European Cross-National Production Networks in the Auto Industry: Eastern Europe as the Low End of European Car Complex[1]

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Abstract:

Automakers have been among the first western firms to enter Central and Eastern Europe. In automobile production and distribution, International Production Networks (IPNs) linking West and East Europe are emerging. The international networking strategies of the car manufacturers, however, show remarkable differences. Some rate the CEEC region primarily as a market, some as a production site, some try to aim at both. These differences are triggered by the domestic bargaining setting (the 'car complex') of these firms, by the dynamics of the internationalization process itself, and by the reception in the host countries. Four different types of cross-national production networks in Europe have developed in the course of the 1990s: *frontrunner*, *follower, peripheral* and *lock-out networks*. These networks represent decreasing degrees of involvement in the CEEC region. Consequently, countries in Central and Eastern Europe will have different prospects of integrating into the European Union and developing autonomous domestic industrial structures. The radically altered patterns of intra-European trade further illustrates the importance of the intra-European production networks.

1. Introduction: a breathtaking transformation

The car industry of Central and Eastern Europe tells a dramatic tale of economic and political competition in a period of transition and transformation. It is a story of major significance to most countries in the region due to the role cars and car related investment plays in the transformation of these countries. In many Central and Eastern European countries foreign direct investments in the automotive sector accounted for large parts of the FDI volume.[2] In many countries, the investments of individual car manufacturers represent the largest investments ever done in the country or region.[3] The restructuring patterns caused by trade and investment do not leave European politics impervious. The biggest policy conflict in 1996 between Poland - the largest of the Central European countries - and the European Commission over the terms of admission to the European Union dealt with the country's trade policy towards cars.

In 1988, total car production in Central and Eastern Europe (including former Eastern Germany, excluding former Yugoslavia) totaled an estimated 3.2 million units. At least nine proud independent producers of substantial volumes of cars existed in Central and Eastern Europe (excluding the Soviet Union): Wartburg and Trabant of the German Democratic Republic, FSM and FSO of Poland, Skoda in Tzechoslovakia, Industrije Motronih Vozil (IMV) in Slovenia, Zastava Yugo Automobili the Serb producer of the Yugo brand, Dacia and Oltcit in Romania.

Since then, car production in these countries rapidly came under the control of Western volume producers. Most of the initial Foreign Direct Investment in the region where in take-overs rather than in the establishment of greenfield sites. Anno 1998, almost all of the existing car production capacity has been taken over, or is controlled, by Western car makers.[4] Seven of the nine producers are now majority owned by western car makers. East of this take-over

[2] In the Czech Republic automotive related FDI over the 1990-1993 period amounted to around 25 percent of all FDI in the country (Czechinvest, 1995: 5). Other countries show comparable figures. In the broader category of "transport and communication" related investment, in early 1996 the share in total FDI flows amounting to around 43% in Latvia, 17% in Bulgaria, and 9% in Hungary (ECE, 1996: 10).

[3] The DM470 million investment of GM/Opel in a vehicle assembly plant in Poland (Gliwice) in March - decided upon in 1996 - represents the biggest greenfield site investment in central Europe since 19990 (EIU, 1997:12). Fiat Poland is the biggest private sector industrial enterprise in Poland (EIU, 1997:108). The mid-1990s take-over investment of Autobile Cariova represents the largest foreign investment in Romania up to date (EIU 1997: 111).

[4] More than twenty producers of trucks, busses and other transport equipment existed as well in Central and Eastern Europe (excluding the former Sovjet Union). According to CCFA (1995:10) estimates, still a relatively large number of these producers survived as independent producers (eight) or entered into more or less equal joint-ventures with western producers. The trucks and bussess segment is beyond the scope of this study.

"battlefield", Russian car industry seems to have remained relatively intact throughout the 1990s. None of the big producers have yet been taken over and Russian and Ukrain producers still dominate the markets of the former Soviet Union.

Most observers - in particular directly after the turnaround in 1989 - have expressed the idea that Central and Eastern European countries are promising future markets for cars. The Central and Eastern European market comprises around 330 million consumers and the car market in this region could reach 3 million units by the year 2000 (Financial Times, Dec. 11, 1990). This expectation has proven to be overly optimistic. Sales in most CEEC countries declined after the break-up of the Comecon. In Poland - by far the biggest market after Russia - new car sales halved from around 284,000 units in 1990 to under 143,000 in the years to follow. But sales bounced back in most countries. In 1995 car sales in the Polish market reached 264,000 units, to rapidly grow towards more than 373,000 units in 1996 (FT, 26/3/1997). In 1995, sales in seven Central European car markets - Bulgaria, the Czech Republic, Hungary, Poland, Romania, Slovakia and Slovenia - rose by 7.3 per cent to over 600,000 cars. More modest and realistic assessments nowadays expect demand in these countries to rise by at least 10 per cent a year to reach more than 1 million in 2000 (FT, 28 Feb., 1996). Additional sales opportunities are clearly important for western European car producers which throughout the 1990s have been operating at considerable degrees below capacity. According to EIU/Autofact estimates, the car industry in Europe operates at 33% below capacity, turning out 6 million fewer cars than they could.[5] The biggest barrier to enter the CEEC market is the limited purchasing power of the (prospective) consumers and their concomitant desire for low-end, competitively priced products.

The CEEC countries can also be used as a production base. Integrating this region into large car makers' `regional' or `global' production base is to offer them improved economies of scale and a better intra-company division of labor. In this division of labor, Central and Eastern European countries, situated close to the EU, can be an obvious source of cheap but skilled labor.

The largest car producers operating in the Western European market have adopted notably different strategies towards the Central and Eastern European region. They aimed at different mixtures of the market/production-base logic. This contribution documents these differences and considers their causes and consequences. This contribution also deals with the

[5] This is a rather universal problem. The worldwide car industry operates at substantial degrees below capacity: in Japan 50% below capacity, in North America 21% below capacity (Economist, May 10th 1997; EIU estimates).

question whether the East is beginning to reshape the production strategies for firms. Does the East shift the relative balance of competitive position or the ability of firms to match their competitors' strengths? How does the sum of the stories affect the competitive balance of the auto industry in Europe (and beyond)? How is the East woven into the West and how do the value chains/production networks tie the pieces together. How does the Western national rivalry play out in Eastern Europe and how is the auto industry a scene for the competition or even an instrument of that competition?

Industry observers have already speculated about the configurations that might develop in the European automotive industry after the year 2000. Some tend to stress the continued salience of existing national and regional differences (Sadler, 1996: 7). Others state that a new map of auto production will be established in Europe due to the inclusion of Central and Eastern Europe in the European "car system" (Banville and Chanaron, 1991; Hudson and Schamp, 1995). Bordenave and Lung (1996) conclude that a continental type of integration of the West and East European car production networks will probably involve a vertical division of labor within Europe, leading partly to the disintegration of national industries and forms of decentralization. This paper shows all three developments can develop at the same time.

This contribution contains three parts. In the first part, the rival strategies of core car firms will be introduced: how have they organized their production networks, how much control do they exercise over other actors in the system and what kind of internationalization strategy have they (consequently) adopted? The second part looks at the strategies of these firms towards Central and Eastern Europe. The strategic intent of the core firms depends upon their existing network strategies, but the realization of their intentions depends as well on the *timing* of their internationalization efforts vis-à-vis their competitors. This paper documents how entry strategies partly seized dynamism of their own. Some firms rushed into the region, while others abstained from major involvement. What are the consequences of these rival strategies in terms of market share? Finally, the policy perspective is tackled: did the different strategies of the car producers induce differences in governmental strategies and vice versa? To what extent do these differences result in different possibilities for Central and Eastern European countries to integrate and cultivate (autonomous) policies towards the automotive industry? Is there also a tiered structure of countries unfolding as a result of these differences and what are the consequences for regional trade patterns?

2. Cars, complexes and production networks: the domestic origins of internationalization strategies

The most important actors in the car industry are still the *end producers*. Companies such as Volkswagen, Ford, Renault and General Motors are buying parts from all kinds of suppliers; they are usually producing the most important component of the car (the engine) then assemble up to 10,000 parts ranging from seats, dashboards, gearboxes to tires into one car; and are overseeing a large and complicated distribution system.

Each large carmaker therefore is the *core firm* of the industrial network surrounding it. The large carmakers are the principal actors as well as the directors of the play (cf. Ruigrok and Van Tulder, 1991, 1995). This makes the identification of core actors in the car industry relatively easy. This does not necessarily mean that they do everything themselves, yet they aspire to position themselves at the core of supply and distribution chains, as well as of political and financial networks, in order to play a leading role in the creation of added value and in restructuring. A core firm strives to be the spider of an industrial web. At certain times, it may have to give up its role as the sole director, and have to accept a large say by other companies or governments, yet it will remain the leading actor, and, if given the opportunity, try to regain control.

The industrial network of the core firm can be called a *car complex.* A car complex includes all the major actors involved in producing the car or in getting it to the customer. Besides the core firm, a car complex consists of five groups of other actors: suppliers/subcontractors, distributors/dealers, workers, financiers and governments. The first three groups of actors are involved in the actual value chain; the two latter are active in facilitating the value chain.

Although the activities in one car complex are all aimed at producing and getting the car to the customer, the relationships between the core firm and the other constituents of the car complex are not necessarily harmonious. Suppliers frequently feel squeezed by car makers seeking lower prices or cutting suppliers off from the profitable After Market of replacement parts. Workers may feel their wages are low or their holidays too short, and at times are willing to strike for a better compensation. Governments may discourage manufacturing companies from investing abroad if this reduces employment at home. Banks have sometimes forced core firms

into restructuring programmes, such as in the case of Mazda in 1973 and in 1995/6. Car dealers usually feel they are best left alone by the core firm or the national importer.

The goals and interests of the members of a car complex may coincide or conflict. Therefore, each core firm has to *bargain* with these members (either as individuals or as a group) about the terms and nature of their involvement in the production and distribution process. Thus carmakers bargain over prices and the time and nature of deliveries with their suppliers and dealers, over wages with their workers, over subsidies and legislation with governments, and over shareholder rights and credit requirements with their financiers. *This bargaining process is a major source of diversity in the car industry - as in other industries.* A car complex, then, can be defined as *a bargaining configuration around a core firm, consisting of (groups of) actors which are directly or indirectly engaged in the production and distribution of a car*.

2.1 Network configurations in the car industry

This section aims at classifying networks in the car industry along a more elaborate version of the two network dichotomies (horizontal/vertical and open/closed) of this research project (cf. Zysman, Doherty, Schwartz, 1996). On the basis of this specification the network configurations that have developed in Asia, Europe and the United States will be listed.

Horizontal/vertical networks

The extent to which vertical networks develop, depends upon the 'make or buy' decision in which firms decide on higher of lower shares of an internalization of markets. The more a firm produces in-house, the higher the degree of vertical integration (cf. Williamson, 1975). In the car industry "horizontal" relationships among networks of peer companies can involve "vertical" network relationships at the same time. Japanese *horizontal keiretsu* such as the Mitsubishi group in which Mitsubishi Motors operates as the car producing entity, can be interpreted as a horizontal network of peers (in complementary industries), while the supply structure is much more hierarchical and vertical - although sometimes consisting of subsidiaries of the peers in the *keiretsu*. Next, vertical networks themselves do not only constitute high degrees of vertical integration. Vertical integration in the economics and business literature is generally thought of as the share of the supply/value chain a firm produces in-house. But, an automotive firm like Toyota adds only around 27% of the value of a car. Nevertheless it should be considered

extremely dominant over its supply chain in which most of the firms are organized in a tiered pyramidal structure of loyal/dependent suppliers around the core firm. The formal control strategy changes into an informal structural control strategy. In the Japanese context such a network configuration is also called a *vertical keiretsu*. Vertical integration therefore will be dubbed "captive supply" in which suppliers can either be de-jure independent or dependent (subsidiaries) of the principal firm. In the interpretation below, the degree of vertical integration implies *de-facto* vertical integration, which relates to the degree of *structural control* exercised by the core firm. Firms with a "strong" level of vertical integration structurally control their supply structures, whereas firms with a "strong" degree of horizontal integration control a large number of complementary activities.

Closed/open networks

The dichotomy "closed" networks versus "open" should be intercepted in the light of the discussion on the boundaries of the organization (cf. Grandori, Soda, 1995). In "closed" networks tight, long-term relationships exist, that are generally not accessible to outsiders whereas "open" networks are supposed to be more easily penetrable by outsiders, with shifting transactions based on exchange relations. Actors involved as "outsiders" or "insiders", need to be more clearly distinguished. Combinations of both open *and* closed networks can exist, depending on the level of the network analysis. Networks change over time. Many firms in fact operate in the relative grey area of semi-closed and semi-open networks, which makes a sharp distinction less useful. This is particularly the case when networks of firms are not organized around one core firm, but around several core firms. In case firms strike a joint venture or a long-standing collaboration agreement the networks around them will change. When two firms orchestrating an "open" and a "closed" network get together, it is not clear what the hybrid form of the network should be called. For the time being, the analysis below refers to the terms *medium-closed* and *medium-open* in case of more hybrid and less ideal type networks.

Other network characteristics can make networks more closed or more open, than might appear from value chain relationships alone. More closed networks tend to appear when the state owns (part of) the company. Firms like Renault and Volkswagen that are still partly owned by the national or local state, can be considered more closed than other firms in the same country without these links (like Peugeot in France or Opel in Germany). The closeness of the network

can additionally be enhanced by other ownership-specific properties. In the car industry some firms (like Fiat and BMW) are still largely family controlled, which makes them more closed than others did. Financial institutions play an important role in the closeness or openness of the network around the core firm. Industrial banks orchestrating supply relations around some of the core firms (in particular with *horizontal keiretsu* like Mitsubishi or Mazda, but also with Volvo in Sweden) tend to make the network more open than in the case of largely auto-financed producers, like *vertical keiretsu* such as Toyota or Nissan, or family owned firms.

Network operationalisations

This contribution makes a further distinction between various sourcing strategies. In case firms primarily use a "single" sourcing strategy the closeness of the network can be considered higher than in case of a "multiple sourcing" strategy in which more suppliers are wielded for the same input. However, a multiple sourcing strategy embedded in a very strong vertically integrated network create higher levels of control (closeness) than a single sourcing strategy, whereas the same strategy in a relatively weak vertical or horizontal network is bound to add to the openness of the network. The interpretation of the relative positions of actors in a network thus remains relative contingent.

Tables 1-3 summarize the characteristics of the networks formed around and by core players in the car industry. Each table contains a short description of the network characteristics of firms in a particular region: European, Asian and American production networks.

Table 1 Asian Production Networks

FIRM	Horizontal versus Vertical?	Open versus Closed?	Internationalization
Toyota	strong/vertical: limited vertical integration (c. 27% of value added); high de-facto vertical integration (*vertical keiretsu)*	structural control implies very closed networks (very large supply base)	globalization (internationalization for gaining access to triad markets; copying national networks), no major alliances
Nissan	strong/vertical: low level of vertical integration (see Toyota); but high de-facto integration (*vertical keiretsu)*	structural control over large supply base (closed networks)	globalization (see Toyota, but slightly less closed and vertically integrated networks), no major alliances
Honda	medium/vertical: low level of vertical integration, medium de-facto integration (small *vertical keiretsu*)	medium open network: small supply base that also relies on Toyota and Nissan suppliers	diadic division of labor (more limited possibility to induce Japanese suppliers to follow the firm abroad); searching for alliance partners
Mitsubishi	medium/horizontal: relatively low level of vertical integration, medium de-facto integration (suppliers are part of the same big *horizontal keiretsu*)	closed network under the aegis of the Mitsubishi group	diadic division of labor (aimed at the US and Asia; in Asia creation of a regional labor division); more prone towards alliances (f.i.Volvo)
Mazda	medium/horizontal: relatively low level of vertical integration, strong control over its Hiroshima supply, but medium to low de-facto integration with the rest of the Sumitomo supply base; coalition strategy in *horizontal keiretsu*)	medium open networks under the joint co-ordination of Ford and Sumitomo	more and more dependent upon the division of labor with Ford (no presence in Europe; more open networks created)
Suzuki	medium/horizontal: relatively low level of vertical integration, but low to medium de-facto vertical integration, *horizontal keiretsu*)	medium closed networks due to control of Tokai Group and the affiliation with Toyota, 3.9% owned by GM; Suzuki uses alliances (with Fuji, Daihatsu-Toyota) to be stronger towards suppliers	modest internationalization towards core markets; going for peripheral markets and production sites where the relative bargaining position towards suppliers and governments is stronger (f.i. Canada for US; Hungary, Spain for Europe); alliance with GM

Daewoo	medium/horizontal: medium levels of vertical integration (production in-house due to weak supplier base), medium levels of de-facto vertical integration through captive suppliers	medium closed/open networks; only in 1992 independent of GM (owned. 50%); still joint ventures in parts making; builds also cars based on Honda technology	relatively small player on domestic market, uses internationalization to increase production volume: recreates medium closed networks abroad
Hyundai	medium/horizontal: medium levels of vertical integration, medium levels of de-facto vertical integration with captive suppliers of the same *chaebol*	medium closed networks, partly owned by Mitsubishi (12,6%) which also provides parts and licenses	modest internationalization based on joint ventures in peripheral markets (Turkey, Malaysia)

Sources: compiled on the basis of company reports, press clippings, Ruigrok and Van Tulder, 1993, CCFA

Table 5 American Production Networks

FIRM	Horizontal versus Vertical?	Open v Closed?	Internationalization
General Motors	strong/vertical: high degree of formal vertical integration, owns many captive suppliers and uses single sourcing; tries to reduce number of suppliers	GM is the result of acquisition strategy; closed network, but difficult to co-ordinate	Internationalization through acquisitions; creates lower degree of vertical integration abroad; co-ordination problems, loose networks with local responsibility in Europe; stepped up co-ordination efforts within Europe, lead taken by GM/Opel (Germany); GM is more regionally oriented than Ford
Ford	medium/vertical: medium degree of formal vertical integration (around 50%), owns a number of captive suppliers (less than General Motors); demands annually a 5% cost reduction of its suppliers	medium closed network, but easier to co-ordinate (more dual sourcing)	Internationalization through greenfield sites; more strict networks with less local responsibility; world car strategy for core markets: diadic division of labor between EU; and US Ford-Germany is co-coordinating the EU production networks; partnership with Mazda for Asian market; Ford-2000 project implies recentralisation of a number of activities in the USA.
Chrysler	medium/vertical: medium/low degree of formal vertical integration (35-40%), faces many independent suppliers (some Ford and GM captives)	medium open networks; more dual sourcing searched	Retreated on the American market; tries to create a regional division of labor within NAFTA, very modest internationalization.

Sources: compiled on the basis of company reports, press clippings, Ruigrok and Van Tulder, 1993, CCFA

Table 6 European Production Networks

FIRM	Horizontal vs. Vertical?	Open versus Closed?	Internationalization
FIAT	strong/vertical: around 50% vertical integration (but declining); significant direct control over supply basis through captive outsourcing; increasingly single sourcing	closed network with wholly owned suppliers such as Magneti Marelli and Teksid, but opening up (less captive suppliers)	Export strategy from strong domestic market (Italy); "World car" local production in/for peripheral regions
Volks-Wagen	medium/vertical: specialized and vertically "medium" integrated (c. 50%); luxury car part (Audi) uses more single sourcing than VW (is vertically more strong)	horizontal acquisitions (AUDI, SEAT, SKODA), medium closed networks; Audi uses more single sourcing (81%) than volume car segment (35%); partly state-owned enhances closed network	Aiming for a regional division of labor within Europe (co-ordination through joint platforms); acquisition strategy to expand production basis abroad: take-over of Seat, Skoda
Mercedes-Benz	medium/vertical: relative interdependence with suppliers (50% vertical integration)	medium/open; going alone; low degree of single sourcing (24%)	Primarily export orientation, some greenfield investments in particular in US local markets
BMW	medium/horizontal: strong German supply base is important for BMW; firm tries to step up vertical integration	medium/closed: high degree of single sourcing (80%)	Export orientation, with significant US expansion
Opel AG	medium/vertical: 30-40% vertical integration; GM captive and strong German suppliers; tries to limit number of suppliers (GME: 1,200 sup-pliers) and reliance on German supply base	medium closed; high degree of single sourcing (87%), acquisition strategy	Acquisition strategy in Westen Europe (Saab), necessitates further searching for regional division of labor; restructuring of facilities in Europe
Ford-Europe	medium/vertical: 30-40% vertical integration;	medium closed; medium degree of single sourcing (62%); going alone	Diadic division of labor between EU and USA; global car; restructuring of existing production facilities in EU
PSA	medium-low vertical integration; conglomerate of various companies; difficult to co-ordinate; low de-facto vertical integration	Medium open networks; many non-captive foreign owned suppliers; semi-autonomous production networks in other country. In France: collaboration with Renault towards suppliers.	Regional division of labor between France, Spain and UK (Talbot); difficult to co-ordinate

Renault	medium-low vertical integration; very car focused production network with state ownership creating medium "vertical integration"	Medium closed networks due to (50%) state ownership; collaborates with PSA (wanted collaborate with Volvo) towards non captive suppliers; partly state owned	Regional division of labor between production/assembly sites around France (Spain, Belgium). Closing down production in Belgium in favor of French production network.
Volvo	low degree of vertical integration (25-30%); limited control over suppliers; moderate horizontal orientation	Open network (supplies are 70% imported), many non-Swedish suppliers that also supply to other car manufacturers	Modest internationalization of production in Europe; rest export strategy; alliance with Renault failed; goes-it-alone but searches for partners

Sources: Company reports, press clippings, Ruigrok and Van Tulder, 1993, CCFA, De Banville, Chanaron, 1990:34

Figure 1 Production Networks in the Car industry: An Overview of Relative Positions

	"VERTICALLY INTEGRATED" strong medium		**"HORIZONTALLY INTEGRATED"** medium strong	
strong **"OPEN**			• Volvo	
NETWORKS" medium		• Mercedes-Benz • Chrysler	• PSA • Mazda • Daewoo • Hyundai	
medium **"CLOSED**		• Honda • Ford-Europe/Ford • Opel AG • Renault • VW	• Suzuki • Mitsubishi • BMW	
NETWORKS" strong	• Fiat • GM • Nissan • Toyota			

Figure 1 displays the resulting positions of the core firms along the two network dimensions of this research project: open/closed, vertical/horizontal. The table allows for a "medium" position on the two dimensions. Figure 1 shows that sometimes firms from different regions share a larger number of characteristics than firms from the same region. Fiat and General Motors resemble each other in their networking approach, while the commonalties in the

networks around for instance PSA (Peugeot, Citroen and Talbot) with the Daewoo network are remarkable. The most "open" network in the car industry can be considered that of the Swedish car producer Volvo. Having to deal with sizeable and strong external actors as industrial banks, large numbers of strong foreign suppliers, strong trade unions and an influential government, the company has the least influence over its network. The most "closed" network in the car industry can be considered that of Toyota: it has organized a large number of actors, including local and national governments, trade unions and financiers, in a network of structural control. Most vertically integrated car producers aim at volume production, whereas most luxury producers operate in more open networks.

2.2 Domestic networks and internationalization strategies

Core firms have different types of internationalization strategies at their disposal. Internationalization strategies can be linked directly to the properties of the home network (Cf. Ruigrok and Van Tulder, 1995). Firms in "horizontal" (*flexible specialization*) networks in which many relatively equal partners contribute to the end product, tend to turn to exports. The same is true for firms that exert a high degree of structural control (*Toyotism*) over their networks. The optimal international strategy of these firms implies sustaining their strong production networks at home, while exporting the surplus production to other parts of the world. Only in case these firms are confronted with trade barriers they will - hesitantly - locate production abroad. Initially they will locate "screwdriver" factories in the markets they want to sell their surplus production. Only in case recipient's governments design policies to increase the degree of "local content" these firms are willing to locate substantial production in the country, provided the latter has an interesting market. Japanese car firms that were confronted with trade barriers thus located production in the United States and - to a lesser extent - in Europe. It is estimated that around 1,8 million cars are produced by Japanese transplants in the United States. In Europe around 0,5 million cars are produced locally. Large parts of the production volume nevertheless remains in Japan with around 8 million cars produced.[6] Production strategies of internationalizing Japanese car complexes aimed at producing *local for local* markets. The more production value firms

[6] Around the mid-1990s, the Japanese production system was assessed to perform at around 50% degrees below capacity. Due to the appreciation of the Yen against the dollar in the 1980s and early 1990s, Japanese producers had a strong incentive to relocate part of their production. The Yen has started to depreciate recently, which leads to the expectation with industry experts that the Japanese producers will again try to raise the volume of exports from Japan to the rest of the world, thereby filling their undercapacity.

located in host countries, the more captive suppliers followed in order to (re)create the same closed network structure locally. These companies have not planned any substantial volume *re*importation into there country of origin. We have called this a *globalization strategy*. In the analytical framework of this research project, this strategy comes close to - but is not the same as - the "Outward Processing" and "Branch Plant Production" strategy.

Firms that are confronted with more independent suppliers and/or other more influential actors like strong trade unions in their domestic car complexes, tend to search for internationalization *inter alia* to contain the influence of these actors at home. Firms opting for direct control in vertically integrated networks (Fordism) have tried to profit from the advantages linked to an international division of labor, based on wage differentials for instance. Carriers of the Fordist production mode like General Motors and Ford in particular have been actively searching for these international labor divisions and have been trying to spread production and supply through multiple-sourcing agreements over more countries and regions. We have dubbed this a *globalization strategy*: firms try to develop an international *company-internal* division of labor. Car firms that invested in regional production networks even aimed at *re-importing* substantial volumes of finished cars back into the home markets. The (threat of) reimportations puts the domestic bargaining arena under pressure: local suppliers might have to compete with foreign suppliers at lower prices, firms can ask trade unions to lower their wage claims, and increase their flexibility.

For some core firms the domestic effects of the internationalization strategy might create bigger profits, than the direct efficiencies gained through for instance hiring lower waged workers in offshore production plants. The investment projects of the American producers in Canada and Mexico, and the investment projects of the French car producers in Spain and Belgium have had this function in the past. The networks of these firms exploit local specialization patterns throughout the region in which the production network is located.[7]

[7] The internationalization strategy of Fordist firms resembles the "Cross National Production Network" type as formulated in the framework of this research project. However, the specification of these CPNs as consisting of functions that can be contracted out to "independent" producers "wherever thos companies are located in the global economy" (cf. Sturgeon, 1996) is an elaboration of cross national production networks that does not seem particularly useful for the car industry. In the car industry, the most common International Production Network structures are (with some modifications for their exact content): Outward Processing, Branch Plants and Cross National Production Networks. "Contract Factories" and "Turnkey production Network Services" are not very common in car production.

Degrees of internationalization and local content

Four specific internationalization strategies are normally distinguished in the car industry -- each containing an increasing degree of "local content":

- exports of complete cars;
- exports and local assembly of cars that are slightly disassembled (Semi Knocked Down or SKD);
- substantial local assembly of cars (Completely Knocked Down or CKD);
- integrated local manufacturing (sometimes referred to as *Built-up* manufacturing).

The first two strategies are primarily aimed at serving the local market, leaving the home car complex relatively untouched. The latter two strategies often function in an international division of labor strategy and can serve as a first step towards re-importation intended to influence the bargaining relations in the car complex at home. In case firms export complete cars to another country the degree of local integration of the network is zero. In case of complete and integrated manufacturing (*Built-up*), a car firm wants to locate production as well as supply in the country it is investing in.

Due to a variety of trade policy measures in recipient countries, very often non- or partially assembled cars are shipped. They are intended to be assembled locally, in the words of the industry: they are *Knocked Down*. In case they are only shipped in a large number of parts, they are called Completely Knocked Down (CKD), in case they are shipped in a relatively small number of sub-assemblies they are called Semi Knocked Down (SKD). In the case of CKD, local assembly activities are much more substantial than with SKD. The nature of the local assembly process is important because many governments use "local content" regulation to decide whether a producers can be considered "local" or not. It is assumed that when the local content of a car assembly factory amounts to not more than approximately forty percent, hardly any local components (in value terms) are produced. Different methods of measuring "local content" exist in the United States and Europe. The US uses a method in which direct production cost are accounted, whereas the European Commission uses a deduction method, starting from the end-products price (see CCFA, 1995: 5, for a good summary). The American method is stricter and in general leads to lower official degrees of local content for comparable production processes. Thus in case the European Union uses a provision of sixty percent local content for producers to be considered "European" (which it does) this is easier to comply to than in case the American government issues a comparable provision.

Actual patterns of internationalization

Tables 1, 5-6 also contained a characterization of the internationalization strategies of the twenty production networks distinguished in this study. In the mid-1990s only a few core firms in the car industry had really spread integrated production over the three Triad regions. Only the Japanese producers Toyota and Nissan (and to a much lesser extent Honda and Mitsubishi) produced substantial volumes of cars in Europe, the United States as well as Japan. Their strategies were based on exports (as long as possible) and local for local production. Only Honda aimed at re-importations towards the Japanese market. This strategic stance illustrates the relatively weak position of Honda in the Japanese bargaining environment - making it the *vertical keiretsu* with the lowest degree of "vertical integration" and the most open production and distribution networks in the local market. Of the relatively small volume of cars that are exported from the United States to Japan, in 1996 Honda-US delivers the largest part, making it the leading exporter as well as re-importer of cars from the US to Japan.

European volume producers on the other hand (FIAT, PSA, Renault and Volkswagen) still have the bulk of their production networks located in Europe. They aim at a regional division of labor, complemented with exports to the rest of the world. Only in South America have they located substantial production facilities. Most of these production facilities house SKD assembly activities for local markets. Only Fiat aims at reimportations towards the Italian home market from these peripheral production sites. The European luxury producers Mercedes-Benz and BMW have largely maintained a *domestic* production base, while serving world markets through exports. In 1992 and 1993 BMW and Mercedes started to locate production of around ten percent of their production volume in the United States - their most prominent market. This strategy may seem a major departure from their previous export strategy, but is largely complementary to their previous strategies. BMW and Mercedes are pressing their suppliers to locate component manufacture near their US factories, which would increase the local content as well as reproduce the so successful supply structure of Germany in the United States. BMW and Mercedes thus largely follow the globalization strategy of Toyota and Nissan. Other relocation activities are not really envisaged, certainly not towards marginal markets.

Ford and General Motors have been the American core companies that have been furthest in forging an international division of labor - thereby exploring the most proliferated edges of the

globalization trajectory. In the mid 1990s, however, they practically operated only in two regions: the United States and Europe. In these two regions Ford and GM located semi-independent vertically integrated production structures, while SKD and CKD assembly operations still prevail in other important (but protected) markets. In both regions the companies strive for further co-ordination of the networks. In particular Ford has been trying to build a new generation of cars (*Mondeo*) on the basis of a labor division between the US and Europe. In Europe, the co-ordination of the Cross National Production Networks spread over the UK, Belgium and Germany in particular, has gradually moved from the UK to Germany. As Figure 1 illustrates, the network of General Motors in the United States can be considered more vertically integrated and closed than the network of GM in Europe with Opel in Germany and Vauxhall in the UK as the most important subsidiaries. The European network is looser. In the case of Ford the difference between the American and the European network are less clear. Ford Europe produces in different countries throughout Europe though, which tend to weaken the cohesion and closeness of its production networks. This makes the continued efforts of Ford understandable to increase co-ordination, for instance in its Ford 2000 programme, which should increase the degree of central co-ordination on a more worldwide level. Europe is supposed to become less independent. Whether this strategy will work, still remains to be seen.

3. The rush to the East: network formation in Central and Eastern Europe

The internationalization strategies of the car assemblers towards Central and Eastern Europe basically follow the same network logic as they did in the past in other regions. Following the events of 1989, all car manufacturers were obviously interested in Central and Eastern Europe. The opening up of the CEEC region could solve part of their overcapacity problem and presented a potential market. This section documents the networks that have developed on the basis of rival investment strategies. It distinguishes between four different strategic groups and motives: frontrunners (3.1), latecomers (3.2), peripheral players (3.3), and voluntary locked-out players (3.4). The strategies developed by each group of players had distinct *origins* in the domestic car complexes. These characteristics also lead to comparable properties of the cross-national production networks, including the supplier networks evolving and the local content related to that (3.5). Moreover the entry strategies had distinct

consequences for the distribution structure and the degrees of market penetration as well (3.6). By choosing a rapid entry strategy car firms were able to "create" markets for themselves.

3.1 Frontrunner networks: Volkswagen, General Motors, Fiat, and Renault

In two years' time, around ninety percent of the production capacity of Central and Eastern European producers was acquired by only four western car producers. As table 7 shows, Volkswagen (1991), General Motors/Opel (1991), Fiat (1992) and - to a lesser extent - Renault (1991) actively led the Western carmakers into Central and Eastern Europe. Many of these moves were based on long-established historical ties. Fiat had worked closely with the Soviets and the Poles since 1966, GM-Europe had some thirty years experience in the Hungarian market. To German-based companies, the eastern part of Germany has been a logical objective. Renault had been co-operating with local producer IMV (Industrije Motronih Vozil) in Slovenia since 1972. Rushing in was necessary, however, because for every take over prey there were many contenders.

These four producers share a number of domestic network characteristics (see Figure 1):

- they belong to vertically integrated and relatively closed networks;
- they are European car producers or a relatively independent subsidiary of a US producer (Opel);
- they produce for the volume car segment and aim at the maximization of their market-share;
- at least three had the closest possible links with their own government (Renault and Volkswagen due to direct state ownership, Fiat due to its monopolist position in Italy, even Opel can be considered to have close links with the German government).

Aiming at maximum market share, while confronted with considerable overcapacity, prompted these firms to adopt a rapid entry strategy in the CEEC region. The fear of loosing out possibilities in a new region, hits particularly hard on firms that compete primarily in the volume car segment. Table 7 gives a more detailed overview of the implemented strategies. The Volkswagen group and Fiat adopted a rapid and rather aggressive take-over strategy. Opel/General Motors was quick, but generally more hesitant than either of the leading European car complexes. Renault took a quick stake in the CEEC car complex, but primarily to pick a lucrative piece of a producer located in a relatively marginal part of the CEEC region.

Table 7 Frontrunner networks

Assembler	Local Partner	Country	Investment	Nature of Investment	Strategic Aims	Planned Prod. Per Year
VW	AZNP (Skoda)	Czech Rep., Slovakia	DM3.7bn	VW built up 70% interest (end 1995)	New assembly plant; second car range; production of engines to be used by a.o. SEAT; production for exports and local market; lower dependence on domestic market; Octavia production e.g. is 80% earmarked for sale in W.Europe.	350,000 units by 1997
	IFA	Eastern Germany (Mosel)	DM3 bn (1/3 state subsidies)	new plant	production of VW Polos for sales in Europe	250,000 units
	IFA (AW Chemnitz)	Eastern Germany (Chemnitz)	U$ 363 mn	acquisition	production of Polos for sales throughout Europe	100,000 units
	Volkswagen	Poland (Poznan)	N.A.	24% share, established in 1993	assembly for local market (e.g. Skoda Favorit/Felicia car)	depends on local demand
	Volkswagen Bratislava	Slovakia	DM 900 m	80% VW ownership (20% BAZ) (1991)	Assembly Passat cars; planning to assemble Golfs as well; production of gearboxes	6,000 units in 1994; 20,000 in 1995 30,000 planned already for 1993; gearboxes

						planned 1300 per day
	Audi Hungaria	Hungary (Györ)	DM 800 m	new plants	• production of new engines • in 1998 assembly of Coupe and Roadster cars	• capability: 750 engines per day • planned: 30,000 units
	AvtoRosija	Russia (Smolensk)	N.A.	two joint ventures	assembly Felicias and perhaps Octavias (Skoda)	planned: 10,000 units in 1997
General Motors-Europe	none	Poland (Gliwice)	DM470 million	new plant	integrated car and component production; reengineered, low cost version of Opel/Vauxhall Astra small family car for the local market	70,000-100,000 units (lateron: 200,000); operational by 1998
	FSO	Poland (Warsaw)	DM 100m in 1994 + DM 50m in 1995	GM's alliance with FSO blocked in 1995 due to take-over by Daewoo	SKD assembly of Opel Astra cars; input from Opel factories in Belgium and Germany. After 1995 expanding local content. No exports to EU planned.	18,000 units raised after 1995 to 35,000 units
	AW Eisenach	Eastern Germany (Wartburg)	US$ 600mn (DM1 bn)	acquisition	prod. of Opel Astras, Corsas and Vectras for	150,000 units by 1993

					the European market	
	RABA	Hungary (Szentgotthárd)	US$200 mn	Opel 67% of equity, RABA 33%; in 1995: complete take-over of RABA share	since 1990: small car assembly plant for Astras for local market; also engine and component plant; of 1994 production, 20% were exports.	realised 12,000 units; planned 400,000 units; realised 160,000 engines, planned 200,000 engines
	Yelaz	Russia, Tatarstan (Yelabuga)	U$ 250 m	joint venture (25% GM, 75% Yelaz)	1997: assembly of all-terrain Chevrolet Blazers for the local market	capacity of 50,000 units
Fiat	FSM	Poland (Bielsko Biala; Tychy)	US$800 mn. + US$ 630 mn. (Fiat 500); total investment plans: $2bn	in 1992 Fiat bought 90% of FSM.	Production of Fiat 126p, 500 and Uno. 126p and Uno are for local sale; 500 is also (predominantly) aimed at exports towards Italy, Germany, Spain and the UK: (62.5% exports in 1992; 56% in 1996). Building the A178 world car as a successor to the 500.	1992: 160,000; 1993: 220,000 units; 1994: 249,000 (190,000 *Cinquecento*) ultimately: 350,000
	VAZ	Russia	N.A.	30% interest	Assembly of new model	300,000 units

	Zastava Automobili	Serbia	N.A.	Zastava builds cars with the technology of Fiat. Half of the "social capital" of the company is payed to Fiat)	Local assembly for local market, distribution channel for Fiat cars. Unknown due to war and international boycot of Serbia.	production declined from around 70,000 units in 1991 to appr. 7,000 units in 1994
Renault	IMV	Slovenia (Novo Mesto)	more than U$ 75 m	Based on existing coope-ration; since 1991 Renault has a 54% stake in company (Revoz); rest in hands of State and Ljubljanska Bank	Assembly of Renault 4, Renault 5 and since 1993 the Clio; over 70% for export to Western Europe; in 1996, more than 85% of production primarily to France and Italy	75,000 units (1991), 74,000 in 1994, capacity of 100,000 installed.

Source: Press clippings, TIE Europe Auto Working Group, Economist Intelligence Unit Reports, databases, CCFA (1995)

Volkswagen's aggressive take-over strategy

Volkswagen's first implemented objective was to modernize the car industry in the eastern part of Germany, in cooperation with IFA Kombinat Personenkraftwagen. In the early 1990s, it aimed to build a new and fully integrated DM3 billion assembly plant in Mosel with a capacity to produce 250,000 VW Polos a year. VW also bought an engine plant at Chemnitz (to produce another 100,000 Polos and 420,000 car engines a year), and started to produce electronic components in the former German Democratic Republic. By the end of 1990, VW's total investment in the eastern part of Germany had already been estimated at some DM5 billion (FT, Dec. 11, 1990).

Next, Volkswagen targeted Skoda of the Czech Republic to become part of its own car complex in much the same manner as it in the past had been taken over other producers like Audi and Seat. The investment in the Czech Republic has been more limited than in Eastern Germany,

the effect on the Czech car industry, however, more profound. In the strategy of Volkswagen Skoda should aim at new lower end markets in Latin America and South East Asia in order to reduce the dependence on the home market. The Volkswagen group gradually built up its equity share in Skoda to 70 per cent by the end of 1995. VW runs Skoda as an "independent" part of the VW group, meaning that it is expanding Skoda's existing dealer network in Europe, and that it has no plans to build VW cars using Skoda facilities.

Volkswagen can be labeled as a global player stuck to its own regional market. In the first half of the 1990s, VW has tried to integrate Central and Eastern European countries into its regional division of labor in the following ways: acquisition of existing production facilities along with the establishment of new plants; maintain plants and brand names with relatively modern production facilities and reputation; maintain competition between the different brands; use older sites as assembly plants for existing models such as the VW Polo, and transform outdated sites into component plants; integrate such transformed component plants in the international supply network and use at least part of the production for re-imports; take over most of the existing workforce as "part and parcel" of the acquisition; use the same platforms as for other cars in the lower end. The Skoda Favorit has been built on a car platform that has also been used for the Seat Ibiza and the VW Polo. The latter has been part of Volkswagen's general strategy to reduce the number of platforms for passenger cars from sixteen to six. By the midst of the 1990s, most of these strategic aims where more or less accomplished.

Fiat: Poland as production site for its Cinquencento and world car

Fiat, heavily depending on its home market, has exploited its existing ties with Central and Eastern Europe to attempt to reverse its sliding position in Europe. Before the changes of the late 1980s, more than half of the two million cars produced in Central and Eastern Europe (incl. the Soviet Union) were Fiat derivatives. To Fiat, Central and Eastern Europe serves as a cheap labor base, which may help it overcome the consequences of the integration of the European (car) market and the gradual elimination of the Japanese Voluntary Export Restraints.

Fiat has particularly built up a strong position in Poland, where it produces around half of the total domestic production, and has a 50 per cent local market share. Since 1992, Fiat has produced the new Fiat 500 in Poland. This compact model replaced the Fiat 126, produced in Poland only since 1981. A large part of production output is exported back to Western Europe.

Exports in 1996 from Poland totaled about 200,000. 85% of these cars were Fiat's Cinquecento's. In fact, Fiat sought Polish government backing for a more far-reaching plan to modernize the entire Polish car industry. Fiat proposed to create a holding company combining both FSM and FSO, in which Fiat would act as "strategic investor". In this way, Fiat hoped to dominate the modernization of the car industries in Poland, as well as the former Soviet Union and former Yugoslavia. However, these plans have not materialized: the Polish government decided that such domination of the domestic car industry was not desirable and only allowed Fiat to take a 51 per cent share of FSM (Financial Times, October 12, 1991).

Fiat now uses the FSM factory in its "world car" strategy. Fiat Poland will produce, along with factories in Brazil, Turkey, India and Morocco, the Palio. The "world car" programme is Fiat's plan to reduce its dependence on car production in Italy.

Opel/General Motors: quick, but more hesitant entry

Through its Opel subsidiary, *General Motors-Europe* has hardly been less energetic than VW or Fiat in trying to expand into Eastern Europe. Especially in the eastern part of Germany. Opel acquired the AW Wartburg to produce the Opel Corsa and Vectra models. GM-Europe's strategy towards Central and Eastern Europe is based on a mixture of acquisitions and greenfield investments, a long tradition in GM's expansion in Europe. GM's Central and Eastern European activities are based on and coordinated by Opel. But compared to VW, GM's plans are less focused. In the case of Poland GM has been willing to engage into years of bargaining and playing-off local and national governments to take over an existing FSO plant. GM's tactics turned sour when a more committed player like the Korean Daewoo came to the Polish fore. The irritation of the Polish government with the hesitant tactics of GM probably played as much a role as the willingness of Daewoo to enter into the country. Instead GM decided to build a new US$340 million car plant near Katowice, indicative of the seriousness with which the company tries to play its CEEC card and establish a regional division of labor. GM uses facilities with reasonable potential for car assembly, while transforming older sites into component plants and integrating them in GM's global supply network. Consequently, the European investment strategy laid the groundwork for a more substantial restructuring strategy of the whole European organization of General Motors starting in 1998. As a result there is a shift of certain low-end cars and expensive components (primarily provided for by German and British producers),

towards Central and Eastern Europe. The CEEC countries thus already function prominently in GM's European restructuring strategy.

Renault: a special 'frontrunner'

Traditionally, French activities in Central and Eastern Europe were largely limited to the Balkan countries. In former Yugoslavia, Renault made a relatively modest investment to start the assembly of the R5 and the R21 models. Over 70 per cent of the output was to be exported back to Western Europe. The two Rumanian car companies, Dacia and Oltcit, maintained long relations with Renault and Citroën (36 per cent of equity) respectively. In Bulgaria, Renault and Balkancar had a co-operation until 1970. Talks have been conducted to resume this Cooperation and start production of 120,000 units, yet these talks have been without success.

All volume producers were bidding for participation in Central European car producers by the start of the 1990s. Renault's attempted take-over of Skoda in 1990/1991 failed. Renault's interest in Skoda suggests that Renault too was thinking of using Central and Eastern Europe as a complementary assembling base and a way of putting the own domestic bargaining arena under pressure. After the bid failed, Renault did continue to explore partnerships or acquisitions in the region. In this process, state-controlled Renault may have been encouraged by the French government to establish contacts with Eastern Europe. In 1990, Renault still assumed its alliance with Volvo would render it both scale and scope advantages; when the alliance collapsed Renault had to shift attention to its existing production base first.

Renault in Slovenia co-operated with local producer IMV (Industrije Motronih Vozil) since 1972, finally resulting in a joint venture (Revoz) for production and commercialization of Renault cars in Slovenia. In 1991 Renault turned this partnership into a majority ownership (54%), while the remainder of the stocks is owned by the Ljubljanksa Bank and the Slovenia State. The company assembled the Renault 4 (until 1992), Renault 5 and the Clio (starting in 1993). The production facility includes stamping (emboutisage), forging (ferrage), painting, surface treatment and final assembly. The whole production of Slovenia of passenger cars is in the hands of Renault. Most of the production is exported, while the country also has a substantial import penetration. The targeted markets for exports are Italy and France (in 1996 more than 85% of production went there). Much more than in the case of VW and Fiat, Renault's re-importantions from its Slovenian production site were intended to substitute for domestic

production. Like GM, therefore, Renault is more rapidly restructuring its Western European production sites - thereby aided by its CEEC strategy. In 1997, Renault closed an important production site in Belgium (Vilvoorde) for instance to the benefit of *inter alia* its production site in Slovenia.

Generalizations on frontrunners

At the early 1990s, all frontrunner firms were amongst the most vertically integrated (Fordist) firms in Europe. In most cases, historical bonds existed already between the Western and Eastern European producers, who facilitated the bargaining process. The alliance strategy thus materialized amongst strategic equals: most CEEC firms have been extremely vertically integrated. In the Czech automotive industry for instance around 65% of all components and materials were produced in-house in the 1980s (Czechinvest, 1995: 5).

Additionally, the frontrunner companies acted in conjunction with efforts of the national governments of Germany, Italy and France. Eastern Germany has been targeted by the Western German volume car producers (including Opel AG) in close consultation (and financially backed) with the Federal German government. No other non-German firms were capable of acquiring a part in the former DDR car industry. The Eastern and Western German car complexes became effectively integrated. The involvement of the governments of the largest Western-European states has been considerable in the first phase of entry. Negotiations on joint ventures or acquisitions involved not only the respective car maker and the Central and Eastern European authorities, but also the Western European governments of the country where the carmaker originated. Even though the investments in Central and Eastern Europe are based primarily on firm-specific strategic considerations, governments in Germany (regarding the eastern part of Germany), Italy (regarding Catholic Poland) and in France (with regard to Renault's failed bid for Skoda, but successful bid for IMV in Slovenia) have supported these investment plans for a variety of political and social reasons, such as the wish to promote stability in this part of Europe. The Italian government has been actively involved in Fiat's expansion to Eastern Europe. The Italian State Export Credit Insurance Agency covered the risks of revenue loss due to political events and actions by Polish authorities that could limit FSM production or block exports.

The frontrunner strategy also necessitated acquiring controlling stakes in the CEEC firms in order to lockout other contenders. No big Greenfield investments were planned other than after misconstrued take-over bids. Minority ownership by the local governments was not opposed. On the contrary, the minority ownership positions of local governments also increased the commitment of the local governments to comply with the strategies of the core firms. Thereby recreating part of the bargaining environment in the home base.

All frontrunner firms aimed at the local market as well as at reimportations back into Western Europe. A *segmentation* of production inside Europe became envisaged, in which the Eastern European part of the network produces the lower end of the models. So Fiat builds its *Cinquecento* - Fiat's smallest car - only in Poland for the whole (European) market, whereas Volkswagen builds its *Skoda* cars only in the Czech Republic for exports to the West. Volkswagen is developing a second range of models to be introduced at the end of 1997, which will bring its production capacity to around 350,000 cars around the year 2000. This is a comparable production capacity as Fiat is planning in its Polish facilities. GM planned to develop and produce a new range of low-cost, small cars in Central Europe - smaller than its Opel Corsa supermini, which is its smallest car at the moment (Havas, 1996: 6).

All four producers attached important value to their first production site. The site - and therefore the country - is planned by most to become the co-ordination point for their Central and Eastern Europe strategy: coordinating ramparts into the home country, sourcing strategies in the region and the like. These markets also represent their most important outlet in the CEEC region. Sales of Renault in the CEEC region are for one third located in the tiny market of Slovenia. Poland is the largest market for Fiat and Opel, the Czech Republic for Volkswagen. Other markets are in lower tiered position.

The eagerness to move in first in the CEEC region can be understood to stem from a desire to influence the local bargaining arena. This was in particular the case for the German car producers that have been confronted with relatively high wages and relatively strong component suppliers. In Germany the VDA, the united car manufacturers, complain for more than two decades about the high wages, which they consider to lower the competitiveness of the industry. This complaint has been equally relevant for the German component suppliers that are leading in Europe. The frontrunner companies (assemblers as well as suppliers) in particular from Germany

are more explicit in making clear that they intend to use their Central and Eastern European production sites in a reshuffling of attention and investments in their whole European operations.

The least a firm has been embedded in the local car complex in western Europe, the more blunt and overt this argument tends to be used. Consequently, General Motors seems to have gone furthest of all four frontrunner firms in its desire to use its CEEC strategy in order to influence the traditional industrial complexes it operates in. GM has been the first "European" producer to explicitly integrate its European strategy. In 1998 GM announced that it will shed of twenty to thirty percent of its European employment (80,000 employees in total) and production capacity. The countries most affected by this strategy are in western Europe (in particular Germany, but also in Spain and the UK), whereas the (greenfield) production sites built in Poland and Hungary will expand and are supposed to built newer generations of the Astra, Vectra and Corsa cars. The cars produced by the GM factories in Central and Eastern Europe thus are also intended to *substitute* for some of the car models produced in Western Europe. Frontrunner producers Fiat and Volkswagen in particular have targeted Central and Eastern Europe more as a *complement* to their existing product range. The effect of imports from these cars on the Western European production system therefore, will remain more limited. With these volume producers, bigger effects on the domestic bargaining relations can be expected from the relocation of component production towards the CEEC region.[8]

3.2. Follower networks: PSA, Ford

The two remaining European volume producers, Ford-Europe and PSA, did not join the bandwagon of the frontrunner firms. PSA wanted to, but could not develop enough bargaining cloud to come to successful acquisitions. Ford-Europe on the other hand did not want to engage in large-scale acquisitions. Both firms tend to be slightly less "vertically integrated" than the other European mass producers, while their networks tend to be more open than those of the frontrunner companies (Figure 1) are. More importantly, however, both firms have less close

[8] It is interesting to note that the most prominent front-runners in Eastern-Europe were also the most profitable "European" players in 1996: Volkwagen increased its sales with 14 percent (DM 100 billion) and doubled its 1995 profits to DM 678 million. GM-Europe (Opel, Vauxhall) earned a profit of U$ 1 billion in 1996, whereas Fiat was profitable (although at a low profit margin of 0.5% of sales) but lacked behind slightly (Intermediair, 24 April 1997). Whether this is cause or consequence remains to be seen. There are indications that the operations in the CEEC countries themselves have not been very profitable. It could be postulated that the profit margins in western Europe have grown, because of the threat of further relocation to the East, making workers, suppliers, financiers and government more open for concessions towards the company management.

relationships with the governments of their "home" country, making their entry strategies least backed by committed governments, lowering their vigor and bargaining leverage as compared to the frontrunners.

Table 8 Follower production networks in Central and Eastern Europe

Assembler	Local Partner	Country	Investment	Nature of Investment	Strategic Aims	Prod. Per Year
Ford	Lada OMC	Belarus	N.A.	Ford takes 51%; Lada OMC 23%; state 26%	Assembly; over 70% of parts to be produced in Belarus	5,000 - 10,000 Escorts, Transits
	none	Poland (Plonsk)	• U$ 50m	• greenfield	• assembly of Escorts Saloons, Mondeos and transits components imported from Germany, UK, Belgium (originally planned as a production site for seat covers)	• 10,000 initially, to be raised to 30,000 units after 1997
	none	Hungary	$52 mn	1990 greenfield, wholy owned	production of electrical parts for supply to Ford assembly plants in Europe and South America	
	Autopal	Czech Republic	N.A.	acquisition	production of lighting and airconditioning components	N.A.
	Namko	Bulgaria	N.A.	local consortium	assembly of Ford Pony for the local market (originally produced in Greece)	5,200 units in 1995, planned: 50,000 units
PSA	FSL	Poland (Lublin)	UK £ 36 m	joint venture, % N.A.; abandoned	assembly of 405	1,600 units in 1994, 10,000 planned for 1996
	FSO	Poland (Nyse)	N.A.	1994 agreement	assembly (SKD) of C15	1,200 units annually

	Dacia	Romania	N.A.	negotiating a joint venture	assembly of Peugeot 306	

Source: Press clippings, Economist Intelligence Unit Reports, databases, CCFA, Ward's Automotive

Ford: greenfield investments and limited assembly operations

Compared to GM-Europe, Ford of Europe has paid only limited attention to Central and Eastern Europe. So far, Ford has announced to set up some smaller scale assembly operations in Belarus, and components operations in countries such as Hungary, the Czech Republic and Poland. A number of specific reasons may account for Ford's lower level of activities. Ford has its largest European operations in Germany, but is less embedded in the German economy than Opel. Opel is generally considered as a "German" company - also by the German government. Opel is better equipped and has more autonomy *vis-à-vis* GM-US in planning its Central and Eastern European strategy than Ford. In addition, and perhaps more important, Ford's growth traditionally has been more inward-driven and less based on acquisitions than GM's. The quickest way possible into the CEEC region has clearly been through acquisitions, which has never been preferred by the company. Instead Ford has always had a preference for setting up greenfield sites, which it is also applying in the CEEC region. Its strategy of gradual entrance aimed at conquering local markets for the moment has limited its market presence (see 3.6). At the same time of the opening of the CEEC market, Ford was engaged in its Ford 2000 restructuring strategy. In case Ford was interested in a regional division of labor (section 2.3), this was to develop between the United States and Western Europe, not necessarily (yet) within the European continent. By the beginning of the 1990s, Ford's strategic priorities clearly lied somewhere else.

PSA: weak entry and retreat due to weaker bargaining position

PSA - like Renault - has historically been involved in the Balkan economies through purchases, licences and joint production agreements. In the past, PSA purchased most of the Oltcit output and sold these cars on the French market. Like Renault, PSA, has been trying to acquire its way into the Central and Eastern European countries. It unsuccessfully tried to acquire Skoda. Other unsuccessful discussions have been held between Citroen and the Hungarian company Videton on the production by Videton of 300,000 gearboxes for commercial vehicles (Nestorovich, 1990), and between the Soviet company GAZ and PSA on the production

of the 306 car. PSA and FSO in Poland were talking on a joint venture, which since 1995 was intended to assemble on the basis of SKD, the C15 car in Poland. Likewise FSL in Poland was assembling the Peugeot 405. Both activities got under pressure after the take-over of FSL and FSO by Daewoo. The distribution agreement with FSO has remained very unclear, whereas the assembly agreement (including the assembly line) with FSL was terminated in 1995 (FT, 26/3/1997).

Investments in components plants by PSA (and Renault) in the CEEC region have additionally remained limited. Since the French component-making sector is not as competitive and internationalized as the German, Renault and PSA may find that the lack of reliable components poses a serious problem to be tackled first. Another problem the French car makers have to face when engaging into Eastern European ventures, is that these ventures could endanger the already unstable productivity coalition with organized labor at home.

Generalizations on followers

Follower producers have been much more modest in their approach to Central and Eastern Europe. The planned production volume in the CEEC region has been substantially lower than for any of the frontrunner companies. Retreat and entry strategies have developed parallel to each other, which illustrates the more incremental nature of the internationalization strategies of these firms - indicative also of the lower importance attached to a substantial presence (especially in production) in the CEEC region. In the country they located production in, the followers share the following characteristics:

- local 'production' involved mostly SKD, on the basis of re-engineered low end cars from the existing portfolio;
- they have been much more interested in greenfield site investments;
- they only located relatively small assembly volumes (10,000 units or less) that require much smaller investment volumes;
- no regional division of labor between western Europe and eastern-Europe is envisaged nor needed for this particular kind of local assembly;
- they primarily aim at the local market and do not aim at large volume re-importations towards western Europe;
- for political reasons, therefore, they need not worry much about a low level of local content;
- the SKD nature of the assembly operations includes the imports of subassemblies from their more important production sites in the rest of Europe; no real pressure develops for captive suppliers to locate in the host country.

The latecomers looked primarily at the region as a market and have not been prepared or capable to make a credible bid for some of the bigger companies left in the East. Because of the market-oriented nature of the investments, most of the plants by the latecomer producers are of SKD nature. The proliferation of their production networks into Central and Eastern Europe has remained limited and the impact of the decision to "go east" on the domestic bargaining relations, therefore, has remained rather limited as well. It can be expected that as soon as the tariff barriers with the European Union will become zero (around 2002), these facilities will be wound down (Cf. Automotive Monitor, February 1997:15). Latecomers will be less interested in setting up local production networks, which makes them less interesting to attract for the CEEC countries that aim at setting up an own car (component) industry.

3.3 Peripheral networks: entering Western Europe through the backdoor

In case a core firm is not part of the existing complexes, an entry strategy through the 'front-door' is extremely difficult and costly. None of the Japanese core producers entered the European Community by locating important production facilities in the strong continental car complexes of Italy, France or Germany (see section 2.3). The Western European car market remains surrounded by direct and indirect trade barriers. Tariffs, quota as well as single franchise dealer structures create a large number of (institutional) barriers to entry. The opening up of the CEEC region as well as the prospect of a free trade agreement - and ultimately economic integration - between the European Union and some of the CEEC countries, however, inspired many of the peripheral firms to try to enter through the 'backdoor'. PSA (in Rumania, and in Poland) and even GM/Opel (in Poland, and Russia) thus got outpaced by more adventurous new entrants from Asia. Suzuki and Daewoo targeted Central and Eastern Europe as a production site to overcome European trade barriers and enter the western European market. In particular South-Korean Daewoo is considered by many observant to be the real 'new' element in European cross border production networks. The speculation is that they might even change the rules of the game in the European car system because of the size of their announced investments and the vigor of the bargaining strategy. It is worthwhile, therefore, to analyze the logic of their investment strategies in more detail.

The newly entering car producers share an interesting common feature: they belong to relatively 'weak' and open car complexes in their home countries (Figure 1). Only since 1992 is

Daewoo capable of exporting cars. The 1992 dissolution of a joint venture with GM freed it from GM-imposed restrictions to export cars under its own badge. The firm nevertheless remains relatively weak. In 1995 Daewoo had an 18% market share in South Korea whereas Hyundai had 52% and Kia 26%. Daewoo lacks the real cash to invest in core regions. Over the 1991-1994 period Daewoo lost approximately U$ 460 million on its car producing activities. Suzuki is still 15% owned by General Motors - according to January 1996 figures. In Japan it is compared to Toyota a relatively small producer of mainly compact cars - yet independent of the larger Japanese players.

Although Suzuki and Daewoo originate from different bargaining environments, they nevertheless share a number of vital network characteristics in their home base. Firstly, they are amongst the weaker players in the home base; this gives them an extra incentive to go abroad in order to escape the relatively inimical domestic bargaining environment. Secondly, they are medium-horizontally integrated (Isuzu in the DKB group, while Daewoo is a horizontal group itself) and share relatively open networks with suppliers from other car complexes; which makes it less problematic for them to "plug into" the networks of others when they move abroad. Finally, they are (or until recently have been) partly owned by other car complexes, making it difficult to enter the core complexes of their (minority) owners.

These common characteristics explain why Suzuki and Daewoo share a number of internationalization strategies, why they did not try to enter the core of the Western European car complexes (and their suppliers, governments and trade unions), but sought to approach Western Europe 'through the backdoor'.

Suzuki: slow and contemplated entrance

Suzuki started to negotiate setting up a production site in Hungary already in 1985. Suzuki hoped to use Hungary both as a cheap production base and as a springboard to Western and Central and Eastern European markets. Suzuki acquired first a 40 per cent stake in Magyar Suzuki, which consecutively became increase to 49.9%. Itochu, the Japanese trading house and nucleus of the DKB group to which also truck producer Isuzu belongs, had an 11 per cent share in the new venture, giving the Japanese a controlling 51 per cent of equity. Autokonszern, a Hungarian consortium, had taken another 40 per cent share. This consortium is made up of local part suppliers (Financial Times, April 25, 1991). The objective to implicate local partners is

obvious: Suzuki had to create a supplier base almost from scratch. In 1996 Suzuki acquired some of the shares held by Autokonszern, which finally gave it a more controlling share of 77.7 percent. This strategic move also gives Suzuki more structural control over its suppliers.

One important reason for Suzuki to establish in Hungary was that it has a better bargaining position *vis-à-vis* the Hungarian government. Still, the negotiations between Suzuki and the Hungarian authorities lasted almost *six* years. Parallel to these negotiations Suzuki bargained with the governments of other peripheral car complexes: unsuccessfully with the Austrian government and successfully with the Spanish government (the production of 31,000 cars started in 1993). Bargaining with a relatively weak government does not always facilitate clear decision making procedures, though. One of the negotiated points with the Hungarian government was that Suzuki demanded a ten-year tax holiday. In 1990, a deal was struck and cancelled again. Finally, this tax holiday has supposedly not been granted to Suzuki, but local government support has remained a clear incentive for the Japanese producer.[9]

Daewoo: rapid and risky entrance

During the 1990s, Daewoo caught most attention of the media by embarking upon a very ambitious production and distribution expansion plan in Europe. The investments in Eastern Europe are part of a plan to quadruple Daewoo's worldwide car production to two million by the year 2000. In 1995 FSL the trailing Polish car producer - reportedly operating only at 1/3 of its capacity - became confronted with two actors wanting to acquire a majority stakeholding: Sobieslaw Zasada Centrum and Daewoo Motor. SZC had links with Mercedes-Benz. In January 1995 - in the middle of FSL's own restructuring period - a team of experts of Daewoo appeared (triggered by a visit of the Polish industry minister to Korea). They stated that they wanted to invest $ 400 million in FSL and promised to continue the plant's existing range of vehicles, plus adding a new passenger car (EIU, 2nd quarter 1995: 66). This deal would supplant a deal with Peugeot for which FSL assembled the 405 type cars (in 1994, 1600 units were assembled) for the local market. Daewoo promised the Polish government that it will launch its most recent models in Poland. Daewoo also offered U$ 1.1 billion, whereas GM was only prepared to offer U$ 340 million. The functionality of FSO for Daewoo in its production strategy is much clearer, while

[9] At the same time Toyota-controlled Daihatsu attempted to make a deal with the Polish FSO, but Daihatsu withdrew as it turned out that the Japanese government was not willing to cover the risk with Poland.

GM would be investing in overcapacity in Europe. GM had been negotiating with FSO for more than four years.

Daewoo aims at establishing a regional labor division between the various plants in the CEEC region. The company made use of the frustration of the local government with lingering negotiations with some of the big western European car producers. As the chairman and founder of the Daewoo group, Mr. Kim Woo-Choong stated, the company denounces the intentions of the other car manufacturers "whose operations suggest something not very different from an extension of former European colonialism" (FT, 8/5/1996). The Daewoo strategy is very risky not only for the firm itself, but also for the local stakeholders. Due to its limited own financial leverage, Daewoo is going public with stocks in local capital markets. This "lock-in" strategy has been particularly successful in shaping favorable trade circumstances for the Korean firm (the box gives more details). The company promised to reinvest the money earned, in order to help finance the US $5 billion the company plans to invest in total in "developing local operations" as it is called (ibid). Poland could become the location of new car models of Daewoo, *provided* the local capital market will provide the funds. It is not certain that this can be achieved. The financial crisis in Asia in 1997/98 robbed Daewoo of financial reserves, which further made the investment strategy uncertain.

Box 1: The Daewoo Story

The Daewoo story: evading local content regulation through the backdoor
The Daewoo story illustrates the typical European bargaining context in which production networks of new entrants are shaped.
The product range Daewoo targeted for local production in Europe initially were low-cost, low-tech models for low purchasing power markets. None of these cars have been Daewoo originals: the Nexia (produced at FSL) and the Espero are reskinned outdated Opels, the Tico mincar comes courtesy of Suzuki, the executive Arcadia is a rebadged, previous-generation, Honda Legend (FT, 27/6/1996). Daewoo's dominant strategy has been to export as many cars possible from its Korean production sites where it runs at overcapacity. Daewoo export oriented strategy and the European Union local contents requirements thus clashed. Daewoo adopted an incremental strategy in order to find out what was "allowed" by the European Union. The strategy chosen by Daewoo largely developed as follows. Complete Daewoo Nexia and Espero cars are shipped by sea up the Adreatic to Slovenia. "There they are dismantled into around ten (some say eight) parts. These parts are then brought by rail to Warsaw. The car is then screwed together again at FSO. This is called SKD or kit production. These cars are assembled in Poland as an intermediary product before Daewoo begins local production of its new Lanos model in 1998. Daewoo had a deal with the Polish government that these car imports would receive tariff exemption. Under 1996/97 Polish import rules, imports of cars carry a 25 percent tariff unless they are delivered in parts and assembled locally (FT, 3/2/97). In addition there are special (increasing) quota favoring the exports from Western Europe to

Poland.
At the same time, the local producers (in particular Fiat) had been enraged by the tariff exemption granted to Daewoo. Fiat - together with Opel and Ford - are assembling cars in Poland allegedly from around 1,000 parts in order to claim the tariff exemption they received earlier. Their Complete Knock Down (CKD) assembly involves must higher local content and much bigger investments in Poland. Other reports, by the way, point at the strategy of VW and Fiat taking advantage of the rules by importing cars in as few as ten pieces themselves as well (FT/26/3/1997). In 1992 the European car manufacturers had inspired the Polish government to adopt this ruling. At that time there were few complaints about unfair competition. Until Daewoo began exploiting the same rule in 1996. The difference according to the European car makers was that Daewoo was circumventing the more tough 35 percent tariff on non-EU imports. Therefore they could argue relatively "objectively" against these kind of imports in general, but focused primarily on the challenge of Daewoo (and other non-European producers).
In July 1996, EU pressure – prompted by the western European car makers – was put on Poland not to allow Daewoo to import 110,000 assembly kits (FT/17/7/1996). The Dutch EU commissioner Van den Broek engaged in the admission procedure of CEEC countries into the EU even threatened that the Daewoo exemption would hinder Polish entry into EU membership. In the end Poland (and Daewoo) gave in. But it could not abolish the exemption rules itself, because the Polish government had official pledges in writing with Volkswagen, Fiat and Opel that the rules for imports of car parts for assembly would not change until 2001 (FT, 18/2/1997). Instead the government agreed that Daewoo would have to bring in cars in more pieces, and therefore at greater cost. The Polish government has made import rules slightly more complex by insisting importers bring parts of individual vehicles in separate shipments and on different days (FT/26/3/1997). "The issue is significant for the whole EU. By establishing a Polish plant, Daewoo will have tariff-free access to EU markets, even if Poland does not join the EU. But Korea's own tariffs remain prohibitively high...." (ibid) On March 15 1997, Daewoo agreed it would comply to this new ruling.

Generalizations on the peripheral players

The strategies of the peripheral players reveal the following common characteristics. Firstly, although they also produce substantial volumes for the local market they produce in, the prime strategic aim is exports to western Europe. Secondly, to supply to the Western European market, a high local content (80%) is required; each peripheral player is trying - out of necessity, because of there relative weakness - to evade EU local content regulation as much as possible. For instance by "redefining" components or supplying local suppliers as second tier producers. Thirdly, they have made use of the frustration of local governments to get a foothold (resentments against "western colonialism" in Poland for instance). As a result, these firms have successfully tried to get joint financing of investments with local governments and actors, which makes the investment risky for these actors as well; it increases the inclination of these governments to use political measures to support/protect this local industry. Finally, to make the dependence on local actors less prominent, the peripheral players at the same time have increased control of the local facility, for instance by installing a manager from the home-base: Suzuki replaced the Hungarian managing director by a Japanese director in April 1994; Daewoo Europe is directly and rather autocratically managed by Kim Woo-Choong, the chairman and

founder of the Daewoo Group. President of Daewoo Motor Poland, its most promising production site, is a Korean national as well.

Suzuki aims at a regional division of labor between its plants in the CEEC region as well as in Western Europe (Spain). Daewoo on the other hand is aiming at a regional division of labor *within* the CEEC region. Because of the bigger investments involved, the bigger production volumes envisaged and the almost exclusive reliance on the CEEC region as its cross-country production network, Daewoo's strategy contains considerable risk. In the slipstream of Daewoo, two other South Korean car producers (Hyundai and Kia) are actively seeking to get some foothold in central Europe. The logic for these producers is comparable to that of Daewoo: because they are no major players in the European market themselves they search for weak business partners and relatively weak governments. Their prime aim is the market of the European Union. With considerable success: in 1991 Korean firms sold less than 50,000 cars in Europe, in 1996 252,000 car units were sold (ACEA Newsletter, March 1997, no. 41).

3.4 Voluntary lockout networks in Central and Eastern Europe: The Art of Neglect

Neither Toyota, Nissan nor Honda or the European luxury producers BMW, Volvo and Mercedes Benz, have shown great activity in Central and Eastern Europe. By their own strategic intent they have voluntary *locked-out* themselves from setting up production sites in Central and Eastern Europe. This grouping forms a logical strategic category. The internationalization strategies of BMW and Mercedes very much resemble the strategies of the big Japanese players (section 2.3). They basically aim at exports and have been relatively late to internationalize. When they finally started to internationalize they only moved noticeable production capacity to their most important markets: the United States (next to Europe). In the United States they have bee trying to emulate their successful domestic supply structures, by demanding from their prime suppliers to move abroad with them. These firms therefore only internationalize under very specific circumstances. They do not aim at an international (company-internal) division of labor.

The "art of neglect" for these firms entails that they ignore as much as possible the inclination every firm has to go abroad and set up production sites in relatively unattractive markets. The art of neglect involves ignoring the bandwagon effect of the frontrunner, with the short-term effect that lower market shares will be obtained. The art of neglect involves staying outside of countries for lack of size and/or possibilities to influence the political arena to the

extent the frontrunner mass producers could do. This argument is particularly true for emerging markets such as the CEEC. Japanese Toyotist firms have only modestly internationalized towards marginal or emerging markets. Whenever they internationalized they preferred SKD or screwdriver assembly. The first priority of the largest Japanese carmakers has been to become local players in the European Union. At the end of the 1980s, this strategy implied local production *inside* the European Union. Except for Suzuki, no Japanese car company decided to set up an operation in Eastern Europe - and in the case of Suzuki it took a long time before the negotiations could be terminated.

Before 1990 total Japanese car sales in Central and Eastern Europe fluctuated heavily. In 1988 Toyota and Nissan were in the lead with 52 and 32 per cent respectively of all Japanese sales. All Japanese car majors have set up import and sales operations, but certainly not to the extent of their European competitors. Toyota for instance has set up an import and sales company with Nissho Awai, the Japanese trading company belonging to the Sanwa group (of which Daihatsu, controlled by Toyota, still is a member company) in Poland. The Japanese firms took a wait-and-see position, while at the same time anticipating that the market will open up after 2001, which would make local production for local markets superfluous.

None of the luxury car producers either expanded their international production networks in Central and Eastern Europe. Only the German luxury car producers Daimler-Benz and Audi (Volkswagen) have invested in particular in former Eastern Germany. These investments were based more on a political than an economic logic. Hardly any production site - not even for screwdriver assembly - was created in the CEEC region.[10]

3.5 The inclusion of Central and Eastern Europe in supply networks

The Economist Intelligence Unit, a renowned automotive industry observant, observed that "the region's governments know that components production is the key to the development

[10] Volvo has no production in the region (only assembly of trucks). BMW has nothing at all. A deal struck was with GAZ in Russia, in which BMW will supply GAZ with engines for the GAZ-3105. In return GAZ will market BMW cars through its 250-outlets dealer network. Mercedes-Benz has no production facilities in the CEEC. Mercedes-Benz has links with Sobieslaw Zasada Centrum in Poland (captured before Volvo could do the same), but this is for assemblying of vans, specialised vehicles and minibuses. Not for cars Truck and buses production is generally more spread around the world, due to higher logistics costs. Mercedes - like other luxury producers - do not feel a comparable need to produce locally: first because their margins on their sales are much higher, making them less susceptible to import duties, secondly, because the sophistication of suppliers is more important and less easy to copy due to the more limited batch size of production. Mercedes-Benz intends to establish production in Russia, but (again) primarily for the trading of buses, small-tonnage trucks and special-purpose vehicles.

of their domestic motor industry" (EIU, 1997: 103). The previous section revealed that the CEEC region is primarily considered by the core companies as either a market for relatively cheap cars or the lower end of the supply chain in terms of lower-end car models and component supplies. The conditions under which local parts suppliers become integrated (or not) in cross European production networks largely depends upon the internationalization strategies and the related intentions for local outsourcing.

Table 9 lists the intended and achieved levels of "local content" of core firms in their most important CEEC production sites as could be recorded in the course of the 1990s. The degree of local content provides a first indication of opportunities for the host countries to developing a local supply industry. The peripheral firms clearly intended to come to high degrees of local content, whereas the followers primarily located SKD assembly operations in the CEEC region and aimed at limited local content. The frontrunner companies almost always promised to have high degrees of local content, but they have been less committed to achieving that level. The lockout networks also include scarce - but not unimportant - investment in component production in the CEEC region. This section explains why.

Table 9 Local contents aims and accomplishment

Producer		**Local content aim**	**Local content level accomplished**
FRONTRUNNERS	Fiat	• Poland (FSM take-over) high local contents due to vertical integration of FSM and Fiat; intention to reduce vertical integration; import substitution. Fiat wants to decrease the number of its suppliers. Encourages joint ventures between (Italian) first tier suppliers and Polish companies. In 1992 FSM was dissolved in three separate entities all controlled by Fiat: Fiat Auto Poland, Magneti-Marelli Poland (components), Teksid Poland.	• Poland. 60% in 1994, around 72% in 1995 for Cinquecento; 28% local content for Uno; imports of components almost exclusively coming from Italy. Cinquecento is exclusively produced in Poland (240,000 units capacity planned). In 1995 sold its own brake manufacturing to AlliedSignal (USA); more than 20 foreign suppliers followed Fiat into Poland, accounting for 37 percent of local supply in 1994. Number of suppliers in Poland decreased from 620 (1992) to 440 (early 1996), in particular Polish suppliers were affected.
	VW	• Czech Republic. The deal with the Czech government includes VW's commitment to develop further the Czech car components industry. New assembly hall with special	• Czech Republic. Original local content of Skoda in Czech and Slovakian parts was around 80 percent (Havas, 1996:7). Six important component suppliers

		parts (Octavia Saloon) and JIT delivery. Built on the common A platform (basis for VW Golf and range of small Audi cars); new paint plant; all-aluminum engine for use in its Tzech car ranges, but also for use by SEAT. • Hungary: Audi Hungary engine plant in 1994. Raba was contracted work related to the construction of the engine plant (Ft2bn worth in 1994).	their supply base near the assembly line (FT/4/11/96) in return for long term supply contracts. Fifteen 'greenfield' factories set up by western component manufacturers (primarily from Germany and the USA, Czechinvest, 1996) provide another 6.5% of the supplies. More than 40 joint ventures between Czech suppliers of Skoda and VW suppliers were established since 1991 supplying 44% of Skoda's purchases. • Hungary: Audi engines production - including outsourcing - is coordinated at VW group level, which leaves little room for local suppliers. German firms or German subsidiaries of US companies have set up production either independently or in a joint venture with local suppliers.
	Opel/GM	• Russia/Ukraine: investment plans into Avtovaz (production of an Opel model), promise rising local content • Poland: creation of a Central European purchasing centre (Srodkowoeuropsjskie Biuro Zakupow) for co-ordination of its outsourcing towards local suppliers and the increase of product quality of the suppliers. The new Polish greenfield site is an integrated plant; GM aims at an increase of local content in its Polish production of DM 1.6 bn, while Polish suppliers should take 40% of these local supplies. • Hungary: Opel does not want to increase the local content of its car production. It intends to slightly increase the local content of its engine production (but not above 60%) and prefers local companies in joint ventures with its traditional Western suppliers.	• Russia: not yet established • Poland: limited local content; SKD production for which complete bodies and kits of parts are supplied from Opel plants in western Europe; New plant, set up of local plants by some prime suppliers such as United Technologies, Allied Signal, Goodyear, Pilkington • Hungary: most parts for the engines as well as for the assembly operations are imported (Havas, 1996:21). It has proven impossible to have Hungarian firms deliver really advanced engine components. Engines are build into cars assembled in Germany (which makes them apply for 'Europen content'), cars are build for the local market. Local content nevertheless slightly increased. For engines from 1% (1992) to 4% (1995), for the Astra from 4% to 9.6% (1995). Western firms
	Renault	• Slovenia: Renault aims at automating part of its Slovenian operations; • Czech Republic: Avia produces Renault SG2 and SG4 (trucks) since 1968; Karosa: autocars, local production	• Slovenia: low local content reached: 30%; important components are imported from France (engines) and Spain (gearboxes and steering systems); • Czech rep:local content reaches almost 100%
F O	Ford	• Poland (greenfield site); imports from other	• Poland: hardly any local suppliers due to SKD status of local assembly

LOWERS		sufficient scale is obtained Ford "will examine" possibilities for local body welding and painting facilities. • Hungary: in-house supply of electrical parts (and other supplies), no major local content; wants to replace foreign supplier with local, in order to cut transport costs • Czech Republic: lighting and airconditioning through acquisition, i.e. taking over part of the local supply structure	• Hungary: initially bought materials and parts from their existing suppliers; one supplier followed Ford
	PSA	• Poland. local assembly for local market: 1600 units of Peugeot 405 by FSL; aims are unclear; SKD assembly of Citroën C15 by FSO (SKD) • Rumania. Until 1988/1991 Rodea/Oltcit produced the Oltena, a Rumanian version of the Citroën Axel. With a very high local content.	• Poland: very low with FSL; FSO: Semi Knock Down has a relatively low level of local content. • Rumania: very high, but cooperation was terminated in 1991
PERIPHERAL	Suzuki	• Hungary. Local manufacture for exports to CMEA and EU markets. For the latter local contents had to be above 60 percent in order to avoid tariffs. Magyar Suzuki follows a single-sourcing strategy	• Hungary. 1992: 'Hungarian' content was 29% (21% Suzuki), whereas EU content was 32%; in 1995 this increased to 50% Hungarian (23% Suzuki) and 64% EU content. Anno 1997 and following a Ft 3 bn investment programme, European content is thought to be around 80% (70% Hungarian) (EIU, 1997: 112). 38 suppliers in Hungary. Virtually all components (except the strategic components engines and gearboxes) are "European made". Suzuki is giving local car parts suppliers a stake in the project by taking them on as equity-holding partners, but requires them also to use Japanese technology.
	Daewoo	• Rumania. Take-over of Oltcit. Local content aim of 80% in 1999. • Central Europe: high local content to enable exports to Western Europe.	• Rumania: Current local content of 35% (1996); Assembly started on the basis of CKD with only 14-15 % Romanian content. • Central Europe: local content disputed by direct competitors; dispute over nature of production; according to EU only CKD of around 10 components in Poland

sources: EIU, Annual Reports, Havas (1995/96), CCFA
** According to Suzuki sources*

3.5.1 frontrunners

Frontrunner firms acquired production capacity in the CEEC region to enter markets as well as re-import low-end cars into western-Europe. Producers from outside the European Union are submitted to import tariffs, except when they have a high degree (80%) of "local" (European) content. For all the western-European producers achieving this local content ratio has been unproblematic and therefore never a reason for outsourcing locally. A political motive for promising high shares of local content, however, has been more prominent: in the bargaining process over the acquisition of the local car firm, sourcing locally has been a major point of discussion. All CEEC governments demanded from the western-European firms commitment to setting up an advanced local parts suppliers industry. A promise readily made - but not always kept - by the new entrant.

The high degree of vertical integration of the acquired CEEC producers, implied a substantial share of "in-house" production of components. After acquisition, most western producers tried to rejuvenate these in-house producers. They also tried to make them supply components to other car complexes at home as well as abroad. The own (western) subsidiaries and first tier suppliers played an important role in this process: most frontrunners actively encouraged joint ventures between their own first-tier suppliers and the local component suppliers in the CEEC region (see table 9 for details). The first-tier suppliers that followed this strategy most rapidly where the own (preferred) subsidiaries.

By the midst of the 1990s, most frontrunner firms entered into a second, consolidation, phase of their investment strategies. They started to scale down the high degree of vertical integration. In particular *Volkswagen* and *Fiat* stimulated a large number of western suppliers to locate part of their business near the production facilities. The core firms at the same time put their suppliers under considerable pressure to produce at high quality levels *and* to lower the prices regularly (Cf. Calbreath, 1995: 9; for examples of the Skoda strategy). In the CEEC region the vertical deintegration strategy, implied that the ownership structure with many previously preferred CEEC suppliers got dissolved. This opened the way to either bankruptcy or the acquisition of these firms by western suppliers. The number of foreign entries in some countries thus boomed in a very short period. By the end of 1995, Fiat Poland purchased already around 37% of its components from "local" suppliers who established operations in Poland only after 1992 (EIU, 1997: 103). As part of the agreement with the government Skoda/Volkswagen

sourced around 70% of its components locally. In 1994/95 VW/Skoda had 174 Czech based suppliers. About 40 new joint ventures with foreign partners and 15 greenfield investments have been established to supply the VW/Skoda Mlada Boleslavoperation.

Frontrunner firms targeted particular supply networks in the Central European countries. In particular Hungary was an important target. Hungary was one of the few Central and Eastern European states with an automotive components industry that was independent from (national) vehicle assemblers (Sadler, 1996: 22). The car engine plants of Opel and Audi in Hungary give examples of the way in which the CEEC countries could be integrated into the production network of Western car manufacturers. Audi's (Volkswagen) and Opel's main aim for investing in Hungary was to supply part to operations in Germany. The working time arrangements available, as well as the wages that can be paid in Hungary were important. Almost everything in the Opel and Audi plants in Hungary other than building the engines is contracted out to local firms, "something impossible under German bargaining situations" as *The Economist* notes (22/11/1997:8).

Hungarian parts suppliers were traditionally leading in Central Europe in supplying car parts in particular towards Lada. Over the 1990s, the Hungarian supply to Lada has become very modest, while the efforts to become integrated into the western European car complexes have mounted partly because of the efforts of the western European core firms (see above), but also due to a strong preference of the Hungarian component industry to dissolve the previous bounds with the Communist system. In case local suppliers want to become a parts supplier to Western core firms they run the obvious risk of becoming dependent upon the core firm, but also upon the suppliers to that core firm. The experience over the 1990s is that CEEC producers can only become supplier by entering into a joint venture with another Western firm. Havas (1996:25) gives an interesting example of this triple dependency with the case of Jung Hungária GmbH, which is considered to be the "first local supplier" of Audi Motor Hungary. First of all the Hungarian company had to become a joint venture with the German firm Jung. Secondly, the actual supply contract was signed with Südaluminium GmbH, a German foundry. "What this means in practical terms is that castings made in Germany are machined in Hungary and (....) supplied directly to the AMH (Audi Motor Hungary) plant in Gyor. In other words, Jung Hungária is a subcontractor of Audi's German first-tier supplier. This arrangement seems to be

the most likely way for Hungarian companies to become involved in major automotive companies' supply networks" (Havas, 1996: 25).

The strategies of the Volkswagen group and of Fiat to use the CEEC production sites in a more global distribution and production strategy means that local preferred (first-tier) suppliers should increasingly be able to supply to the whole Volkswagen group and FIAT. The initial provision towards the Czech suppliers that they could deliver parts to Skoda, without having to be able to supply to the rest of the Volkswagen group, is becoming superseded (EIU, 1997: 104). The number of Czech suppliers that can raise their own quality level to be able to compete with Western producers in such a short period of time, is bound to remain limited. The selection process becomes more sharp at the moment of starting up a new model. So when Skoda moved from the production of the Felicia to the Octavia, some of the traditional Czech suppliers in vital parts as engines and transmission systems lost out in cost advantages, quality and manufacturing capacity (ibid). Comparable developments can be observed in Poland. Fiat's Polish components for instance are also shipped to Brazil, where another site of its "world car" is located. The export volumes of exported car components from Poland and the Czech Republic has risen, which largely represent intra-company trade. Fiat has selected a limited number of companies (70 at the end of 1996) that have complete system responsibility and supply its car assembly operations worldwide. Fiat aims at component standardisation. None of Fiat's systems suppliers is of Polish origins (yet).

General Motors' sourcing strategy is more aimed at a regional division of labor. GM has also been actively trying to reduce its dependence on German based components, which in 1996 is estimated to account for more than 50% of GME's outsourcing. The company has targeted countries with a traditional weak currency, such as the UK, Italy, Spain and increasingly also Eastern Europe. Poland is becoming a vehicle production centre for GME and a source of components for its other European plants, in particular in Germany (EIU, 3rd quarter, 1996: 126). At the beginning of 1998 General Motors, finally, announced its long awaited plans to radically reform its European operations. The company wants to reduce the costs of components, by trading in British suppliers (considered high cost, partly because of the strong Pound) with supplies from the continent, especially from Eastern Europe. At the same time, GM is building new factories in Poland and Hungary to radically restructure its production network. Interestingly, the move of General Motors Europe is meant to recentralise the strategic decision

making capacity of Detroit, while Opel will play a much more reduced role (Business Week, November 3, 1997). The spread of facilities over Eastern Europe, already had weakened the position of Opel in the GM organization.

Renault does not aim at high degrees of local content in its Slovenian production site. The chances of creating an advanced local suppliers industry to the Renault factory, are rather bleak, certainly because Renault imports its most strategic components directly from France.

3.5.2 Follower networks

Follower firms did not invest in production capacity for reimports or exports to other parts of the world. Consequently, the need to create high levels of local content remains both politically as well as economically limited. The number of suppliers that have followed Ford or PSA in their SKD operations remains limited as well. In case components are needed in the local assembly, importing subassemblies is preferred. There is no major pressure on captive suppliers to locate in the host country and local supplies will have hardly any opportunity to enter into any meaningful supply relationship with the core firms ("no tier" relationship).

Ford used the own in-house supplier operations to monitor and help the suppliers. Ford has set this outsourcing strategy within its Ford 2000 programme, which aims at shifting outsourcing from a regional to a global level, thus recentralising its pre-production activities (EIU, 1996: 120). In this process, Ford is also aiming at substantial reductions of the number of suppliers, as well at substantially cutting prices annually. The Ford operation implies a top-down restructuring operation in which many tier-one supplies will become second-tier producers. Ford has given its tier-one (full-service) suppliers the responsibility to choose and handle their own sub-suppliers. The increasingly tiered supply structure adopted by most European car assemblers, implies that the distance between lower tiered supplies and the assembler becomes bigger. Furthermore, the hierarchical network lowers the possibilities of lower-tiered supplies to increase their prices. As far as we can observe from listings of full-service suppliers with a number of producers, the number of preferred first-tier suppliers that have been selected by Ford (but also by GM-Europe and Fiat) from central or Eastern Europe, is very limited.

3.5.3 Peripheral networks

The companies adopting peripheral strategy (in particular Daewoo) have been aiming at a regional division of labor in which some production sites supply to other production facilities within the same group. In this scenario, local component producers have a clear chance of becoming first tier suppliers of medium-tech products. The peripheral players Suzuki and Daewoo differ from the other car companies in their approach to local suppliers. They lacked an appropriate supply structure in Europe, while at the same time they were forced to have more than 80% local content in order to serve their prime strategic goal: exports to the market European Union. As the story of Daewoo in section 3.3 aptly illustrated, the strategic manoeuvres of the peripheral players in the CEEC region is dominated by the strategic desire to show high local content as rapidly as possible. The adherence to high degrees of local content of the peripheral players is born out of political necessity, not primarily out of company-intrinsic strategic considerations.

Daewoo's strategy has been aimed at creating a regional division of labor between local suppliers by taking over other producers and link into their original supply networks. The relatively late entry of Daewoo, however, also implied that it has been only capable of taking over the least attractive core firms and consequently less attractive suppliers. The intention of outsourcing locally without becoming dependent upon the supply networks of other firms, therefore is difficult to achieve. Plugging into the networks of other core firms, is not easy. Daewoo faced difficulties when it wanted to cash in on the contacts of the local suppliers with the existing core firms. These firms are bound to withdraw once they find out the (supplying) company is collaborating with Daewoo. For instance Opel wanted to collaborate with FSO in setting up a DM 500 million production site in Poland, but announced that the partnership would not be created in case FSO would decide in favor of the partnership with Daewoo (which happened).

Suzuki opted for a greenfield investment in the country with the best and most independent supply infrastructure, but with weak or no core firms. In other CEEC countries, first tier suppliers had been strongly linked (often as subsidiaries) to the local core firms. Being linked to the car complex of a more peripheral player like Suzuki poses chances but also problems for the (Hungarian) suppliers. First of all the capacity in particular of Suzuki is not sufficient (50,000 which is not even reached) to reach interesting economies of scale. Secondly, the parts Suzuki

wants are not compatible with other parts in the car industry (Havas, 1995: 14). The latter is the more problematic because other Japanese car manufacturers that might be using comparable parts - in particular Toyota due to its affiliation with Suzuki - are not investing in Central Europe at all. Exporting components to the production sites of other Japanese players in Europe is not likely to happen, where Suzuki does not plan to export the Hungarian parts produced back to Japan (as is the case with most Japanese suppliers due to their "closed" production networks).

The Hungarian car suppliers to Suzuki are "locked-in" into a lower end producer: Hungarian production is for a relatively dated car, even at the start-up of production; furthermore, Suzuki struck supply licenses with its Hungarian suppliers that precluded the Hungarian firms from supply to other Suzuki plants outside Hungary or to other customers in Western Europe (although sales to other assemblers in eastern Europe remained possible, in theory). Sadler, (1996: 24) comes to the conclusion - after comparing Nissan in the UK and Suzuki in Hungary - that Suzuki appeared to be much less committed than Nissan to "the long-term expansion of these (Hungarian, red) companies into genuinely European- or world-class suppliers able to compete at the forefront of technological and organizational change" (ibid.)

3.5.4 Lock-out networks

Of the firms that have engage in a voluntary lock-out strategy in the CEEC region, only the luxury producers Audi and Mercedes-Benz started to outsource components in the region. They did this primarily with their own (relocated) high tech suppliers with production intended for re-importation into the home base. They located important parts of their component production in Hungary, the country with the oldest tradition in component production.

The most obvious reason for outsourcing to the CEEC region can be found in low wage costs. But - according to other sources - this cost advantage has been overstated, whereas the transaction costs involved in setting up greenfield sites has been underrated. An equally prominent reason for the luxury car producers to set up component assembly in the CEEC countries, therefore, has been to create second sources and influence their bargaining relations in the car complex at home, in particular towards the relatively independent suppliers and workers. By threatening to shift output abroad the firms got concessions of the suppliers and workers. Mercedes-Benz for instance, "issued a stern warning to its workers at Rastatt, in southern Germany, that greater productivity and flexibility would be required for the new model to be

produced there" (new MB A Class car) (FT/7/1/97). Workers should lower their wage demands, whereas suppliers are supposed to join the core company abroad under the threat of loosing a vital part of their turnover. In the process, the luxury car producers outsourced substantial volumes of engines to production sites in Hungary. These sourcing networks are very closed, primarily aimed at re-importation to the production sites in Germany. This regional outsourcing strategy tends to be on the basis of SKD production, which only leaves room for local suppliers to become second or lower tier supplier for the local assembly firm with relatively low tech contents of the supplies. In case the domestic trade unions will lower their wage claims even a relocation of the production site back into the home country looms large.

Whenever Japanese core players in Western Europe mention the possibility of relocating production or outsourcing more components in the CEEC region, the intention of influencing the local bargaining arena can also be considered bigger than the intention to really move substantial volumes of component sourcing into these countries. The most important first tier suppliers of the Japanese core firms have likewise targeted western-Europe as a production site, with only limited volumes of components assembled in the CEEC region.

3.6 Distribution strategies: acquiring market shares

Problems of gaining market share in the emerging economies of Central and Eastern Europe have been considerable. To term the Central and Eastern Economies as "emerging" in this context is perhaps not very appropriate. Before 1989, the volume of car sales (and production) in these countries had been higher than throughout the whole of the 1990s. This means that there were already institutions for the distribution of cars. But they were geared towards the needs of a centrally planned production and distribution system. In that sense it is perhaps better to speak of the CEEC region as consisting of "re-emerging" economies. After 1989, problems nevertheless were considerable. Firstly because an efficient distribution network for competing brands was lacking. Secondly, because the Aftermarket was (and is) not really developed. Thirdly, because importers are struggling with political red tape, which makes it difficult to adopt effective entry through imports. Some of the western producers have nevertheless quite successful in reaching substantial numbers of consumers in the Central and Eastern European markets. Table 2 lists the distribution of sales in new cars over the most important producers in the four largest Central European car markets.

Table 2 Distribution of sales of new cars in Poland, the Czech Republic, Slovakia and Hungary by manufacturer (1993 - 1996, in units, %)

	Poland					Czech Rep.					Slovakia#					Hungary				
	'93	'94	'95	'96	'97	'93	'94	'95	'96	'97	'93	'94	'95	'96	'97	'93	'94	'95	'96	'97
Fiat	44.8	45.4	44.1	36.1	34.5+	0	0	0	0	0	0	0	0			0	0	0	0	0
FSO*	25.5	33.6	26	15.6	25.0+	0	0	0	0	0	0	0	0			0	0	0	0	0
FSL	0.5	0.7	n.a.			0	0	0	0	0	0	0	0			0	0	0	0	0
Opel	0	0.1	n.a.	-	-	0	0	0	0	0	0	0	0			1.2	1.3	1.2	1.0	9=
Skoda	0	0	0	0	0	77.2	67.5		56.1	55.3	0	0	0			0	0	0	0	0
Tatra	0	0	0	0	0	0.2	0.1	n.a.	n.a.	n.a.	0	0	0			0	0	0	0	0
UAZ	0	0	0	0	0	0	0.0	0	0	0	0	0	0			0	0	0	0	0
Suzuki	0	0	0	0	0	0	0	0	0	0	0	0	0			1.6	1.8	1.9	1.9	n.a.
Local production	70.7	79.7	70.1	51.7	59.5=	77.4	67.6		56.1=	55.3=	0	0	0	n.a.	n.a.	2.8	3.1	3.1	3.1=	n.a.
Fiat	9.2	6.6	6.8	5.8	n.a.	-	-		4.2	3.9	-	-		5.9	5.2	1.5	3.1	5.5	6.6	5.5
Opel	3.9	2.3	4.5+	7.5+	8.7	2.4	4.2		6.6	5.1	2.0	3.5		5.1	3.4	8.9	10.1	8=	11=	10=
VW Skoda	2.2	0.4	2.6+	3.8+	3.6	-	-	-	-	-	66.7	49.0		29.1	46.1	3.1	3.1	1.8	2.9	3.7
SEAT	0.2	0.7	1.0	2.1	2.7	2.3	4.0		2.8	3.0	2.5	4.3		5.6	3.4	2.6	2.8	n.a.	n.a.	n.a.
VW**	1.1	0.9	1.6	2.3	2.9	3.2	4.9		5.8	4.3	6.5	6.7		8.7	8.3	6.3	7.6	7.5	8.6	13.9
Lada	-	-	-	-	-	2.7	1.2		low	low	6.3	2.6		n.a.	n.a.	22.0	19.0	11.8	3.6	n.a.
Ford	3.0	1.9	1.5	2.7+	3.0	1.8	2.6		4.6	6.1	2.3	1.8		1.7	1.6	5.0	4.7	6.6	6.9	11.3
PSA	1.4	1.3	2.1	>1.7	2.2	1.3	1.8		1.8	3.2	-	-		2.3	4.0	-	-	2=	3.5=	3.0=
Renault	2.6	2.2	3.3	6.0	7.2	0.8	2.6		3.9	4.0	-	-		4.4	1.5	3.3	5.1	8.1	6.9	7.1
Mazda	0.3	0.2	n.a.	n.a.	n.a.	1.5	2.5		2.4	2.2	2.0	2.2		2.5	2.5	1.5	1.2	n.a.	n.a.	n.a.
Daewoo	0.6	0.7	1.4	8.9+	n.a.	-	-		3.0	2.8	0.3	2.0		18.9	10.9	-	-	6.8	8.9	11.5
Others	4.8	3.1			9.8	6.6	8.6		9.2	10.1	11.4	27.9		15.7	12.9	17.8	12.3	n.a.	n.a.	n.a.

Sources: industry sources, Economist Intelligence Unit, National Industry associations, Automotive Industry Data
* including some GM-FSO joint venture sales, for 1994 though negligible
** Audi sales are negligible = own estimates
- : negligible or lower than 1% (can be included in the "others" category)
no local data are available, limited VW (Golf/Passat) production primarily for export
+ local assembly and imports ~ January - June period

The sales patterns therefore illustrate the importance of being part of the local car complex in order to sell large volumes of new cars in an emerging market. Brands produced by frontrunners and peripheral producers have become the only brands that gained substantial market penetration. Market penetration patterns followed the acquisition strategies. Frontrunners acquired market shares. The market share of the frontrunner (and peripheral) producers in other than the markets in which their production is located, is remarkably lower. The acquisition of local market share has become facilitated by preferential treatments of governments and the preferential use of existing distribution structures. For the frontrunners, the local car complexes have become the distributors of their other brands as well. Thus, Fiat and later Daewoo gained market share primarily in Poland. Volkswagen leads in the Czech Republic and Slovakia (where it commenced production of Passat cars in 1996). Renault "conquered" the lucrative Slovenian market, the third largest market in the Central European region.[11] Opel (General Motors) managed to earn a relatively big market share in Hungary. The same is true for Suzuki, which also had to set up a large number of dealerships, while providing a large number of repair garages and second hand car sellers with a franchise. Setting up dealerships in the CEEC region strategy is in any case less costly than in Western Europe.

In most Eastern European countries, state-owned sales and service outlets were representing various makes. The rationale of buying into the local bargaining institutions was also to increase the chance that these "mega-dealers" could be turned into "single-franchise" dealers applying "European specifications". National producers have also become used as importer of other brands of the same parent company. Skoda for instance became the official importer of Volkswagen and Audi cars in the Czech Republic. The paradox with Skoda, the most important player that survived (at least as a name) in the take-over battle, is that it gets penetrated in its own distribution network at home. Higher-end products of Volkswagen like Audi will be displayed next to the lower-end products of Skoda. Skoda on the other can not penetrate the networks of the Mother Company. The export strategy carefully orchestrated in order not to have Skoda "canibalise" comparable other VW products. For this a new network of separate channels is created. Volkswagen build up a complete European distribution network for the lower end cars

[11] Renault sold more than 8,000 Clio's in 1995 which occupies 28.6% of the local market, its highest share in any CEEC country, and around one third of all its car sales in the whole CEEC region (East European Markets, July 19, 1996). In 1996 and 1997 (first half) Renault kept its leading status with Volkswagen as second brand, but with sales volumes only reaching one third of Renault's (EIU, 4th quarter 1997: 241, EIU, 1997: 128).

of Skoda. It aimed at expanding its Skoda dealership network from 1,522 outlets in 1991 to 2,500 in 1994, finally aiming at 4,000 outlets at around 2000 (EIU, 1995:71). The implementation of this strategy reinforces Skoda in its position as a low-end producer: not only has it a separate status in the hierarchy of the company, making use of lower end suppliers, but the firm also has a separate distribution channel.

Car manufacturers that want to make a serious attempt to sell a substantial volume of cars, have to supply customers with attractive credit facilities. Consumers do not earn enough to buy a car, neither do they have much trust in the existing bank system. All major car producers have transferred their credit companies to the region, with various degrees of advancement, but with huge impact on the local financial system. Ford Credit Poland has become the first captive financial institution in the Polish market. Renault offered car buyers loans carrying annual interests of less than 20%, while the bank interest rates were around 30% (Reuters). Leasing is becoming an additionally important financial scheme aided by the captive leasing companies of the car majors. Loyal and single franchise dealers have been an extremely important channel for handling credit facilities, down payments and monthly installments. In Hungary, the facilities provided by the credit companies for instance made it possible that private cars get listed as business cars, which adds additional tax advantages and puts these cars into another import category. In 1995 60% of Volkswagens, and 66% of Seats and Skodas were sold in Hungary with the help of bank loans, installment plans or leasing schemes. The peripheral players have been less willing or capable to set up independent financing or leasing subsidiaries. BDK (Bank Dopositoow Kredytowy SA)-Daewoo for instance was established as a joint venture leasing company. The joint venture will finance the purchase and leasing of motor vehicles and other Daewoo products (Reuters, April 1996).

For the followers companies, entering the local market has been much more difficult than for the frontrunners. They had to invest in a completely new car distribution structure, whereas these markets are hardly big enough to grant widespread distribution networks. The existing dealerships - dominated by the early entrants - tend to dominate the *Aftermarket* as well. Most car assemblers still earn the biggest part of their profit margins in the Aftermarket by selling OEM components - with high profit margins - through their single-franchising dealer networks. Control over the Aftermarket is particularly important in countries were the cars are positioned in the lower end of the market. They need more maintenance. Because inhabitants of CEEC

countries have no sufficient buying power, cars will be used longer, which also requires additional maintenance. In Central and Eastern Europe a widespread system of garages and repairshops has developed. The margins for newcomers will remain small as long as they cannot have major inroads into the Aftermarket as well. But the proper institutions for this are still missing. A flourishing black market of stolen parts of often outright illegal garages has developed in the CEEC region which makes it additionally difficult to reap profits from the Aftermarket. The limited enthusiasm of latecomer car manufacturers to invest in a distribution (and repair) structure in the CEEC countries will have a negative impact on the sales' volume.

Other markets where no production sites were located have largely been ignored in the marketing strategies. This is particularly true for Russia - a potential market of more than one million units. No producer has succeeded nor was really willing in buying itself into this particular market. Throughout the 1990s, the production and distribution structure in Russia remained completely dominated by Russian producers. This position is supported by discriminatory trade policies and a laborious bargaining environment.[12] Finally, dealers face a much more complicated bargaining environment, because they have to pay more for importing a car than individual customers' import. The system thus discriminates in favor of direct imports through large importers.

4. Tiers and fears in Central and Eastern Europe: bargaining in the shade of the European Union

Entry strategies have been politically induced and/or facilitated. As a consequence no non-European firms in the initial phase of opening-up were capable of acquiring any degree of ownership in the CEEC region beyond Eastern Germany. Even the most active American firm, GM-Opel, did not really take over any of the Eastern European car complexes. The lack of enthusiasm was not only because of lack of commitment to the CEEC as a market, but certainly also because of lower political support by the American and German government in the bargaining process.

The prospect of entering into a free-trade zone with the European Union - and ultimately of becoming even member of the Union - raised the willingness of most CEEC governments to

[12] The Worldbank (1997) notes that managers of firms investing in Russia spend more time than in any other country in the world on bargaining with local officials.

enter into deals with western-European producers in particular. European institutions such as the European Bank for Reconstruction and Development have taken an active stance in facilitating the plans of western-European firms.[13] Other interest groups such as ACEA, the organization of "European" car makers, have closely monitored - and influenced - the terms of accession under which non-European firms made use of the CEEC region as a production site.[14] The European Commission has been an additionally active player in the region (see box 1). The role of the European Union and its institutions in shaping International Production Networks, therefore, makes the restructuring of the European region difficult to compare with for instance the Asia region (Cf. Borrus***).

The European integration process also created substantial impediments for *non-European producers* of new cars and components. Tariff barriers for imports from 3rd countries on all categories of imports of cars and components were raised (table 3, 4). The integration process *ex-ante* lead to the adoption of "European specifications". Association agreements signed between the EU and ten Central and Eastern European countries during the interim period towards (possible) full membership provide for the approximation of the other parties' and standards and regulation to those of the EU, as a major precondition for their integration into the EU. This process followed the effective harmonisation of technical requirements for new vehicles (in 1993) and a mutually recognised type-approval certification in any one-member state in 1996. It is likely that in 1998 mutual recognition of EU type-approval certification will be extended to all vehicles. The association agreements have already integrated the CEEC region into most of the EU car institutions. Bilateral agreements (such as the transatlantic Business Dialogue between the US and European automobile manufacturers) are still rare and not well implemented[15] to compensate for discriminatory effects on trade with third countries.

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[13] The plans of Fiat in Poland for instance have been supported by the European Bank for Reconstruction and Development. The Bank for instance took a 13 percent holding (representing DM 66 million) in 1994 in Fiat Auto Poland in order to modernise its Bielsko Biala plant. This participation lowered the Polish state Trasury involvement from 10 percent to 5 percent (Havas, 1995:5).

[14] "In Europe (...) Korean manufacturers are trying to take advantage of legal grey areas to strenghten their competitive position. (...) Daewoo (..) has managed to secure duty free importation of its cars into Poland by exploiting certain procedures within the framework of the World Customs Organisation with the sole aim of circumventing the payment of customs duties." (ACEA Newsletter - The European Automakers, no. 41, March 1997; underline added). The statement illustrates that European Automakers are monitoring the Eastern European market as if it were their "home market".

[15] Or are still discriminatory against tariffs on cars as a result of other agreements: for instance, by the end of 1995 the EU and a number of trading partners (USA, Japan, Canada, Australia, Chili) reached agreement on

The trade policy of the European Union already discriminates imports from Eastern Europe against imports from Japan (Asia) and the United States. In 1997, imports from most CEEC countries into the European Union have become duty free provided they have an EU certificate. This includes new and used cars and components such as tires, engines, platforms, bumpers and gearboxes (source: Dutch Customs, 1997). In 1997, imports from Russia into the European Union were open to small duties. By way of comparison: imports from Japan and the United States in 1997 of new/used cars were open for a duty of 10%, whereas most components had customs/revenue duties between 5% for tires to 6,3% for bodies (coachwork) (ibid.).

Another effect of the prospective accession into the European Union, has been that trade barriers within the CEEC region towards the EU have largely become harmonized. In the area of new and used cars, firms from the CEFTA countries have hardly any advantage as against firms from the EU (tables 3, 4). Only in the area of components (with a major exception in car bodies, see below) lower import duties were created, which therefore facilitate the further integration of the CEEC region as the lower end of the supply chain. The cut-off position of Russia from its previous supply basis becomes also clear from this perspective, because it is the only country that has not differentiated its import tariffs of components in favor of the CEFTA countries. Besides, Russia has the highest import duties on components of the whole region.

Most CEEC governments were in a relatively weak bargaining position. Governments were under pressure to make it possible for consumers to get themselves the cars they had been waiting for for so many years. Cars were considered a luxury product for which you had to wait many years. Cars became also a clear sign that governments were serious about getting rid of the old dominance of the Soviet Union. Therefore, all governments presented various mixtures of generous subsidy schemes, free trade zones and tax holidays in order to attract foreign direct investments. The bargaining dynamics of countries that were the object of the first take-over spree (in particular Poland and the Czech Republic) differed from that of the other countries. Since they were not only a market but also a production site, the local governments developed more restrictive trade and industrial policies. Because these policies have been often developed in close consultation with the new investors (which became part of the national car complex), their content mirrors the strategies of these car complexes in the first place. The CEEC countries

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compensation for tariff increases as a result of the enlargement of the European Union. The sectors included were semiconductors, agriculture and chemicals, not cars.

that had no own car industry (Bulgaria, Albania) went for a much more quick liberalisation of their markets (US Department of Commerce, website). Import duties in these countries are lower than in the CEEC countries with a bigger own production capacity. In many countries the monopoly in the form of a state-owned trading company was demolished, enabling more importers to sell on the local market.

Countries that tried to keep an independent car industry (Rumania) or wanted to build own manufacturing capabilities (Hungary) showed a mixture of policies that also changed over time. Hungary, for instance, removed most obstacles to the private imports of cars in September 1989, very soon after the turnaround. This policy stance represents its position as a car market, without any own production capacity. Only after a few years, however, "various restrictive measures such as 25% VAT, increased import tariffs, import quota, technical and environmental tests for cars over 6 years, etc., have been introduced again in several steps" (Somai, 1993: 4-7, noted in Havas, 1995:7). This new policy position is partly triggered by the wish "to curb the outflow of foreign exchange and the influx of 'moving wrecks'" (ibid.), but also neatly represents the new position of the country in which Suzuki and other western-European component manufacturers have built up local production.

Most of the bargaining dynamics took place between the investors and governments - not with any other actor in the local car complexes. The financial system, the suppliers, distributors were far to weakly developed to play a role in the accession talks. Trade unions -as the representatives of the workers, the last actor constituting the car complex - were relatively well organized. But they remained extremely weak over the 1990s. Firstly, their ties with the former political system had discredited them (perhaps with the noticeable exception of Poland, due to the major role played by the trade unions to oppose against the Communist rulers). Secondly, high unemployment figures put the trade unions under further pressure to accept the deal under the terms of the foreign investors.[16]

[16] In the bargaining process the foreign investors readily made sweeping promises. Not all of these promises materialised. For instance: Suzuki had to revise its production plans downwards for several years. In 1993 13,000 units were produced (5,000 lower than planned). In 1994 output rose to 20,000 (still almost 10,000 lower than the plans). Likewise, export predictions were much lower: of the 20,000 cars produced in 1994 around 3,300 units (instead of the announced 10-12 thousand ones) were exported to Western Europe (Havas, 1995: 13). Suzuki's local content aim became 60%, it had promised 70%. The production of 60,000 cars by 1997, with employment of 1,300, was down-graded several times. Opel in Hungary announced the production of 400,000 units, but realised only 12,000 units. Volkswagen downscaled its investments in Skoda from the promised DM 9.5 bn - which brought it the company - to DM 3.7 bn only a few years later. The assembly of cars with Volkswagen Bratislava (BAZ) did not commence at any substantial volume until 1996 whereas VW had promised to produce 30,000 Passat car anually

The link between Foreign Direct Investment and import dependence of the CEEC countries has been particularly clear. The largest share of new car imports originate in the countries of the most important investors. One third of new car imports in the Czech Republic in 1995 came from Germany, whereas Polish imports of new cars were divided in comparable volumes between Italy, South Korea, Germany (and France). In Slovenia, almost half of all the cars imported in 1995 come from France. In Rumania, 93% of all the new cars imported came from South Korea. In Hungary one third of imports from Germany, as single most important source of imported cars and components. In Russia on the other not more than 12% of all car sales in Russia came from imports in 1995, another indication of its isolated position (Auto Strategies International, 1997:42).

In the course of the 1990s, a tiered structure of countries developed in the CEEC region triggered by an interaction of firm strategies and government policies - mediated by trade and industrial policies. In most countries, governments kept minority shares in the car complexes, which increased the "closed" nature of the network. This section will further discuss the (political) characteristics of that structure and the consequences for overall trade patterns within Europe.

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from 1993 onwards. The production of gearboxes started also one to two years later and at lower volumes. Investment volumes in Slovakia in the 1992-1994 reached an amount of DM 126 million, which is half the "promised" investment (CCFA, 1995: 279). Tables 5-8 have given further examples.

Table 3 Differentiation in import duties: First/second tier countries (1997)

	POLAND			HUNGARY[9]			CZECH REPUBLIC[14]		
Origin:	3rd country	EU	CEFTA	3rd country	EU	CEFTA	3rd country	EU	CEFTA
1. new cars[1]	35%[3]	25%[4]	25%[4]	13%	7.8%	7.8%	19%	7.6%	0%[11]
2. used cars[2]	35%[5]	25%[6]	25%[6]	13%	7.8%	7.8%	19%	7.6%	0%[11]
3. Engines (8407/8408)	9%[7]	3.6%[7]	0%	10%[10]	0%	0%	7.8%	0%	0%
4. bodies (8707)	0%[8]	0%[8]	0%[8]	12.1%	7.3%	0%	7.8%	0%	0%
5. gearbox (8708 40)	15%	6%	0%	10%	6%	0%	4.5%	0%	0%
6. tires (4011 1000/ 4012 1030)	9%	3.6%	0%	5%	3%	0%	8.7%[12]	5.2%[12]	0%[12]
7. other sailant topics	-	-	-	-	-	-	3.4%[13]	0%[13]	0%[13]

Sources: *Dutch and EU customs, EVD (Ministry of Economic Affairs), Customs of individual countries.*

[1] In Poland one tariff is charged for all cars younger than 4 years.
[2] For Poland, these are the tariffs on cars of 4 years and older. Import is prohibited for cars and chassis older than 10 years.
[3] With a minimum of 1250 ECU.
[4] With a minimum of 893 ECU.
[5] With a minimum of 2500 ECU.
[6] With a minimum of 1786 ECU.
[7] The tariff for cars with a capacity of more than 200 kW imported from the EU is 10.2%, from CEFTA 4.1%.850 ECU) and 25% for EU and CEFTA (with minimum of 607 ECU).
[8] For bodies other than used in industrial assembling tariffs are 35% for 3rd countries (with minimum of %.850 ECU) and 25% for EU and CEFTA (with minimum of 607 ECU).
[9] The Hungarian tariffs on cars (both new and used) are very differentiated). The tariffs represented in the table are the lowest applied, and can rise *substantially* with the age of a car, power of the engine or absence of a catalyst.
[10] Lowest tariffs on engines. Tariffs can rise up to 16.8% with power of the engine.
[11] NOTE: tariffs on both new and used cars from Hungary are 11.4%, and the same goes for small cars (up to 1500 cc) from Poland.
[12] This tariff if for new tires, the tariff for used tires from 3rd countries is 8%, from the EU 4.8% and from Hungary 4.8%.
[13] These tariffs apply to several car parts like axis, wheels, shock absorbers, radiators and silencers.
[14] These tariffs apply for imports in both the Czech Republic and Slovakia.

Table 4 Differentiation in import duties: Other countries (1997)

	RUSSIA[1]			ROMANIA			BULGARIA		
Origin:	3rd country	EU	CEFTA	3rd country	EU	CEFTA[2]	3rd country	EU	CEFTA[2]
1. new cars[3]	30%[4]	30%	30%	30%	21%[5]	24%[6]	15%	6%	3.8%
2. used cars[3]	40%[7]	40%	40%	30%	24%	24%[6]	15%	6%	3.8%
3. Engines (8407/8408)	10%	10%	10%	15%	12%[8]	0%[9]	10%	8%[10]	2.5%[10]
4. bodies (8707)	15%	15%	15%	30%	24%	7.5%	10%	0%	0%
5. gearbox (8708 40)	5%	5%	5%	30%	24%	7.5%	5%	0%	0%
6. tires (4011 1000/ 4012 1030)	25%[11]	25%	25%	30%	24%	7.5%	25%	10%[12]	6.3%
7. other sailant topics	5%[13]	5%	5%	[14]	-	-	15%[15]	0%	0%

Sources: *Dutch and EU customs, EVD (Ministry of Economic Affairs), Customs of individual countries.*

[1] In Russia equal tariffs apply for all countries.
[2] The tariffs in this column apply exclusively to the Czech Republic.
[3] For all cars (except the ones up to 1000 cc. Petrol fueled) exists a minimum tariff in ECU/cm3. This tariff depends with the amount of cc, and lies between 0.45 and 3.1 ECU/cm3. In addition, for all cars an excise duty of 5% has to be paid.
[4] Exceptions: the tariff on small (up to 1000cc, petrol fueled) cars is 5%, the tariff on cars with more than 3000cc (petrol) or 2500cc (diesel) is 40%.
[5] This tariff applies to most types of cars. Exceptions: cars with 1000-1500cc (petrol fueled) and cars with 1500-2500cc (diesel fueled) 24%, and cars with more than 3000cc (petrol fueled) 0%.
[6] Exception: the tariff on cars with more than 3000cc (petrol fueled) is 0% for new cars, and 7.5% for used cars.
[7] Exceptions: the tariff on cars with less than 1500cc (petrol fueled) is 30%.
[8] Exception: the tariff for diesel engines with power between 50 and 200 kW is 6%.
[9] This is the tariff for new engines. Exception: used engines and diesel engines with power between 50 and 200 kW 3.8%.
[10] These are the tariffs for petrol engines. The tariff for diesel engines is 0%.
[11] This is the tariff for new tires, with a minimum of 10 ECU/piece. The tariff on used tires is 30%.
[12] This is the tariff for new tires. The tariff for used tires is 20%.
[13] A tariff of 5% applies to many car parts: bumpers, brakes, axis, wheels, shock absorbers, radiators, silencers, steering wheels, clutches.
[14] The tariff for most car parts is identical to the tariffs on tires, gearboxes and bodies.
[15] The tariff on bumpers is 15%, while the tariff on most other car parts (all others in category 8708) is 5%.

4.1 First tier countries: Eastern Germany, Czech Republic, Poland

Eastern Germany has rapidly become included in the Western German car industry, which makes it less appropriate to discuss this example further in this book. The Czech Republic and particularly Poland can be considered as first tier countries in the CEEC region. They function as the apex of a regional division of labor and the front-edge of the internationalization strategies of the German and the Italian car complexes and their respective governments. They have the largest car markets, and are producing the largest volumes of end cars of the CEEC region. These countries developed a trade surplus in units of cars (not in value). The first tier countries have also erected more and diverse trade barriers - largely on behalf of the car complexes that invested in these countries. In addition the first tier countries are the only countries in the CEEC region that are becoming ingrained in the "world-car" strategies of Fiat and Volkswagen. But, they are producing and developing the lower end and often only one model in the parent's product range.

First tier countries have had the biggest room for developing local policies and even sometimes playing of on investor against the other. The government of the Czech Republic, however, only had one important bargaining chip in this process: Skoda. After they had played this card and rendered Skoda to Volkswagen, their bargaining space shrunk considerably. The Czech government put a 14% import tariff on personal cars as part of the deal surrounding the Skoda Mladda Bleslav acquisition (EIU, 1997: 102). Nowadays the Czech car complex is basically centred around one export-oriented core company, which is getting more and more integrated in VW's regional division of labor and specialization strategy. Facilitating the wider interest of Volkswagen in the region (for instance the engine production in Hungary) have contributed to making the Czech Republic additionally a frontrunner in harmonising EU and CEFTA tariff policies to the lowest level of trade barriers in components (table 3).

The Polish government has been in a better bargaining position with a much larger domestic market and bigger production capacity spread over a number of different car complexes. Throughout the 1990s Poland accounted for over half of Central Europe's auto sales. This made it the most important focal point for car firms aiming at Central and Eastern Europe as a (potential) market. The most interesting market, though, has also remained the most closed market. This is not accidental. Direct links between the ownership and the design of the production networks of firms and the closeness of the market can be observed. The Polish

government was also prepared to take a stronger and more critical bargaining stance as regards foreign investors. It successfully barred the attempts of Fiat to take-over (and thereby dominate) the whole Polish car system. At the end of the 1990s, the Polish car system includes three car complexes composed around Fiat, Daewoo and General Motors. The Fiat and General Motors car complexes are integrated in a bi-national division of labor (Poland-Italy/Germany), whereas the Daewoo complex is primarily aimed at exports to the European Union and develops into an intra-CEEC regional division of labor.

The impact of Fiat on the country and on its policy making elite can hardly be underestimated. Fiat plugged into the former state-owned FSM firm and - together with its subsidiaries magnetti Marelli and Teksid - acquired other important parts of the Polish car complex. Fiat bought FSM in 1992 for a single dollar (cf. Reuters, 31 March 1996).[17] Although Poland is progressively lowering its import tariffs - in particular towards the EU with a scheduled zero tariff by 2002 - it is much less quick than most other CEEC countries. In 1996, the ministry of industry and foreign trade extended the scope of protection in 1996, which banned the import of vehicles more than three old until 2001, while sustaining a high level of 35% duties on imported cars. At the same time, imports on car components are facilitated by raising much lower duties.

Poland resembles the political stance of the Italian governments towards liberalisation of trade in cars inside the European Union. Duties on imports of new cars are generally higher than in other CEEC countries (see table 3) discriminating in favor of local production. The policy of import substitution persued by Fiat is supporting the Polish government to sustain its tariff barriers in trade in components and finished cars. The Polish government uses quota in addition to tariffs, that also tend to have a positive and discriminatory effect on the trade flows with Italy. The arrangement specifies quota of new cars manufactured in the EU that can be imported duty-free. Each year the quota increases. In 1995 the quota was 35,250 units, i.e. 13% of total

[17] According to Reuters (31 March 1996) this particularly 'cheap' deal had the following background: Fiat has had links with Polish manufacturing since before World War II, producing 126s since the 1970s. In 1987 the Communist government negotiated a deal to manufacture Cinquencentos at FSM. The cars were to be exported at a fixed price. But as after 1989 the newly liberated currency went into free fall the government found itself having to subsidise production in order to export the cars at the price agreed with Fiat. Inflation spiralled and real interest rates climbed to eighty percent, burdening factories like FSM that could not service their debts with enormous liabilities. The new government which arose from the old Solidarity unions needed a solution fast. With Fiat insisting Poland adhere to the export price agreement and FSM balancing on the verge of bankruptcy, the government had no choice but to turn FSM over to FIAT for next to nothing. For FIAT the deal brought market access, a production base and further import concessions from the Polish government.

domestic consumption, and almost half of all imports. In 1993 "Fiat held 35.9 % of the quota, GM-Opel 24.4%, Ford Europe 16.9% and Renault 13.1%" (US Department of Commerce, 1996, homepage). In 1996, Poland's duty free import quota for 37,000 cars from the European Union was used up in less than two months (FT, 27/2/1996). That is: the car importers acquired licenses, but not necessarily had been selling the cars. Before 1996, Poland allocated the quota on the basis of the principle "as fast as you can retail the car" and allocated in trenches of 400 licenses at a time, which has clearly been in favor of firms with a large number of distributors/dealers such as Fiat. In 1996 the quota (although still with a limitation on the number of licenses granted at a time) depended on how fast the car could be wholesaled, which is slightly less in favor of Fiat.[18]

Another discriminatory measure favoring the interests of local producers, in particular FIAT, is in the duties on bodies used in industrial assembling. They are zero, whereas bodies imported for non industrial assembling have as high tariffs as new and used cars. The restrictive trade policies of Poland have been an important reason for firms to invest in the country. When latecomer firms were not granted comparable protection by the Polish government they generally declined from entering the country.[19] Poland is also the only country in the region that has no import duties to third countries on the imports of bodies. Enabling the free flow of car bodies represents an important prerequisite for SKD assembly (in particular of Daewoo - a 'third country' producer).

The Polish government showed a strong bargaining stance against General Motors when in August 1995 it struck a deal with Daewoo for the acquisition of FSO, Poland's second largest car manufacturer. General Motors had a minority share in the company but waited too long. In June 1995 Daewoo acquired a 61% share in FSO. In March 1996 GM/Opel decided for a DM470 million greenfield vehicle assembly plant in Poland in Gliwice - thus leading to the biggest

[18] The dominance of Fiat on the policy making spheres in Poland, does not go unnoticed, however. Because other interest groups are represented in the Polish car system, from time to time anti-monopoly responses against the dominance of local producers can be noted. In December 1994 for instance groups in Poland wanted to "fine Fiat Auto Poland for alledgedly accepting full-price prepayments for cars sheduled for delivery after three months. Fiat rejected the accusations...." (...) However, various govenment actors represent different interests. So when the Anti-Monopoly Office in late 1994 demanded that import tariffs on small cars (engines of up to 1100cc) sould be lowered from 30% to 10% "in order to limit waht it considered to be Fiat Auto Poland's virtual monopoly of this sector of the market (...) this was rejected by the government's economic committee, which was satisfied that price changes to the Fiat 126p and Cinquencento had not exceeded inflation" (EIU, International Motor Business, 2nd quarter, 1995:59).

[19] Volvo for instance wanted to acquire JZS, a Polish producer of trucks and busses, but it was not capable of getting the tariff protection for its truck business: Volvo had reportedly tried in vain to get the Polish government to adopt measures to protect the truck market against imports from other European countries (EIU, 1995:67).

greenfield site investment in central Europe since 1990 (EIU, 1997: 112).[20] The investment decision has also been part of a new plan of General Motors to restructure the whole organization of its European operations (see section 3.1). In GM's CEEC strategy, the fully controlled Polish site is bound to be the core coordinator of its other activities in the region. Previously, the principal assembly operation was Opel Hungary. This facility will decline in importance in favor of the Polish facilities. At the same time the Hungarian position as component supplier - and thus as second tier country - in the GM/Opel network becomes reinforced by the same strategy.

Nowadays, Fiat's Polish car complex - like Skoda in the Czech Republic - is almost a one product system, with Fiat's Cinquecento accounting for close to 70% of all car output in 1996 (EIU, 1997: 108). Fiat is also the country biggest vehicle exporter, while the component exports from its dependent suppliers also make up the bulk of the country's exports in components. It should not come as a surprise then that the alliance with the government is close and both actors are in direct and regular consultation as regards matters of trade policy and indudstrial policy.

4.2 Second tier countries: Hungary, Slovenia, Slovakia

The second tier countries have become integrated in networks of component supply. The assembly operations they contain generally share a lower local content, whereas their trade orientation is much more export oriented. They share a structural trade deficit (in units as well as in value) in finished cars. Although some of these countries have tried to adopt own developmental strategies in the car industry, their room of manoeuvre has been smaller than of the first tier countries. Three countries apply for second tier status: Slovenia, Slovakia and Hungary.

Slovenia has become "Renault country". Renault's strategy in the country is to produce one brand almost exclusively (Clio since 1996) aimed at exports to France and Italy. The coalition is strong, because the Slovenian government is an important stakeholder in the company (34% ownership). Slovenia is the most affluent car market in central and eastern Europe (EIU, 1997: 128) with car sales in units per head of the population not far behind Western European levels. *Slovakia* has become "Volkswagen country", much like the Czech

[20] It could be coined that GM's hesitation was long-lived becaue it aimed at creating a greenfield site in the first place. Before 1995 General Motors had mentioned plans to come to a greenfield investment of DM 150-200 million in Katowice. Following the Daewoo affair, these plans did not change. The location and the invested sum did have to change, however.

Republic. However, the production site of Volkswagen in Slovakia are much smaller than in the Czech Republic. The export orientation of the cars assembled is even higher than in the case of the Czech Republic (95% in 1995). Exports were mainly to Germany, making the country part of the division of labor in which Germany is on top, the Czech Republic is in the middle, and Slovakia is below. The country functions primarily as a first-tier supplier of large volumes of gearboxes and transmission components for the German car industry.

The country that has been most successful has been *Hungary*, the only country in the CEEC region up to now that tried to build up own car assembly capacity from scratch by attracting a non-European investor. Therefore, the Hungarian example merits further attention.

Hungary did not contain any end-producer of passenger cars. In the division of labor agreed upon in the Comecon system - for Hungary in particular the Soviet-Hungarian specialization agreement signed in 1964 - the Hungarian production system focused on the production of trucks and busses and on components for cars.[21] The Hungarian government had not been satisfied by its position in the (rather unequal) barter trade with the Sovjet Union. As a consequence they wanted to re-establish an own car industry. The weaker the Sovjet Union became, the weaker the buying power of its car producers, the more promising the prospect of an own car industry looked. In the 1990s even two consortia were set up by Hungarian companies in support of this idea. The debate lingered on between two positions: focus on the parts supply and assemble cars again. In the 1980s already the Hungarian government was interested in attracting investments from Suzuki. In 1985 discussion began. After 1989, the strategic focus of Suzuki changed producing a car for the Eastern European market to producing one in particular for the Western European market. However, events took their own way and a planned "developmental" strategy of the Hungarian government is hard to decipher from these events is hard to deduce. In the summary of Havas "to cut this long story short, it is safe to point out that no decision was taken by the Hungarian government on this controversial issue. Rather it was two foreign car companies, looking for favourable locations and market opportunities, who eventually 'resurrected' the Hungarian car manufacturing in the early 1990s" (Somai, 1993; Havas, 1995:11).

[21] Components include ignition timers, swtiches and other less strategic parts. Lada (VAZ) was the single most important buyer of Hungarian parts, but the country supplied also to the car manufacturers in Poland (FSO, FSM), Dacia (Rumania) or Zastava (Serbia).

The development of a Hungarian car industry has been on the basis of foreign direct investment. For the moment, the country's car complex is centred on one relatively weak company: Suzuki. Although General Motors and Audi started small-scale assembly operations in the country, these operations were bound to stay small or even get downsized after regional reconfiguration efforts (see 3,3, 4.1). Hungary is primarily a component producer, which it was already under Russian dominance. The components produced in Hungary are engines, which can be considered strategic inputs to the companies they supply to. Because of the strategic nature of these components, however, we can also see that the room of manoeuvre for the Hungarians is not very big. The car producers do not intend to become too dependent on the Hungarian production structure, rather the relocation of production can be primarily considered to be politically inspired: influence the German bargaining arena and strike better deals with the troubled German supplies and trade unions.

The Hungarian government uses tariff policy and subsidy schemes to make foreign producers invest in the country. However, its bargaining position remains much weaker than for instance Poland. Firstly, because the local producers can only supply 30% of domestic consumption needs. So the Hungarian government is pressed by consumers to lower tariffs on imported cars. The consumers get support of the importers of almost all major western car brands. Secondly, the position of the Hungarian government is weakened due to the nature of the investment strategies by the car producers themselves: Suzuki, Daewoo in cars and Audi and Opel in engines in particular want to make use of Hungary as an *export platform* towards the EU. The Hungarian government reduced duties on cars from the EU in 1995 (according to what it was supposed to do under its EU association agreement!) only after pressure from Western car manufacturers (EIU, 1995: 76). Import duties form EU and neighbouring countries were reduced, but duties on cars from third countries (including USA, Japan, South Korea *and* Russia) remained unchanged. The sustained high import tariffs towards Russia will further lower the already trailing imports of Ladas into the country. Lowering the imports of Ladas will lower the exports of components to Russia, which will in turn put the Hungarian component industry under further pressure and makes it focus more on the western car producers. The uncertainty of the Hungarian government as regards the appropriate policies is illustrated by rather inconsistent policy measures. For instance the government raised its import duties in March 1995 with 6% for

vehicles from EU countries (and with 21%-51% for cars coming from non-EU countries), but the surcharge was abolished again in 1997.[22]

Finally, since 1991 Hungary was heavily promoting foreign investments by the establishment of customs-free zones in which car manufacturers were encouraged to locate to locate manufacturing or warehousing sites. After 1996, this instrument lost large parts of its attractiveness in particular to the frontrunner firms. General Motors now can import its cars and components directly from the EU with only small duties to be paid.

4.3 Uncertain tier status: the political and economic odds of Rumania

Rumania has developed an "uncertain-tier" status. Rumania did not participate in the rapid opening up process of the Central European Countries. The Rumanian government had much less hope for immediate entry into the European Union than Hungary, the Czech Republic or Poland. But at the same time, Rumania also has one of the larger car markets of the CEEC region, containing two relatively big car manufacturers. Traditionally these car manufacturers were not integrated in the Comecon system. The Ceaucescu government had been rather isolated in the Comecon region. The integration of the Dacia car production network in the Comecon region was limited. Even after the turnaround, the local contents level of the Dacia car amounted to more than 96% (CCFA, December 1995: 255). The local production could be sustained at the high level of more than 70,000 cars partly because of relatively high import tariffs (including tariffs towards other CEEC countries, see table 10) and other measures favoring local production. Rumania has been the *only* CEEC country that has installed higher import duties towards other CEFTA countries than toward the EU in new cars (table 4).

The import penetration of the country has been - together with Russia - amongst the lowest of the whole region: around 10% of total consumption (in value). The instability of the country contributed to the uncertainty of the car producers to enter Romania. According to EIU estimates production could also be sustained due to exports to other countries outside the

[22] The Hungarian government also took action against the private imports of cars, in order to supports the official dealership network under construction. From 1995 cars imported privately can be no more than four years old, while other stricter rules apply as well. The producers from the European Union were granted a guaranteed minimum of 50,000 vehicles imports a year. The bigger the number of cars is that can be imported free from duties from the EU, the lower the impact of general tariff measures is. In comparison: the new car sales market in Hungary in 1996 reached around 75,000 units. If we deduct locally produced (and sold cars) from this total, the market neatly absorbed the guaranteed minimum quota, no more, no less, of imported cars from the EU. The official tariffs in Hungary thus have had no impact on the European producers, or put it differently: European producers "managed" to sell only that amount of cars in Hungary that could be exported free of tariffs.

European region: China, Latin America and the Middle East. Like in Poland and Russia local production is bigger than local consumption, which requires producers to aim at exports in order to work at sufficient capacity. Dacia capacity is around 120,000 cars per year, so it already produces at a 58% capacity utilization, which is below the European average.

The relative isolation of Rumania and the bargaining configuration that came with that gave the political elite somewhat more time to try to develop an own strategy. Rumania has been trying to develop two car complexes. Both car complexes (Daewoo and Dacia) are relatively weak and a supply structure weakly developed. In 1994 the Rumanian car production was 85% dominated by Automobile Dacia SA, since 1968 producing the Dacia, a car based on the Renault 12. In 1995 Dacia was the only remaining independent car manufacturer in the CEEC region. It has own production and R&D. The own R&D capacity even resulted in a domestically developed car (the R523 five-door hatchback). Dacia aimed its production primarily at Rumania (where it increased its market share from 23.5 percent in 1992 to 31.4% in 1995). Dacia's main foreign market are in other peripheral regions: 64.4 % of its 1994 exports for instance went to China (FT/8/5/1995). The orientation of the Dacia car complex is likely to sustain Rumania's relatively isolated position in Europe.

The entry of Daewoo could change the position of Rumania in Europe. Daewoo aims at 65% exports, primarily towards Western Europe. Like in Poland, Daewoo could make use of the local government's frustration with hesitant investors from the other European countries. As the Financial Times quotes: "From 1990 to 1993 we talked with 11 carmakers including Renault, Citroen [the providers of technology in the past, red], Fiat, Volkswagen, Chrysler, GM and Nissan (...) With Citroen, we discussed for four years, with Renault for two years. With Daewoo we started in November 1993 and the company was formed in November 1994. The first discussion lasted one hour and 15 minutes and most of what was discussed has happened" (FT5/5/1995). The new Rumanian government under president Ion Iliescu in 1993 rushed the deal through Romanian bureaucracy at unprecedented speed, including passage of a special law through Romania's parliament (ibid).

Rumania granted various tax and duty benefits under a special law created for foreign companies investing more than U$ 50 m in a joint venture. The condition for political support by the Romanian government are: more than 50 percent exports, at least 60 percent local content. These conditions spur Rodae as an export platform much more than a local production site for

the local market. In return Daewoo get duty free imports for seven years materials, parts, etc., a five year exemption from paying corporation tax, an import duty-free quota under a special quota arrangement. This fits nicely into its strategy of locating primarily CKD/SKD production in the CEEC region.

4.4 Third and risky tier countries

In the remaining countries in the CEEC region (Albania, Bulgaria, Croatia, Macedonia, Yugoslavia) only a limited component manufacturing capacity exists. In 1995, Bulgaria constituted a market of approximately 7,000 units (FT/24/7/1995). It prompted Ford and Rover to try to locate some SKD assembly in the country. The other markets are even smaller. Most of these third-tier countries had been abolishing quota and licenses earlier than the other countries. At the same time the Serbian motor industry (Zastava, producer of Yugo) had almost become annihilated due to the United Nations' sanctions to Serbia, while its exports were primarily aimed beyond Europe towards peripheral markets (one quarter to Egypt for instance) (FT/8/5/95).

Beyond the third tier countries, the former Sovjet Union states - in particular the Ukrain and Russia - apply for "risky tier" status from the perspective of the investing companies. Russia and the states of the former Soviet Union are more and more constituting a closed car system. The car production fell by 28% in the 1990s (Sintserov, 1998:11). Hardly any imports and hardly any exports have remained. AvtoVAZ - the most export oriented Russian car producer - saw its exports to Western Europe decline from over 114,000 units in 1989 to around 30,000 units in 1995 (EIU, 1997: 114). Before the turnover, Russian producers exported 55% of all the motor vehicles they produced, at the end of the 1990s only 17% (Sintserov, 1998). In particular the loss of the former "satellite" markets contributed to this loss.

Although Russian manufacturers have been eager to enter into partnerships with Western companies, the latter have been very hesitant. Concerns about political instability, organized crime and the like were complemented by high trade barriers. Russia is the only country in the region that applies the same high tariffs for imports from European Union, the CEFTA or non European countries (table 4). The Russian government does not want to choose for either the USA, Japan, South-Korea or Europe. This implies that the car and component producing countries from Central Europe now also suffer from the high import tariffs. This has further limited the willingness of countries like Hungary in particular to aim at exports to Russia. In

turn, the supply to other neigbouring countries diminished substantially as well. In both directions, therefore, the links with the Central and Eastern European production networks have been cut. Russian automotive sector has become isolated.

The risky nature of the country also involves the supply of components. Moskvich for instance faced so many disruptions in its supplies, that the company worked for only 120 days during 1995, while output became completely suspended in January 1996. Furthermore, it is hard to set up a dealership network in Russia. Other than in CEEC countries companies (such as dealers) face a much more complicated and expensive import regime than individual persons. In Russia, most firms became privatised in 1992 and 1993, but the involvement of the state (with subsidies and the like) remains substantial. A very limited volume of stock of these companies is traded on the open market.

The instability of the state in the risky tier countries adds to the unpredictability of the bargaining environment. The Ukrainian manufacturer AvtoZAZ, once the second biggest car maker after AvtoVAZ, started to negotiate with General Motors. After GM declined for lack of real financial commitment to the company, Daewoo showed interest. Then, the Ukranian government suddenly announced that it would not allow for a foreign investor's stake in the company of more than 30%. Since frontrunner as well as peripheral companies have tended to aim at controlling interests in the local manufacturers, this policy of the Ukranian government effectively barred the Korean company from acquiring the company.[23] Fiat and General Motors were both interested in AvtoVAZ, the leading Russian producer. In 1991 Fiat signed an accord with AvtoVAZ, in which it could take a 30% share. This deal followed old bonds of Fiat with the Russian car producer. 300,000 cars in the new complex of Yelabuga was envisaged for a mid-range Fiat model. But, early 1996 the deal had not yet been implemented. At the same time talks between the same company and General Motors were held. In early 1994 a cooperation protocol had been signed between GM and AvtoVAZ for the assembly of Opel Corsas at the Togliatti factory. No company, however, has really decided to play the Russian card wholeheartedly.

The preference for joint ventures with foreign companies, made these companies hesitant as well. In the rest of the CEEC region all manufacturers aimed at controlling interests in the producers (which happened). But the Russian markets remains tempting. So Fiat (with the

[23] It should be noted, however, that in the past foreign companies were barred from taking a controling interest in Korean companies either.

Russian GAZ plant), Opel (with AutoVAZ), Renault (with Moskvich), next to assembly plants of Daewoo (in Uzbekistan) and Ford (in Byelorussia), or Kia (in the Kaliningrad free economic zone near the Baltic Sea) are assembling cars for the local market. No re-importations are planned from Russia. In February 1998 considerable privileges were announced for foreign investors, who invest more than $ 250 million and which agree to produce fifty percent of all the necessary components in the country before 2003. These privileges for instance contains relieve of most customs duties on components, of municipal and federal taxes. Whether this new political stance is effective in really attracting foreign investments remains to be seen.

4.5 Trade creation and trade diversion effects of CEEC production networks

The interaction between local governments and core firm networking strategies affected the trade orientation and trade streams of the region. Trade barriers amongst the Central and Eastern European countries have been to the detriment of intra-regional trade in finished cars. Before 1990 no real trade barriers existed. As a consequence of stepped up intra-regional trade barriers over the 1990s the cars produced in the Czech Republic, Poland, Rumania and Russia hardly penetrated each other's markets anymore. Skoda sales in Poland for instance fell from 25,000 units in 1992 to a mere 1,024 in 1994 (0.4% of the local market, table 2).[24] Polski Fiat and Dacia (Rumania) were popular brands in Hungary, accounting for 6.5% and 10.2% of the local car parc. Their sales collapsed virtually overnight "because of higher prices" (Havas, 1995: 8). In the same vein, sales of Lada cars declined drastically, with the only temporary exception of Hungary in which Lada was capable of maintaining a twenty percent market share in 1993/94. The old barter trade between Hungarian parts and Russian cars was accountable for this relationship. With the entrance of Western European car producers, and the deintegration of the whole Eastern European production network, the barter lost its attractiveness. Consequently, Lada sales *did* plummet to a market share of 3.6 percent in 1996, selling only 2,646 cars in Hungary. Other former Sovjet producers like Avtozaz (Ukrain) or AZLK Moskvich, saw their car sales in Hungary collapse as well (Automotive Monitor, 1997: 14).

The take-over of all major CEEC car complexes has also changed intra-Central European trade in components. The take-over process has been particularly harmful for the Hungarian

[24] This prompted Volkwagen to start assembly in a plant in Poland (Poznan) of Skodas. In 1995 consequently, the sales of Skoda cars in Poland increased threefold.

economy, which had specialised on the supply of components. Fiat in Poland for instance gave preference to its "own" suppliers above the long established Hungarian suppliers of the old Polski Fiat models (Havas, 1996: 13). The direction of the component streams changed towards direct trade with the "parent" country. In most countries this is Germany, in the case of Poland Italy can be added to that. By far the biggest volume of exports of the Italian transport equipment industry go to Italy, whereas almost one quarter of the exports of Poland in transport equipment go to Italy (in comparison: the German transport market takes 35% of the Polish exports). In the case of Italy-Poland this situation even amounted to a small trade surplus in transport equipment in favor of Poland. In the case of Czech-German trade in transport equipment, the Czech Republic has a clear trade deficit. Polish imports from Germany in transport equipment in 1994 was for instance ten times the volume of trade with the Czech Republic.

Information on trade in passenger cars in Central and Eastern Europe is relatively scattered. This is particularly the case for the value of car production and trade. For this research project data have been compiled from various sources, but the quality of the information remains ambiguous.

The leading production sites in the CEEC (Poland and the Czech Republic in particular) have created overcapacity which has advanced relatively high export ratios in units. The national overcapacity and its subsequent pressure on exporting the surplus production, however, did not create a surplus on their trade balance which is an indication of the rather unequal terms of trade: cheap lower-end cars and parts exports in most countries only partly compensate for expensive car (and component) imports. The investment pattern of the car majors created very specific trade patterns in the region. The overcapacity countries trade the bulk of their products with the parent country of their most important investors. Thus the Czech Republic, Slovakia and Hungary trade the bulk of their goods with Germany. Poland does the same, but adds (legacy of the Fiat connection) an equally sizeable volume of trade with Italy. No other countries come close to these bilateral trade streams. These streams even represent a balanced picture. The macro figures resemble a pattern of interaction one might find with a parent-subsidiary construction in which the two partners make sure that the budget and trade volumes get traded of one against the other. Substantial (more than $ 100 million) *bilateral* trade volumes in the 1994-1995 period only appeared between Germany and Poland, Germany and the Russian Federation.

Finally, notwithstanding 'world car' ambitions of many frontrunner firms, no significant trade volumes of cars have yet been shipped from the CEEC countries to regions outside Europe. This development shows that even a world car primarily is intended for one region, in this case Europe. The dominance of the car industry coming from Germany (including Opel) in the CEEC region is overwhelming. The German car industry has a trade surplus with all countries in the region. This shows the unequal terms of trade that is developing as the consequence of the division of labor designed by the German car producers. The division of labor between Italy and Poland seems more equal; there is a small but constant surplus for Poland in its trade relation with Italy over the 1992-1996 period.

5. Conclusion: An emerging European Car System?

This contribution showed that the shape of International Production networks in the European car industry largely runs along the lines of four strategic groupings: frontrunners, followers, peripheral and (voluntary) lock-out networks. Each group of firms shares different strategic intentions for the region. Followers and lock-out network largely see the region as a still limited market. Peripheral firms primarily use the region as an entry into the western-European car market. Frontrunner firms adopted the most sophisticated (and also most difficult to manage) strategy: they aim at the region as a production site for cheap re-imports back into the home-base, they see it as a source for lower-end world cars and components, *and* they see the region as a market. The frontrunner firms also attach the biggest strategic value to sales (and production) in the region. Consequently, the CEEC region has reached the biggest share of worldwide sales with the frontrunner networks and peripheral players. But only the peripheral players have a considerable share of their European sales in the region. This further illustrates their rather weak status in the international car industry as well.[25]

The competitive balance in the European car industry, has not yet been much affected by the creation of cross border production networks, though. The most important competitors emulated each other's strategies. New entrants from Japan and Korea have shown rapid rises in

[25] Estimated sales in the CEEC region as percentage of total sales in the whole European Economic Space shows shares of around 4 percent for GM and Renault, eight percent for the Volkwagen Group and even as high as 13,4% for Fiat. The peripheral players share an even higher reliance on the CEEC region for their European sales. Suzuki sells 42% of its European cars in the CEEC region, whereas this share is even higher for Daewoo. On the other hand the latecomer firms as well as most of the other Japanese producers (Toyota, Nissan) have less than 1 percent of their overall and less than 2% of their European sales' volume in the CEEC region. By intent *as well* as in practice they attach the least importance to the CEEC region.

sales, and they do they make a difference for local governments. But, the above analysis has put severe question marks with the feasibility of the strategies of some of the producers. The strategy of Daewoo in particular has been highly risky. Local governments engaging in backing up Daewoo's entry "through the backdoor" run the risk of getting integrated in a vulnerable car complex, that is built on weak foundations in its home base. On the other hand, supplier structures might appear in which local expertise could be built up. We saw that local component manufacturers tend to be locked-into at best a second-tier status in the strategies of the other strategic groupings.

The restructuring pressure on the European car industry gets a more acute nature however. This is largely because the overcapacity problem in the European car system - any case in the short run - is exarcebated by the expansion strategies into the CEEC. The extra production capacity planned by the four frontrunner networks alone already showed that around extra production capacity for around 1.400.000 units was envisaged (table 7). With the most optimistic expectations for the whole CEEC market at around 1 million units, and a still limited export volume beyond the European region, the CEEC strategy will contribute to additional overcapacity. The Cross National Production Networks developing in the European region certainly lead to more overcapacity and consequently to further restructuring measures especially in the Western European part of the production networks. In particular for the frontrunner firms, this effect has been intended as part of the strategic plans. Only the French firms have wanted to invest in the CEEC region and did not really succeed in achieving substantial production volumes. In case the extension of European production networks towards the East would affect the competitive balance, this should be most detrimental for the French producers. However, in the meantime, the other European mass producers only have additional co-ordination problems.

The CEEC countries can be considered as locations helping to increase the efficiency of MNCs by hosting the lower-end of the value-added chain". As Bellak (1997: 210) notes, however, it can put the CEECs into "a vicious circle of change", whereas it puts pressure on the bargaining circumstances in the Western-European car complexes at the same time. The best example at the moment of this "vicious circle of change" can clearly be considered General Motors which uses its CEEC strategy as a confrontation with Western European suppliers and trade unions. GM is the frontrunner company with the least commitment to the European bargaining environment, whereas it comes from a much more adversarial bargaining network in

the United States. The other frontrunners have been more modest in their usage of the CEEC-link. This is also possible because they have used the CEEC largely as a *complementary* production base. Only the pressure on their suppliers in the home base is clearly mounting. The biggest effect in terms of efficiency therefore will probably be in the supply chain of the core companies.

As the mirror image of the tiered structure of the International Production Networks, the development of a tiered structure of countries can be observed in the CEEC region. Being part of the first tier, clearly gives the biggest possibilities of developing an autonomous developmental strategy, whereas the third tier status of other countries puts them in a structurally dependent position. The pending integration of the first, some second and a few of the third tier Central and Eastern European countries has had already major effects on the shape of the integration process. It makes the production system more and more "European". Technical specifications get harmonised, whereas tariffs of the Western and Eastern European countries are much higher towards 3rd countries than amongst each other. Consequently, trade patterns in the CEEC region changed from an orientation towards the Soviet Union into a clear EU orientation. Bilateral trade patterns developed in which most countries share clear dependencies with a "parent" economy. In most cases this is Germany which reinforces the position of the German government in the whole integration process.

Countries that have not yet been really integrated in the cross-country production networks - Rumania and Russia and the Ukrain - are still in a position to adopt first tier status. Russia might even find a "third" route into developing a car system relatively independent from European, American, Japanese or Korean car complexes. But this road seems very uncertain at the moment.

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Abbreviations

FT : Financial Times
EIU: Economist Intelligence Unit
OECD: OECD databank
EVD: Export Voorlichtings Dienst (Dutch Export Office)