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## Restructuring via internationalization: The auto industry's direct investment projects in Eastern Central Europe

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**Restructuring Via Internationalization  
The Auto Industry's Direct Investment Projects  
in Eastern Central Europe**

Gerlinde Dörr and Tanja Kessel

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## Abstract

Internationalization based on direct foreign investment is proving to be a key economic factor for the transformation economies of Eastern Central Europe. The decisive influence factors in this process are primarily major investments by groups based on longer-term strategies with the new locations.

The effects linked with this at factory and regional levels are discussed in the study using the example of the auto and components industry. The sector was chosen because it is one of those very strongly linked with such major projects. The Volkswagen group's two prominent investment projects, Škoda in the Czech Republic and Audi in Hungary, are used to illustrate two things. First, that there was very accelerated implementation of the operational expansion of competences, in terms of new products, modern production structures, international competitiveness, and quality standards achieved. Second, that this was able to be done because of the especially highly skilled workers in the area. As a consequence, the firms have since been able to achieve not just strong positions within their respective national economies, but also within the VW group. However, by contrast, impulses for local industry emanating from the major investments have remained very limited. The study attributes this development to a coincidence of various causes. These include, above all, structural change in the auto industry over the past few years, the VW group's specific modernization path, and weak governance on the part of the transformation countries' governments.

The results arising from the extended perspective of globalization and transformation underlying the group's project approach clearly indicate that increased international competition has strengthened the Eastern Central European region's comparative constellation of advantages. This consists of high-skill structures at low-cost conditions. It is unclear how far further reaching industrial upgrading at factory and regional levels can still be achieved in the countries in the face of increased East-West locational competition linked with this. The authors interpret this as a question of implementing new transnational arrangements limiting the negative consequences for locations in the West as well.

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## 1. The Background to the Problem

Foreign direct investment has played an important role in the societal transformation process in the countries of Central and Eastern Europe right from the very beginning. The preferred investment region in the process was Eastern Central Europe, with the main focus on Poland, Hungary and the Czech Republic. Multinational companies in particular are often present with large investment projects. A conspicuously strong interest is exhibited by the international auto industry. Germany's Volkswagen group has established a clear lead over the other major Western auto producers. This is both in terms of establishing production locations in all the countries of the region, and in being involved in especially large investment projects in the Czech Republic, Hungary, and Slovakia, albeit to a lesser extent in the last-mentioned. In the decade since the opening up of Eastern Europe, auto industry investment in these countries has increased steadily and the flow of direct investment from this industrial sector still continues.

The factor of foreign direct investment had, and still has, a major influence on industrial restructuring and general national economic development in the reform countries. Large-scale transfers of capital, know-how and management caused considerable dynamization of the transformation processes, contributing decisively to the countries' economic development. However, it has also led to a situation in which local and international companies have in effect formed separate industrial spheres exhibiting very divergent paths of development. This has resulted from both the large inflow of foreign direct investment and the very different equipping of the two spheres. In general, it can be said that a substantial development dynamism is visible and a high level of production modernization is present in that part of the industry where restructuring is being carried out with foreign direct investment. However, in the sector, where companies are carrying out operational structural conversion under their own steam, the restructuring process has clearly made less progress and the level achieved in many areas is still very low.<sup>1</sup> The two are significantly different in terms of competitiveness attained. In this respect, the discrepancy is clearly leaving its mark on the current industrial structure in the transformation economies. An internationalized, advanced economic sector is separated from one which, by comparison, lags substantially behind, remaining limited to regional or national dimensions.

This phenomenon can be found frequently in Eastern Central European countries. It is mainly a result of asymmetric conditions arising from the transformation situation. These include dependency on external capital and know-how for the major restructuring step required and weak political governance.<sup>2</sup> It is a constellation which

<sup>1</sup> On the problem of discrepant development of strategic and defensive restructuring in general cf. Grosfeld/Roland 1996, Altmann 1997b. On operational restructuring in the Czech Republic in particular cf. Carlin et al. 1995, Myant et al. 1996.

<sup>2</sup> This weak political governance in the transformation countries is rooted in the radical change of system affecting the political and economic spheres simultaneously. The unequal speed of transforming these two subsystems, and in particular the much faster development of the

has brought about typical donor-recipient relationships. Where foreign direct investment is concerned, the hitherto dominant governance can be described as more a transformation-specific arrangement between the national government and a foreign industrial company, whereby the state participant's direct powers of control are limited, or are only exercised as such. The arrangement consists, for the most part, of exchanging investment and know-how for extensive exemption from general taxes and regulations. It is usually based on longer term commitments for jobs and further investment. This form of negotiating represents a kind of location pact, where the political participants give top priority to safeguarding the area as an industrial region. This prioritizing does not mean that the regional effect is being aimed for through spillover effects from foreign investment projects. Instead, priority is being given to internationalization for developing the location. This shift in priorities, from spillover policies to internationalizing in order to strengthen the region, is a remarkable phenomenon of restructuring.

Such a location pact is mainly explained by unequal power relationships, but consideration must also be taken here of the fact that the industrial structures in place only allow for limited connections. This aspect may also be one reason why a definite spillover policy for strengthening regional industry was basically not followed, with the inflow of investment instead forming the main point of orientation. This situation means that foreign investors are left to decide whether, and to what extent, they also build up relationships with local industry through their investment projects, and which spillover effects emanate from them to the region.<sup>3</sup>

However, the positive role apportioned to internationalization in the general economic development of transformation countries still says nothing about what contribution it makes in expanding restructuring skills at the location. This raises the question about which products are imported into the region with the foreign investment projects and which production structures arise. In other words, which old and new forms of specialization are generated and which possibilities ensue from them for also entering areas of higher value creation. This aspect of internationalization is crucial in deciding whether the transformation economies succeed in constructing a specific national pattern for international competition in particular

economy often encountered, means that the respective political and legal institutions and regulations do not yet exist to an adequate extent, or are only partially effective. International organizations (OECD, EBRD) recently criticised this deficit, issuing warnings about good governance for the current second phase of transformation. This was meant not just in terms of an adequate system of rules for the economy, but above all with respect to legal institutions for implementing and controlling this set of rules (as reported in the *Neue Zürcher Zeitung* 12.5.1998 und 20.5.1998).

<sup>3</sup> No industrial policy regulations emerged among the countries in the region with the object of safeguarding economic expansion and their own industrial development. They function as individual entities, sometimes competing against each other where international organizations are concerned. The only exception is the CEFTA grouping, aiming at exchange relations between the countries themselves. Bearing in mind this situation, the question arises of how more-or-less balanced integration can be achieved for the region of Eastern Central Europe with these particularist interest-group policies and the rather weak position of the countries.



segments. The consequence of all this is that internationalization must also be gauged primarily using this measure, in order to be able to assess the long-term consequences for the region and the industrial location.

The main reason for this, is that it can be assumed that foreign investors looking to set up production in simple, labour-intensive areas will be attracted simply because of the powerful inducement of low wage costs in the countries. Traditional industrial mass production structures will be favoured as a consequence, following the old pattern of low cost/low skill/low tech production.<sup>4</sup> It is above all the aspect of low costs which will probably motivate a strong inflow of foreign direct investment. Viewed in this way, it is more doubtful that internationalization will strengthen the structures and skills which would ensure development paths with a real future for the national economies and thus a degree of autonomy.

The region's general conditions of low labour costs, deregulation, and low political governance for foreign investors mean that it is clear that the direction of industrial structural development is determined extensively by the economic participants. Development is greatly influenced by large companies' strategies since they are decisively involved in the region's internationalization process.<sup>5</sup>

As for the European auto industry, far-reaching consequences can be reckoned with in the region of Eastern Central Europe. The sector has not only invested to an exceptional degree, but also symbolizes the increasing significance of Eastern Central European locations, a significance ensuing from far-reaching structural change in the industry linked with fundamental transformation of company structures which has been gathering momentum over the last few years. The region's specific options mean that development could move in a direction strengthening the locations in the qualitative respect named, provided account is taken of the industry's structural transformation where the matter of building up restructuring competence is concerned. Such a development represents a positive and important pacemaker function for an economic upswing in the eyes of the transformation economies. It is, however, hardly conceivable without problematical consequences for old locations in Western Europe. The strain deriving from the new locational competition and adding to growing pressure on social standards achieved in Western labour relations and concessions wrung from employees is becoming clear.<sup>6</sup>

The difficulties with internationalization described so far will now be discussed using evidence from two investment projects carried out by the Volkswagen group. The

4 As a guide in assessing the share of transfers from labour-intensive industries cf. Clement/Vincentz 1997, p. 32. On the hitherto specialization on labour-intensive export goods cf. DIW 1997, pp. 85

5 Analysis of direct investment activity in Eastern Europe reveals that most of this is limited to a small number of major projects (Hübner 1996).

6 This can be seen not just with moderate wage agreements, but also in particular with increased acceptance of much more flexible working hours. Employment and safeguarding a location are at the forefront here too and the margins for negotiating have narrowed considerably. For critical objections to this development tendency and the problem-solving capacity attributed to these strategies of increased flexibility cf. Zilian/Flecker 1998.

main emphasis here is on the matter of establishing skills operationally and on regional consequences emanating from these major projects.

It can already be said in advance, that the developments set in motion represent a major growth in skills and made a substantial contribution to safeguarding the location. This conclusion has been reached on the basis of our operational studies in the companies in the Czech Republic and Hungary. Two aspects here are worthy of special mention. The first concerns the actions of the economic participants in a deregulated space, and the second the group's new strategy of standardization as a reaction to global competition. Where the first is concerned, it is remarkable that the internationalization projects were not separated from regional structures and knowledge resources. Instead they were deliberately linked up at the location with available local potential. One finding which, in our opinion, indicates a more recent element of internationalization, is the fact that such regional orientation came into being mostly without political regulation and that the group is not following any globalization strategy laying down a peripheral position for the new locations. This can be seen by the fact that when strong base institutions are present, the strategies are oriented toward them and location use does not occur in the form of over-use, something attributed in general to globalization strategies as is clear here, for example, with the potential of human resources in the area of technical skills. Although it cannot yet be assessed how far-reaching this phenomenon will become in global terms, it can still be ascertained that foreign and indigenous cultural assets have experienced a visible gain in importance in the economic players' strategies. More precisely, that they have been seen as a resource with the potential of an institutional comparative advantage.<sup>7</sup>

As for the second aspect, the standardization strategy, this has contributed to the Eastern Central European locations being strongly revalued in terms of their specific conditions as production sites in line with extensive standardization of products and processes, and the greater flexibility of production locations made possible by this.

<sup>7</sup> This point attracts, for the most part, little notice in analyses of globalization. Such shifts in importance in economic participants' strategic activities are mostly excluded or treated as an insignificant peripheral aspect in the face of a dominance of convergent development lines (cf. here Altvater/Mahnkopf 1997). It is something requiring clarification, even if it can only be mentioned in passing here. The universally low significance attributed to such institutional and culture-related actions by a participant seems to us to be accompanied by a very narrow understanding of regulation - an understanding which does not comprise an understanding of the weaker institutional or subinstitutional forms. In contrast, our observations suggest much more that precisely these forms are increasingly gaining in relevance. This is indicated in general by the emerging reform of responsibility for safeguarding interests between persons and institutions, and it is especially the case in situations of radical change as in Eastern Europe, where basic institutional structures are lacking, or only just in the process of being reconstructed. Finally, this is also indicated by recent cross-border activities, where joint institutional frameworks also had to be created anew. That is not to say that this type of action could replace formal regulatory institutions, it is rather that its significance in deregulation circumstances and its gain in importance in the new constellations should be stressed here. One thing which can be looked upon as a new feature in this context is that a clear interest has been formulated by the economic participants in establishing basic regulatory institutions for cross-border activities in particular.

The forced restructuring in these investment projects and the new production concepts visible in a technical-organizational sense support this upgrading and have given the projects a kind of model function in the group. The projects can be seen as trend-setting for restructuring at group locations in the West, even if this can only be to a very limited extent because of the particularity of the transformation situation.

The fact that production locations able to reach this position became established at the Eastern Central European sites can, in our opinion, be primarily attributed to the fact that options arose in line with standardization for these locations. This enabled the expansion of production concepts in connection with the given structure potentials, concepts seeing competition in terms of cost and quality as a competitive advantage in the long term. This alignment and evaluation may have played a decisive role in an internationalization strategy with greater regional integration taking effect in both projects.

A somewhat closer look will be taken at the importance the region has gained because of its present continued advantageous constellation for foreign direct investment in particular, before dealing with the operational case studies of some of the development lines.

## 2. The Region of Eastern Central Europe as a New Production Location

The inflow of foreign direct investment since the opening up of Eastern Europe has remained far behind initial expectations and prognoses.<sup>8</sup> Not only that, regional distribution has also been very uneven. From the very start, the favoured investment region proved to be the region of Eastern Central Europe, with the Czech Republic, Poland and Hungary as the core countries.<sup>9</sup> Not only did these countries have an

<sup>8</sup> Cf. here DIW 1997,17; Jennewein 1996, 23. The average level achieved in the countries of Eastern Europe is approximately the same as in South America, and only half that which has so far poured into the East Asian growth region (Clement/Vincentz 1997, 32). One reason for this development could be that the anticipated success failed to materialize and the plans were not implemented to the extent foreseen. Possible explanations might include inexperience with internationalization, or the conception that production sites and operational institutions could be just simply transferred directly without needing any mutual adapting and consulting. This introduces the problem of the need to create an intercultural context based on mutual acceptance, something frequently papered over or underestimated in location strategies. Cf. Bolten 1995.

<sup>9</sup> Hungary has a leading position among the three countries, accounting for around 40%, or \$17 billion, of foreign direct investment flowing into Eastern and Central Europe by the end of 1997 (Ost-West-Contact 2/1998, 47). The lead becomes far clearer if per capita distribution is taken into account. Hungary's \$1,307 puts it well ahead of the Czech Republic (\$712), followed at some distance by Slovakia (\$147) and Poland (\$142) (figures for end of 1996, Quaisser 1997, 11). The exceptionally clear preference for Hungary may be partly explained by the country's longer experience with economic liberalization, companies' greater familiarity with economic relationships with the country, and the very positive attitude of the political class towards foreign investment, something especially visible in its active incentive policy. Hungary is said to have the

above-average share of incoming direct investment, they also hosted a conspicuous number of major investment projects. This was even more remarkable because the region is only a comparatively small market.<sup>10</sup> This phenomenon makes it clear that the market argument was not the decisive factor and does not explain the large concentration of direct investment in the area. The attractiveness in this case originated far more from the region as a location. In other words, from structural conditions seen as advantageous when establishing new production locations. Even if the production location motivation was more important than that of the market in the decision to invest, an equally important role was played by the Eastern European market with its great future potential. This is especially the case here from the angle of safeguarding an early access to markets.

Several factors are especially important in why the Eastern Central European region has become the preferred location for foreign investment. These include the triple constellation typical for transformation of very low costs in comparison with Western Europe, extensive deregulation, and national governments' policies on subventions and incentives. With the last-mentioned it can be said that basically all governments in transformation countries grant considerable preferential treatment and special conditions so as to support the inflow of foreign direct investment. The most common measures include tax relief and exemptions from customs.<sup>11</sup> The only exception in this respect so far has been the Czech Republic. Its economic policy generally did not foresee any direct subsidy measures for industrial operational development, and therefore, no special regulations for foreign investors.<sup>12</sup> Other

greatest level of business confidence within Eastern Europe. Evidence of this is seen primarily in the advanced set of legal and institutional rules, as well as political stability and extensive privatization. As far as specific benefits are concerned, these are mainly the free trade zones provided in Hungary for Western investors. However, the latter are increasingly losing their attractiveness for Western European investors as harmonization with EU norms progresses (EIU 1997, pp. 60).

<sup>10</sup> Poland is the only country in the region with a market of any significant size. Its population of almost 40 million makes it four times as big as either of the other two countries. The larger market may explain why most of the big auto groups have chosen to locate there in particular. Further details about the auto industry in the region can be found later on in the study.

<sup>11</sup> A detailed overview can be found in DIW 1997, pp. 123.

<sup>12</sup> For a long time this form of transformation policy was considered to be the model for successful restructuring, enjoying international recognition because of good macro-economic development in the early years. The specific type of privatization used, known as the voucher method, meant that formal privatization was swiftly achieved. However it did not create the necessary structures or institutions for real corporate governance. In fact, the banking sector was not restructured for quite some time (Mertlik 1996, Altmann 1997a). This considerably slowed down developments for economic participants, companies and plants. The restructuring necessary just did not take place. The policy was oriented exclusively towards macro-economic aims, becoming famous under the neo-liberalist term: *market economy without an adjective*. It is linked with the name of Czech Prime Minister Vaclav Klaus (cf. for example the award conferred upon Klaus by Prognos, the renowned Swiss Economic Research and Strategy Advice Institute, and the recipient's speech in Barth 1996). Changes towards a policy taking more account of structural policy needs only started to become noticeable after the economic slump at the start of 1997 which had revealed the hitherto drastic

factors to be mentioned here include various forms of assistance and support programmes from the West. These are provided by international organizations such as the European Union or at national level, so as to jointly support the flow of investment into this region (Meißner 1997). The governments of the transformation countries grant additional special conditions, particularly for companies who establish themselves in the region with major investments and on whom hopes are pinned for extensive impulses which will be effective in the long-term for the economy as a whole and for industrial development.

Undoubtedly, from an operational perspective, the central parameters motivating the establishment and switching of production locations into this region are the cost advantages from low wage levels and the greater scope for flexibility gained through deregulation. However, Western companies' preference for the region for new production locations also stems from another aspect, in this case a qualitative one. It lies in the region's structural profile. There are in fact several conditions which, from a business perspective, are considered good locational potential and which have increasingly come into focus in the wake of experience with investment projects in this region. The most significant factor is seen to be the fact that the countries of this region are relatively well developed industrial states with a broad spectrum of qualified and skilled workers. This is especially true for qualifications in the technical and engineering area and therefore for a sector of the employment market with a new and important function in modern industrial production. This structural potential means that the countries have at their disposal a resource distinguishing them from other regions of Eastern European transformation countries which are less industrially developed, but also from structurally weak regions of Western Europe. In this context it is significant that professionalism and good occupational training are highly valued in these countries' societal esteem, and that as a consequence there is an important industrial culture factor established, offering Western production projects good opportunities for finding a starting point.<sup>13</sup>

Other factors of advantage arising from the location also have to be taken into account in addition to this highly valued potential. One spatial factor is the region's geographical proximity to Western Europe, where most of the investment stems from. It is a factor which, technically speaking, gives the region the quality of a just-in-time-area especially when account is taken of the close interaction of intercompany relationships. An additional factor, this time cultural, is that there is already wide-scale knowledge of Eastern Europe, the languages, mentalities and practices: know-restructuring deficit at the enterprise level. A concomitant change in government was also associated with this change in policy.

<sup>13</sup> With reference to the importance of these competences, it is possible to observe specific shaping of mentalities, viewed negatively as socialist legacies. These, however, recede considerably into the background and are further modified by the investment in qualifications and further training made at these locations. Business representatives underline the view that, in particular, younger workers with professional training exhibit markedly high motivation. It is compared with an attitude similar to that found in the period of reconstruction in post-war West Germany. This is true to a lesser extent for the group of older workers who are offered fewer options by the new rebuilding efforts because of their vocational biographies.

ledge the companies and participants already possess because of earlier trade relationships. It represents social capital, forming a competitive advantage for building up cooperation and for further market development in Eastern Europe.<sup>14</sup> Finally, there is also the political factor, namely that of the structural rebuilding being continually pursued in these countries and the state of economic and political reforms so far achieved. Decisive here is the undisputed orientation towards the main underlying Western institutions of democracy and a market economy, and the political stability achieved in comparison with the transformation countries in Eastern Europe. At an early stage these countries had already earned the status of being the most advanced transformation countries where these reform aims were concerned. The positive evaluation of developments by Western transnational organizations such as the OECD and IMF has further strengthened this status. It is also expressed above all by the fact that the three countries are among the first from the circle of post-socialist reform states scheduled for membership in the European Union.<sup>15</sup> This option further strengthens the economic and political significance of the Eastern Central European region - especially as regards its location on the geographical and political link between Eastern and Western Europe.

The constellation of comparative advantages which highlights the region of Eastern Central Europe arises from the link up between cost advantages, exhibited by transformation economies in Eastern Europe in general, and the specific qualitative structural characteristics of the countries in the region itself. This special feature may help explain why the direct investment activities of Western companies have so far been so strongly directed towards these countries. This does not necessarily imply that the skills available present are being used in such a way as to ensure positive structural development. Nevertheless, this phenomenon has contributed considerably to the national economies catching up with international developments within a very short space of time.

A perspective going beyond that of the transformation countries alone reveals that this large dynamism is closely connected with the changes set in motion by economic globalization in the highly developed industrialized countries. For the high-cost regions in the West the main consequence of the global competitive situation is that these countries represent a new form of locational competition. A further increase in investment activities then followed at international locations with lower cost

14 It has become generally recognized that old knowledge elites retain an important function in wide-ranging restructuring processes in foreign cultural contexts. This knowledge represents an important competitive advantage for investors especially with regard to constructing interplant relationships such as with suppliers or institutes. The great continuity of old elites in leading company positions is one piece of evidence for this situation (Szelenyi/Szelenyi 1995, Böröcz/Rona-Tas 1995).

15 Apart from Poland, the Czech Republic and Hungary, the only other countries amongst the first group of acceding countries for the expansion eastwards are Slovenia and Estonia. The absence of Slovakia from this group despite similar economic data is mainly due to the lack of basic democratic institutions and failure to attain a stable political system. At the end of 1992, after separation from the Czech Republic, reform policies were not followed to the same extent and the country fell far behind its neighbours (Rothacher 1997).

conditions in reaction to greatly increased cost pressure. This coincidence of transformation and globalization, restructuring requirements in Eastern Europe and increased establishment of production locations in lower cost regions meant that there was a constellation encouraging this favourable situation for the inflow of foreign capital into the Eastern Central European countries.

### 3. The Auto Industry in the Process of Restructuring

The international auto and components industry is one of the sectors which accounted for a very high proportion of foreign direct investment in the Eastern Central European countries in the early nineties. The large sum resulted mainly from a few major investments, in particular by the Fiat group in Poland and the Volkswagen group in the Czech Republic. VW is the largest investor in the region in terms of absolute investment.<sup>16</sup> The group's most prominent project is its participation in the Czech auto manufacturer Škoda. The latter functions as a manufacturing company maintaining its own separate brand within the group. The other VW projects are all plants with the status of group suppliers and assembly shops, although a comparatively large amount has also been invested here. In the meantime, it is clear that most leading auto groups are also represented with major investment projects, even if the amounts invested lag behind those of VW.<sup>17</sup>

Another regional feature also jointly and decisively influences investment decisions. As in the case of the other qualitative structural potentials dealt with, it is the presence of a broad basis of knowledge and competences in the auto production industry, alongside the other qualitative structural potentials named. The fact that this qualitative factor played an important role in the locational evaluation or choice of co-operating company can be seen with the regional distribution of investment projects, in other words with the overwhelming setting up at established old auto locations or locations with industries from related areas. This potential is strongest in the Czech Republic, or the former Czechoslovakia, being closely linked with the

16 The investment programme up to the year 2002 envisages a sum of around \$3.3 billion and is thus considerably higher than the other major auto groups. Korean manufacturer Daewoo's investments amount to ca. 2.0 billion (without Romania), Fiat 1.8 billion, and General Motors/Opel 1.2 billion. These figures do not include the amounts invested by VW and GM in the former East Germany. These are \$1.8 billion (DM 3.2 billion) and 0.6 billion (DM 1 billion) respectively (cf. Financial Times 13.2.1997). An overview of the figures for investment in the region made by the most important groups can be found in the tables in the appendix at the end of the study.

17 The main focus is formed by Western, or West European mass producers. It is remarkable, that no Japanese group is represented apart from Suzuki in Hungary. Presumed reasons for this include their preference for desert districts, in other words for locations without any old industrial structures and no auto tradition (Havas 1995). This can also be read as an indicator of extensive implementation of the distinct Japanese production and management model at international locations.

names of Škoda und Tatra.<sup>18</sup> The situation is somewhat different in Poland, where Fiat models have been produced under licence for decades. Hungary also has skills in this industrial sector at its disposal, though these are much more in the commercial vehicle industry and are linked primarily with the name of the bus manufacturer Ikarus and the engineering group Raba.<sup>19</sup>

The examples of the two companies Škoda-VW and FSM-Fiat make it especially clear that the factor of production competence in auto manufacturing has gained a great deal in importance. The fact that these two companies were chosen from a number of potential co-operation partners for the Fiat and Volkswagen groups after 1989 is also a result of the extensive mutual interest in maintaining existing competences and using them specifically for synergies. A relevant factor in the achievement of the cooperation project, which gave the groups concerned an advantage over their fellow competitors, was good knowledge of each other from long relationships in the case of FSM-Fiat, and an existing long-time mutual recognition of the companies in the case of Škoda-VW, in particular with respect to technical competence.<sup>20</sup>

A look at developments in industrial plant restructuring through foreign direct investment in this sector reveals the following interim picture. Apart from the production spectrum, complete manufacturing capacities can be found at Škoda in the Czech Republic, and FSM in Poland. In other words, those companies which already existed as manufacturing companies and which were to be kept as such with Western participation. Naturally, however, the link up of the company with the group and the latter's more recent centralization strategies were accompanied by a reorganization leading to a different weighting and distribution of the individual competence

18 Škoda experienced enormous development in auto manufacture through its joint venture with VW. Tatra, by contrast, has so far failed to attract an investor or suitable partner, seriously endangering further maintenance of its auto manufacturing skills. The firm's financial difficulties have continued even after its incorporation into the large engineering group Škoda Pilsen. Consequently, the board of directors, under the leadership of Lubomir Soudek, the specially-appointed managing director, are currently even considering shutting down the traditional area of operations of car production (Mlada fronta Dnes 2.5.1998).

19 The differences are explained not just by historically uneven traditions, but also above all by the division of work between the countries of the old Eastern Bloc. These were based less on developed structures and existing skills in the particular country, and much more on laying down industrial specialization from outside. Czechoslovakia, in particular, was strengthened as an auto manufacturing location by this policy, but Hungary experienced obstruction of its already-developing competences in the auto components industry (Havas 1995). Major direct investment activities in the sector were able to compensate for the enforced break in specialization and for hindered development, and core activities again increased substantially thanks to their ability to catch up.

20 In the case of Škoda, this recognition was mainly thanks to Carl Hahn, the then chairman of VW. It was also reflected in his intensive commitment to precisely this object. It is not just a consequence of strategic interests, but also, for the most part, a result of clear recognition of the long Czech auto manufacturing tradition and the company's former leading position. (Cf. here the interview with Carl Hahn carried out in connection with our research, 'Der Volkswagenkonzern und sein Engagement in den Transformationsökonomien', Januar 1996, and Kellner 1993). On Fiat's participation with FSM cf. Poznanska/Poznanski 1996, pp.74.



areas. Limitations arose from this in two aspects, at the company level, and from a regional perspective. In the former it was in the central area of activity of research and development, and in the latter, the decline in local content in the products.<sup>21</sup>

Other, new companies, with the status of manufacturing companies did not arise from these investments. The dominant type of investment project consists of establishing new companies, or joint ventures with existing companies which have the status of manufacturing facilities, functioning in this form as component manufacturers and/or assembly plants. A clear development of the sector with a components industry structural profile ensued in these countries as a result of integration into the international division of labour. In this respect, it is a continuation of national specialization patterns already in existence. However, in the face of continuing structural change in the auto and components industry it is still not clear which level of value-creation will be achieved here, and which upgrading or downgrading processes will result from it.<sup>22</sup>

The major presence of foreign direct investment from this sector is mainly a result of the phenomenon of specifically close manufacturer-supplier relations in the auto industry. As a consequence, the establishment of large Western manufacturing companies in Eastern Central Europe has had a kind of bandwagon effect and brought about a large inflow of direct investment from the area of the components industry. The causes of this are not just these just-in-time relationships, but also above all the massive cost pressure arising over the past few years which the supply industry was subject to. Against this background, it was precisely this industry which was increasingly dependant on locations in regions with low production and labour costs, and reacting more and more to this pressure with strategies of switching production.

The strikingly dynamic development in the area of the components industry may also be partly due to the fact that the region of Eastern Central Europe offers competitive advantages in two ways. The structural constellation of qualified workers and low costs means it does not just compete with traditional low-wage countries like Spain and Portugal, but also in part with high-wage countries in Western Europe traditionally based on quality production.<sup>23</sup>

21 This subject is treated at length in pan 4.

22 Studies partly view the possibility of the industry advancing in a segment with more technically demanding products in a very positive light, provided these countries develop their export efforts (e.g. Inotai 1996). However, it must be mentioned here that the criteria of developing export structure is only partially appropriate as a form of proof since the criterion of how large the share of local added value there is in export products can only be assessed inadequately. This is because the more technically demanding products of foreign direct investment in particular often indicate a high proportion of upstream production. This touches upon a more general problem which is not just the case for transformation economies. Precisely in the highly internationalized auto industry, and in the face of a policy of global sourcing, it is clear that in general, the proportion of imported upstream production in the products is considerable and is continuing to grow.

23 This specific comparative advantage originally existed to the same extent in East Germany. The competitive factor disappeared following Germany's economic and monetary unification. The

The region's positive locational constellation for the inflow of foreign direct investment is, however, confronted with a development in the area of the auto and components industry which could cause considerable limitations for regional industry where improving specializations are concerned. The second large structural change in this industrial sector introduced at the start of the nineties brought profound changes in the form of production for the manufacturers, leading to tasks being reallocated between manufacturer and supplier. Complex production tasks were transferred to the supplier and relationships restructured as a consequence.<sup>24</sup> The manufacturers geared towards a few large suppliers instead of the hitherto large number of direct suppliers. The new higher demands were increasingly linked with developing competences. They also helped bring about a strong concentration process in the supply sector and to the establishment of group structures. This mainly affected the group of supplier companies belonging to the new area of system providers.<sup>25</sup> In the end this process led to a substantial accrued gain in highly value-added production in the components industry, but most of that fell upon the large providers. This new situation made a linking up with existing industrial structures in Eastern Central Europe very difficult. This, despite the fact that Western companies have greatly improved the conditions for producing high-value products through their continued investment activity. It is fair to say that in view of this general structural change in the sector, the rise of the local components industry in areas of higher value-added production depends on how far international system suppliers fall back on regional industry for their upstream activities, or whether important competences remain primarily within the group set-up here too.

#### 4. Options and Barriers to Restructuring

In the following section, two of the German Volkswagen group's investment projects, Škoda in the Czech Republic and Audi in Hungary, will be used as examples in setting out typical problems and constellations arising in the wake of the group's internationalization strategies and shaping structural development at the respective locations. The investment projects represent two very diverse groups of VWs internationalization strategy within which specific interests and motivational situations have emerged. In the case of the Czech company Škoda, the main motivation lay in securing broad access to the large new markets in Eastern Europe. Targeted

continued very low level of investment activity in Eastern Germany compared with Eastern Central European countries is linked closely with this development.

23 This rationalization process is based on a technical innovation, modular manufacturing. It enables the production process to be split up into larger, independent production units. Through this the manufacturing of these units can now be carried out relatively independently from each other. It also made it possible to remove major production tasks or to transfer them to the supplier. On the problems of reorganizing the auto industry cf. Hancke 1997.

24 On the concentration process in the components industry cf. Hagele/Schön 1998, Süddeutsche Zeitung 8.5.1998

participation in Škoda meant participating in the manufacturing company with a traditionally leading position in the region. As a result, not only was a near monopoly in the Czech Republic ensured, but also a presence in the Eastern European markets already served by the old company, together with a strategic advantage over competition. This investment project was based on a strategy of expansion.

In Hungary, the motivation for investing in the establishment of a manufacturing facility for Audi motors was completely different. The regional market played a negligible role in this case. The group's interest was directed far more towards the production location and its comparative advantages.<sup>26</sup> The investment project was closely connected with fundamental, wider-ranging reorganization of core competences within the group set-up.<sup>27</sup> In contrast to the Czech case, the Hungarian investment type is that of a strategy of relocation. Investment here initially occurred in the wake of an expansion in capacity, however, thus having a less serious negative impact on the German locations.<sup>28</sup>

The various alternative models within VWs internationalization strategies accordingly result from varying initial constellations. A joint venture with the perspective of a take-over was the objective in the case of Škoda, but with Audi it was purely a greenfield investment. Škoda is a manufacturing company with proven independence towards the group, whereas the newly constructed Audi factory possesses only very limited autonomy as a supplier operation for the group. There are corresponding differences in the respective site management's scope in restructuring. Naturally, the initial situation and developed structures meant that there were far greater pressures to adapt in the Czech joint venture than in a new company in a rural area where production and organization had arisen completely from scratch and a totally new workforce had been recruited. The characteristics of both investment projects outlined also make it clear that they differ greatly in their effects on their surrounding regions. In the greenfield production example these are mostly restricted to the operational area, thanks in part to its strong integration into the group's

<sup>26</sup> The fact that Hungary was chosen by VW out of 180 international locations in a bench-marking evaluation underlines the significance of the region's special constellation of advantages. Generous policies of state subsidies and incentives for foreign investors increased the Hungarian site's attractiveness still further.

<sup>27</sup> The VW group reacted to structural change in the auto industry by enforcing technical innovation as pan of its general cost-lowering strategy. For the purposes of implementation this innovation was given the title of platform strategy or equal parts policy. It aimed towards greater product standardization and was mainly linked with wide-ranging redistributing of responsibilities and competences within the group set-up.

<sup>28</sup> Favourable conditions at the Hungarian scheme meant that a compromise capable of winning support was reached between the company panics. In this compromise, it was possible to establish a link between locational reconstruction and safeguarding the location. It was agreed that around one third of the almost \$120 million (DM 210 million) saved on costs would be allocated for investment and production modernization at the German location (cf. interview with Riester 1996).

overall production. However, in the joint venture case, these extend beyond the production site and also benefit regional industry.

### **a) Transfer and Production Strategies**

One characteristic common to both projects is that in neither case did Volkswagen simply transfer an existing model for restructuring and constructing sites from another location. Rather, its strategy was aimed towards modernizing production at the Czech and Hungarian locations to a greater extent than at any of its sites in the West. It was a strategy based on its new basic principles and models. Structures were set up relying on close linkage between the available potentials on site and new demands arising from the globalization process. Consequentially, the basic principles of decentralized organization were introduced in both companies with more local responsibility at the production level, alignment towards staff abilities and competences, smaller chains of authority, co-ordination and leadership based on communication, and group and team structures. Naturally, both strategies differ in their actual layout. Two factors are primarily responsible for this. First, the characteristic feature of the respective strategy already outlined: constructing a new engine plant as a group supplier versus reconstructing and extending an existing brand name company for the East European market. Second, different possibilities opened up for using new forms of organization. With the Hungarian greenfield investment, the emphasis was on changing the organizational relationships within the plant, but in the Czech joint venture it was much more on developing intercompany organizational relationships. The characteristic features of both strategies will now be expounded further using the case studies.

Audi: The production strategy followed with the Hungarian engine plant can be considered to be very far reaching in terms of implementing key lean-production principles. Its decisive elements are radical decentralization, with just two hierarchical levels remaining, and a consistent shift of industrial management directly into the area of production. The new strategy places high demands at the level of production processes both on the breadth of specialist knowledge and on transdepartmental co-ordination. The central structural element is the newly-created leading role of production manager, someone who must combine good engineering qualifications with quasi entrepreneurial responsibility for the respective production unit.<sup>29</sup> New forms of self-regulation and participation at the level of the production worker were also introduced, including above all, group and team discussions, covering technical-specialist, organizational and staff problems. One of the basic improvements in this

29 Engineers with university qualifications, in particular from mechanical engineering, were consistently recruited for this first hierarchy level in production. The provision for entrepreneurial decision-making responsibility can be seen in the direct control over a local budget for smaller investments - e.g. buying tools, minor staff and production requirements, and direct implementation of improvement suggestions as part of the idea management strategy. The guiding principle of the "businessman-on-site" (Unternehmer vor Ort) was coined for the responsibility and independence of this role. On the early evaluation and identification with the new entrepreneurial employee role cf. Kessel/Dörr (1998).

respect is the introduction of participative management with the key element of 'target setting'. In this way, targets for production and performance are no longer set unilaterally by managers invested with the power to define and direct, as was previously the case, but are instead open to negotiation within a given framework. This aspect of leadership places performance steering on a communicative basis with the aim of replacing external checks with self-regulation. It is a development marking a new switch in the form of regulating working process and working relationships.<sup>30</sup>

Characteristic of this strongly decentralized communication-based model is explicit alignment towards qualifications and production skills, and so to a resource readily available in the region.<sup>31</sup> Undoubtedly, the implementation of this production model was also aided by the very low wage levels in general, allowing use of, for the most part, skilled and highly qualified workers. However, another structural characteristic arose from the low-cost scenario: a much lower level of automation in comparison with the West. The obvious advantages, from the company's point of view, lie not just in lower capital and investment costs, but also primarily in greater flexibility, easing the many conversion steps arising from ever-shorter product life cycles and considerable product diversification, and accommodating the requirements of efficient customer-oriented manufacturing.<sup>32</sup> However, this low level of automation has also meant that very monotonous and restrictive working requirements exist in areas where the most simple mechanical procedures and functions occur - such as assembly. In this respect, the new production model exhibits a dual structure, with areas of highly qualified skilled work and technically highly qualified engineering staff located alongside areas where the simplest of tasks were carried out. This constellation can be considered characteristic for the new production strategies in the transformation

30 This change follows on from the replacement of monitoring by superiors with technological monitoring. Both forms should certainly be seen under the aspect of increasing performance by disciplining staff. However, self-regulation is also intended to create space for bringing in individual creative potential. On the switch to technology-based surveillance cf. Dörr 1991. There is a wide range of assessments of the ambivalence of the autonomy gained through self-regulation in decentralized organizations. Recent studies taking a particularly critical line on the social consequences of increasing flexibility and the new form of control include those by Sennett (1998) and Deutschmann (1989). The latter specifically relates this to new management roles. The positive line associates the greater responsibility and participation with an approach placing the issue of democracy in the field of production, cf. Dörre (1996), Müller-Jentsch (1994).

31 The clearest indicators are the polytechnic and university institutes present in the region, indicating a clear specialization in the area of engineering. This is mainly in connection with the universities in Budapest and Miskolc, and also the polytechnic in the industrial town of Győr in western Hungary. The linkage between industry (mechanical engineering) and polytechnic forms a core resource for the location, something benefiting the regional job market.

32 The automation of production forced through in the 1970s is generally evaluated as over-using technology and hindering flexibility. It is considered to be a central impediment in restructuring in the auto industry in the former West Germany, frequently being blamed for slow conversion and delayed adaptations (cf. i.a. Lutz 1997; Jürgens/Lippen 1997).

countries of Eastern Central Europe. It turned out to be a problem where highly-skilled and trained employees were deployed for extremely undemanding tasks.<sup>33</sup>

It would seem that an important course has been set if one assesses the production and work structures which have arisen in the Hungarian company in terms of their continuing development opportunities and taking account of the below-average level of automation in comparison to Western standards, the extensive reorganization, and the specific orientation towards skilled work. This course makes the new location particularly suited to technically demanding products and production processes as well.<sup>34</sup>

Škoda: the new production form of modular manufacturing formed the basis of the guiding principle for restructuring in the case of the Czech joint venture.<sup>35</sup> Naturally, where the old structures were concerned, it could only be implemented gradually into the organization. Simultaneously, the assembly structures were completely reconstructed according to this modular principle in the wake of large expansion investment. The investment was also aimed at expanding the product range. This synchronized "two-step" made it possible to link up with existing structures and competences in the restructuring process whilst simultaneously forcing their further development. A twofold stabilization of the company was aimed for by linking the modernization of existing production organization with product innovation. The short-term aim was to switch quickly to international minimum standards, especially in terms of product quality. In the longer term, the aim was to harmonize with the VW group standards, so increasing Škoda's international competitiveness for Western markets too.<sup>36</sup>

- 33 The discrepancy between demands and vocational qualification was, on the whole, negatively assessed in our interviews, but generally accepted thanks to the lack of alternatives. What emerged was the high importance attached to career and work, and the interest in retaining competences gained. In this respect, the unhappiness and latent tensions which were expressed were not primarily due to material reasons, but more the threat to career-cultural identities. Positive points attributed to the job included above-average wages for the region, the opportunity to get to know state-of-the-art production methods, both technical and organizational, and getting to know internationally recognized standards regarded as being beneficial for professional development.
- 34 Further expansion of the factory extends beyond the plan for a location for motor production to include vehicle assembly for a new product. Other measures currently being discussed include locating research and development capacities at the Hungarian site.
- 35 This form of production organization has become known under the name of fractal factory. A core section of this is the integration of external firms (suppliers) into the manufacturing company's production process. However, this model of 'firms within a firm' conflicts with the German system of co-determination which was geared towards the factory as a homogenous unit. This is because the fractal factory model tends to dissolve this structure and limit the area of applicability of operational co-determination. On this subject cf. Streeck (1996). In this respect, this point indicates a barrier to the Škoda model's transferability to German locations.
- 36 Until then the Škoda company was only represented in the small car segment. The joint venture means that a second series of models has now been developed, located in the medium class. Expanding the product range was seen as a strategic necessity following the decision to retain Škoda as a company with its own name. This was because of the need to be able to survive under conditions of global competition in the car markets. For the Škoda management, the critical size

A key aspect of the new production strategy is reorganizing manufacturer-supplier relationships. Following this strategy, the most important supplier firms are no longer located just in the region or in the same locality, as was assumed until now under the just-in-time premise, but are instead in the company itself and directly integrated into the production process in accordance with just-in-sequence delivery. In this way, the structure follows the new principle of maintaining maximum spatial-temporary linkage of supplier and manufacturer. It is open to dispute how far this model of "enterprises within an enterprise" will remain restricted to being a path for radical transformation contexts or will experience further expansion. There are strong doubts, not just in terms of the social and institutional implications, but also because of the risks associated with close linkage and dependence which impede broader implementation.

If one assesses the restructuring process at Škoda in relation to its consequences then a concept emerges linking the new form of production organization with product innovation and a far-reaching reorganization of intercompany relationships. As a consequence, the firm has not just been able to defend its traditional leading position in Eastern Europe, but also achieved good new positioning in important Western markets. It is true that co-operation has caused the limitations in areas of competences outlined (e.g. research and development), nevertheless, maintaining all key company functions is a remarkable result. To this extent, this is an example in which group participation has contributed to strengthening independence, rather than reducing the backward Czech company to being a junior functional unit.

### **b) Governance and Spillover Effects**

A comparison of the two investment projects to assess which spillover effects emanate from them to regional industry and how far an active governance based on industrial policy can be seen, provides the following picture:

Governance: The Czech manufacturing company which has extensive exchange relationships, possessed its own network of suppliers and had been firmly anchored in the region for a long time. The question of regional integration was an important point in the political negotiations about the joint venture thanks to this structure and the strong position of the company in the national economy. In contrast to this case, the Czech government did not as a rule develop special packages of incentives for foreign direct investment - unlike its counterparts in the other transformation countries. The extent to which Czech industry as a whole was linked with this major enterprise, and the object's resulting industrial-political significance, is underlined by the role played here by the regional components industry in negotiations on cooperation. The Czech aim was clear, to obtain an undertaking to retain the company's status and its name. The fact that they achieved their aim is not just thanks to the fact that this was a fundamental demand, but is also explained by the uniqueness of the object and the great strategic significance the German investor placed on it for

for this was represented by a variance of three series of models (deputy chairman Detlef Wittig quoted in *Süddeutsche Zeitung*, 2.6.1998).

the new East European market. In that respect, this really is an exceptional case in investment policy terms - both with the Czech policy towards direct foreign investment and the commitments achieved.<sup>37</sup>

In the Hungarian Audi engine plant project, tying the company in with the region's existing industrial structures was not a distinct matter for negotiation and the planned investment's realization was not linked with any specific condition. A look at the Hungarian governance with respect to foreign direct investment indicates that the case hardly differs from other major investments. The government's interest was primarily directed towards the inflow of direct investment, explaining the very extensive policy of incentives and subventions together with the great scope available to foreign investors. Consequently, there are two main reasons why relevant spillover effects are hardly noticeable in the Audi project. It is partly because there are no supplier structures, and partly because the internationalization project is very closely linked with existing supplier relationships within the group in this case. Hungary confirmed this exclusively transnational orientation and strengthened it still further by granting the company a duty-free area for its necessary cross-border transactions.

Against such a background, no major spillover effects could have been expected for local industry. However, the Hungarian side did perceive it as a long-term possibility for helping further specialization in vehicle construction, and so towards strengthening a key industrial sector in a country which, until now, has only seen development in the commercial vehicles sector. As regards governance, the Hungarian case shows that the political player hardly made an explicit assertion to the major investor of its own industrial policy interest in securing spillover effects for the region. However, a positive balance can be seen, despite the Hungarians' substantial concessions on industrial policy. It results mainly from the group's intention to reinvest at the new location in the long run. Knock-on effects for regional industry have so far been minimal. Nevertheless, this major project is rated very positively because of the jobs created and above all for the signal effect which radiated from it to other investors. Seen in this way, it has made a significant contribution to developing regional restructuring skills, albeit more indirectly.

Spillover Effects: The Czech case is of special interest where spillover effects are concerned, and so worth in-depth consideration. A considerable number of Western supplier firms have located in the Czech Republic in the wake of VW's investment activities.<sup>38</sup> The Škoda board initiated intensive efforts to find Western co-operation

37 On the type of regulation cf. Zemplerova (1994), on the decisions in the Czech Republic cf. CzechInvest (1998), on the actual agreements about the Škoda-VW joint venture cf. Schomer/Herkenhoff (1994, p. 235-238).

38 According to the latest figures, almost a fifth of all foreign direct investment in the Czech Republic up until the end of 1997 flowed into the auto industry (cf. CzechInvest 1998, Pomery 1997, p. 13). It must however be stressed that in the initial phase the share was actually much higher, mainly because of VW's investment, accounting for almost a quarter of direct investment (cf. Ost-West-Contact 4/1996, pp. 30). This clearly indicates, that the auto industry is the most important key industry in the Czech Republic in which the supply industry accounts for a high proportion. On investment activity in the components industry cf. EIU (1997, 21),



partners for the most important suppliers. Its motivation in doing so was to force through the necessary structural conversion and competence extension at the domestic companies in order to achieve the required international quality standards in a short period of time.<sup>39</sup> One example of this is the way the company set up a training and further training programme for Czech supplier companies, and in so doing carried out its own form of know-how transfer. Ultimately, Škoda's extensive commitment in the area of the components industry derives from the site management's own determined self-interest in being able to make comprehensive use of the region's cost advantages, not just in its own manufacturing but also via a high proportion of local sourcing. Another, more politically motivated factor for actively setting up suppliers was the stagnation of the manufacturing restructuring process associated with the Czech privatization method and the resulting precarious situation of domestic companies.<sup>40</sup> In view of this difficult situation, a strong interest in creating a stable and competitive environment of suppliers developed in the newly reorganized Škoda company, in order to protect as well as possible against the negative consequences of this delayed transformation.<sup>41</sup>

The dynamic development in local industry also initially sparked off by the joint venture with VW can be seen as a relevant spillover effect from this major investment.<sup>42</sup> However, the positive balance from the starting phase did not continue throughout the joint venture. One main reason for this reduction was to be found in the structural change the auto industry went through and the strategies developed by group management in reaction to it. It was not just the production processes which were completely transformed by this, but also manufacturer-supplier relationships. Škoda experienced major limitations to utilizing supplier structures at the Czech location in particular, experiencing a drastic reduction in local content as a result. This was mainly caused by the radical cost-cutting strategy, with its two core

39 In the first years of reconstruction, the board was led by two people who were experts on East European industrial structures and who succeeded in pushing through the setting up of a regional components industry for Škoda. On the Czech side, there was a representative from the auto components industry, and on the German side, a long-standing representative of the group in Eastern Europe. Thanks to these two, the problem of supplies was allocated a high priority in restructuring.

40 One key problem arose from coupon privatization. It did not lead to effective corporate governance and prevented the establishment of one of the most important entrepreneurial institutions (Altmann 1997a, pp.39). This situation helped cause the country's biggest economic crisis at the start of 1997 and seriously put back the transformation process.

41 At an early stage, operational experts in particular had already evaluated the Czech transformation process as being very difficult in terms of the domestic companies' competitiveness and forecast a crisis. From an operational perspective, the assessments about the level achieved and the development of the Czech transformation process stood in clear contradiction to the generally very positive assessment of the country from a macro-economic perspective, with it long being viewed as an example of successful transformation.

42 As a direct result, some 70 Western supplier firms located in the Czech Republic, around 50 in the form of joint ventures and 20 as greenfield investments. These delivered ca. 50% of upstream activities in the production of the joint venture's first new model series, the small car Felicia (CzechInvest 1996, p. 9).

elements of centralizing all the group's purchasing and standardising key product components.<sup>45</sup> The effect of extensive restructuring undertaken at all group companies was especially noticeable for the Czech subsidiary. These effects were, however, both positive and negative.

Undoubtedly, the positive side for Škoda comprised of the products' high quality leap following the transfer of group know-how. This tremendously improved the image of the Czech product name and gave a substantial boost to its international competitiveness. Visible evidence of this includes continuously rising sales figures and the company's increasing presence in Western markets too.<sup>44</sup> This brought further economic stabilization for Škoda, and it is now the most important company in the Czech economy in terms of turnover and exports.<sup>45</sup> The negative side lies mainly in the fact that Škoda can no longer use the location's comparative advantages (i.e. local sourcing) to the same extent, and that important research and development competences have been transferred to the group following on-site standardization.<sup>46</sup> The negative points have far greater significance as far as their effects on the regional economy are concerned. Prospects of participating in the manufacturing company's upsurge there have lessened after the marked reduction in the utilization of the Czech components industry.

In connection with this, a further factor has come into play here arising from the new forms of production. Development has been strengthened by structural change in the components industry, in the course of which a few larger system suppliers have evolved. At Škoda, too, the new production concept of the fractal factory was linked with focussing supplier relationships on such system suppliers. However, this function will now be taken over by large international group companies, located directly on site by Škoda and closely integrated into the production process. Whether

43 Whereas the local content share of the product was still ca. 70% in the beginning, it was down to ca. 40% by the time the group's platform strategy had been implemented (Mladá fronta Dnes 2.9.1996).

44 Of a total production of around 357,000 vehicles, 70% were exported. The most important West European markets include Germany, Italy, and Britain, with a share of over 20%. Production has risen very rapidly over the last three years with annual rates of between 20 and 35% (cf. Škoda annual report 1997, Financial Times 3.2.1998).

45 Škoda accounted for around 8% of the Czech Republic's total exports in 1997 and doubled its turnover from the previous year to ca. \$2.5 billion (cf. Škoda annual report 1997)

46 This was caused by reducing vehicle platforms from 16 to just 4 and the concomitant centralizing of research and development for this part of the product. VW and Audi have responsibility for the two new platforms. It is still unclear how much responsibility in this section will be regained by the group's two smaller companies, Škoda and Seat. However, it is planned that each company label should be responsible for one platform. Cf. VW board member responsible for development Martin Winterkorn in: *Automobil-Produktion* 10/1997, pp. 22. This negative point would have to be modified if it really were to be implemented.

relevant spillover effects for local industry can still be expected will depend on the relative scope for activity and restrictions the companies have as system suppliers.<sup>47</sup>

Even if a rise in status to being a system supplier for the Czech components industry is hardly achievable for domestic companies in the short term and without foreign direct investment, this still does not mean that none of them can develop into being suppliers for system components. This is because the new modular construction method is such that more complicated building components no longer have to be stored on site. The manufacture of technically challenging products could also be transferred here against this background, bearing in mind the cost advantages of the Eastern Central European region in global locational competition, advantages which are likely to continue for some time. Viewed from the perspective of the Western European locations, this is something which represents a definite danger of reducing skills and cutting jobs, but for the components industry in the transformation countries it represents far more an opportunity of moving up into a segment with greater value creation.

## 5. Conclusions

At the present point in time, one conclusion is at least certain in any overall assessment of the influence the two investment projects dealt with in this study have exerted on developments on operational restructuring competences in the Czech Republic and Hungary: In both cases structures were drawn up which have established a strong competitive position for the companies. This makes it clear, that the dominant strategies here were not in fact the pattern of the extended workbench. In other words, they were not the dominant type of globalization strategies, which have often been prophesied for less-developed regions.<sup>48</sup> It is rather the case that companies arose with structures and products, firms which could prove themselves as manufacturing operations with complicated technology and also with suitably qualified people. It might generally be true for less-developed regions that the globalization process reinforces the differences between rich and poor regions rather than contributing to a balanced diffusion (cf. Boyer/Drache 1996), but as has been shown, this is conditionally the case for Eastern Central Europe. The alternative development path can primarily explain why the Eastern Central European type of a

47 We have no clear information on this question. Nevertheless, it can be assumed that the effects are more likely to be low because of the generally observable high import ratio for foreign investment projects in manufacturing industry (cf. Pomery 1997, pp. 21).

48 The image originates in a general view in which the developed Western industrial societies function as a model allocated a permanent pioneer role. This self-image has, if anything, been strengthened by the events of 1989. The feeling of superiority has not least meant that the pending fundamental restructuring requirements have been allowed to be pushed into the background; the transformation countries' weaker position was considered to be a permanent fact. Warnings are increasingly being made in the meantime to depart from this way of thinking (cf. Lepenies' call (1997) for a stronger attitude more capable of learning in societal exchange relationships).

"backward" economy examined here nevertheless has a strong institutional and structural framework (above all a good education system and an industrial specialization base) which enable later upgrading. The fact that these potentials are also used by economic players in the extensively deregulated space supports the thesis expounded at the beginning about the increasing significance of the "cultural-institutional factor" in the economic players' activity, an increase in significance not simply due to the civil aspect, but also resulting from the economic revaluation of these potentials under the new competitive conditions.

The dominant characteristic of the newly-constructed organizational structures is the strong orientation towards qualifications and work (as opposed to technology) and so a reduced level of automation. The structural constellation of the regional advantages is reflected in this. The production concept draws its great flexibility from this linkage and so an important competitive advantage over the group companies in the West.

An important restriction to this finding must, however, be emphasized. It may be that the decentralized production concept in the technical production has improved the skilled workers' and engineers' job specifications, but this is only true to a limited extent for manual production and even less so for the broad area of assembly.<sup>49</sup> Here, the same constellation of advantages has led to a situation in which the level of automation has remained far below the possibilities and standards achieved in the West.<sup>50</sup> The partially high degree of process standardization may be provided with a counterbalance through the decentralized self-regulating structures, but the requirements for expert skills remain very limited in these areas.

On the whole, it is noticeable that in terms of the current key factor of quality standards, the investment projects have been successful with the operational expansion of skills. It is indisputable that the transfer of know-how from the group played a major role in this success. There is also no doubt that important preconditions were present at the new locations. The firms are looked upon as pioneers beyond just the region itself. Nationally they are also seen as substantial economic factors. Moreover, they were also able to cement their position within the group. The most visible expression of this favourable position is the considerable expansion investment planned by the group at the new location.<sup>51</sup> The extent to which this investment strengthens the option for expanding competences in areas and processes with higher value-creation in particular is strongly linked with developments at the

49 It may be that a great difference is observable between manufacturing and assembly in the new organizational forms in terms of skilled processes and room for manoeuvre. It must be underlined that this is not a specific phenomenon of Eastern locations, but is just as likely to be found in the group work model at Western sites (cf, Schumann/Gerst 1996).

50 How drastic the differences can be is shown, for example, by the Slovakian location where the level of automation is not above 30-35%, making it the lowest in the whole group (cf. Volkswagen director Folker Weißgerber in: *Automobil-Produktion* 10/1997, p. 56).

51 In both projects the initial investment programmes were increased substantially. In Škoda's case from \$ 2.1 billion (1994) to \$2.5 billion up to the year 2002. With Audi, the rise was from \$400 million (1994) to \$467 million up to the year 2000 (figures from Škoda and Audi).

locations in the West, because the projects' strong upsurge cannot be seen separately from the positive market development the VW group has been experiencing since mastering its crisis (at the start of the 90s). Until now, favourable economic conditions ensured that both projects were tied into the context of capacity expansion, and in Škoda's case, linked more with positive feedbacks for the group's companies in the West. This is only partially true with Audi's engine plant in Hungary. It may well be that its establishment was linked with product innovation, so allowing the project to be considered an expansion measure, but in the longer term, the new manufacturing may be able to replace the old products, possibly leading to a shifting of competences. So far, the restrictions for the German locations remained moderate only because development was closely linked with the group's upsurge. The situation is a consequence of the favourable business situation. Critical factors in its further continuation include the ability of the group to continue to maintain its position in the face of worldwide overcapacity, and the choice of location for cutbacks if the occasion should arise.

If one assesses developments from the angle of the consequences for Eastern Central Europe as an industrial location, then positive impulses have emanated from both investment projects for industrial specialization. In Škoda's case, the existing strong pattern of auto production specialization was cemented and developed further through the process of internationalization. With Audi, the investment project represented an important step for establishing regional competences in the car industry, a sector underdeveloped in Hungary to date. Moreover, the Eastern Central European locations experienced a general revaluation thanks to the successes outlined. The signal and demonstration effect emanating from both restructuring projects to further direct investment in the region is not insignificant. The two also share the same decisive marks of success, the innovative implementation of the new production concepts and their ability to link up with existing specialization profiles. As a result, they both stand for new locational strategies specifically linked with qualitative structural potentials, albeit in different ways.

The effects the investment projects had on local industry are, by contrast, less positive, as has been illustrated. The limited spillovers have undoubtedly helped widen the gap which has arisen between international and local companies. It is currently impossible to see how far this deficit is simply an effect emanating from the starting phase which will decline over time. This division of industry into two very unequally developed areas which has occurred is seen critically from the perspective of the national economies. It resulted, however not just from the group strategies but also from the very weak industrial and structural political governance of the transformation countries.<sup>52</sup> The precariousness of these consequences of separation can be

52 In general, governance is seen as pragmatic and defensive in this point in the transformation countries. For the most part, structural policy is limited to the respective privatization policies and their consequences. These are seen as ranging from structural-policy-neutral to structural-policy-inspired (cf. Lageman 1997, p. 253). This form of governance is explained by the particular conditions of the old system's collapse. It was also, however, a firm leading principal in politics - as in the case of the Czech Republic

seen, for example, in the migration into the internationalized area by the most important sections of the workforce, and of highly qualified skilled workers in particular, (cf. Myant et al. 1996, p. 169). If this trend continues, and key actors are no longer available to help in restructuring the already weakened local industry, then that will undoubtedly worsen its chances still further of making up ground in the economic development process.

Even if our preliminary conclusion about the first phase of transformation indicates a much better result at the operational level than at the regional, the overall view is still positive. The internationalization process in the auto industry has set the course for development allowing the transformation economies to expect to attain a good middle ranking in the international division of work - provided the transition to more technically demanding products really does occur and the disparities mentioned can be limited. This cautiously optimistic prognosis leads, however, to a critical point from a Western European perspective. It cannot be ruled out that further upward revaluation of Eastern Central European countries as production locations might possibly cause a switching and withdrawing of skills from the old Western locations. This tendency can be relied upon to gain momentum for reasons other than just cost. These include the fact that the number of regions offering high-skill qualifications at low-cost conditions has increased markedly, and because the possibilities for a technically challenging production are no longer just limited to high-cost regions in the West.

As a result, however, the new context of internationalization also raises the question of restructuring competence and governance in a further dimension which also needs to be understood. It is no longer just related to the transformation economies, i.e. to establishing and further developing skills, as was the case so far in this study. Governance and restructuring competences are, rather, also increasingly in demand for the developed industrial regions in the West and they must gear themselves towards restructuring skills with the aim of maintaining them. The restructuring difficulties in this double perspective make it clear, that governance geared solely towards a national framework is no longer sufficient to cope with the interactions and consequences. It is clear that what is required is a form of governance systematically incorporating the international factor into national policies in order to support an institutional linkage for the new transnational processes. This means that basically a form of industrial-ecological governance is needed. It would be invested with the task of combining the aim of maintaining space and resources at the old industrial locations with the development perspective of other regions. This would be a form of controlled internationalization, allowing both opportunity and restriction in equal measure, and counteracting the potentially ruinous effects of locational competition.

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## Appendix: Auto Groups' Investment in Eastern Central Europe

**Table 1:**  
*Investment by Group:*

Group	Countries	Planned Investment (up to 2002, in \$)
VW	Czech Rep./ Poland/ Hungary/ Slovakia Poland	3.3 billion
Daewoo		2.0 billion
FIAT	Poland	1.8 billion
GM/ Opel/ Isuzu	Poland/ Hungary	1.2 billion
Suzuki	Hungary	250 million
Ford	Poland/ Hungary	235 million
Hyundai	Poland	120 million

Own calculations based on: Financial Times 25.3.98/ 15.12.97/ 13.2.97, Frankfurter Allgemeine Zeitung 10.11.97, EMERGO 2/96, Wirtschaftsnachrichten Ungarn 2/97, Ost-West-Contact 11/ 97

\*\* Transformation and Globalization Research Group, WZB/May 1998

**Table 2:**  
*Investment by Country*

Country	Group	Planned Investment (up to 2002, in \$)
Poland	FIAT, Daewoo, GM/ Opel, Isuzu (GM), VW, Hyundai, Ford	4.9 billion
Czech Republic	VW	2.5 billion
Hungary	VW, GM/ Opel, Suzuki, Ford	1.3 billion
Slovakia	VW	240 million

Own calculations based on: Financial Times 25.3.98/ 15.12.97/ 13.2.97, Frankfurter Allgemeine Zeitung 10.11.97, EMERGO 2/96, Wirtschaftsnachrichten Ungarn 2/97, Ost-West-Contact 11/ 97

\*\* Transformation and Globalization Research Group, WZB/May 1998

**Table 3:**  
*Investment by Project:*

Country/Group	Planned Investment (up to 2002, in \$)	Situation at End of 1997 (in \$)
Poland		
FIAT	1.8 billion	1.3 billion
Daewoo	2.0 billion	760 million
Ford	100 million	54 million
GM/ Opel	550 million	*
Isuzu (GM)	300 million	*
Hyundai	120 million	*
VW	*	*
Hungary		
VW/ Audi	555 million	360 million
GM/ Opel	390 million	*
Suzuki	250 million	*
Ford	135 million	*
Czech Republic		
VW	2.5 billion	1.2 billion
Slovakia		
VW	240 million	*

\* - no figures

Own calculations based on: Financial Times 25.3.98/ 15.12.97/ 13.2.97, Frankfurter Allgemeine Zeitung 10.11.97, EMERGO 2/96, Wirtschaftsnachrichten Ungarn 2/97/ 1/98, Ost-West-Contact 11/ 97, Motor 48/97 (Poland)

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