings triggered an industrialization wave in the smaller cities of Györ-Moson-Sopron county, with man companies in Györ, and to a lesser extent from Budapest setting up subsidiaries in Csorna, Kapuvár, Sopron and Mosonmagyaróvár. The decentralization of investment by Györ-based companies did not survive the transition crisis, when crisis-ridden companies first downsized, closed or sold these countryside subsidiaries to save their headquarters and central production sites. However, the situation in these smaller outputs of industrailization would have been even more severe had ownership been largely centered outside the county (Megyei Jogú Város, 1998, p. 2).

Due to the industrial revitalization of Györ and the county, industrial production quadrupled and the workforce doubled between 1949 and 1973. The county contributed 4.4 per cent of total Hungarian industrial production in 1973, employing 80,000 workers in 963 plants. The three major industries were engineering, textile and clothing, and food processing, which together provided almost 90 per cent of industrial employment in 1973 (Table 5). Due to the nature of the state socialist production system, production was concentrated in a few very large companies: The seven biggest companies employed 36 per cent of the industrial workforce of the county. Györ's central

[4] On major shifts in state-socialist industrial policies see Enyedi, 1993.

position in the county was illustrated by the fact that it employed 51 per cent of the industrial workforce in the county in 1970, including 20,000 commuters from neighbouring villages.

Table 5: **Györ county, share of national employment in the principal industries**

	1949	1960	1970	1973
Heavy industries and engineering	37%	48.4%	48%	46.4%
Textile and clothing	38.7%	39.3%	38%	38.8%
Food processing	13.3%	2.9%	2%	2.4%

Source: Kulcsár and Laczkó, 1975, p. 270.

After the merger of the Ganz Mávag Works with the Machine Building company in 1964, the resulting RÁBA works became one of the biggest enterprises in Hungary, employing 18,000 employees in the early 1970s. RÁBA developed into a regional industrial conglomerate with a diversity of products including trucks and truck components, train wagons, and other engineering products. With its headquarters in Györ, RÁBA established subsidiaries in the neighbouring cities and counties as well. However, unlike many other regions that developed into mono-industrial regions or were dominated by one-company towns during the socialist era, Györ maintained a multisectoral economy.

Besides RÁBA, the clothing and textile industry developed rapidly and Györ became the second most important textile and clothing production site in Hungary, employing 20,000 workers in the early 1970s. Enterprises like Gardénia, Richards, Rábatext, Lenfonó and Györi Kötöttkesztyügyár became important employment providers. Graboplast produced all plastic leather in Hungary. The food processing industry, despite the fact that its share of employment decreased, remained a major employer in the city giving work to 5,000 employees in the 1970s: The Györi Szeszipari Vállalat produced 51 per cent of spirits in the country; Györi Keksz és Ostyagyár became the country's leading biscuits and confectionery manufacturer in the 1980s.[5] Other important employers included the Vegetable Oil and the Ringa meat processing companies. The urbanisation of Györ gave rise to a considerable construction industry, concentrated in three state and local government-owned companies.

Industrialization was accompanied by rapid growth of the city. The city's population increased from 46,000 in 1945 to 111,000 in 1973 and the number of flats nearly doubled (Kulcsár and Laczkó, 1975, p. 285). The National Regional City Development Conception of the socialist period designated a central role to Györ, alongside four other similarly large cities with over 100,000 inhabitants.

The re-approachment between the 'western world' and Hungary and the slow opening of western borders in the 1960s and 1970s further benefited the region, and the city of Györ slowly regained its earlier role of a bridge between the West and Hungary. State-owned companies, which earlier solely produced for COMECOM markets, began to establish contacts with western producers. For example, in 1964 RÁBA acquired the manufacture licence for a diesel engine from MAN and started to supply the Hungarian bus and lorry industry with these engines. In the 1970s it began to manufacture heavy tractor under a licence for Steiger and began to export undercarriages to major US companies, including GM.

[5] www. unitebiscuits.co.uk/ unitebiscuits/comprod/cecpce21.htm

The large state-owned companies were not the only beneficiaries from the slow opening of the country. Tourism started and locals travelled to western countries in increasing numbers, while low prices attracted large numbers of tourists from Austria, Germany and the Netherlands. The local government, to attract tourism, began the reconstruction of the historic centre of the city in the late 1970s. The tourist industry, alongside retail trade and the service sector, became one of the key industries of the emerging private sector. Learning German, English and other western languages also gained importance (and this language knowledge later facilitated the setting-up of foreign owned production facilities). A host of official and personal contacts developed between westerners and Hungarians, including key managers and functionaries of state-owned companies and local government bodies. These contacts were to later facilitate the establishment of foreign firms in the region, the involvement of foreign investors in the privatization of state-owned companies and the integration of local enterprises into production chains of western companies. A small number of Hungarians even managed to get employment in neighbouring Austria and in Germany. The increasing knowledge of western institutions and practices facilitated the quick adjustment of the region and its residents to the new realities of the 1990s. The first joint ventures were set up in the region in the late 1980s, among them one of the first private joint ventures in the country, the battery manufacturing plant of the Leier family in Gönyü (Györ Megyei Jogú Város 1998, p. 2-7). Such undertakings were encouraged by the local authorities at that time who realised that COMECON could collapse at any moment. They themselves co-operated with Austrian investors in the establishment of the Györ Industrial Park, the first industrial park of Hungary, as early as 1988.[6]

In the late 1980s the city experienced several parallel and contradictory developments. On the one hand, an important private sector developed, mostly in the shadow economy, which after 1988, with the legalisation of private entrepreneurship, became one of the potential sources of revitalization of the local economy (Rechnitzer, 1993, p. 75-103). On the other hand, the growing crisis in the state-owned industries forecasted a major economic disaster. Also, the deepening crisis of the state socialist regime left its mark on the budget of local government, funds for development decreased from 35 per cent to 18 per cent of the city budget between 1985 and 1990 (Györ Megyei Jogú Város 1990, p. 10).

One of the major developments in the last years of the state socialist regime was the considerable expansion of vocational training in Györ, triggered by a demographic wave that reached the secondary school age. The city council responded by adding 61 schoolrooms for the existing vocational schools and supporting development of new training curricula to prepare students for future challenges, including subjects like export-import administration, clothing machinist and computers. In 1989 a new vocational school preparing students for the tourism sector opened, including the teaching of two foreign languages. Also in the late 1980s efforts began to develop Széchenyi College, the city's highest educational institution, into a University, the City Council contributed HUF 3 million to this cause.

Another vital element for future development of the region was the start of the preparations for the Vienna-Budapest highway, the reconstruction of the Vienna-Budapest railway line and a construction roundabout to circumvent the congestion of the city centre. These mostly centrally-funded infrastructure developments, which were completed in the mid-nineties, accentuated the importance of the Vienna-Györ-Budapest axis and prepared the logistical background for the

[6] Interview with the mayor of Györ.

industrial rejuvenation of Györ.[7] Györ entered the new period with comparatively excellent infrastructure endowments. In its function as a regional centre, the city was the headquarters of the regional electricity, gas and water companies. This central position provided a solid foundation for future investments (Györ Megyei Jogú Város 1990, p. 7). The city is not only situated on a major trans-European East-West communication route, comprising highways, railways, airports[8] and rivers, but is the centre of a star-like road network in northwest Hungary as well.

Another characteristic of the pre-transition developments in Györ was that by the end of the 1980s the major state owned companies were often led by relatively young, dynamic managers, who tried to follow events in the West and who established their own contacts abroad. They developed strong co-operative strategies among themselves and good contacts with the local political elite. This was facilitated by the fact that in the pre-transition period the mayor of the city was the former economic secretary of the ruling party, a similarly reform-minded politician, with good contacts to this informal group of dynamic managers. Already before 1989 they were thinking about the long-term possibilities for their enterprises and how to privatize them while maintaining their own position.

Since the mid-1980s the role of the Party in Hungary and in Györ slowly eroded, but the decomposition of the party-state only took place in early 1989, which was marked by the severing of the official link between the Party Committee of Györ and the local government authorities. Also, early 1989 saw the emergence of local organizations of the new non-communist political parties, which set up an Opposition Roundtable in early summer 1989. The City Interest Reconciliation Forum was set up in June 1989 to oversee the local government, to which the representatives of the new political organizations were invited. These forums secured a smooth transition and the correct preparations for the first free elections in the city in summer 1990. The early involvement of new political parties in the affairs of local government assured a certain continuity after the local government elections in autumn 1990, which brought representatives of new political parties into power (Györ Megyei Jogú Város 1998, p. 5).

Despite the apparent advantages of the local economy and society, Györ was hit hard by the transformation. All state-owned industries were thrown into crisis, resulting in massive job loss. Unemployment increased to 12-13 per cent in the early 1990s. Many of the traditional agricultural cooperatives in the villages disintegrated and most of the agricultural sector turned into small-plot subsistence farming. The three big construction companies were closed down due to the end of the centrally-financed construction of flats. The textile industry also underwent a thorough crisis. RÁBA, the major conglomerate of the city, was at the brink of collapse in 1991, like many of the star companies of the socialist decades. In summer 1991 the company had 8.5 billion HUF debt (Népszabadság, 15 May 1995). Consequently the workforce of the company was cut from 14,719 in 1989 to 6,300 in 1996 (KÁPÉ, 11 April 1996). The ramifications of the crisis of the large state-owned companies on the local economy were further aggravated by decreasing orders to traditional suppliers. Moreover, state companies sold to strategic foreign investors cut-off their local supplier relationships in many cases due to changes in their product portfolio and their integration into the existing supplier networks of their new strategic owners (Farkas, 1995).

[7] Magyar Köztársaság Kormánya,Országos Területfejlesztési Koncepció, 1998. p.178-181.
[8] Györ is one hour drive from three major international airports (Budapest-Ferihegy, Vienna and Bratislava Ivanka).

Still, although most companies suffered from the crisis, contrary to many other cases in the country, the main companies in the region did not collapse completely. For example, RÁBA downsized substantially in the 1990s but it survived. Many others were privatized rather than closed. The region was fortunate to have a multi-sectoral profile and not be dependent on the industries that suffered most from the transition to a new economic system: mining and heavy industry. Apart from this, and most importantly, the region has managed to attract huge amounts of foreign investment which has become the motor of its re-industrialization. In the next section, foreign investment and its effect on the local economy will be discussed.

4. Foreign direct investment in Györ and its effects on the local economy

4.1 Introduction

Since 1989, many changes have taken place in the economic and social situation of Györ. The reorganisation and revitalisation of the local economy has been taking place in various ways, including privatisation, the start-up of companies on the ruins of former state-owned companies, the emergence of a new small enterprise sector, and new investments by foreign investors. The engine of the revitalisation has clearly been the involvement of foreign investors. By the end of 1997, there were 1260 enterprises in the county that had foreign financial involvement. Their total subscribed capital amounted to HUF 157.9 billion, 69.4 per cent of which was foreign direct investment.[9] FDI is dominated by manufacturing which will be discussed in detail below. However, some other sectors have also received substantial foreign investment. Large retail companies like Spar, TESCO and Metro have established large, multi-functional supermarkets in Györ. At present they already account for more than 50 per cent of local retail turnover. They have created strong competition for local domestic retailers, many of which went out of business. The net employment effect of these investments is therefore not clear. Foreign direct investment can also be observed, to a lesser extent, in business services, construction and tourism. Finally, foreign investment has played an important role in the regional infrastructure. The regional gas company was bought by a French investor, the Györ industrial park was established with participation of Austrian investors, and the construction of the M1 motorway to Vienna relied heavily on foreign investment.

Below we will focus on foreign investments in the manufacturing industry. We will discuss the different types of FDI in Györ, the motives of foreign investors to come to the region and the effect of foreign investment on the local economy. In section 5 these developments will further be illustrated by a case study of Audi, possibly the most important foreign investor in the region.

4.2 Four main types of manufacturing FDI

Four main types of foreign investment in manufacturing can be observed in Györ. The first type of foreign investment, characteristic for the early days of the transition period, consisted mainly of small and sometimes medium-sized enterprises, mostly Austrian, establishing plants in neighbouring Hungarian villages, benefiting from local contacts and low production costs. These

[9] The total amount of FDI in Hungary at the end of 1997 amounted to HUF 2039.8 billion. Of this amount, 64.6% was accounted for by Budapest and the surrounding Pest county. Of the amount that went to the remaining 18 counties, Györ-Moson-Sopron received the highest amount and accounted for 15.2%.

enterprises, often joint ventures, were normally initially with cautious aspirations.[10] Over the years several of these small initiatives have grown into enterprises with 100 or more employees.

The second kind of FDI is made up by the acquisition of the "jewels of local industry" by strategic foreign investors through privatisation. Strategic foreign investors bought local companies based on two principal objectives: serving the Hungarian market or developing low-cost export platforms. An important example of the first objective is the acquisition of the 100 year old Györi Keksz by United Biscuits from the UK in 1991. Györi Keksz was already a market leader in Hungary with more than 50 per cent of the cookies market so it provided a strong entry in the Hungarian market. The company, then run by its enterprise council, decided privatisation was the best alternative for the future and started to look for a strategic investor to secure its position in the market. For United Biscuits the purchase was quite an uncertain adventure as it was one of the first major privatisations in Hungary and the local market was far from stable at that moment. It has proved to be a very profitable investment over the years though, and the company recorded sales revenues of HUF 8.5 billion in 1998 and pre-tax profits of just under HUF 1 billion (ECONEWS, vol.12, no. 13). For United Biscuits the acquisition of Györi Keksz was a decisive step towards becoming a major player in Central and Eastern Europe.[11] The example of Gardénia curtain manufacturer represents the other objective of foreign investment through privatisation. Gardénia was acquired a by a group of Austrian investors and the company currently exporting its products to 33 countries, deriving two thirds of its turnover from exports (Kisalföldi Gazdaság, 6 January 1998).

The third type of foreign investment in the region is large and medium-sized greenfield enterprises set up by Western companies. This started in the early nineties as well with the arrival of (among others) a number of car component producers in villages in the Györ region. For example, Kromberg Schuber set up a greenfield plant in Köszeg to produce electric cables for BMW and Mercedes (Népszabadság 1996. április 4). Also, Keiper Recaro built a factory to manufacture car seats in Mór and Györ, for Audi, Ford, Mercedes, Opel and Porsche (Havas, 1997).

Greenfield investment experienced a breakthrough in 1993 when Audi A.G. established Audi Hungária Motor Kft. (AHM) initially dedicated to the production of engines but later also to the assembly of complete cars. Audi has played a very important role in the region and will therefore be discussed in more detail in section 5.

Audi was followed by a number of other large industrial FDI projects. For example, VAW Aluminium AG opened a new DM 80 million cylinder head plant owned by subsidiary VAW Aluminiumtechnika Kft in Györ in 1996 to supply the Opel engine plant in neighbouring Szentgotthard and Opel in Austria. Later it built a new aluminium engine block manufacturing unit representing an additional DM 50 million investment. This plant will have a total annual capacity of 400-450,000 engines, and started production at the end of 1998 for Audi and Mercedes. The cylinder head factory will have total annual turnover of DEM55 million and the engine block factory DM 60 million after production reaches full capacity and they will provide employment for some 240 workers.

[10] In general Austrian investment projects in Hungary have been small in the 90s, much smaller than Austrian investments in the EU but also smaller than Austrian FDI in other Central European countries. Also, often they were the first experiences of the respective Austrian companies with investing abroad which explains why they have not always been very successful (Altzinger, 1997).

[11] It had even bigger plans and built a potato chips factory, however, it soon became apparent that UB would not manage to enter the already saturated Hungarian chips market and the undertaking was abandoned.

In 1997, AMOCO Co. USA opened a new plant on the Györ industrial park, investing DM 750 million. It planned to produce 150 million square meters of carpets annually, mainly for the European market. The plant is relocated from Gronau, Germany and employs 250 workers. In 1998, Erbsloeh AG of Germany started to build a plant at the Györ industrial park that will produce aluminium spare parts for carmakers BMW and Mercedes. The initial investment is of DM 11 million and the initial staff will be 70 to 100 (ECONEWS, 11-6-1998). In the same year, Hanna-Wilson Polimer Fedolgozo Kft, the Hungarian subsidiary of the US company M.A. Hanna Co, opened a USD 5 million polymer production plant, also at the Györ industrial park. The company develops, produces and distributes colour concentrates and additives and other related products. Finished products are mainly packaging materials such as foil, cups, boxes and bottles. The company will also make plastic components used in the electrical, electronic and motor vehicle industry. It will distribute its products throughout Central and South-East Europe and plans extensive growth in the coming years (ECONEWS, 9-6-1998). The largest recent investment comes from Philips which established a component plant in Györ. The Györ plant has been growing rapidly as well and instead of the originally planned 600 currently the plant employs around 2700 workers.[12]

A fourth kind of foreign involvement in the Györ economy has been the participation of financial investors in several important local enterprises. Whereas for example Györi Keksz decided to look for a strategic investor to buy the company, a different route of privatisation was adopted by the management of Graboplast and RÁBA. In the beginning of the 1990s, Graboplast already decided to seek financial investors rather than strategic investors. The company, engaged in the production of plastic carpets, was privatised in 1990 with an initial foreign participation of 30 per cent, acquired by a group of foreign financial investors (Graboplast. Vállalati kiadvány). This share was increased over the years to 80 per cent. The company restructured into three cost-centres in 1991-1992 and decided in 1994 it would aim to provide the complete scale of home interior products. With the injection of foreign capital the company managed to development a series of new products and to conquer foreign markets. The company went through rapid expansion in the early nineties, buying a carpet factory in Sopron, Uniontext in Györ, a wallpaper factory in Kesztölc (Figyelö. 1998. február 2), and establishing a subsidiary in Tatabánya (Györ Megyei Jogú Város 1998, p.3). Graboplast has also established subsidiaries in Slovakia and in Romania for wallpaper production (Népszabadság 1998. október 15). Financial investors acquired 80 per cent of the shares, while 16 per cent is still owned by management and 4 per cent by others (Graboplast. Vállalati kiadvány). The share of plastic carpets in sales decreased from 80 per cent to only 16 per cent. Graboplast is considered one of the main successes in the Hungarian privatisation history (Magyar Hirlap, 7-7-98). Lately it has been suffering though from the Russian crisis which has affected particularly its wallpaper activities and by the end of 1998 the company was forced to start further restructuring and downsizing of the workforce (ECONEWS, 14-11-98).

The success of Graboplast offered an example to the management of RÁBA. RÁBA, after a turning point in 1992 secured a relatively secure supplier position to a number of major multinationals for many of its key products. It returned to profit and increased its workforce again to 9000. The privatisation of the company was delayed until 1997. In 1997, the successful management, in coalition with the local trade unions, blocked the acquisition plans of Daweoo

[12] Philips has become the largest foreign investor in Hungary and had exports of USD 925 million and domestic sales of USD 68 million in 1997. The company has ambitious plans in Hungary and in 1998-1999 the company plans domestic sales of USD 200 million and exports of USD 2.3 billion.

fearing that acquisition by a strategic investor would undermine its supplier position. It envisioned and succesfully went through a similar privatisation scheme as Graboplast (Magyar Hirlap. 1998. július 7). The State Property Agency (ÁPV Rt.) first sold less than 50 per cent of its share package to a host of financial investors, including the EBRD, the First Hungary Fund, a Hungarian financial investor group, RÁBA Management Investment Kft and DRB Hicom Group. In a second round the capital of the company was increased by HUF 25 million. Moreover, employees could buy 7.85 per cent of shares. As a consequence, currently 61.39 per cent of RÁBA's shares are owned by financial investors, 30.76 per cent by small investors and ÁPV Rt. and 7.85 per cent by employees (Népszabadság, 18 February 1998).

4.3 Motives for foreign investment in Györ

Investment by foreign companies has been motivated by many different concerns and often it has been a combination of factors which has made investors come to Györ. First of all, foreign investment in Györ should be seen in the wider context of increasing international competition and the opening up of the Hungarian economy. On the one hand multinationals are increasingly confronted with pressure to decrease production costs and increase flexibility and are therefore interested in a country like Hungary that provides a cheap but well trained and flexible workforce. On the other hand, it has been a clear objective of the three post-communist governments to stabilise the country's political situation, open up the economy and attract foreign capital, and the country has successfully been trying to gain the confidence of Western investors.

In this context, a number of factors have made Györ one of the leading FDI receiving regions of the country. With the start of transition, Györ had a number of attractive companies to offer for privatisation. Some of these companies offered foreign investors a ready and cheap entry to the Hungarian and the Central and Eastern European market, including brand names and distribution channels. Other companies rather constituted a good base for the development of low-cost export activities. Györ also had a number of potentially viable companies and interested in finding financial investors.

Access to the local, national and Central and Eastern European market has in varying degrees been an important motive for many investment projects in Györ, also non-privatisation projects. Notable are the large foreign retailers, which successfully captured local customers. The local construction industry, with strong Austrian investment and often serving the process of re-industrialisation in the region, is a good example as well.[13]

Another group of investors are less oriented to the domestic market and have a prime interest in using Györ as an export base. Naturally, comparatively low wage costs played an important role in their decisions. Low wages and other cheap production factors like transport, maintenance or security, give Györ a major advantage over many other locations in Europe. However, low wages is not a unique advantage for Györ, and in fact, wages are substantially lower in East Hungary or in countries like Romania, Ukraine or Bulgaria. A decisive factor here for many enterprises has been the availability of a pool of highly skilled labour. Because of its industrial history the region could offer well-trained workers with experience in several industrial branches (textile, engineering, etc.). This advantage has been strengthened by the willingness and ability of local vocational schools to adapt their programmes to the needs of the restructured and new enterprises. Several large foreign

[13] As mentioned before, Austrian investment has played an important role in Györ. A survey among Austrian investors in Hungary revealed that for no less than 82.2%, market access was the prime motive for investing in Hungary (Altzinger, 1997).

enterprises have established close relations with the local educational institutions. Local experts also emphasise the role of the strong work ethic and industrious nature of the local popuation, which facilitated their quick adaptation to the requirements of modern production systems.

A further major advantage of Györ is the exceptional geographical location of the region, on the border of the EU and close to large cities like Budapest, Vienna and Bratislava. The exporting enterprises often have important markets in the EU or in the major Central European cities and prefer to remain close to these markets. Also, proximity to headquarters or traditional suppliers in EU countries is an advantage. Short distances represent cost advantages and allow the companies to use modern just-in-time practices. Also, the well developed local infrastructure has been of major importance. The road network is good and connected to the Budapest-Vienna highway, there is a harbour on the Danube, the city is close to three airports, etc. The Györ industrial park has been of major importance as well, as it offers all necessary utilities to facilitate the start-up of companies. Apart from this, there were a number of production halls of former state-owned companies available in the region to foreign investors.

A number of traditional (foreign) suppliers to large MNCs with transplants in the region have come to Györ to be close to the end assembler. Often they have been encouraged to do so by the final manufacturer.

Investors in Györ can also receive financial incentives from the local government. Investments of over HUF 1.5 billion get a 5-year break from local taxes while investors in the industrial park of the city get a 2-year tax break. If profits are re-invested, a corresponding 10-year tax break can be obtained. Medium-sized companies investing over HUF 40 million receive a 1 or 2 year tax break from local taxes while small companies with less than HUF 6 million are simply exempted from local taxes. Apart from this, the national government has a series of support programmes for investors. Still, the importance of these local and national incentive programmes in attracting foreign investment should not be overstated as most countries and locations in Central and Eastern Europe have similar schemes.

A final factor has been the active role of local actors and institutions. It is characteristic for the local companies that they themselves actively looked for interested investors corresponding to the company's particular needs and established foreign contacts. Local institutions like the municipality, the labour office or the vocational training and education institutions have been important in providing a flexible and responsive environment for investors, in establishing foreign contacts, in developing the industrial park and the local infrastructure, and in adjusting the profile of the local labour force to the need of the new companies. Local actors and institutions have not only been of importance in attracting initial investments but also helped them to grow, often far beyond the initial investment plans, through supportive policies. More attention to their role will be given in section 7.

4.4 FDI and its effect on the local economy

Foreign direct investment has without a doubt been the motor of development in the Györ region. It has provided the region with the necessary capital so badly needed to restructure and modernise large parts of the local economy. It has been one of the main reasons for the better performance of Györ compared to most other regions of the country and of Central and Eastern Europe. It has truly incorporated the region into the global economy.

Foreign investors have helped to save a large number of jobs in existing enterprises and created thousands of new jobs in greenfield investments or through expansion of privatised enterprises. This does not mean that the effect of FDI on local employment has been without controversy. In the process of acquiring and restructuring local companies foreign investors laid off a substantial number of employees. A good example is the case of the machine building plant of Tungsram, owned by General Electric, which cut its workforce from around 600 to some 200. Still, after drastic reorganisation it became the sole world-wide supplier of bulb making machines for GE-Lighting.[14] Also, state-owned companies sold to strategic foreign investors in many cases severed their relations with local suppliers due to changes in their product portfolio and their integration into the existing supplier networks of their new strategic owners (Farkas, 1995). In cases where FDI enterprises entered in direct competition with local companies, notably in the retail branch, their employment effect has been less positive or less apparent than that of industrial investments as they often compete directly with the traditional domestic small retailers. On the other hand, there is a palpable trickle-down effect of foreign enterprises to local enterprises that has led to direct job creation in transport, construction, security companies or cleaning enterprises, or indirectly in, for example, the hotel branch. In the construction industry, for example, the Pannon-Team Kft. became a major regional construction firm of industrial sites. The development of Pannon-Team is due to the orders of MNCs and 90 per cent of the buildings made by the company are for foreign investors. The company currently employs 150 employees. The transport firm West-Trans Kft. has also been growing rapidly by serving local sites of MNCs, transporting export and import goods.

Although FDI dominates the region and positively contributes to strengthening dynamism and development, in many respects for the time being it has had a rather limited effect on the local economy. At present, most large foreign enterprises have only a very limited number of local suppliers, accounting for minimal shares of their inputs. The exceptions are some of the enterprises privatised through sales to foreign investors which may have maintained their traditional suppliers. A good example here is Györi Keksz, which continues to buy many inputs from the same flower mills and sugar suppliers as ten years ago; these are however agricultural inputs. Still, for most of the important foreign owned enterprises, local suppliers play a limited role and the "local content" of their products is low. According to a survey of 38 companies by the MTA-NYUTI, the share of local suppliers was around 15 per cent (Máthé, 1997).

The main argument against using local suppliers seems to be that, with a few exceptions, they are not considered to be able to supply goods of sufficient quality in sufficient amounts and in the required time for a better price than the traditional (foreign) suppliers of the foreign-owned enterprises. Their inability to deliver in a given time period and to meet the quality demands of end-assemblers was identified as especially important according to the above-mentioned survey (Máthé, 1997). A wider survey of 57 companies in north-west Hungary carried out in 1996 shows that most of the local companies have rather old machinery (Döry and Lados 1997). These factors – quality, amount, time and also price are of varying importance, depending on the product. Quality for example is a main factor in the case of VAW, which has not been able to find domestic aluminium suppliers meeting their standards and continues to work mainly with Western and Polish suppliers. Quality is less of a problem in the engineering industry, as there are many smaller enterprises with qualified engineers and highly skilled workers. However, they may face the problem that they only have 2 or 3 computer numerically controlled (CNC) machines and cannot finance the purchase of

[14] Based on interview made by István Csabai with the Director of VTG GE-Tungsram.

another 10 or 15 machines needed to produce the particular motor part or other sub component in the required quantity of 200,000 per month.[15]

Complaints about the absense of a well capitalised, technology intensive, quality producing medium sized enterprise sector can be heard across the board from major investors in the region.[16] On the other hand, one can also observe a hesitant attitude of MNCs towards Hungarian suppliers. According to a radio interview with a local enterpreneur, German car manufacturing companies do not like to establish direct supplier relationships with Hungarian companies due to their lack of trust in the legal system. Moreover, many small firms can only get orders from large multinationals if they adopt ISO quality standards, but this certification process is very expensive for them. As a result, many domestic small companies act as sub-contratctors to local affiliates of foreign-owned components and sub-assembly manufacturers instead of developing a direct relationship with the final manufacturer, which considerably reduces their profit margin.[17]

Still, efforts have been made recently by the foreign enterprises, in co-operation with, for example, the county Chamber of Commerce and Industry, to strengthen the linkages with local suppliers. A number of so-called supplier conferences were organised in 1997-1998 to inform local companies of the supply opportunities and requirements of large foreign companies like Philips, Audi and others in expectation of increasing their local content in the future. The Chamber and also the national government have special supplier programmes aimed at upgrading the technological level of local suppliers and increasing the local content of the products of foreign enterprises. Also, considering the fragile Just-In-Time production schemes used by some of the foreign companies in the region, and their high and consistent quality requirements, it would be unrealistic to expect them to change to new, unknown suppliers soon after arriving in a new location. This may however very well happen in the future. Apart from this, looking only at the suppliers to multinationals with plants in the region limits the understanding of the inclusion of local suppliers in international supplier chains. There are a number of local companies that may not supply multinationals in Györ but do supply Western companies located in the EU or the US.

Another limit to the impact of foreign investment in Györ is that it has concentrated in labour intensive activities, while the more technology intensive, and particularly the R&D activities, have remained in the West. In the international division of labour, Györ definitely is not at the bottom, considering FDI enterprises provide many semi-skilled or high skilled jobs. However, it is far from the top as well, considering that none of the foreign enterprises has any important R&D department in Györ while technologically advanced parts, intermediate goods and materials are usually imported. Foreign enterprises employ only a small number of highly educated (technical) professionals. This, combined with the limited use of local suppliers, restricts the transfer of technologies and knowledge from foreign enterprises to the local economy, and limits the upgrading of endogenous technological capabilities, generally considered a vital element in the sustainable development of regions (Sengenberger, 1994). Upgrading for the moment concerns mainly skills of blue-collar workers and management skills of local managers. Increasing the technological capabilities of the domestic enterprises remains an important task for the region for the future. There are signs of improvements in this respect, particularly the fact that Audi is considering the establishment of an R&D unit in Györ which would employ around 100 engineers.

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[15] According to J. Rechnitzer, director of the Győr Centre for Regional Studies of the Hungarian Academy of Science, this was one of the major outcomes of the supplier conferences organised by multinationals.
[16] Information based on interview with the Director of the Chamber of Commerce and Industry.
[17] Rádió interjú, 11.19.1998.

There is a general low incidence of R&D activity in the region's manufacturing sector. According to the above-mentioned survey of 38 companies, two-thirds of the interviewed companies do not have an R&D department or R&D personnel. At those companies which do have R&D staff, the number of professionals ranges from 1 to 5 (Máthé 1997). As a consequence, companies in north-west Hungary spend a maximum of 2 per cent of their turnover on R&D in the best cases. Fifty-six per cent of companies did not developed new products between the period of 1993 and 1996, focusing only on improvement of the existing product line. The average age of products is around 15 years (Döry – Lados, 1997).

The above does not mean there is no local innovative activity in the region at all. There are several examples of highly innovative domestic small and medium size enterprises, which indicate that endogenous innovative potential does exist and may be further developed in the future. One example is Jankovics Hidraulika, which designs and manufactures hydraulic systems, hydraulic jacks and rectifiers. The company was set up in 1992 by three persons and grew to employ 45 in 1996. The company decided to establish an 800 sqm. plant and an office building on the industrial park and to expand employment to 150 (Világgazdaság, 8 November 1996).

Another example is the Gépkontakt Mérnöki Iroda, Tervezö, Gyártó és Kreskedelmi Kft. This family-owned small company was established in 1993 to design and produce machine components and parts. The company currently employs only 6 employees, but it forecasts rapid growth due to its supplier relationship to Austrian Railway Company. The company plans to develop a two-phase investment in the industrial park. In the first phase it will build a 400 sqm. CNC machine shop and 130 sqm. office and increase employment to 40. The investment would be complemented in the second phase by a 1000 sqm. assembly hall (Györ. Hírlevél a város polgárainak. 98/20).

A central question is the extent to which FDI is embedded in the local economy and the risk that it would move to other locations once, for example, wages rise or tax holidays come to an end. On the one hand, as argued above, although FDI contributes strongly to the local economy, in many ways it has only loose links with it. On the other, it is unlikely that the major foreign investors would leave the region in the short or medium term.[18] The investors that only came to take advantage of very low wages have already left the region and moved further east. Most of the foreign-owned companies have more than one reason to be in Györ and are unlikely to find a similar or more advantageous location in the near future. Also, most of them are simply doing quite well, as is demonstrated by their results and further investments, often beyond their original plans.

5. The case of Audi[19]

5.1 Introduction

At the beginning of the 1990s Audi, along with the rest of the VW group, was severely hit by recession. High labour costs in Germany, outdated production organization and an aging range forced the company to make a change of direction. Among other things, it sought to globalise its production with the creation of lower cost factories outside Western Europe (Heimer, 1997). Part of this anti-crisis programme was the foundation of Audi-Hungária Kft and the construction of the Györ engine manufacturing and car assembly factory.

[18] This was confirmed in a number of interviews in the region with, among others, managers, the mayor, the director of the labour office and the director of the Györ Centre for Regional Studies of the Hungarian Academy of Science.
[19] This chapter is to a large extent based on Tóth (1999).

5.2 The choice of Györ as the location for Audi Hungária Kft.

The background to the construction of the Audi Györ plant is made up of three distinct but inter-related features. First, developing the new five-valve generation of engines and deciding to put them into production, Audi realised that a new kind of engine could not be produced on existing production lines in the Ingolstadt headquarters. New investment in manufacturing facilities was unavoidable, and the optimal solution was to seek a new site for a car assembly plant. Second, because of the trend towards globalization, in contrast to their previous investment decisions, Audi did not limit itself to consider sites within Germany but became considerably more open to locating motor vehicle production in another country. Third, in a climate of increasing competition, the company was interested in reducing its production costs and increasing productivity.

These three factors shaped a broad search to find the best location for the new manufacturing plant. Audi examined 180 prospective sites across Europe. On the final shortlist, alongside Györ and Ingolstadt, were sites in East German and Czech cities (Magdeburg, Chemnitz, Branau and Mlada Boleslav). In the final selection of Györ, the following five factors played an important role:

1) *The city's exceptional geographical location.* Györ lies on both the Budapest-Vienna-Munich motorway and the Budapest-Vienna main railway line. The area's foreseen potential for even better transportation is now being developed: The Gönyü international port is being constructed next to the town on the banks of the Danube and the nearby former military airbase Pél to be re-opened soon as a civilian international airport.
2) *Proximity.* Györ is 610 kilometres from Audi headquarters at Ingolstadt. Within the VW Group several components factories are located at similar distances from their assembly plants. The company considered the distance manageable, and the town's logistical features permitted the organization of just-in-time production to govern relations between the factory and the assembly plants.
3) *Highly skilled and readily available workforce with experience in engine manufacture.* Györ has a tradition of machine and motor vehicle manufacture based on the Rába Enterprise, which has been involved involved in the production of heavy vehicles and diesel engines. With the Rába downsizing, the local labour market was flooded with a surplus of highly skilled labour with relevant work experience.
4) *The time pressures experienced by Audi.* In order to recover from the recession of 1992-93 Audi wanted to change its outdated 80/100 model range in the shortest time possible. Audi hoped that the fastest possible introduction of the A4 model on the market would lead to the renewal of the company and spur its recovery from recession. For this reason they brought forward the introduction of the A4 by six months from the originally planned date. They furthermore wanted to place the A4 on the market with the newly developed five-valve, four-cylinder engine and was already planning a new engine plant for its manufacture. Audi wanted to use these technical innovations to strengthen the model's modern and innovative nature. For this reason it was extremely important for the company to find a site where they would be able to begin engine production in the shortest time possible. Györ provided the most favourable conditions for a speedy start-up. Rába had already begun constructing a 100,000 square meter hall including full hook-up to utilities (water, gas and electricity). The availability of this appropriate facility represented a major saving of time, and spared Audi immersion in bureaucratic red tape.
5) *Cost factors.* The Györ site presented considerable cost advantages to Audi. These cost advantages were made up of several factors. *1)* Labour costs were reportedly one seventh to one eighth of German levels. *2)* The availability of the Rába hall reduced building costs to

something like a third of what they would have beeen had the investment been made in Germany. *3)* According to the company's calculations, the costs of non-production services (external and internal transportation, maintenance, cleaning and security) were considerably cheaper than similar contract services in Germany. *4)* The various exemptions and subsidies given to new investors by the Hungarian government were also influential. According to the information released in the press the total support for the engine factory meant that the company secured a 30-40 per cent cost advantage over making a comparable investment in Germany (Heimer, 1997). According to other press reports Hungarian production of the TT coupe and roadster models represented a 60 per cent cost saving to the company (Autocar, March 1998).

5.3 The development of Audi Motor Hungária

5.3.1 The initial investment plan and its expansion

On the basis of all of the above factors the company decided on 25 November 1992 to construct its new engine factory in Györ. On 18 February 1993 the Audi Motor Hungária Limited Liability Company (hereafter AMH) was founded. In April 1993, AMH bought the complete structure of the 100,000 square metre hall and an accompanying 250,000 square metre factory site from Rába for the engine factory. The company also acquired the first option on the purchase of a further 230,000 square metre site next to the factory site. The AMH gained a five-year exemption from taxation and over the five years following the exemption it would be allowed to keep 60 per cent of its corporate tax bill. Furthermore if the company re-invested its profits in Hungary during the second five-year period it would be granted a total exemption from corporate tax. Alongside its tax exemptions, AMH would be able to apply for HUF 400 million worth of state subsidy for infrastructure development, environmental measures, training, and research and development. The factory site was also exempted from paying import duties. The status did not merely mean that the new company escaped considerable customs bureaucracy and expense but gave it the essential ability to implement just-in-time production given the importance of meeting tight deadlines and avoiding delays (AMH. Basic Press Information, 6 August 1997).

Originally Audi planned to locate the manufacture of its newly developed five-valve, four-cylinder petrol engines in Hungary in three stages with a total investment of DM 800 million. In the first stage the factory would have a capacity of 750 engines per day with an investment of DM 300 million. At the second stage, between mid-1996 and mid-1997, the company planned to double the capacity of the engine factory whilst setting up the equipment to manufacture the crankcases so that the profile of the factory would be broadened. This expansion required an investment of a further DM 220-50 million. In the third stage, during 1997 and 1998, a further DM 220-50 million was to be spent to re-locate to this site the manufacture of two engine cases, the connector and the main shaft, whilst increasing the total number of engines produced daily to 2,200 (Havas, 1997). The production processes necessary to fulfil the original investment plans would have taken up barely more than half of the enormous, 100,000 square metre hall. The plan for the use of the remaining space envisaged that suppliers and service providers would be allocated within the factory, so that time and money could be saved (Havas, 1997).

The smooth functioning of the AMH during its initial two years of operation demonstrated that Györ was able to produce engines of appropriate quality at low cost for Audi and for other companies within the VW Group. On the basis of this success, Audi AG decided in May 1996 to re-locate all its engine production from Ingolstadt to Györ and consequently to concentrate all Audi engine manufacture at Györ. Along with the concentration of engine manufacture in Györ the city was chosen as the site for the assembly of the Audi TT coupe sportscar and the Roadster models. 20,000 of the first model, and 10,000 of the second would be produced annually at the plant (AMH, Basic Press Information, 6 August 1997). The company earmarked a further DM 200-250 million investment for this proposed expansion (Havas, 1997). As a result of the changed investment plans Audi AG planned to invest a total of 1 billion DM in Hungary by the end of 1998 (Havas, 1997).

The decisive factor in the decision to concentrate engine production and the assembly of the TT models in Györ, besides the positive environment it offered, was that the company had recovered from the crisis of the early 1990s and had been able to both increase its product range and the total number of cars produced. The success of the A3 model and the preparations made for the manufacture of the A12 model demanded a substantial increase in capacity at the German factories in Ingolstadt and Neckarsulm. The increase in capacity allowed company management to re-structure the company and to introduce an improved production system without resorting to a painful and conflict-ridden process of job reduction. It meant that despite the concentration of engine production in Györ surplus labour at Ingolstadt could still be employed in car assembly, which was to be concentrated in the two German factories. The company management and the General Works' Council were able to renew the "Audi Jobs and Industry Pact" up to the end of 2001. Under the terms of the pact the company will not lay off any staff for economic reasons, and will maintain the number of apprentices at a steady level[20]. Following the closure of the Ingolstadt engine plant, not a single worker was laid off, mainly because the workers were re-trained to complete certain stages in the production of the bodies for the A3 and the TT models. These re-trained workers were re-deployed in the pressing factory where they worked either in car body manufacturing or car body painting.

5.3.2 The engine plant

Between the foundation of the company and October 1993 the construction of the engine plant was completed and in December the trial production runs began[21]. Almost a year later in August 1994 the manufacture of the four-cylinder, five-valve 1.8 litre engines began. They were produced in daily production runs of 750. In October 1995 the plant was awarded the ISO 9002 quality certificate. In September 1996 the production of two-valve 1.6 litre aluminium engines began. In 1997 in accordance with the amended investment plan the production range was expanded with the 6 and 8-cylinder petrol engines. In the second half of 1997 full-scale production of the V6 engines started. In October 1998 manufacture of the V8 engine commenced in Györ. According to current plans the plant will produce 4000 engines per day by the end of 1998, whilst the annual capacity of the factory will stand at 1 million engines (ECONEWS, No.2, 1998). The result of these developments was that the Györ factory became Audi's central engine plant, and at the end of 1997 90 per cent of Audi's demand for engines was met by the new plant. Alongside this Györ also produced engines for other factories owned by the VW Group, to VW itself as well as to Skoda and Seat.

5.3.3 The car assembly plant

In October 1997 AMH began the trial manufacture of the TT coupe in a separated, 30,000 square metre area of a hall. AMH completes the assembly and final quality control of the TT models from components manufactured elsewhere in the Audi group. The engine types

[20] Audi AG Media relations, Corporate and Finance. 11.12.97. http://www.audi.com/cgi-bin/textnews.pl
[21] AMH. Basic Press Information, 6 August 1997.

manufactured in Györ are incorporated into the cars. The basic, painted body of the car arrives by train from Ingolstadt. Full-scale production of the coupe began in the second quarter of 1998, and the production of the roadster in the second half of 1998. The assembly of 10,000 cars is planned for 1998, and in 1999 production is planned to reach 30,000 (ECONEWS, No.2, 1998).

5.4 Company results and plans for the future

According to the Ministry of Industry and Commerce, Audi became the second largest exporter in Hungary during the period between January and November 1997. The total value of AMH's exports reached US$ 710,400,000 which represented 4.16 per cent of total Hungarian exports[22]. AMH was already profitable in its first year of operation. Since then the company has increased both its turnover, and its rate of profit. In 1997 company profits reached DM 140 million, and the turnover DM 1,663 million. Employment in the company rose rapidly from 254 in 1995 to 3,200 in 1998 (Table 6), making Audi one of the most important employers in the region.

[22] http://www.itd.hu/english/stat7.htm

Table 6: **Employment, earnings and profits at Audi, 1995-1998**

	1995	1996	1997	1998
Number of employed at the end of the year	254	1,100	2,550	3,200
Net earnings (in millions of DMs)	290.9	521.8	1,663	-
Profit (in millions of DMs)	29.4	42.3	140	-

Source: own calculations based on press records.

Conditions appear ripe for the continued development of Audi's work in Györ. In 1997 the company bought the 230,000 square metres of land adjacent to the factory site, to meet the demands of medium term development. Several provisional projects have been suggested for the site, but no decision had yet been made on further large-scale investments. Besides the possible expansion of production there are concrete, though as yet undecided, proposals to shift research and development work from Ingolstadt to Györ. If Györ is successful in securing the investment, then, in line with the investment practice of Audi, a multi-stage development process would be launched and an engine development centre would be established, employing some 100 development engineers. The provisional long term plans suggest that Györ would become the development centre for the models intended for the East European market, though it is also possible that in the long term Györ would gain even more basic research and development work.

5.5 Audi's supplier relations

AMH's freedom to choose its suppliers is restricted by the global sourcing policy of the VW Group which is directed from Volksburg. Moreover, AMH's procurement, unlike that of Magyar Suzuki, for example, is not constrained by domestic content requirements. i.e. its products need not contain a certain proportion of Hungarian-produced goods. Audi did not want to endanger the quality of its finished products by using untried suppliers, especially in its first years of operation when Audi had virtually no experience of Hungarian conditions. In fact, proximity to its traditional suppliers had been taken into consideration in the location search process that culminated in Hungary. Simultaneously, both cost advantages in Hungary and increased engine production and the beginning of vehicle assembly forced the company to purchase components in Hungary. At the end of 1997 a team was assembled in Ingolstadt with the task of increasing the role of Hungarian suppliers. According to the managing director of AMH, Hungarian companies have to develop a great deal if this goal is to be reached. When the company first arrived in Hungary it invited potential contractors to a one-day conference on Audi and procurement. Of the 50 people that attended the morning session, only 23 remained for the afternoon, so doubtful were they that they could meet Audi's specifications.

So far, Audi has sourced primarily from its traditional suppliers, which followed Audi and established manufacturing facilities in the Györ region. In engine manufacture, up to this time there is only one Hungarian supplier, Jung Gmbh, which has been a supplier to the VW group for some time. At Drégelypalánk it built a precision metalworks, which has sent suction ports to Audi since December 1995, which represent 2 per cent of all supplies to Audi (Dávid-Mátyási, 1997). It is expected that there will be greater opportunities for Hungarian suppliers to secure orders from the car assembly plant which begins in 1998, than there are with the engine factory. Even here, though, it is expected that in the first instance Audi's traditional suppliers will re-locate to Hungary in order to secure the supply contracts. At the same time it is possible to find a large number of Hungarian companies on the bottom rung of suppliers.

Beyond the components used on the Györ site, Audi (and in a broader sense the VW Group) is buying components in ever greater numbers in Hungary. In 1992 Hungarian supplies to the VW Group accounted for only 20 million DMs, but by 1996 the VW Group bought 60 million DMs worth of products from companies operating in Hungary (of which Audi alone accounted for 50 million DMs). Of these, about two thirds were cable products, and beyond this metal components and foam for seating and plastic components were exported by Hungarian companies. According to current plans up to 1998 the value of total Hungarian exports to the VW Group could reach 200 million DMs Figyelö, (14 August 1997).

5.6 The relationship with the city

Audi has quite a positive image in Györ and the company means a lot to the city. In the first instance it represents jobs, in the second instance earnings, and in the third instance a boost for the hospitality industry in the city due to the large influx of foreign workers and experts. This economic benefit accrues not only from Audi itself, but also from the large number of supplying companies that have re-located to Györ. Alongside this, the company has subsidised cultural and social activities in the city. One of the largest beneficiaries of the company has been the Györ ballet, but in addition Audi subsidises the city museum, and its art gallery. The company restaurant is also permanently used for exhibitions. The company has supported the city centre regeneration programme through the purchase of a statue. In the field of education the company has financed the beginnings of a German language programme in one primary school. One of the stated aims of Audi's training fund is directing money towards the local education system. As a result of this there is close co-operation with three or four secondary schools which train pupils in the various skills required by Audi. Audi has played a key role in their curriculum development.

As of 1998, the company continued to enjoy the tax exemption gained as a recruitment incentive. When this exemption expires, the practice of trade tax it will pay should represent a significant sum to the municipality. According to some estimates, the amount paid by Audi will be as much as that paid by all other companies operating in Györ together.

6. Local vs. national labour market performance

The encouraging developments in the enterprise sector have led to a quite favourable labour market situation in Györ. Table 7 gives an overview of the main labour market indicators for the Györ-Moson-Sopron county in the period 1992-1997. As can be seen, the region has performed above the national average in almost all respects. While employment at the national level only declined in this period, in Györ it has been growing since 1996, albeit slowly. Total employment in 1997 stood at 95.6 per cent of its 1992 level (compared to 89.3 per cent for Hungary as a whole). In 1997, unemployment in the region is remarkably lower in Györ (6.2 per cent compared to 8.7 per cent for the country).

Table 7: **Main labour market indicators for Györ-Moson-Sopron county, 1992-1997**

Year	Employed ('000)	Unemployed ('000)	Economically active ('000)	Participation rate (%)	Unemploment rate (%)
1992	178.6	14.1	192.7	61.0	7.3
1993	171.2	16.8	188.0	59.1	8.9
1994	172.6	13.7	186.3	57.6	7.4
1995	169.5	11.6	181.1	55.5	6.4
1996	170.1	12.3	182.4	55.9	6.7
1997	170.7	11.3	182.0	55.8	6.2
1997 as % 1992	95.6	80.1	94.4	91.3	84.9

Source: Labour Force Survey, time series, CSO.

A number of structural changes can be observed in the county's labour market (see Table 8). First of all, the share of small and micro enterprises in total employment is growing slowly. In 1992, 32.5 per cent of employment was accounted for by enterprises with fewer than 20 employees (including self-employed) and this share increased to 35.3 per cent in 1997. Second, the share of agriculture has been declining, particularly in enterprises with 20 or more employees (from 12.0 per cent in 1992 to 7.4 per cent in 1997). After an initial decline, industry has been recuperating its share in enterprises with 20 or more employees and in 1997 it had surpassed its 1992 level, 41.3 per cent, in 1997 compared to 37.6 per cent in 1992. For the various types of services developments are less clear in Table 8, however, this is due to a large extent to their concentration in small and micro enterprises.

Table 8: **Employment by industry in Györ-Moson-Sopron, enterprises with 20 or more employees, 1992-1997**

	Agric.	Industry	Construct.	Retail	Hotels & restaurants	Transport	Financial services	Total
1992	14,642	46,081	5,946	9,859	1,698	11,160	1,851	122,409
1995	9,673	43,342	6,250	8,582	1,927	10,983	2,432	114,210
1997	8,133	45,602	4,515	7,277	1,930	10,205	2,331	110,463

Source: CSO

The very low unemployment rate, which has actually been declining during 1998 is one of the unique features of the region: *while unemployment is a major problem in all transition countries, Györ virtually enjoys full employment.* In fact, the region suffers from a worker shortage; commuting from towns in a range of 60 to 80 kilometres from Györ has increased enormously over the past few years. Enterprises which offer low-skilled work and corresponding wages, like Philips, have difficulties getting workers in the region and recruit commuters. Enterprises needing semi- or skilled workers also face shortages. For example, Amaco came to the region in part because of the local textile history. However, once it started to look for employees it was confronted with the fact that many former textile workers had been retrained and found employment in other branches. Also, the traditional textile-oriented vocational schools had often changed their profiles according to the demands of the labour market and focused on other branches.

As can be seen from Table 9, in 1996, GDP per capita in Györ-Moson-Sopron was only surpassed by the capital Budapest. Wages in Györ are on average higher than in almost all other regions of the country. This can be attributed both to the tight local labour market, resulting in a stronger bargaining power of employees, and the dominant presence of foreign enterprises. The general impression is that 'world brand' MNCs, are paying higher wages[23], and observe more rigorously health and safety requirements than domestic firms of similar size and with similar employees[24]. This does not mean, however, that a "closing of the wage gap" with western countries can be observed. Despite growing wage pressure, up to now no major closing of the wage gap between the two sides of the border has been seen. For the moment, even in the large multinationals in Györ wages tend to be one seventh to one tenth of wages in their Austrian, German or American plants. On the one hand, this is related to the fact that industrial rejuvenation and absorption of the local labour supply is a very recent phenomenon. On the other hand, Györ is part of the wider Hungarian environment, where due to governmental policies, real wages declined by 12 per cent in 1995 and by an additional 5 per cent in 1996. Wage increases in the last two years have not been at a commensurate level. The success of Györ has rather been that it has been able to avoid a similar dramatic wage decrease until 1996 and a higher increase since 1997.

Even though MNCs in general pay higher wages than comparable domestic companies, they follow diverse wage strategies. Some of them have adopted a high wage / high skill / high commitment policy, while others follow a low wage/low skill strategy. Although companies in the first category are most important and beneficial for the future of Györ, there is space as well for those companies pursuing a low skill/low wage strategy if full employment in the relatively large regional labour market is to be secured.[25] Also, if wages are very low compared to those of comparable western workers, working hours in the Györ multinationals are often longer, including more overtime and more flexible working time arrangements.

[23] According to the literature, MNCs are paying 20-30 per cent higher wages than local firms.
[24] see: A multik nem szabályszegök. Report from the VIII. National Health and Safety Conference. Népszabadság, 11 June 1998.
[25] This argument is based on comments of the director of the County Employment Office.

Table 9: **GDP per capita, average monthly gross earnings and unemployment, by county, 1996**

County	GDP/capita 1996 (1000 HUF)	Average monthly gross earnings 1996 (HUF)	Unemployment rate 1996 (%)
Budapest	1,251	61,132	8.0
Bács-Kiskun	508	39,632	8.5
Békés	510	40,333	8.7
Borsod-Abaúj-Zemplén	473	41,471	14.7
Csongrád	624	42,768	5.8
Fejér	688	49,168	8.3
Györ-Moson-Sopron	740	45,102	6.3
Hajdú-Bihar	523	41,155	12.3
Heves	489	42,688	12.0
Baranya	518	42,753	7.2
Jász-Nagykun-Szolnok	509	40,007	12.3
Komárom-Esztergom	600	44,740	12.3
Nógrád	382	37,663	14.6
Pest	494	45,544	6.9
Somogy	503	39,777	9.1
Szabolcs-Szatmár-Bereg	397	37,576	11.4
Tolna	602	43,148	10.3
Vas	731	41,879	5.2
Veszprém	539	42,625	8.8
Zala	626	42,474	8.5
Total	672	47,491	9.2

Note: Unemployment rates are based on the Labour Force Survey. Persons in military service or on childcare leave are considered economically active.
Source: Regional Statistical Yearbook, CSO, Budapest, 1998.

Table 10 sheds some light on the origin of the favourable position of Györ. In 1996, Györ received the second-highest amount of investment per capita, second only to the country's undisputed leader Budapest. In industrial investment per capita Györ was even the first in the country, more than 2.5 times the national average.

Table 10: **Per capita investment, by county, 1996**

	Per capita investment		
County	Total 1996 (HUF)	Industry 1996 (HUF)	Industry as % total
Budapest	175,767	34,918	19.9
Bács-Kiskun	58,731	23,613	40.2
Baranya	45,616	17,634	38.7
Békés	54,362	22,464	41.3
Borsod-Abaúj-Zemplén	80,899	48,114	59.5
Csongrád	83,532	35,119	42.0
Fejér	116,188	78,275	67.4
Györ-Moson-Sopron	147,876	99,473	67.3
Hajdú-Bihar	48,708	20,051	41.2
Heves	63,907	29,553	46.2
Jász-Nagykun-Szolnok	64,980	34,641	53.3
Komárom-Esztergom	130,485	76,600	58.7
Nógrád	46,593	18,407	39.5
Pest	67,319	33,196	49.3
Somogy	44,261	14,607	33.0
Szabolcs-Szatmár-Bereg	36,668	13,593	37.1
Tolna	81,663	54,098	66.2
Vas	121,928	72,153	59.2
Veszprém	64,942	30,168	46.5
Zala	61,936	25,206	40.7
Total	92,224	37,544	40.7

Source: Regional Statistical Yearbook, CSO, Budapest, 1998.

Industrial investment counted for just over 67 per cent of total investment in 1996, more than 1.5 times the national average. This means as well that investment in other sectors was limited, especially compared to Budapest where services counted for the lion's share of investment. As a result, Györ is acquiring a comparatively strong industrial character.[26] This is further confirmed by the very high number of industrial employees per 1000 inhabitants in Györ (Table 11). Another particular feature of industrial development in Györ is the strong orientation towards exports. More than 50 per cent of industrial production is exported, far above the national average (Table 11).

[26] As can be seen from the tables, Györ is not the only county where such a process of (re-) industrialization can be observed. A similar process is underway especially in Fejér county, and also in Vas county and Komárom-Esztergom county.

Table 11: **Industrial employees per 1000 inhabitants, industrial production per employee and the share of export in industrial sales, per county, 1996**

County	Employees in industry per 1000 inhabitants	Industrial production per employee (1000 HUF)	Share of export in sales, industry, 1996 (%)
Budapest	62	7,154	32.0
Bács-Kiskun	66	3,806	39.0
Baranya	62	4,515	20.3
Békés	70	4,472	37.4
Borsod-Abaúj-Zemplén	86	5,614	29.7
Csongrád	71	4,624	25.2
Fejér	112	9,392	55.0
Györ-Moson-Sopron	102	6,129	52.9
Hajdú-Bihar	63	4,959	22.6
Heves	75	4,963	25.1
Jász-Nagykun-Szolnok	75	4,440	37.8
Komárom-Esztergom	91	6,240	37.5
Nógrád	71	2,918	33.0
Pest	47	6,125	27.7
Somogy	53	4,367	46.7
Szabolcs-Szatmár-Bereg	51	3,578	38.4
Tolna	82	5,003	17.4
Vas	119	7,894	73.8
Veszprém	97	4,275	32.6
Zala	93	3,944	29.2
Total	72	5,845	36.9

Source: Regional Statistical Yearbook, CSO, Budapest, 1998.

7. The role of local policies and institutions

Local policy making and local institutions have played an important role in facilitating the developments documented above. The efforts to upgrade local resources have been decisive creating an environment conducive to economic growth and investment. In this way they have contributed successfully to the influx of foreign investment and have facilitated the expansion and upgrading of domestic and foreign enterprises in the region. This section reviews the major local policy issues that have proved pivotal to strengthening Györ's competitive position. First the development of local infrastructure will be discussed, after which the region's education system will be reviewed. Then the attempts to promote enterprise development, the role of the county employment office, and coordination among local actors will be examined.

7.1 The development of infrastructure

The deepening crisis of the state socialist regime during the 1980s left its mark on the budget of the local government and funds for development decreased. Still, certain infrastructure projects started in this period played a central role in preparing Györ for its role as a host of foreign investment, in promoting industrial rejuvenation and in becoming a major hub between Eastern and Western Europe. A good example is the fact that the city council co-operated with Austrian investors establishing the Györ Industrial Park, the first industrial park of Hungary, as early as 1988. Another good example is the reconstruction of the historic centre of the city, started in the late 1970s, which boosted tourism and retail trade, key elements of the emerging private sector.

The first decade of the transition has been characterised by two contradictory processes. The 1990s brought important developments in the physical infrastructure, enabling enterprises to improve competitiveness and attracting investors. On the other hand, the previous processes of urbanisation and population growth were halted, limiting the prospects for further industrial development due to the lack of labour.

The improvements in the physical infrastructure of Györ and the respective plans for the near future are quite impressive. The road network in and around the city has been developed considerably since 1989. Especially important are the construction of the M1-M15 highway connecting Györ to Vienna, Bratislava and Budapest and the recently launched project to connect the industrial park to the highway system. The reconstruction of Budapest-Vienna railway line also improved the logistic connections of the city. Apart from this, there is a plan to develop a industrial railway station at the Industrial Park. There are plans as well in the region to develop the railway connection between Györ and south-west Hungary but they have not yet received support of the central authorities. Also, there are plans to develop a regional airport at the former military airport of Pér close to Györ and the city council established a joint venture to develop the project. The development of the Gönyü port on the Danube is underway, with support from a PHARE project, to provide increased capacity to handle cargo and it is planned to build a direct railway connection between the port and the city. Complementary to the port construction, the establishment of a logistic centre at the Gyönyü port is underway, financed with central government funds. The industrial water, gas and electricity supply of the city is secure and has considerable additional capacity to be able to supply future needs. There is no shortage in telephone lines and a new digital telephone centre has provided EURO-ISDN line connections since 1997. Currently a project is underway to establish optical cable lines for large companies to provide them with the necessary modern communication means.

Meanwhile, the population of the city is decreasing. The city had 127,429 inhabitants in 1996, a decrease of 2.8 per cent compared to the 1993 peak of 131.087. This decrease is due to, among other things, the rupture of the urbanisation of the city. In the 1970s, 1,400 new flats were built yearly in Györ and the city expanded rapidly. This urbanisation secured the workforce for the expanding companies. In the 1990s, when central government funds for construction of housing dried up, only a few hundred new flats were built annually. These flats are actually bigger and of considerable better quality than those built in the socialist decades, and they meet the demand of the *nouveaux riches* rather than of ordinary citizens. Due to the low wages, building or buying houses is barely possible for ordinary employees and they are hardly able to move to Györ from crisis-ridden regions.

The parallel rapid development of the local economy and the halt in the growth of the city have created a tension between the growing need for employees and the stagnating population. A number of companies, including Audi, have already approached the city council to re-launch a mass-scale flat building scheme.[27] Due to lack of funds, for the time being the city opted for a second-best solution and started to support the local and regional public transportation system,

[27] Interview with Vápár József, Director of CCI.

particularly the public bus transport company Kisalföld Volán Rt., to facilitate commuting to the city. Since 1994, public transport is in the red and the city council covers the losses of the company to avoid drastic increases in ticket prices (Megyei Jogú Város, 1998, p. 12). Without this support, ordinary employees hardly would be able to cover their individual commuting costs from their salaries.[28] The bus transportation routes were reorganised based on cooperation between enterprises and Kisalföld Volán. This cooperation was supported by the County Employment Office, interested in employing unemployed from neighbouring villages. Due to the fact that the state-socialist industrialisation model also built on commuters, the villages can offer not only low skilled labour, but highly skilled employees as well. For big investors, like Audi and Philips a good public transportation system within the city and between the city and neighbouring villages is a key element to allow for expansion.

7.2 Education

There was a considerable expansion of vocational and higher level education in Györ and a growing attention to foreign language training in the mid-eighties. Between 1980 and 1990 the share of vocationally trained among the 18 years and over population increased from 37.2 per cent to 43.2 per cent, while the share of college or university trained people increased from 9.8 per cent to 15 per cent of the 25 years and over population (Megyei Jogú Város, 1998, p.2). Also, in the late 1980s efforts began to develop the Széchenyi College, the city's highest educational institution into a University. The City Council contributed to this cause and supported efforts to broaden the education profile of the College.

At present, a plethora of educational institutions is maintained by the city to provide education for the new generations and ensure the renewal of human resources of the city. There are 17 day-care facilities for 1-3 years old children, 28 kindergarten for 3-6 years old children while 35 elementary schools, 34 vocational and secondary schools (gymnasiums) and 4 colleges provided education in 1996. In recent years close attention has been given to the adaptation and upgrading of the schools. The curriculum of elementary and secondary schools was expanded with computer classes and language training.

Beyond public funding, the city council and the Employment Office requested companies to lend financial assistance to local vocational training institutions and colleges. The city council provides incentives for such support through a local tax reduction scheme. Consequently a number of companies are contributing to local education institutions. For example, Audi supports three local vocational schools (Kisalföldi Gazdaság, 6 January 1998) while OTP, the local branch of the leading Hungarian bank supports four business vocational schools (Kisalföldi Gazdaság, 5 June 1998). This kind of support allows institutions like the Gábor Áron Metal Skills Vocational School to develop modern training facilities, enabling the school to teach students to use the latest generations of CNC machines.[29] Several vocational schools have drastically changed their profile in the 1990s to provide the professions and skills demanded on the labour market. Through cooperation with enterprises vocational students get a chance to practice their skills in a real life situation. The vocational school system provides retraining as well and 1800-2000 students participate in retraining and further training programs annually (Megyei Jogú Város 1998, p. 20).

[28] See on this: Tóth, A. (1992).
[29] Interview with the vice director of Gábor Áron szakközépiskola done by Olbricht Andrea.

There are four colleges in the city, the Apáczai Csere János Tanitóképzö Föiskola (elementary teacher college), Magyar Táncmüvészeti Föiskola (Hungarian Ballet and Dance College), Római Katolikus Hittudományi Föiskola (Roman Catholic College), and Széchenyi István Föiskola (Széchenyi College-SZIF). The SZIF is the biggest college and the 10th largest higher education institution in Hungary. At the SZIF, new curricula were introduced recently in economics, law, automotive engineering, and business studies. A number of companies have developed close contacts with the SZIF, supporting their education programmes and offer on-the-job training possibilities to their students. The city council established the Universitas-Györ Foundation to support the upgrading of the Széchenyi College to university. The city in the last decade experienced a boom in higher education and the number of students expanded from 2,000 in 1992 to 5,000 in 1996 (Megyei Jogú Város, 1998, p. 29).

Despite the above developments local companies are increasingly facing shortages of skilled employees. According to the newspaper of the Chamber of Commerce and Industry, companies in the engineering, textile, wood and plastic industries have been complaining about such shortages (Kisalföldi Gazdaság, 30 January 1998). The renewed need for skilled workers, especially with engineering-related skills is in clear contradiction with the preferences of parents and children. After the industrial crisis of the early 1990s and the increasing importance of the service sector, their interest has shifted towards retail trade, business and tourism-related training, while traditional engineering related training has fallen in esteem.[30] These preferences exist despite the fact that school leavers with engineering skills were almost sure to find a job, while those with fashionable service-related skills were facing a much less secure future. To promote reorientation and to avoid the emergence of further skill mismatches, the Employment Office launched an annual publication in 1997 providing up-to-date information on job opportunities for school leavers with different types of education and training.

7.3 Promotion of enterprise development

The city council plays an important role in the promotion of the development of the enterprise sector. One of the most important projects has been the establishment of the industrial park, which was the first of its kind in Hungary. The Györ Industrial Park is the result of cooperation of the city council with Austrian investors (Bank Austria AG and Mischek Bau AG). It was established in 1988 and the council contributed 40 per cent of its start up costs. In the light of the ensuing crisis in the major state-owned companies in Györ, the city council saw the Industrial Park project as a key condition for the renewal of the local industrial base, providing space and facilities for new industries.[31] The city planned to develop the Industrial Park for technologically advanced small and medium-sized enterprises, especially in engineering, to secure employment for the skilled workforce of the city (Kisalföldi Gazdaság, 30 January 1998). Companies like Jankovics Hidraulika, and the Gépkontakt Mérnöki Iroda, Tervezö, Gyártó és Kreskedelmi Kft, corresponding to this profile, did move into the Industrial Park. However, despite the original intentions, the major enterprises active in the park are MNCs. The clothing plant of Hubert-Tricot, the carpet plant of AMOCO, the auto component manufacturing plant of VAW and the electronic component manufacturing plant of Philips provided employment to more than 3000 people in 1999. The city continues to think that the establishment of more high-tech SMEs in the Industrial Park is necessary, and to facilitate such development, it has supported setting up an enterprise incubator in

[30] Interview with the vice director of Gábor Áron szakközépiskola done by Olbricht Andrea.
[31] Összegzés a Györ megyei városi tanács munkájáról. 1985-1990. Györ, 1990. szeptember 19. p. 13.

the Industrial Park (Megyei Jogú Város, 1998, p. 27). The city council also continues to support infrastructure development programmes to improve the quality of the park. It has direct bus lines to the city for commuters and a customs office. Recently the construction of a direct road connection between the RÁBA-Audi sites and the Industrial Park was undertaken. This investment is expected to facilitate the further arrival of suppliers to the park. The project is co-financed by the city, the MÁV (Hungarian Railway Company) and the Ministry of Transport.[32]

To provide general assistance to small and medium-sized enterprises, a business support centre was established in 1991, with the support of United Biscuits, which had just become the owner of Györi Keksz. The centre provides a general package of services to small enterprises, including training, consultancies, and business plan writing. It also assists small enterprises to get loans from banks or from small enterprise support programmes.

As mentioned in section 4, the city also tries to support businesses through a favourable tax policy. It claims to have the lowest local enterprise taxes of all Hungarian cities (Kisalföldi Gazdaság, 30 January 1998). Recently the city was forced to increase local taxes to redress its increasing budget deficit. The city council decided to increase the local enterprise tax for retail trade, banks and insurance companies from 1 to 1.3 per cent, and for all other industrial and service enterprises from 1.4 to 1.5 per cent. To lessen the increasing tax burden on micro and small enterprises, the city decided that the amount of minimum taxable net turnover would increase from 5 to 6 million HUF (Györ. Hírlevél a város polgárainak. 98/20).

The issue of local business tax policy is the subject of a sensitive local debate between the city council and the Chamber of Commerce and Industry (CCI), which was sharpened by the tax rate increases. The CCI argues to cut all tax holiday provisions and to reduce the general tax level, given that the preferential elements of the tax system only, or mainly, benefit large MNCs (Kisalföldi Gazdaság, 27 February 1998). To lessen the criticism, the city council recently launched certain SME promotion schemes. For micro-enterprise development the city set up a 10 million HUF loan guarantee fund, which lends at 60 per cent of the minimum interest rate set by the National Bank (Kisalföldi Gazdaság, 30 January 1998). The city council planned to launch a loan security scheme to help companies who were temporarily in the red (Kisalföldi Gazdaság, 30 January 1998). Also there were plans to rebuild the thermal bath of the city to boost health-tourism. The city council submitted to Phare a project to develop bicycle routes around the city to develop an alternative type of tourism to the traditional car-based mass tourism. The city will be the organiser of the world championship of Kenou and Kayak sports, and thus hopes to boost water-based tourism (Megyei Jogú Város, 1998, p. 12).

The city actively participates in a number of cross border co-operation projects, and thus is able to tap into additional development resources. One of the major projects is the PHARE CBC, operational since 1995, which targets co-operation with the adjacent Austrian region and which is complemented by the Austrian INTERREG II programme. The major goal of the regional co-operation programmes is to develop infrastructure and communication between the cross-border regions of East-Central Europe. The city also participates in the Alpok-Adria Project. These cross-border co-operation projects are preparing a wider regional industrial centre role for Györ in the so-called Vienna-Bratislava-Brno-Budapest 'Gold-Triangle' (Megyei Jogú Város, 1998, p. 1).

[32] Still, 40 per cent of the 125 ha. territory of the Industrial Park is empty and waiting for investors, which is partly due to the fact that empty assembly buildings and office buildings of closed or downsized former state owned companies offered alternative production sites for incoming investors and start up companies outside the park.

The County Employment Office plays an important part in supporting enterprises as well, combining it with its objective of reintegrating unemployed people into the labour market. In the early 1990s, the Employment Office went beyond its traditional role and actively participated in the county's efforts to attract foreign investment. These activities included the mapping of unemployment in the different municipalities and villages of the county and the creation of a database of empty assembly plants and other sites available for greenfield industrial projects. Using the personal and official contacts with neighbouring Burgenland, Austria this information was regularly provided to the Chamber of Commerce and Industry of Burgenland and people from the Employment Office also personally 'advertised' the benefits of establishing production sites in the county. The provision of information was complemented by assurances that local institutions would assist investments by Austrian micro and small enterprises in the border villages of the county and further east. The Employment Office opened up its database to incoming investors requesting information.

Different challenges were posed by the arrival of major MNCs establishing greenfield manufacturing plants from 1993 onwards and the doubling or trebling of the employment capacity of these plants within a short time. Each plant had its particular labour market requirements, including the need for large numbers of employees with certain characteristics. Thus, the Employment Office tried to serve these companies by matching them with unemployed workers, by organising commuting from more distant localities and by facilitating contacts with vocational schools in order to launch new training profiles and teach German and English.

In order to be able to pursue active labour market policies the Employment Office set up good connections with companies and launched a host of programmes targeting different segments of the unemployed. It tried to facilitate their reintegration into the labour market based on the need of many companies for additional workers. In this way, it tries not only to secure employment for the regular unemployed but also for the more vulnerable groups, including older women, disabled persons and ethnic minorities as well. For example, in order to facilitate the employment of unemployed women over 50, unemployed Roma people, and disabled people at the Györ plant of Philips, it offered to test candidates for the company in exchange for a promise that Philips would employ them. As a result, Philips set up a special subassembly line to employ disabled workers.

The Employment Office also established a 'managers club'. Every month it invites the human resource managers of the region's major companies to exchange information on labour market needs. The club is used as a means to predict labour market changes and to anticipate major redundancies or needs. For example, when Coca Cola Co. closed its local bottling plant in the region, the Employment Office was informed of this well in advance through the managers club. Through the same club it managed to secure employment for most of the employees in other companies.

7.4 Interest representation of business and employees

The decomposition of state socialist regime left a rather different institutional heritage to workers' than to business representatives. Trade unions were traditionally an integral part of the party-state apparatus and were present at every workplace and almost all employees were trade union members. The trade unions of the socialist regime enjoyed widespread rights; however, their main function was to be the executive arm of the personnel management. Trade unions had a centralised, industrial structure, but a decentralised, company level regulation system had also developed. Company union sections had the right to conclude so-called collective agreements, which, within the framework of the Labour Code, made specific local regulations possible and thus served the development of company-specific labour markets (Tóth 1993). Business interest representation did not exist as such. There were compulsory and party-state controlled organisations for companies, based on the type of ownership (e.g. state-owned enterprises, co-operatives, private entrepreneurs), which were mainly regulating organisations and hardly had an interest in representing constituencies. During the last decades of the socialist regime, however, these organisations took up certain interest representation roles.

The collapse and transition path of the state-socialist regime had a profound impact on both sets of institutions. The decomposition of the party-state freed them from the party and state control and enabled them to fulfil their interest representation and bargaining functions. On the other hand, these organisations lost their monopoly positions. The return of freedom of association opened space for alternative and competing interest representation organisations and for members to simply leave organisations with which they were not satisfied. The negotiated transition path, however, saw the re-emergence of the interest representation structures formed in the socialist era for both businesses and workers. There were some attempts to set up new, alternative organisations for interest representation for workers and business, but these new organisations managed to attract only a small number of members due to the presence of the well-established and well-endowed organisations from the socialist past. Consequently, a voluntary but highly fragmented interest representation structure developed.

The membership of employers' organisations is mostly confined to state-owned or privatised former state-owned companies, while certain segments of newly established private companies have established their own representatives organisations. Employers' organisations mainly serve as commercial business associations for their members, but hardly bargain with trade unions in order to regulate terms and conditions of employment. Collective bargaining at the regional level hardly takes place in Hungary, and Györ is no exception to this.

In order to re-establish social regulation over certain issues concerning business conduct, the 1994.LX Law established the chambers of commerce, industry and retail trade with compulsory membership. The chambers are organised both regionally and sectorally to be able to serve all companies. The chambers were granted not only a regulating role, but are allowed to perform certain business promoting activities as well. They were barred from bargaining with representatives of employees over terms and conditions of employment.

The Chamber of Commerce and Industry in Györ-Sopron-Moson County was established in October 1994, but until early 1996 its main task was to set up its office and structure. Because of troubles in getting membership fees paid the presidency of the Chamber had to resort to a security company to collect them in May 1998. Establishing sectoral organisations also took a while. For example the Food and Retail Trade Section was set up only in November 1997, representing 2,900 enterprises (Kisalföldi Gazdaság, 5 June 1998). Some 90 per cent of the members of the chambers are SMEs and therefore the chamber sees its role as representing the interests of the domestic enterprise sector in local politics.[33] In order to attain a bigger say in local development policy, since 1997 the Chamber has tried to have a stronger voice in the redistribution of regional development funds, in developing logistic centres and to facilitate infrastructure investments and regional development (Kisalföldi Gazdaság, 6 January 1998). The Chamber tries to offer wide services to its

[33] Interview with József Vápár, President of the Chamber of Commerce and Industry.

members. It established an Economic Development Fund to support investment projects (Györ-Moson-Sopron megyei Kereskedelmi és Iparkamara. Éves beszámoló 1996). It publishes a by-weekly newspaper, which besides giving information on the latest local economic news and about changes in legal regulations has partner seeker columns, local entrepreneurs with free production capacity offering services and foreign companies post their searches for temporary or long term production capacity. Apart from this partner-seeking service, the Chamber facilitates company development by offering training and counselling in e.g. financial issues and accountancy or computation, and by offering legal advice (Kisalföldi Gazdaság, 5 June 1998). The Chamber organises training for both entrepreneurs and their employees. Recently it launched a supplier project in order to facilitate inclusion of domestic firms into supplier chains of western companies. As mentioned before, besides the Chambers, the local business support centre plays an important role in helping establish start up businesess and facilitating their commercial success.

In the absence of effectively functioning sectoral and regional employers organisations for regulating terms and conditions of employment, collective bargaining takes place at the company level where fairly autonomous company union sections are bargaining with their own employers. Industrial federations and regional trade union bodies are mostly active in information exchange and have a (weak) co-ordination role in local bargaining.

Trade unions in different sectors of the Györ economy have taken very different paths in the last decade. In the public service and public utility sectors unions were able to retain their bargaining position and much of their membership (at most of the enterprises). Unions in the competitive industrial sectors of the economy experienced a different process. The collapse of the state socialist industrialisation model, the ensuing crisis, restructuring and privatisation, accompanied by the fall in real wages and massive lay-offs heavily affected both the organisational presence and membership of unions in industry. As a general rule, unions were able to retain their organisational presence in the main plants of privatised companies, but outsourcing was often accompanied by the dissolution of local union sections. Membership varies heavily at former state owned companies, depending on the local relationship between union and management and the ability of local union leadership. For example, at Györi Keksz many employees are still unionised, but at the Soproni Vasöntöde only 80 out of 500 employees are union members.

Unions in Györ were generally unsuccessful in organising the newly emerging domestic and foreign-owned small and medium-sized enterprise sector. The lack of employers' organisations in this sector and the impossibility for the chambers to negotiate with representatives of employees made the social regulation of terms and conditions of employment in this sector almost impossible for regional and sectoral union organisations.

Union federations in Györ, especially in the retail trade and the engineering-automotive sector, have made efforts to organise employees at the greenfield sites of multinational companies. The success of these attempts has so far been limited and where unions were able to achieve a stable organisational presence only a minority of employees has joined these newly established unions.

As a consequence of the decomposition and weakening of union sections surviving from the past and the rather slow rate of union organisation at new workplaces, the organisational presence of unions is currently fairly weak in Györ's industry. In the metal and engineering industries the Metal workers union has union sections at 16 companies organising around 1,500 members. There is a collective agreement in force at 14 out of 16 these companies which means that the regulating force of unions is wider than membership size alone would suggest.

Due to the nature of decentralised company level collective bargaining, social regulations only cover a of major companies, while the majority of SMEs and low wage ‘sweatshops’ of whatever size are out of the reach of trade unions. The weak presence of the local trade union sections is further diminished by the absence of strong sectoral unions and effective sectoral/regional bargaining.

Decentralised bargaining and the lack of effective social regulation above the company level enables a variety of management strategies, including the relentless pursuit of a low wage/low skill/low commitment strategy. Apart from sheer competition, there is no institutional force or societal pressure to push employers to a higher wage/higher skill production strategy and thus to promote the continuous upgrading of production, productivity and human resources.

8. Conclusions

In many aspects, Györ is one of the few success stories in East Central Europe. It has managed to create economic dynamism through export-led industrial rejuvenation, has achieved virtually full employment and enjoys higher-than-average wages and a higher-than-average living standard. The success of Györ can be attributed to three main and interrelated factors as argued throughout this paper: the relatively favourable endowments at the start of transition, the huge amount of foreign investment that has entered the region, and the active promotion of economic development by local actors.

Györ entered the transformation period with a multi-sectoral economy, which made the region less vulnerable to the emerging crisis in the (former) state-owned industry. Although the local industry had to go through a profound restructuring process, most larger enterprises proved sustainable. The “survival” of enterprises was further facilitated by the fact that many of them had their headquarters in Györ, which allowed them to externalise part of the crisis to subsidiaries in other regions. A second favourable feature has been the high educational and skill level of the population, a result of the industrialisation in the 1970s and 1980s and of the promotion of education during the 1980s. Industrial skills have proven of major importance but also the relatively good knowledge of foreign languages, a result not only of educational efforts but as well of the relatively intense contacts with the West. Thirdly, Györ was the centre of the regional public utilities, had a good infrastructure (including the industrial park) and had put a lot of effort in the renovation of the city centre, a vital element in attracting tourists.

The region attracted high amounts of foreign investment, much higher than most other regions in the country and in Central and Eastern Europe. Three groups of FDI can be seen: First, Györ has become the base of a number of minor and major western manufacturing, service and retail companies looking to gain access to the previously untapped Hungarian or Central and Eastern European markets through acquisition of local companies or greenfield investments. Second, companies relocated manufacturing operators, to lower their costs and be more competitive within their traditional markets in the West. Third, a group of companies came to the region to supply earlier arrived multinationals. Finally, Györ has attracted financial investors participating in several important local enterprises. It has also proved attractive for foreign investors, not only in industry, but also in services, public utilities infrastructure development and retail trade.

Györ has proved attractive for foreign investors because of a combination of many factors, of varying importance for particular investors, depending on the motives to come to the region and to stay and expand. The region has benefited from the favourable, stable national environment, which made Hungary the primary location in Central and Eastern Europe of foreign investment. This includes the government policies promoting privatisation and foreign capital influx, and Györ had a number of highly interesting companies for privatisation to strategic investors or for participation by financial investors. Also of importance have been the region's favourable location close to three major urban centres and the EU market, in combination with its well developed infrastructure, including the industrial park, good connections to the West, the local harbour on the Danube and the availability of ready-to-use production halls. The region's skilled labour force combined with low wages (in comparison to the West) and relatively weak trade unions have been of importance as well to attract investors to the region. Further attraction has come from the availability of cheap services (again in comparison to the West), the tax incentives offered and the magnet effect the first companies had in drawing subsequent investments. Finally, the active attitude and high adaptability of local managers, local government and other local institutions have played an important part in attracting and, above all, nurturing foreign investment in the region, facilitating its expansion and embeddance in the local economy. A major problem, however, has been that the practice of decentralised bargaining and the lack of effective social regulation above the company level enables a variety of management strategies, including relentless pursuit of low wage/low skill/low commitment strategies. There is no institutional force to push employers to a higher wage and higher skill production strategy and to promote the continuous upgrading of production and human resources.

Compared to other regions in Hungary and to the rest of Central and Eastern Europe, possibly none of the above-mentioned factors attracting foreign investors is unique to Györ. For example, Györ's location in terms of proximity to the EU market is not more favourable than that of many parts of the Czech Republic or Poland. Tax incentives are offered in most countries and regions, while many former mono-industrial localities offer ready-to-use production sites. Also, wages are not lower in Györ than in the rest of Central and Eastern Europe, often rather the reverse, and unions are rather powerless in most countries of the region. It has rather been the accumulation and combination of favourable factors that has made the region so suitable for foreign investment.

The main role of local actors has been the creation of an enabling environment facilitating investment and economic growth. Györ has an open and entrepreneurial culture, rooted in the historic development of the region, including its long industrial history and its traditional role of a bridge between the West and the East. The region has actively adapted its education and training system to the requirements of the new era and has developed an appropriate infrastructure allowing enterprises to implement modern Just-In-Time strategies. In this sense, they purposefully built competitive advantages for the region, improving the quality of local resources and facilitating economic growth. The region has shown a high flexibility and capacity to adapt to new circumstances, a precious quality in today's volatile and ever-changing global capitalism.

Still, Györ's success has to be interpreted cautiously. First of all, the achievements of the region are rather recent and it may be too early to claim victory. Second, GDP per capita, income and wages, although high for Central and Eastern Europe, remain far below the EU level and little catching-up seems to be taking place. This would suggest that Györ may be destined to remain on the traditional eastern periphery of the European division of labour for quite some time. The low level of research and development in the foreign enterprises and the limited innovation in domestic local enterprises would only strengthen such a pessimistic view.

The broader question here is how sustainable the present path of development is, what the chances for a substantial upgrading of the industrial structure of the region are, and to what extent the region's labour market and the living standard of the population would benefit from such eventual processes. Here much will depend on the particular strategy the region will follow in the longer term to preserve and strengthen its competitiveness. As discussed in the introduction, international experience shows that there are two principal policy approaches that have been adopted to improve competitiveness and employment performance in regions or local areas: the *Low Road Approach*, advocating downward-directed price competition and downward adjustment of labour standards, and the *High Road Approach*, based on the mobilisation and upgrading of local resources, the systematic exploitation of local strengths and advantages, the promotion of endogenous growth and the improvement of labour standards and wages. For the moment, developments in Györ seem to be based on a combination of high road factors, part of a process of upgrading local resources, and low road factors. In the first category we would place the high skill level of the regional labour force and the continuously adapting education and training system, the region's transportation infrastructure, the active local institutions and the region's entrepreneurial and industrial culture. The latter would include the tax holidays provided by the local authorities, the weak local trade unions, the possibility for enterprises to impose high working rhythms and worker-unfriendly shift arrangements, the strong dependence on foreign capital and thus on decisions made in distant headquarters, and the limited innovative activities in the region.

The question of wages is less easy to fit in this high road/low road framework as it depends much on the perspective taken. When looking at the (re-) location strategy of western companies, wages seem to have a low road character, as many companies are attracted to the region by wage costs far below western standards. On the other hand, when looking from the perspective of the Central and Eastern European region, wages are higher than average and have increased under influence of the foreign investment-based industrial restructuring taking place since 1989. The region is more than wage competitive compared to the west but actually has high wage levels compared to the rest of Central and Eastern Europe.

At the moment, Györ moves on the "middle of the road", combining high road and low road features. It seems well possible though that the initial phase of rapid restructuring based on foreign capital may be followed by a process of further upgrading of the region's industrial structure including the strengthening of its innovative capacity. The ongoing expansion and upgrading of several foreign investment projects, the firm conviction among local actors that they have to promote endogenous innovation, and the continuing efforts to upgrade local resources inspire confidence for the future. However, a firm high road strategy, including a constant upgrading of productivity levels, will also require improvements in the areas of wages and industrial relations.

References

Altzinger, W. 1997. 'Scope and Structure of Austria's Foreign Direct Investment in Eastern Europe', paper presented to the conference *Integration and Transition in Europe: The Economic Geography of Interaction*, ACE/PHARE, September 1997, Budapest.

AMH. Basic Press Information. 1997. August 6.

Autocar, various issues.

Berend, I. and Szuhay, M. 1989. *A tökés gazdaság története Magyarországon 1848-1944 (The history of capitalist economy in Hungary 1848-1944)*, Tankönyvkiadó. Budapest.

Central Statistical Office Hungary. 1998. *Regional Statistical Yearbook*, Budapest.

Cooke, Ph. 1995. 'Introduction', in: Cooke, Ph. 1995. *The Rise of the Rustbelt*, 1995, UCL Press, University College, London.

Cossentino, F., Pyke, F. and Sengenberger, W. (eds.). 1996. *Local and Regional Response to Global Pressure: the Case of Italy and its Industrial Districts*, IILS, Geneva.

Dávid, J. and Mátyási, S. 1997 'Kicsik és kocsik' (Small enterprises and cars) *HVG* 1997. November 1.

Döry Tibor and Lados Mihály 1997 'Regionális konjúktúra kutatás eredményei és tapasztalatai' (Results of regional business research). *Tér és Társadalom* 1997.1.283-296.

ECONEWS, several editions, Budapest.

Enyedi Gy. 1993. 'Társadalmi-területi egyenlötlenségek és területi politika Magyarországon' (Social and regional inequalities and regional policy in Hungary) In.: Enyedi György (ed.) *Társadalmi-területi egyenlötlenségek Magyarországon. (Social and regional inequalities in Hungary)* (KJK. Budapest, 1993.

Farkas, P. (1995) *A külföldi müködötöke beáramlás hatása a KF-re és az innovációra Magyarországon*. (Impact of FDI on R&D in Hungary) Mimeo. Kutatási Jelentés. MTA VKI. 66.

Fazekas, K. and Ozsvald, E. 1998. 'Transition and Regional Policy: the Case of Hungary', in: Keune, M. (ed.), *Regional Development and Employment Policy: Lessons from Central and Eastern Europe*, ILO, Budapest/Geneva, 1998.

Gorzelak, G. 'Regional Development and Planning in East Central Europe', in: Keune, M. (ed.), *Regional Development and Employment Policy: Lessons from Central and Eastern Europe*, ILO, Budapest/Geneva, 1998.

Graboplast. *Vállalati kiadvány (Graboplast PR leaflet)*

Györ. Hírlevél a város polgárainak, various issues.

Györ Megyei Jogú Város, 1990, *Összegzés a Györ megyei városi tanács munkájáról. 1985-1990.* Györ, 1990. szeptember 19. (Györ County Right City: Summary of the Activity of the City Council 1985-1990).

Györ Megyei Jogú Város, 1998, *Beszámoló Györ város önkormányzatának négyéves tevékenységéröl* (Györ County Right City: Review of the Last Four Year).

Györ-Moson-Sopron megyei Kereskedelmi és Iparkamara. *Éves beszámoló* 1996. (Chamber of Commerce and Industry. Annual Review)

Havas Attila (1997) *A munkahelyek 'áttelepülése' ('szabad áramlása') a jármüiparban. (Relocation in the car industry)*. Mimeo. Munkaügyi Kutató Intézet, Budapest.

Heimer, 1997. 'Világgá futnak' (They are running away) *HVG* 1997. April 12.

Hudson, R. 1998. *What Makes Economically Successful Regions in Europe Successful? Implications for Transferring Success from West to East*, Centre on European Political Economy Working Paper No.3, Working Papers in Contemporary European Studies, Sussex European Institute, Brighton.

ILO-CEET. 1997. *Hungary: Employment and Sustainable Livelihoods*, Country Review prepared for the UN-ACC Task Force on Employment and Sustainable Livelihoods, Budapest.

KÁPÉ, various issues.

Keune, M. 1998a. ‘Introduction’, in: Keune, M. (ed.), *Regional Development and Employment Policy: Lessons from Central and Eastern Europe*, ILO, Budapest/Geneva, 1998.

Keune, M. 1998b. *Youth Unemployment in Hungary and Poland*, Employment and Training Papers, ILO, Geneva.

Kisalföldi Gazdaság, various issues.

Kulcsár, V. and Laczkó, L. (eds). 1975. *Magyarország megyéi és városai (Counties and Cities of Hungary*, Kossuth, Budapest.

Magyar Hirlap, various issues.

Magyar Köztársaság Kormánya, 1998, Országos Területfejlesztési Koncepció, (The Government of the Hungarian Republic: National Regional Development Conception).

Máthé, M. 1997 ‘Északnyugat-Dunántúl gazdasági és ipari szerkezetének átalakulása’ (Restructuring of the spatial and industrial structure of North-West Dunántúl), *Tér és Társadalom* 1997.1.73-108.

McAleavy, P. and De Rynck. 1997. *Regional or Local? The EU's Future Partners in Cohesion Policy*, Working Paper Robert Schumann Centre, European University Institute, Florence.

Nemes-Nagy, J. 'The New Regional Structure of Hungary', paper presented at the conference Integration and Transition in Europe: the Economic Geography of Interaction, Budapest, 11-14 September 1997.

Nesporova, A. 1998. 'An Active Approach towards Regional Restructuring: the Case of Ostrava, Czech Republic', in: Keune, M. (ed.), *Regional Development and Employment Policy: Lessons from Central and Eastern Europe*, ILO, Budapest/Geneva, 1998.

Népszabadság, various issues.

Petsching, M. (ed). 1998. *Túl az alagúton (Beyond the tunnel)*. Pénzügykutató Rt, Budapest.

Petrakos, G. 1995. *Small Enterprise Development and Regional Policy: Comparative Analysis and Implications for Eastern and Central European Countries*, Working Paper 39/1995, Leuven Institute for Central and East European Studies.

Piore, M. and Sabel, Ch. 1984. *The Second Industrial Divide. Possibilities for Prosperity?* Basic Books, New York.

Pyke, F. *Local Development and the Management of Change in Europe,* Employment and Training Papers 31, ILO, Geneva.

Rehfeld, D. 1995. 'Disintegration and Re-integration of Production Clusters in the Ruhr Area', in: Cooke, Ph. 1995. *The Rise of the Rustbelt*, 1995, UCL Press, University College, London.

Rechnitzer, J. 1993. 'Innovációs pontok és zónák választási irányok a térszerkezetben' (Innovation sectors and points in the regional structure). in: Enyedi, Gy. (ed.) *Társadalmi-területi egyenlötlenségek Magyarországon (Social and regional inequalities in Hungary).* KJK. Budapest, 1993.

Scarpetta, S. 1995. 'Spatial Variations in Unemployment in Central and eastern Europe: Underlying Reasons and Labour Market Policy Options', in: OECD. 1995. *The Regional Dimension of Unemployment in Transition Countries*, Paris.

Scott, A. 'The Geographic Foundations of Industrial Performance', in: *Competition & Change: The Journal of Global Business and Political Economy, Vol. 1, No.1*, Harwood Academic Publishers.

Sengenberger, W. 1994. 'Labour Standards: An Institutional Framework for Restructuring and Development', in: Sengenberger, W. and Campbell, D. 1994. *Creating Economic Opportunities: the Role of Labour Standards in Industrial Restructuring*, IILS, Geneva.

Sengenberger W. and Keune, M. 1996. 'The Role of Proactive Policies for Employment Creation at the Industrial and Regional Level - International Experience', in: *For More and Better Jobs in the Russian Federation*, ILO-CEET, 1996, Budapest.

Storper, M. and Scott, A. 1992. *Pathways to Industrialisation and Regional Development*, Routledge, London/New York.

Swain, A. 1998. *Institutions and Regional Development: Evidence from Hungary and Ukraine*, Centre on European Political Economy Working Paper No.4, Working Papers in Contemporary European Studies, Sussex European Institute, Brighton.

Tóth, A. (1992) 'The Social Impact of Restructuring in Rural Areas of Hungary: Disruption of Security or the End of the Rural Socialist Middle Class Society', in.: *Soviet Studies*, Vol. 44, No. 6.

Tóth András (1993) 'Great Expectations and Fading Hopes, Trade Unions and System Change in Hungary'. in.: *The Journal of Communist Studies,* 1993. dec. Vol. 9. No. 4.

Tóth, A. (1998) 'The Transformation of the Industrial Relations System in Hungary' *South East Europe Review for Labour and Social Affairs*, Vol. 1. No. 3. September 1998. pp.117-134.

Tóth, A. (1999) 'Development of the Hungarian Motor Vehicle Industry: The Case of the Audi Engine Plant', paper written for the ILO/Multi, Geneva.

UN-ECE. 1998. *Economic Survey of Europe, 1998 No. 3*, United Nations, New York and Geneva.

UNDP. 1997. *Latvia Human Development Report 1997*, Riga.

Világgazdaság, various issues.

Persons interviewed:

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