Relocations and Transnational Collective Negotiation

An integrated approach to relocations in the European Union: information and consultation procedures and the impact on collective negotiation

Final Report

In partnership with

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This report has been produced by a trans-national Syndex team located in Paris and Warsaw, on the request of the European Trades Union Confederation. It is based on knowledge of the overall sector dynamics and strategies, gained from expert analyses that the firm carries out each year in some 1 200 companies.

Interviews were carried out jointly by people from Syndex in France and Germany, S.Partner in Poland, Estonian, Finnish and Turkish experts in their respective countries.

During this study, more than 70 interviews were carried out in 6 EU countries: Germany, Estonia, France, Finland, Italy and Poland, as well as in the candidate country Turkey. We would like to thank all those who have given us their time to enable us to carry out this work. These interviews looked at two aspects: issues concerning relocation and resettlement that the people interviewed have had to manage, and dialogue and negotiation methods (when they exist).

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Introduction

Relocations, a burning issue

Since the beginning of the 2000s, the question of relocations has taken on increasing importance in the public debate, thus kindling employees' fears and worries. From research in the Factiva[1] database, more than 12 000 press articles appeared in Europe in 2004 looking at the question of outsourcing or relocation abroad. This debate is not unique to France, since it also occurs as much in the United States, the United Kingdom, Germany, Poland, and Turkey as in the Philippines, Bangladesh or Mexico. The question of relocations has thus made a sensational entry into the public debate[2].

From a macro-economic point of view, the impact of relocations nevertheless seems less important as its omnipresence in current debates would suggest.

What are we talking about?

There needs to be a definition of what we are talking about in terms of relocation, since the debate is considerably muddied by a range of confused ideas: deindustrialisation, relocation, competitiveness, attractiveness, etc.

Competitiveness and attractiveness

The ideas of competitiveness and attractiveness are often use for political reasons. They conceal a highly free-market content: the idea of competitiveness is often misused, to make believe that this is limited to a question of costs or prices and that it suffices to compare wages in Germany and China… In reality, a company's competitiveness cannot be reduced to its competitiveness in terms of costs, but includes a number of other factors (research and development, product quality, brand image, lead times, reliability, etc.) which are said to be "off cost". This is what

[1] Quoted in *Délocalisations, normes du travail et politique d'emploi*, under the direction of Peter Auer, Geneviève Bresse and Dominique Méda, La Découverte, Paris, 2005.

[2] Relocations had already arisen in the public debate, but to a lesser extent in France, in 1991, on Hoover's relocation of a unit from France to Scotland, or in Germany in 1998 when several motor manufacturers (Volkswagen, Opel, Mercedes-Benz) renegotiated working time and flexibility.

explains why Germany is the world exports champion, despite having some of the highest employee costs.

It should be added that the competitiveness of a country has no real meaning. There is no precise way of measuring competitiveness. The drawbacks of the major indices and winners-lists are brought to light when they are compared with other instruments such as Foreign Direct Investment (FDI) or the number of firms moving in and setting up: France often appears a way down the list of winners (twelfth, twentieth, etc.), whereas year on year it is one of the leading countries in the world in terms of FDI or industrial set-ups.

According to the European Union, competitiveness, as defined at the Lisbon summit of March 2000, should make it possible to enable sustainable growth likely to improve the standard of living of its inhabitants and provide them with a high level of jobs and social cohesion. In this sense, competitiveness is the result of all economic policy (macro-economic, research, innovation, training, infrastructures, industrial policy, etc.). For this reason it is difficult to appreciate the competitiveness of a country through a multi-criteria analysis with highly questionable weightings. As for measuring by per capita GDP, even in parity with purchasing power, this is over-simplistic and is not satisfactory either[3].

Deindustrialisation to be put into perspective

The distance observed in industry in total employment is less marked than the gross data would suggest:

- industry plays a major role in productivity gains, an essential condition for raising standards of living;
- it is just as necessary for innovation, the role of which is strategic in Europe in a number of sectors (aerospace, biotechnologies, electronics, defence, etc.);
- the reductions observed in industrial employment are to be corrected with outsourcing made by industry to services: initially, ancillary activities such as caretaking and catering, in a second wave, accounting and pay or shared services… Moreover, internal growth also strengthens this optical effect which amplifies the weight of services;
- the drop in the relative costs of industrial products in relation to services accentuates the phenomenon;
- the growth in industrial production in volume, even if it is slower than the production of services, is continuing.

Industry still plays and will continue to play a primordial role in European economies.

[3] The human development index is a composite index which is no more capable of getting closer to social reality.

Externalisation and relocation

These two movements are part of vast movement in corporate reorganisation. They overlap in part, but only in part. In the first case the idea of outsourcing is to get another company to something that was previously performed internally. In that, the outsourcing falls within the modification of the company's borders. However, relocation indicates locating an activity which was previously carried out in the country of origin in another country. By crossing the question of the borders of the company with the choice of location, the following cases result:

	Country of Origin	Abroad
Within the Group	Production made in the Group in the country of origin.	Relocation. Production in the Group but in a subsidiary abroad.
Outside the Group	Production is given to a provider in the country of origin. Outsourcing.	Relocation. Production outsourced abroad. Offshoring

Strictly speaking, relocation consists in closing a unit in the country of origin and opening another one where manufacturing costs are significantly lower and from where production would be re-imported. Taken in its broadest sense, the idea can also be understood in terms of investments which can be made in another country and which are made to the detriment of the country of origin, through a subsidiary or through an outsourcer. It is then possible to talk of "losses of opportunities" in employment.

Relocations can be looked at on two levels:

- transfer of a production unit from the country of origin to a foreign country;
- recourse to a foreign country, which, following arbitration, can benefit from investments to the detriment of a unit located in the country of origin.

Relocation is one of the dimensions for reconfiguring production systems...

The financial logic which weighs on companies, and the profitability constraints which result, lead to companies constantly reorganising and restructuring.

Since the middle of the 1980s, restructuring have become permanent, whether they are a response to genuine economic difficulties or are simply comfort or stock market restructuring. They are carried out in many ways: partial restructuring of a site, total closedown of one or more establishments, merger-acquisition, outsourcing or relocation. These are some of the levers companies use to reply to their profitability constraints.

For around twenty years, European transnational or multinational companies have tended to redeploy in Eastern Europe or in North Africa, whereas American companies have done the same thing in Central America and particularly Mexico, and Japanese companies have set up in South East Asia. These phenomena go beyond a simple continental logic: multinationals have managed to set up low-wage international production bases[4].

Relocations come from a "mature strategic choice" and not a circumstantial decision. Location should not therefore be seen as a constraint, but as one of the levers of corporate organisational change.

Blackmail and competition between employees

If there have been many articles and works published over recent years, it is because people have been particularly struck by at least three phenomena:

- on the one hand, several affairs (Bosch, Siemens, etc.) have been in the headlines showing the blackmail that company managements try to use to renegotiate working times and pay;
- on the other, the rapid rise of China – and, to a lesser extent, India – in sectors such as toys, textiles and electronics was not expected and surprised everybody;
- finally, the rapid development of Central and Eastern European countries and the enlargement of the European Union have strengthened these fears.

Over recent decades, there have been many changes and companies have been able to redeploy on a worldwide scale:

- the liberalisation of commercial exchanges;
- the almost perfect mobility of capital;
- the drastic drop in transport costs (without taking into account external environmental and social factors) and communication;
- digitalisation, enabling exchanges of an increasing flow of information;
- the abundance of workers, technicians and engineers in emerging countries with costs significantly lower than in North America or Europe.

Companies now have the possibility of modulating various functions and stages in their processes (from research to after-sales separating out design, production, assembly, R&D and marketing) and spread them over several countries and outsourcing companies.

The globalisation of companies and the construction of medium-term plans (strategic plan) means that they can now make comparisons and arbitrate to localise their production research or logistics functions and thus bring into competition countries or their territories and their production, tax and social systems. It is a strategy to minimise production costs and, primarily, labour costs, which can co-exist with other factors (market access, proximity, etc.).

[4] *Les multinationales et la mise en concurrence des salariés*, Claude Pottier, L'Harmattan, Paris, 2003.

This competition is translated by increased pressure on employees and their representatives[5]. Recently, it has become a means of applying pressure, and even blackmail, for companies who want to bring into question employees and their benefits. The result is a drop in employee representatives' bargaining power.

This competition has also made it possible to double the worldwide workforce level[6]. In effect, in 1985, market economies (North America, Western Europe, Japan and the "Asian Tigers") concerned 2.5 billion inhabitants. 15 years later, with the end of the autarchy of the Indian economy, the Chinese transition to capitalism and the end of communism, the globalised economy represents more than 6 billion inhabitants (on constant level for 1985 it would only be 3.3 billion).

This doubling of the worldwide workforce is not reduced to the emergence of hundreds of million of unskilled workers coming to compete with the un- or low-skilled workers of Western countries. Increasingly, it is also the activities of skilled workers which are subject to competition (R&D, financial services, software programming, etc.)[7].

[5] The question of countries or territories caught in a non-cooperative "lose-lose" situation – in which each country cuts its taxation to attract investors, but is quickly copied by its neighbours and loses its tax income – is covered in Part I.

[6] *Doubling the Global Work force: the Challenge of Integrating China, India and the Former Soviet Block into the World Economy*, Richard B. Freeman, November 2004.

[7] Whereas the United States trained 60 000 engineers and science graduates in 2003, 700 000 engineers and science graduates left Chinese schools that same year!

Part 1
Relocations, an overview

1. An attempt to understand the phenomenon

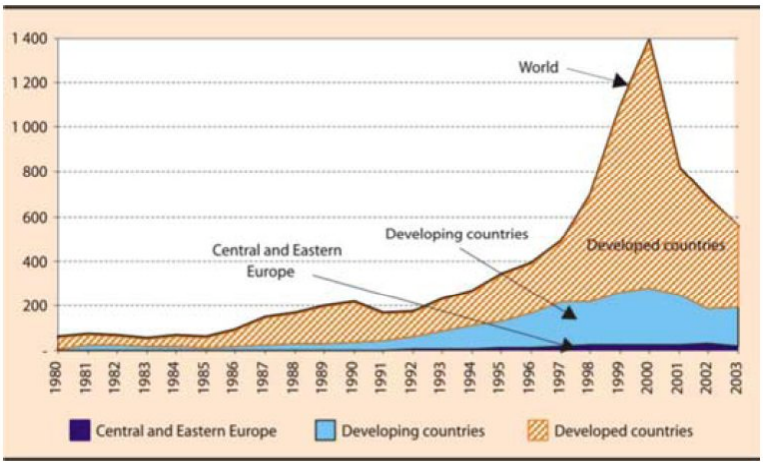
1.1. A protean reality

The reality of relocations today is complex and protean in the various member countries of the European Union. Relocations are generally perceived through the prism of rich countries alone. They are however far from reducing themselves to it, since they are part of the deep-rooted movement underway of the globalisation and relocation of industrial activities and services.

Relocations are observed between countries of the North and emerging countries, and also between "rich" countries or between developing countries. On the latter aspect, several publications tend to overlook emerging countries, which are themselves faced with relocations. The textiles industry is emblematic of this re-dealing of the cards between the countries of the South. The consequences of the liberalisation of textiles are causing relocations from one country in the South to another: some countries such as Morocco, Turkey, Cambodia or Mexico have seen their textiles industries threatened by Chinese and Indian competition.

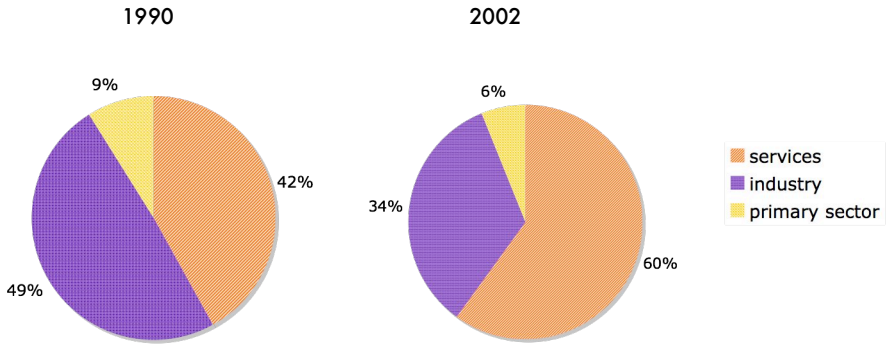
In this study, the choice was made to look at countries such as France, Germany, Italy, or Finland, but to take into account the situations in Poland, Estonia and Turkey, which can not only receive relocated activities from the first set of countries, but also have to cope with relocations to Ukraine, Russia or Asia.

FDI Inflows, global and by group of countries, 1980-2003 (Billions of dollars)



Source: UNCTAD, IDE/TNC database (www.unctad.org/fdistatistics).

Spread of FDI by sector (1990-2002)



Some indicators, such as Foreign Direct Investment (FDI) or the foreign trade balance, make it possible to approach the phenomenon, even if they are not designed to measure relocations and therefore have several limits.

1.2. FDI

After a peak at the very beginning of the 2000s, FDI went through a three-year downturn worldwide before picking up again from 2004 onwards. The graph gives an initial idea of the destination of FDI flows by main geographic zone and puts in perspective the share taken by emerging countries in relation to developed countries. These flows still remain highly concentrated in developed countries, although a now substantial part of them goes to Asia in development (these FDI come to a very large extent – two thirds? – from Asia – Japan, South Korea, Taiwan, etc. – and converge on China).

The two thirds of the FDI consist of stakeholdings, whereas intragroup loans and reinvested profits only make up 23 and 12 % respectively.

1.3. The rise of services in FDI

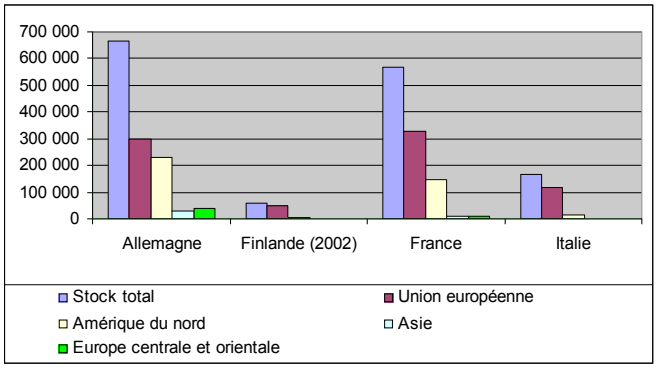
Services represent a growing share of FDI. In the 1970s, they only represented a quarter of the worldwide stock of FDI whereas in 1990 this share reached around 42 %. In 2002, out of the total of outgoing FDI stocks, services represented 60 % of worldwide levels, and industry only represented 34 %, the primary sector receiving the remainder, i.e. 6 %. The share of developing countries went from 1 % in 1990 to 10 % in 2002.

The make up of FDI is also changing. FDI was concentrated above all in commercial and financial sectors. Recent years have seen the development of investments in sectors such as telecommunications, water and electricity. Overall, a large part of FDI is designed to set up in a foreign country. It should be added that services remain much less internationalised than industry. Only 10 % of the production of services is under international trade, as opposed to 50 % for the manufacturing sector.

For the countries studied in this report, as much in terms of flows as outgoing foreign investment stock, the main destinations are not low-cost countries in relocation operations, but, on the contrary, mature markets, for merger and acquisition operations with a view to conquering foreign markets.

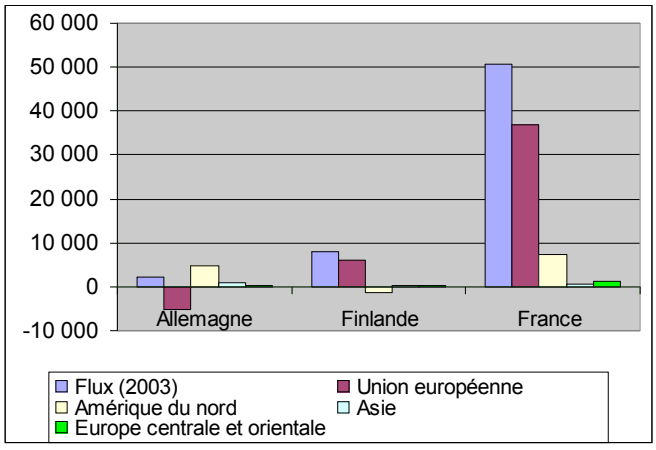
In the case of Germany, the foreign direct investments stock held in Central Europe represents 5.5 % of the total German stock, whereas North America represents 34.5 %. Similarly, in 2003 France made 72.3 % of its foreign direct investments in the European Union (EU15), as opposed to 2.4 % in Central and Eastern Europe and 1.1 % in Asia.

Value of FDI stock by region held for four European Union countries (2003, in billions of euros)



Source: UNCTAD

Value of FDI flow by region made by three European Union countries (2003, in billions of euros)



Source: UNCTAD

1.4. The relocation of services abroad is a recent but growing phenomenon

The relocation of services abroad can be done through the setting up of a subsidiary abroad or by using a local outsourcer. This is translated by the transferring of various services (accounting, software, testing, invoicing, data analysis and processing, etc.) previously carried out in the country of origin.

Up until the beginning of the 2000s, 70 % of services (call centres, shared services, software, IT services, etc.) relocated abroad were concentrated in four countries: Ireland, India, Canada and Israel. Since then the share of India has strengthened, whereas Asia (China, Malaysia, Singapore, etc.) and Central and Eastern European Countries (Czech Republic, Poland) have joined the scene. Nevertheless, the share of countries such as Ireland, the United States, the UK or Germany remains very high in the total of all new investment projects.

Around 20 years ago, relocation of IT services to India increased in the US. Since then, the movement has spread widely to Europe, and a whole series of activities – call centres, data capture and processing, software development and, more recently, R&D – have been transferred to Asia or Central Europe.

For a country such as India, this has been translated by an explosion in software exports and other services which have increased by half a billion dollars (12 billion in 2003-2004 in total) in the space of a decade, whereas the share of this activity went from 3 % to 21 % of Indian exports between 1996 and 2003. Multinationals such as Nortel, Intel, General Electric, or Microsoft have played a major role in this phenomenon.

Tableau 11. Projets d'IED axés sur l'exportation dans des centres d'appel, des centres de services partagés, des services informatiques et des sièges régionaux, par destination, 2002-2003
(en nombre et pourcentage)

Région/pays	Centres d'appel		Centres de services partagés		Services informatiques		Sièges régionaux	
	Nombre de projets	Part du total	Nombre de projets	Part du total	Nombre de projets	Part du total	Nombre de projets	Part du total
Monde	513	100	139	100	632	100	565	100
Pays développés	279	54	48	35	293	46	339	60
Dont								
Allemagne	20	4	1	1	34	5	22	4
Canada	56	11	3	2	14	2	25	4
États-Unis	15	3	2	1	26	4	80	14
France	13	3	2	1	16	3	11	2
Irlande	29	6	19	14	14	2	15	3
Royaume-Uni	43	8	7	5	73	12	64	11
Pays en développement	203	40	72	52	315	50	209	37
Afrique	7	1	1	1	10	2	4	-
Amérique Latine et Caraïbes	29	6	5	4	22	3	10	2
Asie et Pacifique	167	33	66	47	283	45	195	35
Dont								
Chine	30	6	4	3	60	9	38	7
Émirats arabes unis	13	3	-	-	12	2	31	5
Hong Kong, Chine	2	-	-	-	14	2	37	7
Inde	60	12	43	31	118	19	7	1
Malaisie	16	3	6	4	8	1	17	3
Philippines	12	2	1	1	9	1	4	1
Singapour	16	3	8	6	35	6	36	6
Europe centrale et orientale	31	6	19	14	24	4	17	3
Dont								
Hongrie	11	2	7	5	4	1	4	1
République tchèque	9	2	6	4	5	1	-	-

Source : CNUCED, *World Investment Report 2004 : The Shift Towards Services*, tableau IV.7.

In Central and Eastern European countries, the investment of DHL in Prague (IT centre) or Philips in Lodz (accounting services) are the European equivalent of these relocations of services to so-called low-cost countries.

1.5. The internationalisation of R&D is speeding up

The eminently strategic question of R&D and its location arises increasingly, as is underlined by the latest report of the United Nations Conference for Trade and Development (UNCTAD)[8].

For the time being, R&D spending remains very concentrated in the more developed countries. In 1996 and in 2002, the ten biggest countries in terms of spending represented 86 % of the total. Only two developing countries were in this list: China and South Korea.

Table III.1. The 10 leading economies in R&D and business R&D spending, 1996 and 2002
(Ranked by their 2002 values, billions of dollars)

	Total R&D				Business R&D		
Rank	Economy	1996	2002	Rank	Economy	1996	2002
	World	575.6	676.5		World	376.3	449.8
1	United States	197.3	276.2	1	United States	142.4	194.4
2	Japan	138.6	133.0	2	Japan	92.5	92.3
3	Germany	52.3	50.2	3	Germany	34.6	34.8
4	France	35.3	32.5	4	France	21.8	20.6
5	United Kingdom	22.4	29.3	5	United Kingdom	14.5	19.6
6	China	4.9	15.6	6	Korea, Republic of	9.9	10.4
7	Korea, Republic of	13.5	13.8	7	China	..	9.5
8	Canada	10.1	13.8	8	Canada	5.9	7.9
9	Italy	12.6	13.7	9	Sweden	6.6 [a]	7.3 [b]
10	Sweden	8.8 [a]	9.4 [b]	10	Italy	6.7	6.6
	Total	495.8	587.6		Total	334.7 [c]	403.4
	Share in world (%)	86.1	86.9		Share in world (%)	88.9	89.7
	Developing economies, South-East Europe and CIS	44.5	57.1		Developing economies, South-East Europe and CIS	20.4	31.9
1	China	4.9	15.6	1	Korea, Republic of	9.9	10.4
2	Korea, Republic of	13.5	13.8	2	China	..	9.5
3	Taiwan Province of China	5.0	6.5	3	Taiwan Province of China	2.9	4.0
4	Brazil	6.0	4.6 [e]	4	Russian Federation	2.6	3.0
5	Russian Federation	3.8	4.3	5	Brazil	2.7	1.9 [e]
6	India	2.1	3.7 [b]	6	Singapore	0.8	1.2
7	Mexico	1.0	2.7	7	Mexico	0.2	0.8 [b]
8	Singapore	1.3	1.9	8	Turkey	0.2	0.4
9	Turkey	0.8	1.2	9	Hong Kong, China	0.2 [d]	0.3
10	Hong Kong, China	0.7 [d]	1.0	10	Chile	0.1	0.2
	Total	39.1	55.4		Total	19.7	31.5
	Share in developing economies, South-East Europe and CIS (%)	88.0	97.0		Share in developing economies, South-East Europe and CIS (%)	96.4	98.7

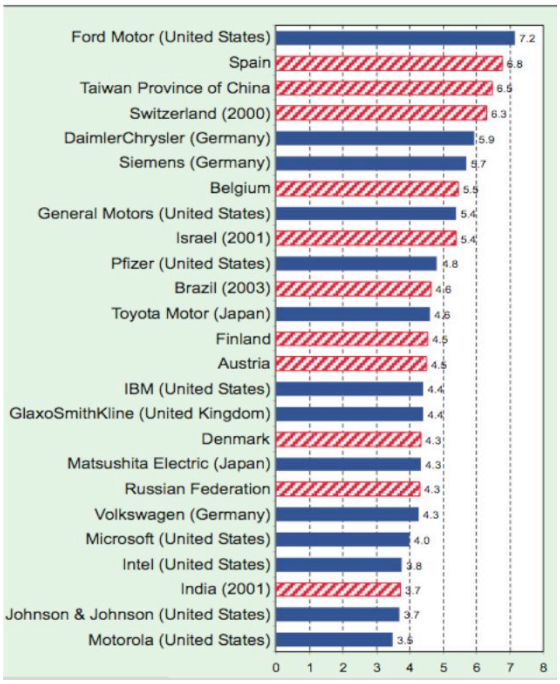
Source: UNCTAD, based on annex table A.III.2.

The evolution in R&D spending can be largely explained by the growth in the efforts of the United States (+ 5.8 % par year), the UK and Canada to a lesser extent. China saw its efforts – still small in value – increase significantly (+ 20 % per year). However, France, Germany and Japan did not have a very dynamic evolution in their spending. The share of developing countries, which was very low at the outset, went

[8] *World Investment Report 2005: Transnational Corporations and the Internationalization of R&D*, UNCTAD/CNUCED.

from 2.5 % of the world total in 1991 to 8.4 % in 2002. This growth was largely carried by South, East and South East Asia. In developing countries, the effort was also very concentrated, the ten largest countries making 97 % of the total.

R&D spending of some transnational companies and certain countries
2002, in billions of dollars



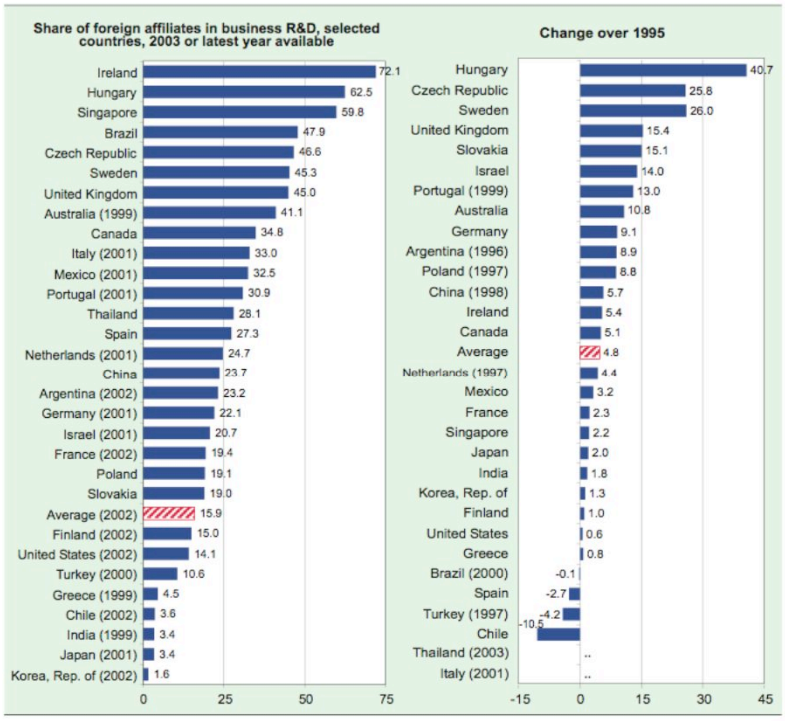
Source: UNCTAD, *World Investment Report*, 2005

Just as was observed for services activities, it is possible to see rapid development in the internationalisation of R&D activities. Multinationals are once again the driving force behind worldwide R&D (multinationals such as Ford or Siemens have R&D budgets greater than or equal to those of China or Brazil) and a vehicle for its internationalisation, with several emerging countries benefiting from this dynamic. For the time being, the phenomenon is only at its beginnings: R&D is one of the least internationalised activities, and FDI in R&D are mainly greenfield investments.

For the United States, a precursor country in this, the share of R&D spending of foreign subsidiaries has increased and represents 13.3 % of the total. This share went from 22 % to 43 % in Sweden between 1995 and 2003. In Germany, France, Italy and Japan, the proportions are much lower, around 4 % for Japan.

According to a study carried out by UNCTAD between 2004 and 2005, the trend towards internationalisation is accelerating.

Figure IV.6. Trends in R&D spending by foreign affiliates, selected economies, 1995-2003
(Per cent)



Source: UNCTAD's calculations, based on national sources and data provided from the OECD AFA database.
Note: In Argentina, Chile, Israel, the Republic of Korea and Mexico, the R&D expenditure of United States-owned affiliates has been used as a proxy for the R&D spending of all foreign affiliates. In India, the share of foreign affiliates in total R&D spending has been used as a proxy for their share in business R&D spending.

Source: UNCTAD, *World Investment Report*, 2005.

The results show that if the United States, the UK, France, Italy and Germany are among the main countries, a growing number of developing countries are also mentioned in this study.

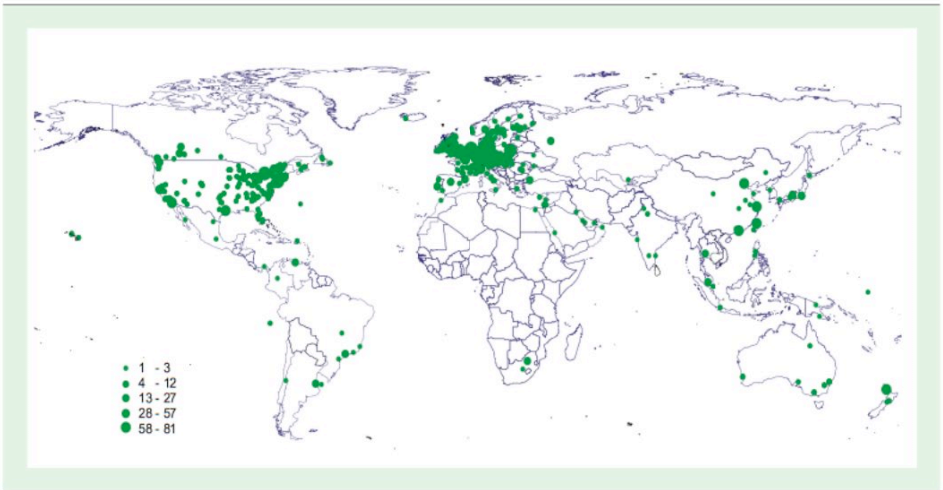
Table IV.1. The top 20 firms, by R&D expenditure in the world and in developing economies, South-East Europe and CIS, 2003
(Millions of dollars)

World				Developing economies, South-East Europe and CIS			
World rank	Corporation	Home economy	R&D spending	World rank	Corporation	Home economy	R&D spending
1	Ford Motor	United States	6 841	33	Samsung Electronic	Republic of Korea	2 740
2	Pfizer	United States	6 504	95	Hyundai Motor	Republic of Korea	734
3	DaimlerChrysler	Germany	6 409	110	LG Electronics	Republic of Korea	612
4	Siemens	Germany	6 340	178	Taiwan Semiconductor	Taiwan Province of China	342
5	Toyota Motor	Japan	5 688	219	PetroChina	China	265
6	General Motors	United States	5 199	255	Accenture	Bermuda	228
7	Matsushita Electric	Japan	4 929	258	Korea Electric Power	Republic of Korea	227
8	Volkswagen	Germany	4 763	267	KT	Republic of Korea	219
9	IBM	United States	4 614	298	Marvell Technology	Bermuda	197
10	Nokia	Finland	4 577	300	POSCO	Republic of Korea	196
11	GlaxoSmithKline	United Kingdom	4 557	317	Petroleo Brasileiro	Brazil	183
12	Johnson & Johnson	United States	4 272	328	SK Telecom	Republic of Korea	172
13	Microsoft	United States	4 249	337	China Petroleum & Chemical	China	167
14	Intel	United States	3 977	348	Winbond Electronic	Taiwan Province of China	158
15	Sony	Japan	3 771	349	Embraer	Brazil	158
16	Honda Motor	Japan	3 718	350	United Microelectronics	Taiwan Province of China	157
17	Ericsson	Sweden	3 715	486	Pliva	Croatia	99
18	Roche	Switzerland	3 515	516	Sasol	South Africa	91
19	Motorola	United States	3 439	518	AU Optronics	Taiwan Province of China	91
20	Novartis	Switzerland	3 426	585	Hyundai Heavy Industries	Republic of Korea	77

Source: UNCTAD, based on United Kingdom, DTI 2004.

Over recent years, many companies (General Electric, Siemens, Intel, Honeywell, Pfizer, etc.) have announced that they would make significant investments in China, India, South Korea, Malaysia and Singapore, in particular. Most of these companies are trying to strengthen their presence in emerging countries to be able to benefit from low labour costs and a highly qualified workforce. The concentration of R&D centres in developed countries nevertheless remains very strong.

Worldwide location of majority-owned foreign affiliates engaged in R&D, 2004



Source: UNCTAD, based on the *Who Owns Whom* database (Dun & Bradstreet).
Note: On the basis of 2,603 majority-owned foreign affiliates engaged in R&D.

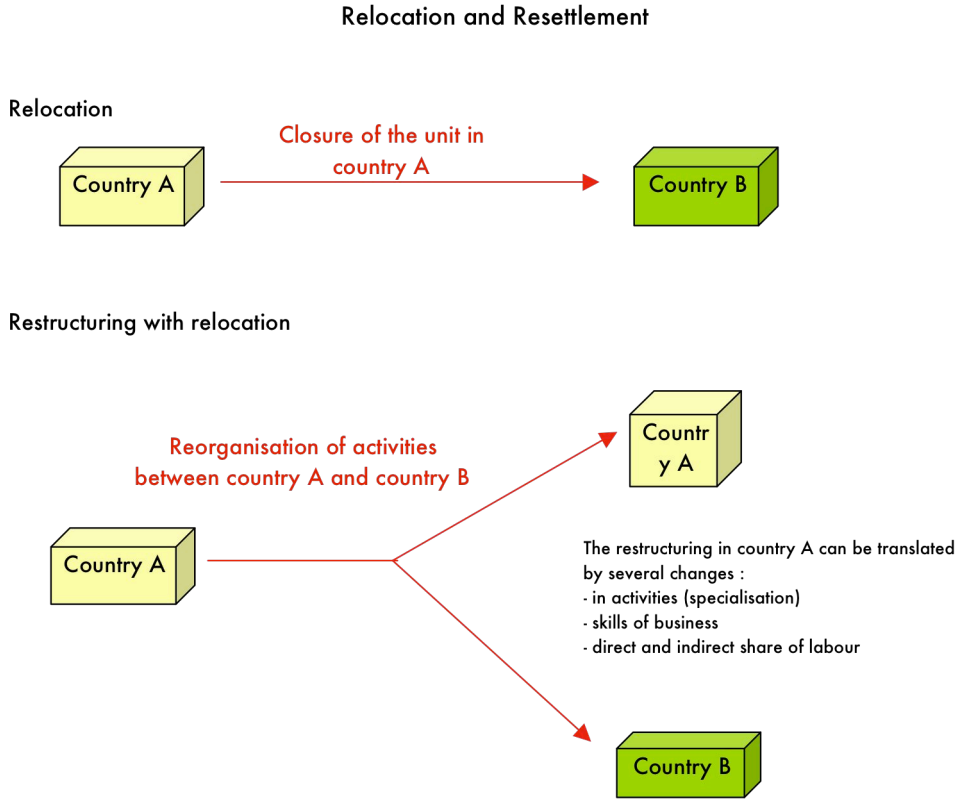
Source: UNCTAD, *World Investment Report*, 2005.

1.6. *The limits of an FDI-based approach through*

The FDI approach has many limits:

- FDI and relocation do not overlap, as the purchase of an existing company in the destination country does not change the production capacity of the country in question;
- only greenfield investments can be considered as relocations, and only when it is not a question of serving the local market, but re-exporting production;
- many sectors are not concerned, by nature, although investments are high. In the mass retail sector, for instance, when Carrefour, Tesco's or Wallmart invest in a country and open shops, it cannot be relocation, given the type of activity of these multinationals. The same applies when a telecommunications operator buys out a foreign operator, or for the major utilities companies;

- another limit of FDI is that naturally it does not provide a grasp of "deferred relocations".



1.7. Foreign trade

The evolution of international trade also gives indices providing better insight into the size of the relocation phenomenon at a worldwide level. In effect, investments made in the context of relocation operations in countries where labour costs are low are at the source of exports to zones with greater purchasing power. They therefore have a positive effect on the exports of the destination country.

Statistics make it possible to relativise the hypothesis of rapid massive relocation of the production of multinationals in favour of emerging countries. In effect, the share of these countries in world trade, even if it is progressing, remains relatively modest.

Exchanges of goods on the worldwide scale take place mainly between countries with high purchasing power. In 2004, North America and Europe, together, represented 60% of worldwide exports, Germany remaining the main exporting country, with 10% of the market.

At the level of the European Union, the observation is similar, and intra-community exchanges are still mainly between neighbours and on similar products. Exchanges with the new members of the European Union only represent a minor share (15 %) of the trade of EU15. In 2005, France imported 3.8 billion euros of Polish goods, whereas at the same time it imported 65 billion in German goods.

Furthermore, the growing openness of the economies of the new members to commercial relationships with the European Union has taken place in an imbalanced way, imports from the zone made up by the ten new member states (EU10) growing quicker than exports. The EU15 countries therefore have a trade surplus in this zone, which is not compatible with a massive and rapid movement of relocation from one zone to another.

Nevertheless, at the worldwide level, the rise of Asia in international exchanges is noteworthy. The 5 point increase in the region's market share between 1990 and 2004 can of course be explained by the explosion of exports from China, which went from 1.8 % to 6.6 % of the worldwide market over the period. However, 50 to 60 % of Chinese exports come from foreign companies.

Market share in exports (in billions of US dollars and in rates)

	Valeur	Part				Variation annuelle en pourcentage			
	2004	1990	1995	2000	2004	2000-04	2002	2003	2004
Monde	8907	100,0	100,0	100,0	100	9	5	17	21
Amérique du Nord	1324	16,6	17,1	19,5	14,87%	2	-4	5	14
Etats-Unis	819	11,6	11,7	12,5	9,19%	1	-5	5	13
Amérique du Sud et centrale	276	3,1	3,0	3,1	3,10%	9	0	13	30
Brésil	96	0,9	0,9	0,9	1,08%	15	4	21	32
Europe	4031	-	46,5	42,0	45,26%	11	7	19	19
Union européenne (25)	3714	-	...	38,9	41,70%	11	7	19	19
Communauté d'Etats indépendants (CEI)	266	-	2,2	2,3	2,98%	16	6	27	37
Russie, Fédération de	183	-	1,6	1,7	2,06%	15	5	27	35
Afrique	232	3,1	2,2	2,3	2,60%	12	2	25	32
Afrique du Sud	46	0,7	0,6	0,5	0,52%	11	2	23	26
Moyen-Orient	390	4,1	3,0	4,3	4,37%	10	5	20	29
Asie	2388	21,8	26,0	26,4	26,81%	10	8	18	25
Chine	593	1,8	3,0	4,0	6,66%	24	22	35	35
Japon	566	8,5	8,8	7,6	6,35%	4	3	13	20
Six pays ou territoires commerçants de l'Asie	860	7,8	10,3	10,4	9,65%	7	6	15	24
Pour mémoire:									
ANASE (10)	552	4,2	6,4	6,9		6	5	13	20
MERCOSUR (4)	136	1,4	1,4	1,3		13	1	19	28

Source: WTO

1.8. The vision of the European Monitoring Centre on Change (EMCC)

Since 2003, the European Monitoring Centre on Change (EMCC) has been collecting data on restructurings which appeared in the papers (which introduces a bias as not all cases are in the press, SMEs attracting less attention from the media, etc.). Even though the data is not perfect, it nevertheless sheds an interesting light on things[9].

From the data for the period spanning 2002 to April 2006, a picture appears of jobs being cut on account of relocations representing less than 5 % of all jobs cut on account of restructurings. The examination by country confirms this trend: for France, out of a total of 196 000 jobs cut, only 9 800 (5 %) of them were on account of relocations. For Germany, the data is 313 000 jobs slashed, of which 10 500 were relocated (3.3 %). Italy saw more than 70 000 jobs cut, 2 860 of them on account of relocations (4 %). Only Finland had a more significant proportion of relocations: 4 380 jobs out of a total of 31 500 job cuts (13.9 %). For Poland and Estonia, the weight of relocations is very marginal: 710 jobs relocated out of 95 700 jobs cut and no jobs registered in the case of Estonia. However, the two countries which had a positive balance between the number of jobs cut by restructurings and jobs created thanks to the expansion of companies: 95 700 jobs restructured and 161 000 jobs created in Poland, 1 068 jobs destroyed and 2 570 jobs created in Estonia.

type of restructuring	number of jobs cut	% of jobs cut by cause	number of jobs created	% of jobs created by type of restructuring
internatal restructuring	1 296 879	74,90%	21 847	3,6%
expansion	950	0,10%	570 252	95,1%
bankruptcy / closure	237 621	13,70%	837	0,1%
relocation	79 209	4,60%	21	0,0%
merger/acquisition	66 478	3,80%	3 985	0,7%
resettlement	25 202	1,50%	1 225	0,2%
outsourcing	20 035	1,20%	0	0,0%
other cases	4 477	0,30%	1 210	0,2%
total	1 730 851	100%	599 377	100%

data EMR / EMCC

[9] Given difficulties concerning the method of listing the restructuring cases, the cases chosen involve headcount reductions/increases of at least 100 people and involving sites with at least 250 employees or at least 10 % of the company's headcount.

1.9. A gap between social perceptions and evaluations

Most macroeconomic work[10] concludes on a very limited impact of relocations on jobs (around 3 to 7 % of jobs lost). This work doesn't fall in well with the perception of the union teams or employees in the various sectors studied. A certain number of observations shed light on this discrepancy:

- in the strict sense of the term, relocations refer to the stopping of production in the country of origin, the relocation of this production abroad and the re-exporting of goods or services to the country of origin. When these exchanges take place within one company, they are particularly difficult to appreciate from a macroeconomic approach, on account of the value calculation methods which vary from one company to another, as they do within a single company. A certain number of case consequently slip through the statistical net;
- the flow of immaterial goods (data flows, etc.), which are frequent in industry, are a type of exchange flow which is extremely difficult to grasp and put a value on using statistical tools;
- the stopping of production in a given site is not always immediately concretised by the relocation of production abroad. In some cases, production is firstly externalised to local suppliers, then, some time after, withdrawn from these suppliers in the context of an offshoring policy in low-cost countries. The field survey we carried out showed that the relocation of procurement is a phenomenon which is tending to become more general in all sectors;
- generally, it is essential to underline that relocation is not a separate phenomenon, isolated from other forms of general organisational changes (outsourcing, restructuring, etc.) which has concerned industry for the past thirty years;
- similarly, macroeconomic studies have focused – by definition – on cases of proven relocation. However, from the point of view of political and union action, cases of potential relocations are nevertheless just as important. Our field observations have shown that many companies are currently reconfiguring their industrial systems, giving them a territorial basis. In this context what will the role devolved to low-cost sites be? Producing for the local market or for re-export? The answer to this question is often not clear, the analysis of the management's projects showing evolving hypotheses (the share of production to be re-exported to the country of origin being re-evaluated).

[10] Out of step with these studies: see the work of Bronfenbrenner Kate Luce Stephanie, *The Changing Nature of Corporate Global Restructuring: the Impact of Production Shifts on Jobs, in the US, China and around the Globe*, 2004. This studies considers that there has been a big increase in relocations over the past three years. The estimates made are much higher than the estimates from other organisations: a ratio of 1:5 with the Bureau of Labour Statistics, for example.

2. Transversal determinants

2.1. *Financialisation of company policy*

The industrial choices of floated companies are strongly influenced by constraints which come from the importance of the shareholder. The shareholder has become much more resonant with deregulation policies (opening of many sectors to competition), removal of intermediaries (financing through the share issues rather than using banks), and decompartmentalisation (of markets and bringing down of barriers), which have significantly contributed to the development of the activity of the financial markets and the rise in investment funds, pension funds and speculative funds.

Consequently, the 1990s marked the move away from industrial capitalism to financial capitalism characterised by the weight of institutional investors and the evolution of company management systems (corporate governance, value creation, etc.) and a short-term vision (quarterly) of affairs.

Collective management funds are averse to conglomerate structures, which they suspect of engendering "local under-optimisation"[11]. That is why they have encouraged firms to rationalise their portfolios so as to have transparent comparables to allocate their investments to the "best performing" firms. Strategic management has tended to align on performance criteria valued by shareholders, through the choice of double focus:

- focus on a limited number of markets to benefit from the oligopoly income and use of concentration operations to strengthen them;
- focus on a limited number of functions to vary charges, minimise assets and increase productivity of factors by generalising the commoditisation of the supply of industrial goods or services.

The "interiorisation by managers" of shareholders' interests[12] has led to a querying of the methods for sharing productivity gains (through the setting up of variable remuneration policies based on stock market performances).

This change in the rapport de forces between employees and capital owners for the benefit of the latter is concretised by the creation of "guaranteed minimum capital income". This remains paradoxical, insofar as companies do not (or no longer) depend on the stock markets for their financing: on the contrary, since the middle of the 1990s, companies[13] have "given back" more capital to their shareholders (in the form of dividends or repurchase of shares) than they have kept… … They participate

[11] They consider that it is up to them to manage the risk, through diversified investments, and not the company, through a presence in sectors with distinct cycles.
[12] LBOs can be considered as the quintessence of the link between shareholders' and managers' objectives, insofar as they are based on the use of debt which allows the minimising of the contribution from shareholders.
[13] On average, 80 % of profits from French companies in the CAC 40 are still allocated to the distribution of dividends…

in the querying of the social democratic adage of "today's profits are tomorrow's investment and the day after tomorrow's jobs"…

One of the key points of the financialisation of company management rests in the primacy of the timing of financial communication (every quarter). However, this horizon is not really compatible with industrial choices, insofar as:

- it favours risk-free investment, i.e. an investment which ensures the remuneration of the capital opportunity costs (the famous 15 % return on equity);
- it favours cost competitiveness through the search for management gains with short-term effects on the results and the clearing of cash flow…

Companies subject to more or less acute financial constraints (from a large float[14] to the existence of an LBO mechanism) are the most sensitive to the optimisation of their choices by geographic location, whether it is a question of:

- location of their industrial base;
- use of offshoring in development;
- varying of charges through re-balancing and direct procurement policies in low-costs zones.

The financialisation of management makes it difficult to develop innovation or quality competitiveness policies, which are by their very nature risky or capital hungry…

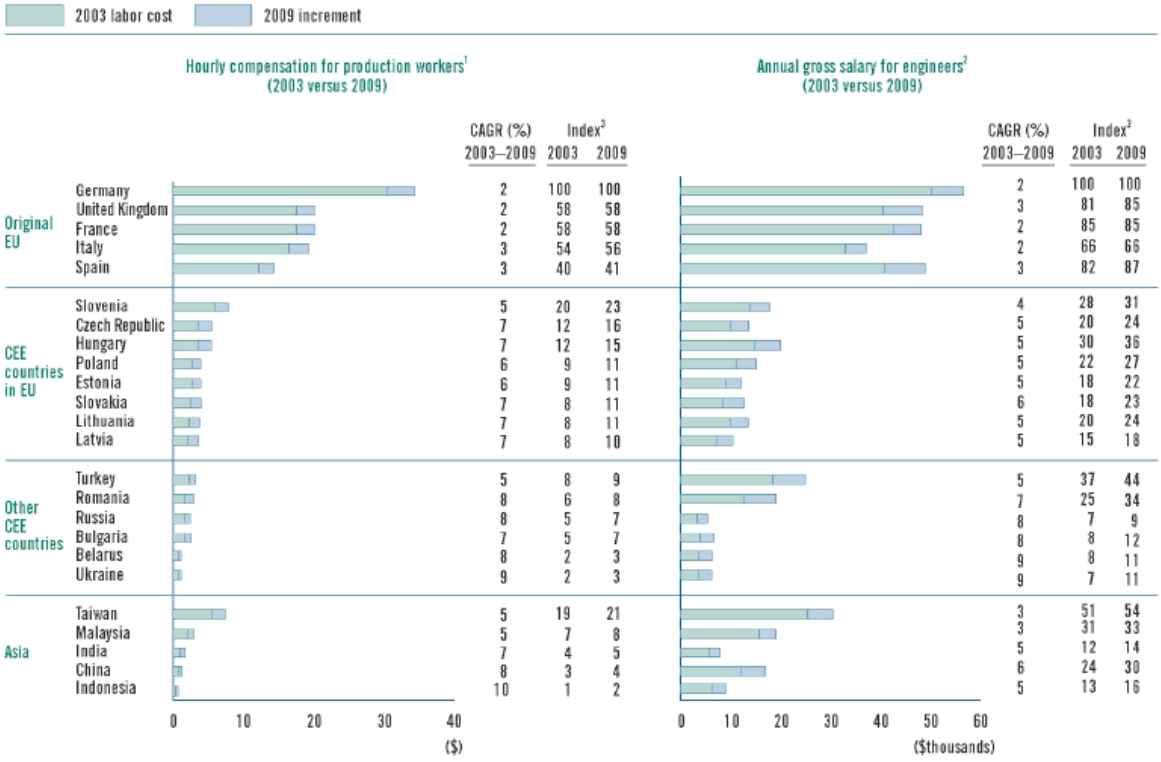
This is how the heterodoxical models developed by companies in the sectors studied come out of firms whose control of the capital is not, or is only slightly, subject to the arbitration of pension or investment funds.

2.2. The labour market

The cost of labour, without being the only element behind relocations, is nevertheless a decisive element. In Polish company V, which produces motor engines, unit labour costs are ten times lower than in Germany. The differences between the old member states and the new members remain very high and are, for the time being

[14] Share of a company's capital not held by institutional investors.

The advantage of Central and Eastern European Countries over the West in terms of costs is founded on considerable differences in labour costs



Sources: BCG analysis; press research; UBS.

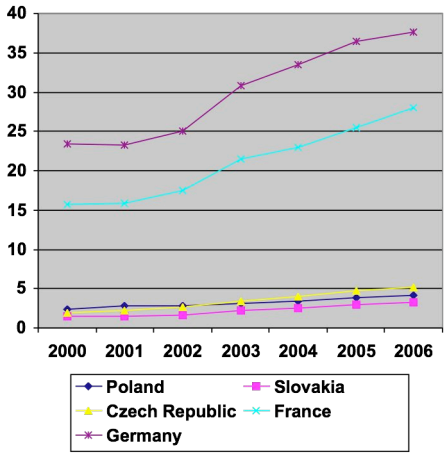
[1]Compensation includes benefits.

[2]Salaries are for employees of industrial companies in the electrical engineering sector (in capitals and other major cities).

[3]The index was calculated as a percentage of the value for Germany.

far from reducing. As is underlined in the European Commission report on assessment two years into the enlarged Europe of 25, whereas from 2002 to 2004, unit labour costs went up 1.5 % in EU10, and it increased 2 % in EU15.

Labour costs per hour, in US dollars

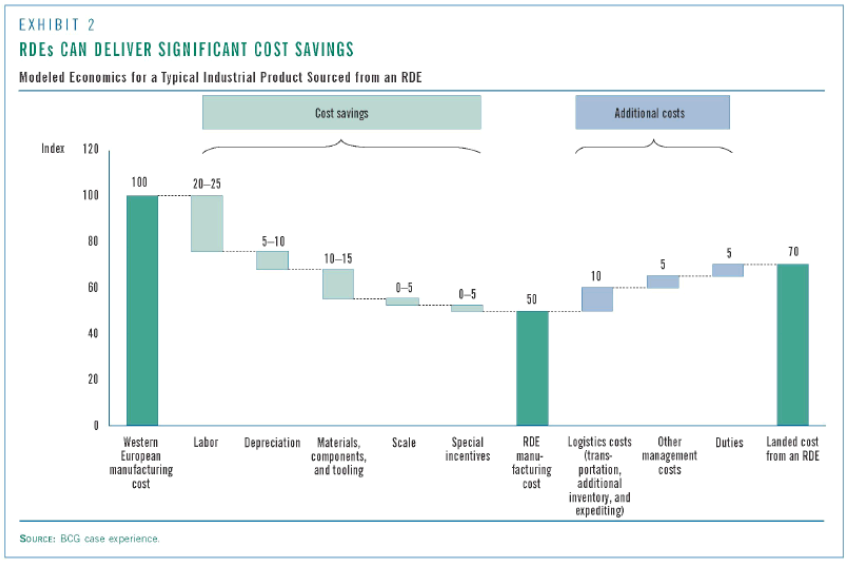


Source: Intelligence Economic Unit (forecasts 2006).

According to a report from the Boston Group[15], relocation to a Central European country enables savings of 30 % of total production costs on average, including 20 to 25 % in labour costs. Such a figure takes into account not only differences in productivity, but also costs arising from the initial investment in the human capital. The relationship between the margins generated in terms of labour costs and the extra costs due to transport and logistics are determining factors in relocations, which are designed to increase companies' profitability. It is interesting to note here that most Central European countries offer financing covering employee training, and also, sometimes, the first years' wages (up to 2 years), enabling companies setting up there to make the most of labour costs, whereas the first years of an investment are characterised by high spending and losses in profitability due to the setting up of the various logistics chains.

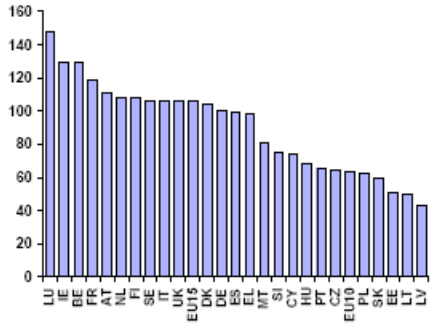
In terms of labour costs, as the Boston Report stresses, the new members of the European Union are just as competitive as China. For a company in the manufacturing sector, whose labour costs represent 30 % of total costs, the savings of relocating to China from a Central European country would only provide on average a saving of 3 % of total costs, even though blue collar labour costs are three times lower in China than in Eastern Europe.

[15] The Central and Eastern European Opportunity.



To get an image which is fairly close to reality, the differences in productivity should be looked at.

Labour productivity per person employed, 2004



Source: Eurostat, Commission services (Ameco)

Macroeconomic statistics do not take a twofold bias into account very well. Firstly, there are different production structures in the countries of EU15 and those of EU8[16], particularly lower capital intensity. There are also differences between the productivity of multinational companies and that of local companies. Most of the companies we analysed in the destination country had higher productivity that their group as a whole. For the same investment, employees in companies in the destination country had higher productivity than their colleagues in the source country. This situation is confirmed, furthermore, by the Boston Group report mentioned above.

[16] The Group of ten new member states which joined on 1 May 2004, minus Cyprus and Malta.

Above and beyond the costs of labour, the rules of the labour market must also be taken into account. The new member states in the European Union, just as Turkey, provide employers with a legislative framework which is much more flexible than many countries in EU15, particularly in terms of employment contracts and working time requirements. Added to this is the fact that in practice, at the company level, labour law is often left to one side and this leads to major differences in flexibility in the destination countries. In many of the companies we visited, the argument of flexibility added to the idea of just-in-time was just as much a determining factor as labour costs.

Finally, the high potential in a skilled labour force in Central and Eastern Europe must not be forgotten, without mentioning the huge reservoir of engineers in India.

EXHIBIT 7

CEE RANKS HIGH ON SEVERAL DIMENSIONS OF LABOR AVAILABILITY

	Ranking of labor availability			
Country	Overall weighted rank	Skilled labor	Qualified engineers	Competent senior managers
India	1	2	1	2
Ireland	2	3	4	3
United States	3	1	7	1
Turkey	4	6	6	4
Hungary	5	7	3	5
Czech Republic	6	4	2	11
Slovakia	7	8	5	9
Taiwan	8	5	10	6
Poland	9	10	9	10
Russia	10	9	8	14
Italy	11	13	11	8
United Kingdom	12	12	13	7
Slovenia	13	11	12	13
China	14	14	15	15
Estonia	15	15	14	12

Sources: IMD; BCG analysis.

2.3. *Territories brought into competition*

The increased mobility of production sites has brought about the emergence of competition between continents, countries in the continents and regions in the countries. The positive effects on jobs, economic activity and tax income provided to a territory by the maintaining or setting up of a new site drives national and local authorities to implement increasingly encouraging policies to tip the balance in their favour. Companies play this competition card and, for the biggest among them, start off bidding wars to obtain the best conditions for their operations. In the long term, it is the infrastructures, legal systems and location which will determine the choice for setting up a site, but, at the end of the day, when only a few sites are in competition, the final choice is often decided on by the financial concessions granted to investors in terms of grants or free land.

Tax competition between countries in the European Union

Initiated by Ireland, tax competition to attract inward investment has intensified considerably since the middle of the 1990s in countries which were then candidates to join the European Union.

According to data from the World Bank published as part of a study into the relationship between FDI and levels of corporation tax in EU8, the average effective tax rate on businesses[17] was reduced over the period from 1995-2002 from 15 % to 9 %, whereas it rose in EU15 (from 10 % to 14 %). Currently this rate, measured by the World Bank, is significantly lower in EU8 than EU15 (5 point difference).

The rise in the effective rates in the EU15 zone over the period 1995-2000 (from 10 % to more than 15 %) has its origins in the widening of the taxable base. However, up until 2000, the fall in effective rates in the EU8 zone was linked to a reduction in tax rates following policies designed to attract foreign capital. However, the harmonisation of the tax bases related to the acquis communautaire observed since 2000 has enabled a drop in the difference in tax rates between the zones, from more than 6 points in 2000 to 5 in 2002.

According to the conclusions of the World Bank, tax considerations come in third place in decisions of international operators to invest in the European Union, after the investment climate – which takes into account social stability and macroeconomics in the country, the efficiency of the rules of law, business practices and production costs.

The international institution today supports tax competition policies between states less actively. The study concluded that strategies for further cuts in corporation tax were not optimal for the EU8 countries in relation to other types of cuts in obligatory stoppages such as payroll charges, opening up competition between social security systems following that of tax systems.

[17] To get a reliable basis for comparisons between countries, the study took into consideration effective and not nominal corporation tax rates. To do this, the countries' tax bases must be harmonised, the differences residing mainly in the amortisation rate, the treatment of losses and the methods for evaluating stock…

Competition in terms of financial investment aids ...

The "packages" of grants provided by countries very often play an important role in the final choice of countries receiving investments. The competition between countries in Central Europe to catch major manufacturing projects gives rise, in the months preceding decision, to genuine auctions between countries in terms of financial grants and grants in kind.

In this region of Europe, "the battle for inward investment" is monitored very closely by public opinion which often sees in it an indication of the commitment of the public authorities to fighting unemployment. This is the case, for instance, in the series of consecutive turnarounds encountered by the Polish authorities in the motor industry in 2003 and 2004. The reaction of opinion following the loss of major motor assembly plants launched by Peugeot and Toyota, then by Peugeot alone and finally by the Korean Hyundai, to the Czech Republic and Slovakia illustrate the sensitivity of public opinion on the issue.

However, these failures were related not only to the superiority of the competing sites in terms of communication infrastructure, but also in the refusal of the authorities (national and local) to provide a package of "competitive" incentives (tax exemptions and granting of free land), whereas neighbouring countries were offering direct grants of up to 10 % of the investment for this type of operation). This reluctance to give direct grants was nevertheless accepted at the highest level, the Prime Minister of the time himself considering that it was not in Poland's interest to attract inward investment at just any price. However, this considered choice was subject to virulent attacks in the press against the government and the foreign investment support agency, which were considered inefficient in promoting the setting up of new businesses in Poland.

However, the possibility of being able to sign up to the compensation programme relating to the purchase of forty-eight F16s by Poland, with the – confidential – associated advantages, no doubt played a role in General Motors' decision to relocate production of two assembly models previously in Germany to Poland.

… Do European funds contribute to relocations in the European Union?

Since Poland joined the European Union on 1 May 2005, entrepreneurs operating in the new member states of the European Union, whatever the make-up of their shareholding, can, if they fulfil certain criteria, claim Community financial support to develop their activities.

The implementation of this financing provides opportunities for direct aid for foreign companies under structural funds, which have been spread in relation to the eligibility of the regions of the new member states, with a view to regional convergence.

The complexity of the procedures to implement – there are 20 000 pages in the programming documents – means that those who are the most capable of accessing aid for training and investment are most often multinational companies, with a lot of similar experience in other European markets and capable of gathering specialist advisers to carry through the applications. Paradoxically, Community funds have made it possible for companies to strengthen their production in low-cost European countries while profiting from Community support.

Employee representatives from Siemens have wondered about the role of European funds in the relocation blackmail they have been victim of. In effect, it would appear that in the global equation put forward by Siemens, relocation to Hungary was made more interesting by the financing the Siemens could obtain to develop its site there…

2.4. *Procurement policies of prime contractors contribute to destabilising the industrial fabric in the West*

More than the prime contractors, it is suppliers who are suffering the negative effects of relocations head on. Procurement policies carried out by prime contractors are a melting pot of the fragilising of lower rank players and the break up of the social and industrial structure in place.

Outsourcing strategies have led to putting purchases under pressure

Outsourcing strategies executed by prime contractors since the last decade have had serious consequences on the evolution of the relationship between prime contractors and suppliers.

If they pull out of activities to hand the responsibility to a supplier, prime contractors nevertheless remain customers: they are no longer project managers, but continue to be project owners. They thus determine the specification and impose production conditions and prices on suppliers. In other words, they try to keep control of the product, even when it is outsourced.

The means of selecting, managing and controlling the implementation by prime contractors in relation to their suppliers go quite a long way today, through:

- downward auctions, going to the lowest offer in terms of price (for motor manufacturers, for instance, downwards auctions represent 2 to 3 % of purchases and mainly concern commodities);

- "price target systems" (what solutions can suppliers provide for a given price?);
- demands in terms of location of production and purchases with, in some cases, imposing of a proportion of supply and production in low-costs countries;
- endorsing of the compliance of production sites by the prime contractor;
- the prime contractors' right to inspect and have regular audits on the suppliers' plants;
- supplier possibly put in competition for a programmed product;
- financial penalties if certain non-quality thresholds are crossed …

In all the sectors studied, it is the downstream players – distributors and/or prime contractors – who control the industrial sector and who set the production conditions for the upstream players. The autonomy of suppliers therefore seems to be increasingly restricted. This phenomenon is strengthened by the intensification of competition from the international of prime contractors and the concentration of prime contractors, increasing their market power.

The concentration of prime contractors has strengthened the market power and the value capture by distributors

The concentration of prime contractors and/or of distributors gives them a market power which is even greater in relation to their suppliers, enabling them to pass on to the suppliers the constraints imposed by the final customers, while still capturing a large proportion of the value of the product.

This transfer is particularly visible in industrial activities which depend on mass retail (textiles, general electronics). A growing part of the value is captured buy the service provider to the detriment of the industrial sector. In a configuration like this, the players who are furthest away from the prime contractors are subject to sales price levels which are often incompatible with their production structures.

This situation gives food for thought to the industrial prime contractors on their capacity to integrate a bigger service dimension in their product (after-sales service, diagnosis, networking, logistics, etc.). This type of evolution can be observed as much in the prime contractor/operator relationship to the client as in the prime contractor/supplier relationship (increased control of certain services such as transport…).

The internationalisation of prime contractors has initiated the development of a new flow of suppliers... at low cost

The internationalisation of activities has another aspect to it, which is the perspective of making growth through new markets. However, rather than making do with broadening their existing capacity, the prime contractors have chosen to have part of this growth carried by the acquisition or construction of extra facilities in these new markets, which also offer capacity at a lower cost.

These new facilities mean that there has to be a new flow of supplies, at least for activities where there has to be a physical proximity of the flows, either for reasons of reactivity and storage, or for reasons of logistics (cf. supplier park models).

The possibility of having low price capacity on site is an extra argument for the development of the activity of suppliers in these countries.

In the motor industry, the main metalworking activity in Turkey, most of the worldwide manufacturers are present. From the interviews carried out in Turkey with major players in the motor industry, high productivity and high staff qualification levels were highlighted. These observations nevertheless hide certain phenomena. The international players in the sector focus their Turkish sites (whether fully owned or in a joint-venture) on strategic and complex activities. They benefit from a relatively structured and competent network of motor outsourcers on site. The working conditions at the outsourcers are much less beneficial and are based on jobs which are not always declared (on average 50 % of jobs in Turkey are in the underground economy).

2.5. *Breaking down entry barriers*

The need to break down entry barriers to access a national market (customs duties, absolute advantage in terms of costs, product differentiation, standards, etc.) is theoretically not part of the decision to relocate production, since it is part of a strategy to conquer new markets, and not cut costs.

However, in sectors such as the motor industry or white goods, the choices of location in relocation operations are not only determined by the search for competitive costs, but also by the possibility of entering or strengthening a position in a market which companies consider as being buoyant.

The example of the development of the motor industry in Central and Eastern Europe is particularly interesting from this point of view. Market studies have shown that national brands boost group sales and explain in part the positioning between EU15 and the CCEE. They come, for instance, to more than 50 % for Skoda (VW) in the Czech Republic and in Slovakia and more than 60 % for Dacia (Renault) in Romania.

This "chauvinism" happens just as much to manufacturers who have been there for a long time, such as Suzuki in Hungary, which produces bottom of the range cars and which is virtually considered as "national", or like Fiat in Poland.

Similarly, the setting up of a new unit by a foreign company and the accompanying repercussions in the media often contribute to brand recognition and the adoption of the brand as a local brand.

When Electrolux set up a tumble-drier plant in Poland for €30 M, the production of which was almost exclusively for export, company leaders stated on many occasions that the choice of Poland as the location for this plant was linked to the size of the market and not the attractive business conditions in the country. Apart from production, the aim of this productive investment was to accompany market growth in tumble-driers in Poland.

In the case of the CCEE, relocation FDI are not solely motivated by a search for production cost cuts, but also the need to gain a position among the first to be in high

growth potential markets where trade entry barriers (product differentiation) play a big role.

The evolution of groups' strategies in this field has been very rapid. A soon as new member states joined the European Union, a certain number of non-Community manufacturers made the CCEE the point of entry into the European Union.

LG.Philips LCD, in the context of a strategy to optimise its production at a worldwide level, decided to build an LCD unit in Poland with the aim, according to Duke Koo, vice-president in charge of sales of LG.Philips, of getting closer to European customers while cutting production costs.

2.6. *Exchange rate management*

During our interviews, the question of the appreciation of the euro against the US dollar was often raised to justify setting up or relocating to a country which used the dollar as a currency or which had a currency which was indexed against the dollar.

Outside the context of monetary policy, the impact of changes in the rate of the dollar against the euro is extremely complex and must be analysed at the level of the area of activity, even the company, as the situations are very distinct.

To illustrate the diversity of the impacts of exchange rates, the reading of a profit and loss account is very revealing. What does the appreciation of the euro compared to the dollar cause in a company which states its accounts in euros?

- **on turnover: a mechanical drop in the contribution of sales states in dollars (which can be combined with the impact on sales of the drop in the competitiveness of products where costs are in euros in relation to the same products in dollars);**
- **on operating income: to be qualified, in relation to the currency used to purchase raw materials and plant. All costs incurred in dollars become advantageous, the euro zone being generally les affected by the rise in oil prices, stated in dollars;**
- **on financial earnings: there is also an impact. These results can, for example, benefit from the appreciation of the euro when debts debt is stated in dollars.**

Naturally, the use of hedging mechanisms to protect against exchange rate risks and their efficiency have an influence on the impact of exchange rate variations.

Concerning the question of the impact on locations, two models can be taken as an example:

- one which is inspired by groups which produce in consumption areas. Producing and selling in local currencies makes it possible to maintain levels of profitability which are identical in each region. In this case, a company exporting from Europe could be tempted to transfer production destined for export to the sales zones. The question is then one of outlinging production

destined for the euro, dollar or yuan market and the future allocation of production;

- the other model, which is more risky, is to take a decision to relocate only production from the euro zone to the dollar zone. For the time being, it would not appear that relocations related exclusively exchange rates have taken place. However, it is one factor looked at among others. One example is STMicroelectronics, a company which sells products which are mainly stated in dollars (and it also publishes its accounts in dollars), but which has costs in euros. The argument was put forward that for STMicroelectronics the relocation of sites such as Rennes was also made necessary by the level of the euro. These costs in euros are mainly made up, theoretically, of labour and materials costs (the equipment is mainly sold in dollars in the semi-conductor industry). For only part of the costs (which are relatively small in relation to the weight of the cost of the equipment) "monetary" relocation presents an advantage with a highly unpredictable duration, should the United States or Europe decide to change their monetary policies.

Current exchange rates certainly have an influence today on decisions of location and allocation of production. It should be remembered that the effects of the improvement of the euro should be looked at on a case by case basis and cannot in themselves justify a relocation decision. It would appear that the gains made given the costs induced by production transferred are potentially tiny and above all can be cancelled out by a shift of exchange rates in the other direction. This raises two questions: that of monetary policy – should Europe allow this situation to continue for a long time? – and that of hedging mechanisms and their efficiency.

3. The limits of relocations

3.1. *Political and legal instability*

The reduction of the political risk at the worldwide level has encouraged relocations...

The transfer of a site under a relocation or relocation operation theoretically exposes companies reorganising their production systems to an increase in the country concerning their operations.

The idea of "country risk" (economic, political, legal, social, etc. risk) covers too broad a range of factor to specify the constraints encountered by companies which have decided to make part of their production outside their country of origin to limit costs.

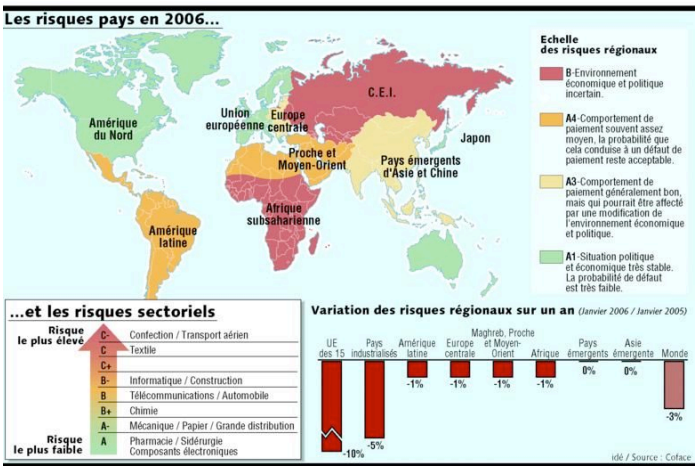
That is why it is necessary to gain a better grasp of the political and legal obstacles companies have to cope with in relocations.

The first observation, within the boundaries of the European Union, political risk in the strictest sense of the term – i.e. the nationalisation of a company's assets and their appropriation by the State of residence – is no longer a concern for the directors of

the companies questioned. Outside the borders of the European Union, entrepreneurs consider that the political conditions for receiving inward investment have clearly progressed over the past twenty years in most countries likely to receive FDI. Consequently, the range of destinations which can be envisaged in relation to political risk currently provide many opportunities for relocations.

This observation made, the managers underlined that nearly all emerging countries, including the new members of the European Union, remained subject to significant legal and political instability requiring the mobilising of considerable resources to carry through the operations of companies abroad.

Country risks in 2006



Source: Coface

Political and legal instability in many countries receiving foreign investment are still a major constraint for companies

Despite significant capital requirements which characterise emerging countries and countries in transition, the legal and political conditions for receiving foreign investors often remain insufficient despite the policies implemented.

Investment in a country where labour costs are low clearly brings its share of uncertainties and pitfalls, as much in terms of regulations as relationships with the political authorities, despite often considerable spending committed to carry out feasibility studies before such operations are undertaken. Problems appear, of course, at the moment of the set up, and also following it with the everyday activities of the production subsidiaries.

The company leaders interviewed considered that national legal systems and rules remain very restrictive in comparison with the country of origin for foreign companies and inefficient, as they do not fit in with their expectations and needs: persistent tendency to adopt circumstantial legislation, a heavy overzealous bureaucracy, which willingly practices "administrative and fiscal harassment", courts which are over

occupied and lacking in professionalism, lack of unity of jurisprudence throughout the territory, traces of corruption, etc… The membership in the European Union of ten new states tends to reduce the legal instability, but the application of the acquis communautaire, although written in national legislation, still remains incomplete.

The imprecision of many texts and the impossibility of determining their field of application are sources of considerable uncertainty, accentuated by the deficiencies in the public authorities to reply to investors' questions.

These difficulties are all the more complex to grasp for a number of foreign companies as they are not often able to forge sufficiently strong links with the public authorities to make their interests heard. That is why some relocation operations can lead to significant malfunctions for companies which have to learn how to develop in a new political and legal environment. If the level of international experience plays in favour of new operations, each new country, in the European Union as well, has its particularities which can surprise even the best prepared companies.

At the local level, political instability is also a genuine risk. Setting up a foreign company requires very close collaboration with the local authorities, particularly for building permits, land development or support in recruiting staff. Experiences related by company managers are not all the same, ranging from very close collaboration in finding a place to invest in and speeding up of its execution to serious blockages in a context of corruption leading to the modification of the site originally chosen. Collaboration with the local authorities is so important for the success of a start-up that many managements give it as being the leading criterion for the choice of the site in a given country.

Relocation operations restrict companies undertaking them to implement policies which are often costly in legal and political risk management, and which require the commitment of considerable resources, such as analysts, lawyers and lobbyists.

3.2. *The quality of infrastructures and public services*

The lack of, or low quality of local infrastructures can be a hindrance to the location of activities. In particular, production costs are automatically changed if the company has to invest, for example, in a sewage plant, which also has an impact in terms of return on investment timeframes.

In reality, the existence of the main infrastructures is rarely an entry barrier in Europe, where transport, telephone and electricity networks are very widespread.

3.3. Environmental externalities

Increases in logistical circuits created by relocations, combined with the recent rise in oil prices, have introduced new increases in the cost of transporting goods. These elements are measure and passed in varying ways in product costs.

This is not the case for the cost of negative externalities.

A contribution in a study (INFRAS & IWW, 2004) on the subject of negative externalities linked to transport showed that:

- average HGV transport costs come, in Europe, to €88 per 1 000 tonnes and per kilometre, not including congestion costs;
- congestion costs vary between €1 and €14 per 1 000 tonnes and per kilometre.

In comparison, rail and sea external transport costs come respectively to €18 and €22. These evaluations make it possible to weigh up the approaches solely from the point of view of private costs (costs for the company) and shed light on the costs for the community represented by arbitrations in terms of choice of location distancing the production site form the distribution site.

3.4. The impact on territories

For the source country…

Despite the indifferenciation put forward by the economic discourse, relocations always concern a particular territory. With the leaving of a company, it is a local economic fabric which can be unbalanced. Very often, the legal scope of the company remains the only framework for "treating" the consequences of relocation decisions. However, for a given territory, there can only be a local solution – be it economic or social.

Experiments are not very advanced in taking the territory into account in restructuring operations in the broad sense, even if certain systems do exist (territorial council of redundant employees, participation in systems for reactivating employment basins, attempts at structuring territorial social dialogue, attempts to organise territorial forward planning for employment, etc.).

In France, the law now provides, in the case of restructuring, for the re-activation of employment basins when they are significantly affected by redundancies. But the efficiency of actions undertaken in this context are still limited, and the place reserved for the unions and employee representatives remains marginal when it actually exists.

For destination countries, the arrival of new investors can contribute to increasing territorial inequalities

Relocations can create jobs in the destination country, but often have difficulties in contributing to regional development. Foreign investment does not generally choose zones which are the most affected by unemployment. On the contrary, relocations tend, even, to polarise towards economic zones which are the most active and often contribute to accentuating imbalances and the widening of the inequalities between territories. The phenomena of the concentration of FDI in territories find their sources in the often determinant place of transport costs for relocation operations, and the tax benefits granted to a certain number of free zones.

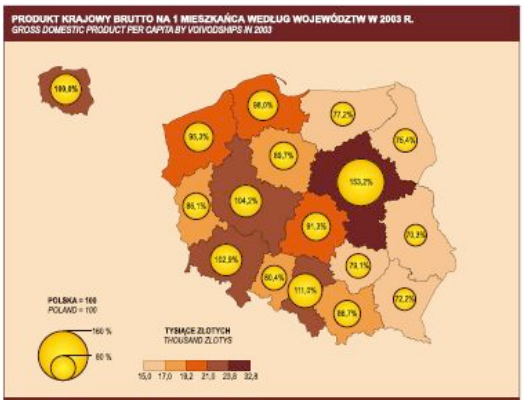
Location of foreign investment and territorial imbalance

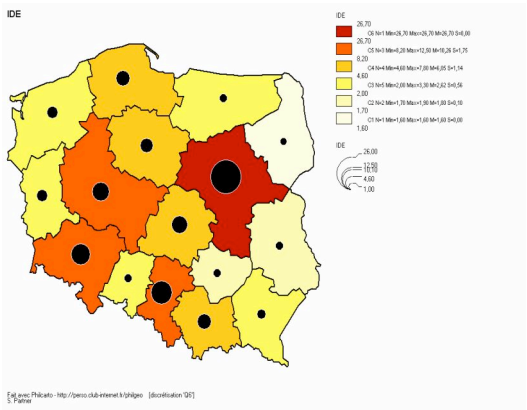
Optimum investment location choices in a low-cost country take into account transport costs, which represent a considerable part of production costs in many industrial products. Production sites tend to be located close to borders or major communication routes, to make exports easier.

On account of this, there is often a phenomenon of regional polarisation of foreign direct investment turned towards foreign sales, and a concentration of units by activity.

This trend can, for instance, be illustrated by the case of Poland, where foreign investors, outside the region of Warsaw, have concentrated on the German border in the West of the country, in the most economically active zone. The poorer East of the country, which does not benefit from the West-European market, remains not very sought after by investors, despite the high level of unemployment and relatively low labour costs.

The comparison of the two maps below show to what extent, in Poland, foreign direct investment accompanies and even strengthens regional inequalities.





Source: PAIIZ, GUS

Apart from these regional characteristics, there is also polarisation in sectors of activity, as can be seen by the example of the motor industry in the CCEE. On the

location front, business is concentrated in an oval including the Czech Republic, the South of Poland, Slovakia and finishing by Budapest and the West of Hungary. Regional production as a whole already currently represents around two-thirds of Spanish production of private vehicles. The flow of parts manufacturers from all countries locating part of their production in the region has not been stemmed and is strengthening agglomeration in this region. Hence, paradoxically, a lack of workforce in certain sectors which benefit particularly from FDI, whereas unemployment rates remain high elsewhere.

Tensions have already appeared in the labour market in certain regions, if we can judge from macroeconomic studies carried out with entrepreneurs[18]. We can quote here the West of Hungary, Central Bohemia in the Czech Republic or capital cities and their immediate surroundings. More than 40 % of company managers considered that the availability of a skilled workforce is now not enough, for all industrial branches, in Central, Northern (Liberec) and Eastern (Brno) Bohemia, and in Northern Moravia (Ostrava) in the Czech Republic, around Poznan and Wroclaw[19] in Poland, to the West and South and around Budapest in Hungary. Depending on the region, the availability of a workforce varies in relation to the level of qualification: in Budapest, the biggest lack is in IT managers, whereas it is skilled workers and product managers who are lacking in the West of the country.

In Slovakia, companies coming to invest (Citroën and Hyundai) found great difficulty in recruiting professionals in many areas of activity (particularly managers in the electronics sector) whereas at the same time the country has one of the highest unemployment rates in the European Union.

Free zones are finding it difficult to fulfil their role in regional rebalancing…

Free zones set up to welcome foreign investment in a number of emerging countries, apart from the erosion of tax income that the engender, tend to strengthen the concentration of economic activities in these zones of advantageous taxation.

In the CCEE, these free zones theoretically participate in rebalancing projects for the poorer region. However, experience has shown that they find it difficult to fill their role of supporting regional turnaround.

As the director of the special economic zone of Suwalki, located in the North-East of Poland, stated "companies choose sites which have the best road and airport infrastructure. The special economic zones are no longer fulfilling their function of attracting companies to regions which are the most affected by unemployment". Furthermore, the negotiating power of foreign investors often makes it possible for them to obtain a reconfiguration of the special economic zones to achieve optimum locations, while keeping the tax benefits. These are methods which doubly damage policies for fighting unemployment at the regional level.

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[18] Kienbaum studies, German bilateral chamber of commerce, with Hungary, Poland and the Czech Republic.

[19] Which does not stop there being an unemployment rate of almost 37 % in Walbrzych, where the Toyota engine and gearbox site is located, 70 km south of Wroclaw.

3.5. The break between R&D and manufacturing

Fabless[20] strategies of major prime contractors are in part countered by the interest of maintaining plants close to the development (technical centres) of products. This proximity (physical accessibility within the day) is important[21] at at least two points in time:

- when the product is being designed, where the industrial side must be present to set up tools and identify defects;
- on industrialisation, where the technical-industrial link is necessary to find and solve defects rapidly.

During the "normal" manufacturing phase, the material development part must also be able to intervene in the plant more quickly to solve any problems which were not detected during the industrialisation and test phases[22]. **The critical point is therefore the location of the hardware development which conditions the location of the manufacturing part…**

The maintaining of series production capacity internally is also necessary, so as to maintain knowledge of industrial processes in a context of complexification and increased technicality of products sold to clients.

3.6. Technological evolutions

In several industrial sectors, particularly electronics, the technological evolutions of products are concretised by:

- sub-assemblies which provide more and more functions in a smaller and smaller volume (nanotechnologies);
- industrial processes characterised by a generalisation of high-throughput fully-automated equipment for assembling all these components.

[20] Without factories.
[21] This element was underlined by all the people questioned in the "industrial" field.
[22] If the number of defects in stable production phases is tending to shrink considerably, there are still some, requiring the participation of the development team. The further away this is, the longer production is held up...

Miniaturisation and evolution towards highly technical products continuously reduces:

- the proportion of labour in the assembly function;
- and the potential to use highly labour-intensive content …

Which is today the interest of these sites in low-costs countries…

This is how, in certain sectors, the wage part in the total cost of products is around 6 to 12 % depending on the technicality of the product. Under similar supply conditions, the gains made from relocation could be around 5 to 7 points, counterbalanced by transport costs (particularly for Asia), implementation costs and logistics (which is now strategic) management costs, and more globally, costs for coordination with the various[23]… This potential gain is therefore negligible, or more exactly, a potential source of a risk of disorganisation for the company…

3.7. Quality in product design which enables a reduction in the challenge of differences in wage costs?

The technological developments described above should strengthen the technological aspects of products and the importance of skills in terms of hardware development, and more particularly in terms of design.

The following example, of a telecoms producer, gives an illustration of this situation:

- for most network infrastructure products manufactured by a telecoms producer in Europe, there is no difference in the industrial cost price between equipment proposed by this company and another, providing the same functions, proposed by a Chinese producer;
- the difference resides in the "product appearance": a more efficient design making it possible to considerably reduce the labour in the industrial phase, using the automation of the assembly-integration plants maintained internally. Thanks to the quality of the design, 80 % of products are manufactured in plants in high-cost countries.

3.8. … and the shortening of production cycles?

Now, in most sectors studied, the pressure for shorter delivery times on a specific client configuration basis requires a production cycle which is shorter and shorter and just in time management with suppliers.

On account of this, for deliveries in Europe, it is still necessary to manufacture in Europe: "relocating is expensive in relation to short-cycle products and with a low labour share".

The maintaining of reactive assembly-integration plants, i.e. ones that are capable of coping with variations of around 25 % in a short lapse of time is therefore possible.

[23] Given that the costs induced by relocation are often largely under-estimated (cf. BCG study).

This could be managed in part by the development of deposit stocks from the main suppliers (and managed by them) in the assembly-integration plants. The company even needs to know the manufacturing cycles and methods of the components to determining the safety and flexibility levels ("supplies cannot simply be the affair of buyers-financiers").

It should be noted that this type of organisation is only possible with a network of local suppliers (European) for the most critical aspects. Everything that is specific to the prime contractor (unlike standard products) should be secured locally.

3.9. Logistics and a rise in transport costs?

Logistics is a question which is both central and annex in the context of decentralisations: central, as the transporting of products must not jeopardise, either economically or qualitatively, the fruits of relocation, and at the same time annex, as it seems that it is finally considered as a simple "housekeeping" problem. However, with the development of relocations, isn't there a risk of transport facilities becoming increasingly rare, thus causing, above and beyond oil prices, an increase in costs before an environmental attitude means that there has to be some sort of regulation of negative externalities?

Will global reflection make it possible to take this constraint into account?

Logistical problems can arise in the context of relocation on the condition that it:

- separates the site of manufacture from the site of consumption: however, "market" relocation (i.e. to accompany the development of a local market) tends to minimise product delivery logistics costs on the consumption site;
- distances the manufacturer from its suppliers: however, a manufacturer who gets closer to its suppliers (e.g. electronics in Asia) will see its logistics costs drop on account of the geographic proximity.

Two main questions concerning logistics condition the decision to relocate:

- are extra logistical costs related to relocation significant in the view of the savings made elsewhere?
- are transport and exchange conditions satisfactory in regard of quality and time demands?

The answer to the first question often concerns data which is can be calculated fairly immediately and which takes hidden costs into account (extra costs and market losses should there be a problem, difficulties in coordination and reactivity…). Furthermore, it must take into account the weight of logistics in the added value of the product and in the savings to be made (which are often over-estimated) on account of relocation. Extra logistics costs tend to be rather under-estimated.

Furthermore, the answer to the first question is strongly influenced by the very widespread acceptance whereby transport costs drop regularly on account of the growth in international exchanges. If an analysis over a long period would tend to show this (McKinsey, *The Economist*, 13 November 2004), it does not cover the period 2000-2005 and shows stagnation in the costs of air freight. Thus, the recent spectacular rises in

transport costs between Asia and developed countries, particular for maritime transport, illustrate the fragility of such reasoning.

Finally, the answer to the second question is difficult to put a figure on as it takes into account a range of possible risks: will transport make it possible to observe lead times and quality conditions?

Risks of malfunction increase with:

- distance;
- the sensitivity of the logistics flow to timing and errors (just in time and strategic parts which can block a bigger whole…);
- obsolescence of the product.

Beyond the individual risks, where we have seen above the difficulties in correctly assessing the consequences, collective risks are just as significant: insufficient awareness of environmental costs (particularly for road and air freight) and the serious consequences of deregulation in the sector (illustrated by flags of convenience and oil slicks in maritime transport) means that it is not possible to appreciate the costs of transport at their fair level.

The fight against climate change is the responsibility of governments and should require the payment of negative externalities linked to the development of transport in international exchanges and the exchange of goods.

It is also possible to doubt that transport costs remain at sufficiently low levels for them not to be taken into account by companies moving further way from their clients and/or suppliers by relocating.

Part 2

Relocations: a sector approach

Above and beyond characteristics common to all economic activities, the sectors studied reveal differences in the way in which they are affected by the dynamic of relocation, depending on their degree of progress in internationalisation.

The choice for this study was to analyse four sectors:

- textiles-clothing, as it is a sector which has been globalised for a long time and which fuelled the debate in Europe over 2004 and 2005;
- information and communication technology (ICT), as it is a sector which belongs to both industry and services and is a sector with a high added value very subject to the rise of China and India;
- automobile, as it is a traditional industry which has been reconfigured in Europe during the 1990s, with redeployment between the South of Poland and Romania, while crossing the Czech Republic and Slovakia (the famous "central and eastern motor belt");
- plastics.

This sectoral approach makes it possible to show the disparities between sectors and dynamics unique to each one of them.

1. Textiles-Clothing, a sector which has been international for a long time

1.1. *An industry which has been transformed under a twofold constraint*

The activities of textiles and clothing (which will be referred to as textiles below) and, to a lesser extent, the leather industry, were the first to be affected by what is now commonly called "globalisation". The textiles industry inaugurated, in the middle of the 1960s, the new international division of labour and its free-market credo.

The constraint of the internationalisation of its activities

Transformations in the industry have their sources in the arrival of Commonwealth countries in cotton activities, strong competition from India quickly leading industrial countries to protect themselves (long-term agreement [LTA] on cotton).

Paradoxically, these first protectionist measures encourage the emergence of other countries, particularly the Asian dragons (South Korea, Taiwan, Singapore and Hong Kong), who chose to invest downstream in the industry from comparative advantages on the clothes making part, by offering cheap labour. From these positions conquered downstream, they progressively moved upstream, firstly attacking spinning and weaving activities, then investing in chemical textiles, which triggered their industrial diversification process at the same time. The 1980s was the decade of the new industrialised countries (NIC), as much from Asia (the four dragons), Latin America (Mexico and Brazil), or Europe (Spain, Portugal, Yugoslavia).

Initially, the development of the NIC came about under the control of industrial countries. On the one hand, exchanges were governed by the MFA[24] which, renewed several times, limited the export possibilities of the NIC in question. Then, the industrial countries quickly developed strategies for responses to counter the comparative advantages (mainly the low-skilled very low-cost workforce) of the NIC.

The constraint of modernisation in the industry

The strategies developed by the industrial countries were broken down into three areas, linked to innovation.

An initial way of getting around the comparative advantages relating to low-cost labour was **product** innovation. The emergence of new fibres and their mixing with natural fibres enable the development of new technologies (for spinning, knitting, weaving or ennoblement), as these fibbers had resistance, good covering capacity and thermal qualities… which had been unknown until then. Innovation also concerned new products in the strict sense of the term, particularly in the field of technical

[24] Multi-Fibre Arrangement.

textiles (geotextiles, pneumatic, non-woven, etc.) which played an important role in industrialised countries. Product innovations finally concerned the renewal of fashion cycles for clothing, with the increase in the number of collections, combinations of elements to build up clothing styles, etc. All these product innovations were firstly initiated in industrialised countries, which were looking to manufacture products with a higher added value, with a more developed knowledge content than those from traditional spinning, weaving and sewing techniques.

The second way of reversing the comparative advantage is to transform the sector into a more capitalistic industry, by significantly cutting the advantages of labour costs. This second series of innovations therefore concerned production techniques, with the implementation of production techniques (open-end spinning, shuttle-free weaving, laser cutting and design, etc.) combined with information technology and production process controls (CAD-CAM, etc.). Unskilled labour has been significantly reduced (a large proportion of the drop in headcount in the1980s-1990s is due to technological progress rather than imports, which are in part controlled by the MFA), which has modified the nature of the workforce (more qualified, with a change in jobs and skills) and working conditions.

This has led to a third source of innovation in the industry: its organisation. Organisations have changed in parallel to production processes: as much in the production units – new working rhythms, increased flexibility (daily, seasonal, yearly), setting up of autonomous working groups, etc. – as between them (outsourcing, groups of SMEs on geographic lines or complementary activities, etc.). All these organisational innovations were designed increasingly to adapt production units to market demands.

1.2. *Transformations in production structures*

Firms and States: two players faced with internationalisation

Under this twofold constraint, companies in industrialised countries are not adapted, even if they had to ability (financial, managerial or initial positioning in the marketplace). The result, over the 1990s, was an increasingly oligopolistic structuring of the worldwide industry, very largely under the control of Western companies. This is how these multinational firms maintained their financial power in the main. On this point it is enough to look at the ranking of major firms in the industry: very few companies emerge from the third world over this period.

Nevertheless, these transformations significantly modify the initial positions of companies in the industry. The oligopolistic structure developed with the changes in the rapport de forces between the vary stages of the industry, in relation to the two aforementioned constraints. Firms were unequal in their ability to benefit from innovations and protect themselves, via the MFA, from various categories of imports. Finally, companies found themselves – or not – in a position where they could use to

the benefit internationalisation in its various forms: international outsourcing, outward processing traffic[25], installation of industries abroad, etc.

Finally, the States themselves have had very varied interventions, as much in their nature (aids for modernisation, innovation management, training evolution, the consequences of restructurings, etc.) as in their size (textiles plans, macroeconomic decisions such as competitive devaluations, regional grants, etc.).

Big divergence in national evolutions of parts of the industry

Given big national divergences, the implementation of modernisation was not uniform: be it for production stages or European countries, big gaps appeared and still remain. The result was many contradictory interests on these two fronts.

Gaps in modernisation between parts of the industry are significant:

- certain parts of the industry, in particular those which are not very technical were totally relocated to low-wage countries (*cf. table*). The phenomenon is all the more market as other components in the manufacturing cost, such as tariff and non-tariff barriers gradually became more uniform with the opening of the markets;

Hourly wage differences by country

Pakistan	0,31 €
Continental China	0,38 €
Indonesia	0,46 €
Coastal China	0,63 €
Tunisia	1,62 €
Morocco	1,73 €
Turkey	1,95 €
Poland	2,66 €
France	14,61 €

Source: Europa, April 2003

- other parts of the industry were up until now more or less preserved (particularly in the textiles part);
- whereas others were developing, such as, for instance, innovative textiles where the outlets are varied, other than that of clothes manufacturing (industry, medical, environmental protection, etc.). These high added value products, where the price is not yet the determining purchase criteria, represent a growing

[25] Type of outsourcing which often operated in free zones, with exports, initially of a semi-finished products (e.g. printed fabrics) from an industrialised country to a country where clothes manufacturing is low-cost, then re-importing after transformation of the finished product (e.g. dresses) to the industrialised country.

part in the European textiles markets (30 %). In this case, industry has been maintained in Europe thank to the close links between the industry and the prime contractor, on the condition that R&D investments continue to be sustained.

Some European countries have succeeded better than others. Italy has clearly redeployed on products with a higher added value, with a great deal of creativity (particularly on fashion products), and has maintained its exports. It has also used devaluations which preceded the implementation of the euro. It has a fairly original organisation, with a fairly limited weight for major multi-national firms until recently and an original form of competition/cooperation between SMEs: "districts". Partnerships founded between textile companies, research centres and major prime contractors, the districts provide a certain competitive edge: the capacity to innovate. This organisation can be explained by the economic fabric characterised by a multitude of small companies (90 % of companies in the sector count less than 15 employees). There are around 20 industrial districts spread over the North of the country, grouping together some 31 500 companies.

Other countries, however, sacrificed their industry early on, such the UK, where multinationals had a relatively high weight, gambled on their size and the internationalisation of their activities in the 1970s.

Some countries developed the technical parts of the industry – such as materials (Germany, Switzerland and Italy) – benefiting from the export of this material to NIC. Doing this, they set up the conditions for another stage of internationalisation, i.e. the gradual modernisation of the industry in these countries (with the progressive rise of NIC towards the upstream stages of the industry).

European polarisation: Euromed

It should nevertheless be noted that internationalisation was highly polarised up until the middle of the 1990s. Thus, among the Southern countries only the NIC of South East Asia managed to extricate itself in the 1980-90s. Particularly in areas where there was redeployment of activities: in Europe, with the former countries of Eastern Europe and the Mediterranean zone (Morocco, Tunisia, Turkey). Industrialised countries found areas for relocating activities with a high labour content (mainly clothes making), with dedicated zones (free zones, etc.) where large companies maintained control of production (often in outward processing traffic, such as the export of printed fabrics and the re-importing of made-up products) and particularly outlets. In North America, the United States worked in the same way, particularly with Mexico and other Latin American countries.

Two consequences result from this:

- the resistance of upstream activities in the sector in industrialised countries, relocation concerning above all the downstream part;
- the constitution of a Euromed basin focusing on the more dynamic parts of the industry (reactivity, innovation, etc.), low-price bottom of the range products being left for imports.

The industry has therefore seen significant relocations over this period ranging from 1970 to 1994. But these movements were still to a large extent under the control of

the industry and the closer relocation zones. Jobs were significantly affected and the European Union wanting increasingly to regulate the social consequences of restructuring linked to modernisation and relocation linked to internationalisation. It gave free rein to competition, the application of market laws allowing the free exchange of products, people and capital, freedom being presented as a postulate.

1.3. The break in the middle of the 1990s

Three events came together in the middle of the 1990s, overturning the competitive scheme linked to theses of comparative advantages:

- the programmed end of the MFA;
- the irruption of China in international trade;
- the rapport de force in favour of mass distributors.

The end of the MFA: from the ATC to the total liberalisation of exchanges

The internationalisation of the industry was controlled firstly, with the application of multiple protection system waivers to the GATT (ALT and various MFA), then the WTO (agreements on textiles and clothes [ATC]).These protections made it possible, initially, to slow down the relocation phenomena in Europe.

The ATC signed in 1994 left a further 10 years to prepare form the liberalisation of exchanges, which was institutionalised with the creation of the WTO.

Could the triad (Europe, North America, Japan) which developed in the 1980-1990s around the consumption basins, and often production basins, resist in this new context given that:

- intra-European textiles-clothes trade was greater (including Turkey, North Africa and Central and Eastern Europe [CCEE]), fuelled by the outward processing traffic quotas: it represented 55 billion dollars in 2002, as opposed to 38 billion for the Asia zone in 2002. Furthermore, these exchanges were framed by a range of bi-lateral agreements with countries from North Africa, Central and Eastern Europe and Africa (Lomé conventions);
- the United States also used rules such as the *yarn forward* (cf. NAFTA of 1994: fabric had to be made from yarn which originated in the zone) to protect itself.

Clearly, the liberalisation of exchanges since January 2005 has affected this regionalisation built up under the European Union and the United States, and has led to a new international division of labour. It modifies the "internationalisation" dimension which gave a certain degree of freedom to companies (given the protection mechanisms). It accentuated competition within the whole of the industry. With the end of the ATC, internationalisation changed in nature: European borders have become the most open in the world, without any real compensation being obtained during negotiations with the WTO.

The irruption of China on the international scene

China joining the WTO on 11 December 2001 did not happen overnight. Negotiations lasted a long time – and also gave the various players time to prepare themselves. At the time, everyone knew in effect that Asia – particularly China and India – would become a major economic player, implying new regionalisation in terms of production and commercial exchanges.

Furthermore, the liberalisation of exchanges in place on 1 January 2005 planned for a transition phase until 2008, through the possible triggering of a safeguard clause.

As soon as it joined the WTO, China accentuated its worldwide presence in the industry, and the end of protectionist measures (end of the ATC since 1 January 2005) increased this phenomenon. Here the results are dazzling: in 2005, European imports from China leaped up 50 % in value (i.e. 17 billion euros) for clothes and 25 % for textiles (4.4 billion euros). The increase was even bigger for the US (+ 85 % for apparel, i.e. 13.5 billion euros)[26].

The surge from China brought protection measures of varying degrees of firmness.

On 11 June 2005, the European Union used its safeguard clause concerning China, imposing an increase in exports from 8 to 12 % on certain products (men's trousers, shirts, tee-shirts, dresses, bras, linen, cotton fabric, bed linen, table and kitchen linen). This agreement was questioned on 5 September 2005 by a new negotiation between the president f the European Union and the Chinese president Hu Jintao, driven by European distributors whose goods were blocked in ports.

Here again, the American agreement on the safeguard clauses of certain textile products was firmer than Europe's: the American agreement, for instance, spans a longer time period (up until 2008). It concerns 34 categories of products (as opposed to 10 for the European Union) and does not allow transfers between categories, unlike the European Union.

It should be stressed here that the arrival of China changed the international exchange model, which tries to explain the transformations in the world economy: with China, Ricardo's theory of competitive advantages is replaced by Smith's theory of absolute advantages.

In effect, according to the traditional theory of international trade developed by Ricardo (at the beginning of the 19th century), a country which can produce all goods cheaper than all the other countries should nevertheless specialise in the production of those for which it has production factors which give it the greatest advantage in relation to its competitors. The specialisation of each country makes possible the exchange of products with mutual benefit. Such an approach is based on the idea that each country does not have a considerable quantity of all the factors which come into play in the development of competitive advantages. It is in the interests of each country, consequently, to play by common rules and therefore specialise (this supposes, furthermore, that the advantages are shared fairly, via exchanges).

[26] Source: IFM.

With China, the availability of production factors, particularly the cheap labour factor, has nothing to do with what the first countries that went into globalization were offering. China benefited from a considerable level of labour resources and capital and had no scarcity limits in terms of production factors. It can therefore develop production capacity in many sectors, and not only in textiles and clothing. On top of this, it invests a lot in research, including in high added value industrial sectors.

Apart from its labour reserves, which are far from being exhausted, it is not a partner "like other partners", on account of:

- the role of the State in its economy;
- the Chinese textiles demand, which has big potential. It should not be forgotten that the country remains a big textiles importer for its clothes-making activities;
- its clothes consumption potential which is estimated at 100 billion dollars in 2012 (source: *China Statistical Yearbook* and Asian Demographics Ltd.), i.e. four times the French market.

Another country with high potential demographics is emerging: India, which during the 1960s, put up with the constraints of the ALT on cotton products (it is a country which has invested considerably in services).

The role of mass retail

Internationalisation of supply, combined with the growing role of marketing, puts mass retail in the front rank (be it specialised or not). It is at the heart of the new logic of product valorisation. It is profiting fully from the free market and the recent arrival of China.

In the value chain, mass retail currently captures income related to internationalisation. In effect, whereas import prices have dropped considerable over recent years, under the effect of Chinese competition, consumption prices in the clothes segment have remained stable overall in Europe, with the exception of the UK, where the drop in prices has had a favourable impact on consumers.

However, the pace of capital accumulation and profits is accelerating for mass retailers, as can be seen in the accounts of groups such as H&M or Inditex Zara. The liberalisation of exchanges has not therefore benefited the final consumer.

1.4. *Including the former balances in the industry*

Modifications in exchange flows

The relative protection brought by modernisation to industrial countries has been brought into question. The countries of the South (particularly China) are in their turn accessing the various dimensions of this modernisation and are now accumulating the cost advantages and progress linked to innovations.

Current internationalisation in the textiles industry can be explained more through the new organisation of production on a worldwide scale than a rise in exchanges of finished products, itself linked to new commercial outlets. Even if worldwide demand

for textiles has got slow growth, is above all the origin of the flows of exchanges which are changing.

The WTO expected that China would represent 29 % of European imports in 2010, as opposed to 18 % currently.

There is no reason for competitive pressure to drop. They will increase on the areas of the industry with high levels of low-skilled labour (sewing, etc.), but also on modernised parts in the 1980-1990s (spinning, weaving, ennoblement) which tend to accompany the downstream of the industry (clothes making).

In effect, after having developed a clothing industry with high labour demands, since 2002, China has turned towards more capitalistic activities. The country already has 22 % and 24 % of world production capacity of spinning and weaving respectively, as opposed to 5 % for Western Europe.

The harshening of competition will particularly penalise:

- countries which recently joined the European Union (Poland, etc.), and candidate countries (Bulgaria, Romania, Turkey). In particular the removal of quotas could have significant repercussions on the countries of Southern Europe, whose exports are directed 75 % towards the European Union. This has already been the case for many years for Morocco and Tunisia;
- developing countries neighbouring China, with the exception of India (+30 % in value of clothes to the European Union, i.e. 3 billion euros). In effect, the dismantling of quotas did not cause a surge in overall European imports in textiles and clothing (+4 % for clothing at 51 billion euros, stable for textiles at 20 billion euros), which shows the sky-rocketing of China to the detriment of the other countries;
- and also the older industrialised countries which had maintained a strong industry (Italy).

The social impact

The Europeans are not the only losers in this free exchange policy:

- Chinese workers, whose purchasing power is far from following the pace of economic growth in the sector, are kept in conditions which are not far from slavery;
- workers in poor countries in competition with China will be hit hard:
  - ⇨ Bangladesh: according to the United Nations programme for development, a million jobs could be lost following the end of quotas, with the loss of contracts to the benefit of China[27]. According to IMF and WTO studies, 40 to 50 % of factories could close in the next three years,

[27] 6.8 million Bangladeshis live directly or indirectly from textiles.

- ⇨ Indonesia: according to the Indonesian textiles association, the textiles industry employs 1.7 million workers. The drop in activity expected is estimated at between 20 and 30 %,
- ⇨ The Philippines: 400 000 people work in the sector. In order to safeguard the country's competitiveness, the minimum wage in the textiles industry has been reviewed downwards.
- ⇨ Morocco.

1.5. European responses are not adequate

In an industry which is very internationalised, textile and clothes exchanges are in the main flows between companies which are legally independent, linked by sub-contracting or co-contracting agreements, and not by inter-group flows. This phenomenon has been accentuated with the increasing weight taken by mass retailers in imports with opacity on the actual origins of suppliers, despite all the talk of social responsibility.

This situation does not encourage the informing of employee representatives, who have no legal access to data on outsourcing.

The only common policy applied to the textiles industry is commercial. The liberalisation of exchanges has led to the sacrificing of the textiles industry, including in new or candidate countries, who had nevertheless based part of their conversion to the market economy on these activities.

There is no longer a European industrial policy, and even less a joint economic vision, making it possible to defend the European model, including for the maintaining of a minimum amount of industrial activities. Consequently, the firms present in the industrial elements often have no choice but to withdraw from the industry or to fall back on relocation.

However, the creation of a nearby free exchange zone could make it possible to have a stronger partnership between all the players, particularly the clothes manufacturers in the Mediterranean zone and European textiles industries. It nevertheless appears that this direction is not on the agenda.

The challenge is major for the Turkish textiles industry, which is seen as being a powerhouse for the country, with almost a third of total exports. The country is the second textiles-clothing supplier after the European Union, behind China.

Most companies have structured their industries around high integration of the industrial process, based on higher outsourcing, particularly on a number of small clothes making workshops. The outlets are mainly directed towards exports.

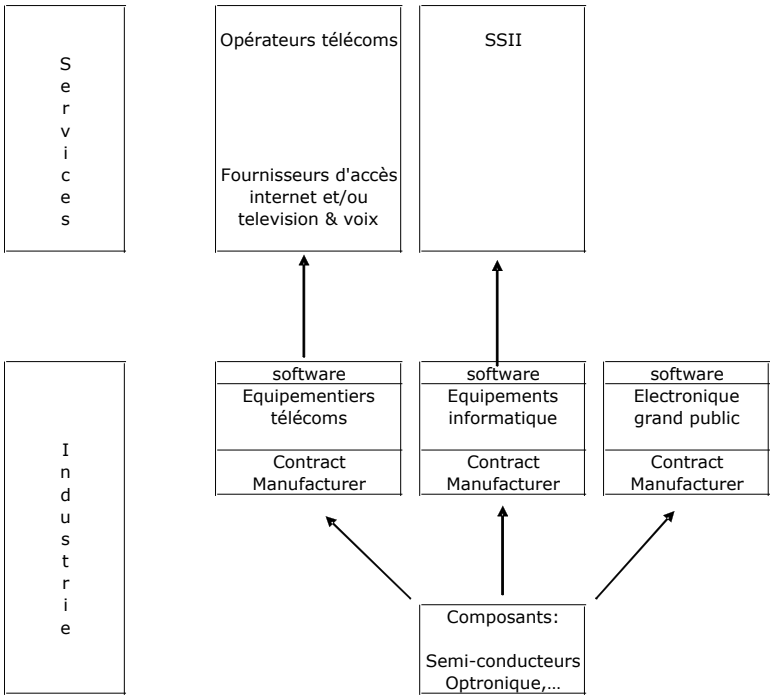
The sector represents 11 % of the "declared" worker population but in reality there are more workers in the sector (around 3 million).

80 % of "undeclared" workers work in the sector, with wages and working conditions which are well below those of employees affiliated to the social security:

- whereas the legal working time is 225 hours a month, workers in the "grey" economy work up to 320 hours a month;
- the monthly wages of "official" workers vary from 200 (the legal minimum) to 400 euros, depending on whether the employee is in a union or not and on the geographic location. In parallel, the wage of workers in the underground economy can be as low as 115 euros in certain cases.

2. Information and communication industries, a sector with high-speed globalisation

Simplified view of the electronics industry



2.1. *What has been observed in the information and communication technologies sector?*

Jobs in the European information and communication technologies (ICT) sector have dropped considerably over recent years. This evolution must be connected to the recent situation in the industry where the main characteristics are:

- the bursting of the speculative bubble at the end of the 1990s;
- the disastrous effects of the auctioning of UMTS licences, which dried out the financial resources of telecoms operators, provoking a contraction of

investments over the period 2001-2004 and a race for the lowest purchase price at the source of the price war with hardware manufacturers;

- continued considerable productivity gains and the search for organisational productivity through the de-integration of the main prime contractors;
- a certain dynamism in Asian markets, a consequence of the "first equipment effect", and also more committed players in terms of innovation;
- the emergence of new– Korean and Chinese – competitors from geographic areas "protected" from the deregulation-liberalisation process alongside older industries such as Japan.

These elements have clearly influenced the choices of the location of productive systems, which nevertheless operate under a twofold constraint:

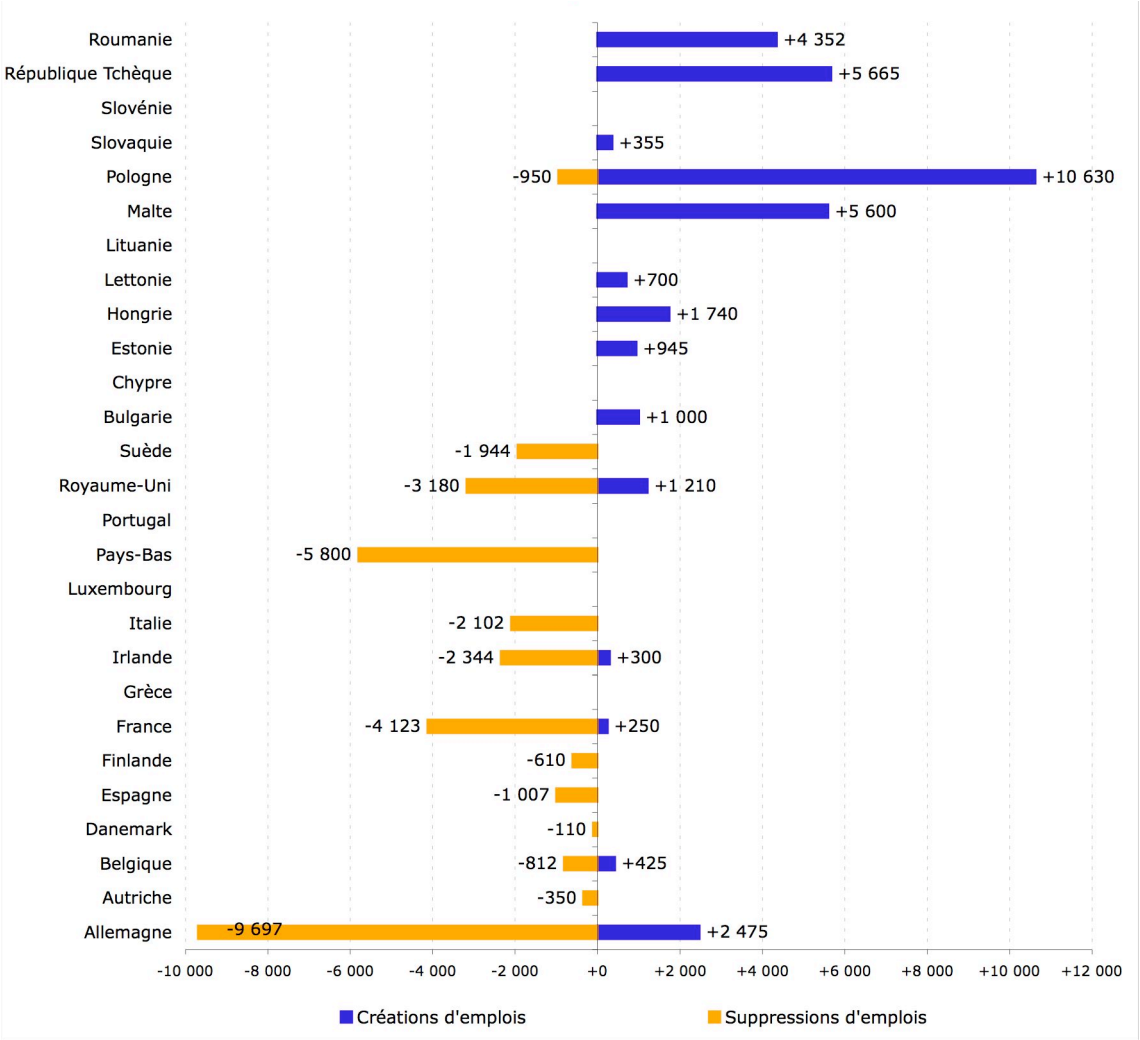
- increased pressure on OEM[28] sales prices fuelled by the precarious financial situations of certain prime contractors in professional electronics, through situation of oligopsonies in general public electronics and the commercial internationalisation of Asian and American producers;
- for groups quoted on the stock market, the persistence of consequent profitability demands, interiorised by the management.

It is true that it is difficult to put a precise figure on the contribution of these factors to the drop in the number of jobs in Europe. It is nevertheless clear that choices in terms of location now touch all the companies in the industry (component manufacturers, outsourcers, OEM, operators) and, within them, the main functions in the company (administrative, industrial, R&D, etc.).

EMCC data for ICT for the EU25 (and the two potential new members) clearly characterise the situation for the years spanning mid-2002 to 2006: globally, the cutting and creation of jobs balanced out… However, 97 % of job cuts occurred in EU15, whereas 86 % of jobs created were in the 10 new members and the two countries that will join in 2007. It would, of course, be excessive to confirm restructuring in the former perimeter of the European Union are all concretised by relocations to the new member and candidate states. But the recent examples of EDS, IBM or HP, announcing simultaneous restructurings and openings of establishments in the Union tend to prove that this phenomenon is consequent during the period under review.

[28] *Original equipment manufacturer:* manufacturer/integrator selling hardware or equipment manufacturer.

Announced job cuts and creations in the countries of the European Union (and candidates), in the ICT sector according to EMCC over the period mid-2002-May 2006



2.2. *Relocation of the industrial function in ITC: challenges, realities, limits*

The challenges: from outsourcing to relocation?

For the past fifteen years or so, there have been major and continuous changes in hardware:

- on the product front, the purely material element now only represents between 7 % and 15 % of the added value of equipment, the rest coming from software applications,
- within this, the industrial added value has shifted considerably from manufacturing-assembling of electronic boards to the downstream sector of components (semi-conductors, ASIC, optical components), elements which integrate an increasing amount of hardware and software capability[29];
- industrial productivity gains estimated globally between 5 and 10 % per annum.

The movements described above weigh, for a constant volume and type of outlet, on the level of industrial employment. However in the context of their pure player[30] strategies, of increasing profitability by reducing the capital engaged, even abandoning the sale of "products", the various OEM did not want to ensure the diversification of their plants. This movement alone could nevertheless compensate for the phenomena described above.

The OEM "offloaded" this need at the worst time[31] to subcontractors[32], to whom they outsourced virtually all their industrial sites for the manufacturing of upstream blocks (printed circuits, electronic cabinets, etc.) and electronic boards, even the assembly-integration of hardware.

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[29] According to Anvar, the share of the added value taken by microelectronics in electronics went from 5 % in 1960 to 10 % in the 1980s. Since then, the trend has continued accelerating: the microelectronics content exceeded 30 % in 2003 and will probably reach 40 % of the value of equipment in 2010. This acceleration of the migration of the added value of equipment towards microelectronics can be seen in new products (DVD, decoders, digital TV, etc.), where the share of microelectronics can today reach 45 % and will reach 75 in a near future.

[30] Expression used to characterise the refocusing of companies on a limited number of outlets. The most striking example in France is the passage from Alcatel-Alsthom to Alcatel, the group having abandoned over the past ten years its activities in engineering, electronic construction and cables …

[31] The outsourcing of most OEM sites took place over the period 2000-2002, during the turnaround in the ITC sector cycle.

[32] (*Electronic*) *Contract Manufacturer* or *Electronic Manufacturer Services*.

PCB Assembly: manufacture of electronic boards

Customer Outsourcing Trends

SANMINA-SCI

Outsourcing Penetration by PCB Assembly & Systems

	PCBA	Systems
Wireless	45%	22%
Switching	24%	10%
Enterprise	54%	36%
PC's	72%	45%
Servers	67%	39%
Storage	50%	4%
Industrial	32%	10%
Multi-Media STB's	43%	12%
Defense & Aerospace	18%	1%
Medical	29%	12%
Grand Total	51%	20%

"Systems Outsourcing is an Emerging Market"

EMS Division - Strategy & Execution
Customer Focused Strategy

SANMINA-SCI

However, the provisional assessment of the capacity of outsourcers to ensure the sustainability of sites they take over is glum. Many sites taken over have been closed, whereas, in several cases, production has been relocated in a context of continued industrial overcapacity[33].

- *We should indicate that above and beyond manufacturing, outsourcing has extended to all the labour functions considered as not creating value (in Porter's sense of the term): accounts, pay, building management, logistics, installation, etc.*

From products to systems?

With the low success of their policy of capturing new production, sub-contractors are attempting to convince OEMs to give them bigger blocks than "simple board making". They would now like to be given the supply of new turnkey solutions, and not just sub-assemblies, whereas the main, manufacturer/integrators focus of applied research and product sales. Subcontractors could therefore evolve in two main ways:

- by taking over assembly-integration sites from the OEM. This situation is already a reality for a certain number of telecoms companies;
- by becoming an ODM[34], i.e. offering OEM products that they themselves could have developed and designed.

The question is therefore one of knowing whether the manufacturer/integrators consider that the "industrial product" is no more than a commodity[35] (in the sense of the consideration currently given to micro-computers)… With the risk of seeing sub-contractors competing with them in time on their own markets, as can be seen by the example of Acer, which at the beginning was just a sub-contractor for manufacturing PCs.

This extension of the role of sub-contractors would raise the question of the geographic management of their production system in a context of pressure to focus on low cost zones.

[33] See below.

[34] *Original Design Manufacturer.*

[35] It is likely that the appreciation of this state depends strongly on the technicity of the product in the sense of features fulfilled.

2.3. Factors determining the choice of allocation of manufacturing and the realities of industrial relocations within the ITC sector

Relocation in the electronics industry is often associated with announcements in the media of fabless (factory free) corporate strategies as much in the field of semi-conductors (Philips), general public electronics (Thomson, Philips) as telecommunications (Alcatel, Nortel…).

The question of relocation however covers a different reality depending on the type of markets served or companies concerned. This means that the relocation choices respond to different logics:

- the search for "wage" competitiveness to find room for manoeuvre in relation to price cuts, which can be applied to a product with greater manual labour intensity (televisions, for instance);
- the search for "supply" competitiveness: relocated plants benefit from the presence of a fabric of suppliers capable of ensuring lowest levels of purchase prices: assembly in Asia of electronic boards for products which do not have delivery time constraints thus benefit form the size of the Taiwanese semi-conductor industry;
- opening up to new outlets to overcome entry, taw or technology barriers: China has defined constraints for the local share and re-exporting of products for the obtaining of "public" markets, and has chosen specific technical standards in terms of DVDs or mobile phone networks.

Within the manufacturer/integrators

General public electronics: the accent on "cost" location

The main players in general public electronics (GPE) have chosen to loosen the constraints they feel they are under (high market power of mass retail or operators, intensification of competition through commercial and/or industrial implantation of players in Europe) justifying the choice of locations **mainly on the basis of costs differential arguments (particularly wage costs)**[36]. This concerns the segments:

- with higher labour intensity (televisions, for instance, where relocation could be almost total by 2008…);
- as those which are less intensive (mobile phones).

It could nevertheless be considered that these evolutions show the incapacity of European industry to be a driving force behind major product innovations in recent

[36] By benefiting form the tax benefit opportunities to the provided by the new members of the European Union.

years (e.g. LCD-Plasma screens[37] or DVDs), and therefore its inaptitude to compensate for job losses in renewal markets by "first equipment" jobs.

Professional electronics: the need to remain close to rare resources and final customers?

Within the professional electronics industry given the relative diversity of clients served, it is difficult to isolate a generic model in terms of allocating the industrial tool remaining in-house.

- For civilian applications: in parallel to the generalisation of the outsourcing movement, the maintaining of integration-assembly plants[38] shows a twofold proximity logic:
  - ⇨ being close to critical resources (material development centre, key suppliers, etc.),
  - ⇨ being close to customers, who have to be delivered and where there is increased variability …
- For State applications[39]: obtaining approval (then the later controlling of this approval) delivered by reference organisations (DGA, GIE Cartes bancaires…) has a big influence on companies in their choices of location and is a big obstacle to relocation. Even in the case of outsourcing, these constraints can be applied to the sub-contractor chosen… generally conditioning the maintaining of these activities in France.

Within first tier sub-contractors: relocation or management of geographic redistribution?

For leading EMS[40], it is a question of knowing whether the sites located in Western Europe will remain. They have started to be affected by significant relocation phenomena since 2003. These movements come from a double desire:

- that of leading EMS to rationalise a production tool sized for the peak in the 2000s and benefit from this opportunity to reallocate production towards low costs zones;
- that of the prime contractors who, at the end of the supply contracts (generally three years) signed at the moment of the transfer of property to the EMS, impose significantly downgraded price levels to their suppliers.

It should be remembered that the purchases of the EMS were combined in 2000-2002 with a policy of opening capacity in emerging countries. The end of the initial

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[37] In this field, Thomson, which had a technological advance upstream, chose not to give the priority to these products in the context on a strategy of refocusing on services, and therefore abandoning the hardware side.

[38] Whereas it popularised the concept of fabless companies, Alcatel still has much more than Nortel and Thomson…

[39] Defence, aeronautics and security.

[40] Mainly Solectron, Sanmina, Celestica, Jabil, Flextronics, Benchmark or Elcoteq.

contracts negotiated during the sale of these establishments could lead to the transfer of production towards sites in Eastern Europe or Asia.

The question is partially different **for national-sized sub-contractors** which have survived the crisis. Despite the complexity of internationalisation in relation to the surface and their means, most of them now having (themselves or in capitalistic partnership) production sites in the CCEE, North Africa or China.

Today, it would seem that use of these "relocated" sites often most frequently falls within (concerning product positioning) not the need for wages competitiveness, but rather flexibility competitiveness in relation to the volatility of orders from the prime contractor, particularly in terms of general public electronics. The sites of low cost countries play the role of absorbing charge fluctuations. They could also serve as a base to compete with the leading EMS in medium ranges…

With this, the more tangible anchoring of these groups in the territory, their lack of exposition to the pressure of financial markets and a policy of more measured external and internal growth – and in relation to a lesser financial surface – have overall restricted the capacities and desires for relocation… They have also forced these groups to choose product/market pairings enabling them to differentiate and load their various establishments…

However, these players try to pass on to their suppliers part of the cost competitiveness constraint, through partial relocation of their raw materials procurement in Asia…

Within component manufacturers: the degree of technicality of products conditions the location of production sites...

Situated at the end of the chain, component manufacturers vary greatly depending on their size and the type of component they make (notably active or passive): their degree of criticity (and rarity) have a big influence on their room for manoeuvre in terms of location. This technicity is closely linked by the capital intensity of the product, whether it is in the field of active components (semi-conductors, opto-electronics, etc.) or passive ones (printed circuits). However, globally, these segments have been more sensitive to the shrinking of their outlets and the relocation of certain prime contractor plants. However, this appreciation must be completed by a key to give understanding in terms of belonging to an internationalised group and of a sufficient size.

Similarly for sub-contractors manufacturing boards, it would seem that medium-sized groups, whose capacity to choose between different locations is lessened, have had to compromise with the maintaining of their French sites and implement appropriate policies for this constraint.

2.4. The limits of the relocation model and the potential of a "new industrial model"?

The movement of relocating industrial production which affected companies in the electronics industry cannot be separated from the difficult economic conditions the sector has gone through. Over the period 2001-2005, relocations are indeed not one of the components in the big decrease of industrial employment in Europe, the increased jeopardisation of certain sub-contractor units could engender an acceleration of this movement in the next two or three years. This appreciation must however be counterbalanced by a certain number of elements which could attenuate this pessimistic vision.

What capacity to maintain a group totally or partially integrated in high cost countries thanks to a strong policy of marketing and technological innovation?

The "de-industrialisation" of leading OEM in Europe is genuine. However, there seems to be no "fast track" in terms of the search for competitiveness, a single path based on an exclusive combination of outsourcing-relocation. Two examples (Nokia and Sagem) show that there is no determinism, given that the company strategies are very different. These two companies nevertheless have a common trait: a very high level of commitment to R&D and the choice of an industrial logic of proximity…

In 1988, Nokia was a conglomerate present in around ten different areas (wood, chemicals, machine-tools, rubber). At the time telecommunications represented around 8 % of its total turnover. In 2002 Nokia was the world's leading telecommunications company, a position it obtained with a "heterodoxical" policy based mainly on:

- high specialisation on one business: mobile phones (terminals and networks) which was based on the sedimentation of knowledge in the of the general public market in the company's historic businesses (notably TVs);
- focused growth, Nokia only carrying out small targeted acquisitions;
- the personalisation of products and the construction of a reference brand;
- internal control of the value chain, with production maintained internally and largely located in high cost countries;
- in terms of R&D, high involvement in the promotion and definition of technological standards imposed in the marketplace[41];
- early awareness of the importance of services offered to end users.

Today Nokia has production units and R&D centres in 9 countries. Finland has 50 % of headcount, the US almost 15 %, Germany almost 8 % and the UK 4.2 %. In total,

[41] The slight drop in market share of the Finnish company in 2003-2004 can be explained by an error in anticipating innovation/products.

around 77 % of Nokia employees are located in countries where payroll costs are considered to be the highest in the world!

4.D Property, Plants and Equipment

At December 31, 2004, Nokia operated 15 manufacturing facilities in nine countries around the world. None of these facilities is subject to a material encumbrance. The following is a list of their location, use and capacity:

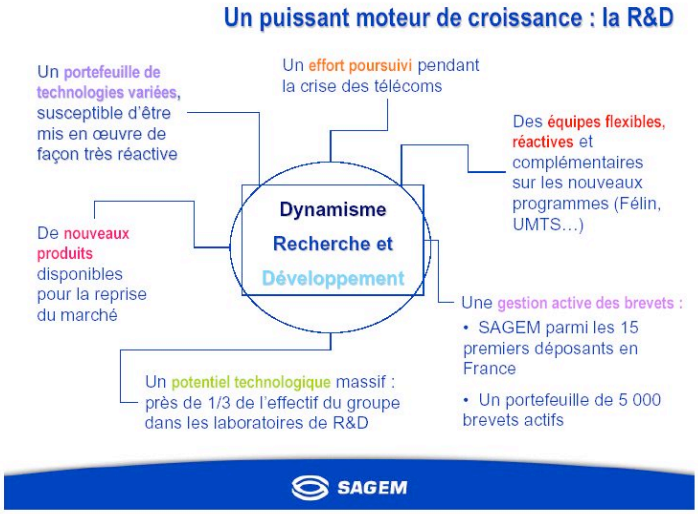
Country	Location and Product	Productive Capacity, Net (m^2)[1]
BRAZIL	Manaus (mobile devices)	12 352
CHINA	Beijing (mobile devices)	23 095
	Dongguan (mobile devices)	12 768
	Suzhou (base stations and cellular network transmission products)	6450
	Beijing (switching systems, base station controllers, transcoders, home location registers)	4 634
FINLAND	Salo (mobile devices)	28 440
	Oulu (base stations)	13 322
	Espoo (switching systems, base station controllers, transcoders, radio access products)	10 674
	Oulu (plug-in units for both GSM and WCDMA base station product families)	6 538
GERMANY	Bochum (mobile devices)	28 389
HUNGARY	Komárom (mobile devices)	30 062
MEXICO	Reynosa (mobile device batteries, mobile devices)	9 102
REPUBLIC OF KOREA	Masan (mobile devices)	34 768
UNITED KINGDOM	Fleet (mobile devices)	2 728
UNITED STATES	Fort Worth, Texas (mobile devices)	20 749

(1) Productive capacity equals the total area allotted to manufacturing and to the storage of manufacturing-related materials.

Source: Nokia, *Rapport 20F*, 2004.

Sagem also has heterodoxical characteristics concerning the policies put into practice by other major electronics groups. This company:

- started by taking a consequential position in the European mobile phones market ensuring deliveries from its Fougères plant;
- has just announced its entry into the television market, at a time when other companies in this field are leaving the French territory;
- ensures production that others have outsourced or abandoned (fax machines, for instance);
- maintains, against the flow, a very integrated industrial structure (having maintained the manufacturing of mobile phones[42] through to printed circuits).



It would seem that this situation comes from:

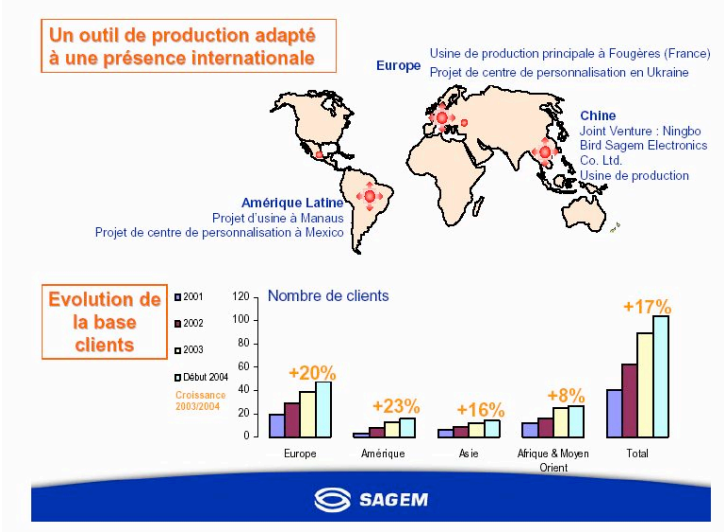
- high autonomy of its managers, linked to a corporate capital structure (the capital is more or less locked up by the management[43] and "institutional" shareholders);
- a strategy mainly focused on technological innovation. It has a base in the defence and "security" electronics markets. These markets enable it to:
  - ⇨ amortise part of the considerable R&D efforts of the company (30 % of the company's headcount is in this area),

[42] *"Controlling the whole of the chain enables us to be more flexible and respond better to the demand of our operator customers"*, stressed Yves Portalier, marketing director of Sagem's communication branch. *"By relocating, we can make gains in labour expenses, but we lose on flexibility, without mentioning transport costs"*.

[43] "By taking control of the capital, the employees' aim was not to make an immediate gain by buying and selling shares, but to safeguard the company's strategic independence". Grégoire Ollivier, CEO of Sagem, seminar at the École de Paris du management, 4 October 2002.

⇨ and probably start policy ensuring the reciprocal re-use of technologies developed for civilian or military applications;

- a diversification of the activities portfolio[44] enabling the commercial optimisation of these developments.



The emergence of sub-contractors and component manufacturers well-anchored in the European territory, with strategies of proximity and technicity and decentralised organisation?

The reconfiguration of the electronics outsourcing segments, which has been underway since the sudden turnaround in the cycle in 2001, has brought a concentration in production capacity benefiting the major North American EMS, and also groups with a national shareholding and management, in the field of outsourcing of the manufacture of boards and certain passive components (in particular printed circuits).

These groups have indeed taken over industrial sites from OEM, but often to aim for specific markets (aeronautics, defence) or specific skills (plastics, for example). They were also starting from an old and "proprietary" industrial base. It must be said that these groups seem to succeed better in a genuine diversification of sites from OEM, and to bring job sustainability. This is based on the implementation of niche strategies based on:

- being close to the customer. Proximity is seen as the capacity to respond to the ups and downs of the prime contractor and speed in the processing of its orders, without a heavy structure (which the major EMS do have);

[44] "Our strategy, contrary to fluctuating advice, is to be present in markets where our skills in high-technology electronics can be applied, noting that more diversified markets bring increased stability to growth", Grégoire Ollivier, CEO of Sagem, seminar at the École de Paris du management, 4 October 2002.

- physical and cultural proximity with OEM contacts;
- a better supply of "Europe" services? This service being defined as the capacity to secure a medium-term relation and produce an analysis of the value of customers' products, ensuring gains for the latter, and the quality of a "communication" capacity with the same clients. This being particularly valued in relation to clients who do not have any real electronics skills;
- a positioning on diversified small and medium series with a high technical content.

It should be noted that these groups function on an "SME federation" model, where each of the sites[45] appears autonomous in its operational and commercial management of its existing customers, the centre mainly ensuring a prospecting function. Is this decentralised organisation, which triggers operational proximity, one of the bases of the continuity of these groups?

However, the sustainability of the model depends on the maintaining in Europe of the prime contractors' hardware R&D development centres… The only thing remaining to be questioned is the social model of these groups, in terms of the individual and collective status of the employees as much as in terms of internal and external flexibility.

What provisional conclusions can be drawn?

Relocations seem to find their economic legitimacy (from the point of view of managers) when there is the combination of high volumes, high labour contribution and low lead time constraints. The last two elements can nevertheless be questioned by the technological evolutions of products and the squeezing of manufacturing cycles.

There is nevertheless room for maintaining an electronics production industry based on innovation, design quality and technicity, factors which will settle out networks of local suppliers, sub-contractors through to specific components.

This model is in part founded on proximity between hardware development and manufacturing, but is based on the maintaining and quality of the skills in the hardware development centres in Europe.

The migration of industrial added value towards microelectronics shows the importance of this segment and the support that needs bringing to it.

All these elements could plead in favour of partial reconfiguration of the industry to a "local production system" on a European basis (integrating North Africa) for systems and their subassemblies. This production system could respond to the following outlines:

- maintaining of hardware development in the manufacturer/integrators on sites which exist today;

[45] Of "modest size": between 80 and 300 employees.

- internalisation or outsourcing of assembly-integration units close to development centres and where the vocation is to deliver to the "Europe" zone with a spread between:
  - ⇨ prototyping and introduction of new products in plants kept by the systems manufacturers[46],
  - ⇨ large series products stabilised with the major EMS in emerging countries,
  - ⇨ small and medium series with high reactivity and end of life of products with small EMS;
- influence of location of these plants in the local supplier network, where proximity is required by the technicity and specificity of products.

It is necessary to remember this structuring[47], insofar as it suggests that industrial policy decisions could "trickle down" to sub-contractors and component makers of a more regional size.

2.5. Can R&D in the electronics industry be affected in the same way as production by an outsourcing-relocation phenomenon?

The scientific and technical industrial innovation system in Europe has been offset by the actual reduction in value of public contributions to R&D:

- the privatisation of the former public monopolies has cut off the funding allocated to laboratories (e.g. the CNET in France being the most significant from this point of view);
- R&D spending is dropping in context of shrinking activity since 2001.The temptation is towards geographic redirection of the location of technical centres to maintain the effort in volume (people per year);
- "the arrival of digital" has shaken up IT and telecommunications: the end of proprietary systems no longer enables the independent (even autonomous) development of technology of a single company (or even a national public programme), and the often rapid training of younger generations in these new technologies encourages countries with a high population potential (such as China or India) which have been intelligent enough to gamble on the sometimes impressive development of their universities.

[46] For prime contractors who do not (or who no longer) have their own industrial facilities, the subcontractor should dedicate a plant (or part of one) to this function of introducing new products.

[47] It should be noted that this is based in part on considerations which tend to harmonise tax and social systems.

Uniformity of R&D activities and the associated risk of relocation

Firstly, it should be remembered that the term "R&D" covers a sequence of different roles: upstream research, hardware and software development, integration and testing. Consequently, the different phases of R&D do not represent the same exposure to the threats of relocation.

The location of companies' upstream research (pre-application) is highly influenced by the link with university laboratories and public applied research centres, and foster the location of applied development centres in relation to a fluid transmission of work.

The risks of relocation today seem to be concentrated on development activities:

- hardware: on account of the relocation of certain production to Asia, the argument of the "required proximity" between hardware development and industrialisation, used to avoid the relocation of manufacturing tools, turns against its initiators (concerning R&D centres) once the industrial relocation has been carried out;
- software: this is perceived as being less "noble", and is also less of a provider in terms of the employees concerned. The fashion for offshoring, particularly through the many announcements of establishment or strengthening of development teams in India or China accentuates this concern.

This jeopardisation of software development activities is aggravated by:

- software development productivity which has remained almost stable over time, which contrasts strongly with the situation in the hardware field, hence a relative increase of costs in software;
- the gradual extinction of major proprietary company software, then replaced by architectures based on open programmes and programmes available off the shelf…
- However Europe's position is relatively low in the field of software publishing[48], and "the time of the developers in a monopoly situation and integrators entrusted only with the deployment of their solutions is coming to an end, to give way to integrators who control relationships with customers and in a position to choose themselves which software solutions they wish to use".[49]

[48] According to the report produced in October 2003 by the *Conseil stratégique des technologies de l'information* to the French government.
[49] ditto.

The case of R&D in the European telecoms equipment company XS

In 2002, faced with the unprecedented crisis due to the bursting of the internet bubble, XS decided to reduce the "complexity" of the way it managed its R&D centres by limiting the number of them and to cut costs by massively re-affecting them to low cost countries. The programme was wide-ranging, since it involved drop in the number of R&D centres of 60 to 75 % and an R&D budget allocation in low cost countries of 5 % in 2001 to more than 30 % in 2007 in 2 to 3 years. Thus, if the number of centres in these countries should drop, according to forecasts, by around 40 %, those in developed countries should plummet by 75 to 90 %. The objective being that there should be only one site by technological speciality (instead of 5 to 7 sites) in high cost countries for 2 to 4 sites in low cost countries. Whereas the headcount was spread 80/20 between high cost and low cost countries, the ratio should have been brought to 50:50 after 2 or 3 years of restructuring.

The choice criteria of the R&D centres were theoretically as follows:

- **strategic:** the strategic importance of being close to the customer, local satisfaction and company shareholder participation in the capital of the centre greater than 50 %;
- **very important:** performance (patents, quality, productivity, results,...), hourly costs;
- **important:** share of the activity in the country, respecting of internal procedures, presence of specific knowhow and core business and size of the centre;
- **medium importance:** innovation capacity, innovation environment and physical access difficulties of the centre.

In practice, the positioning of the centres happened with the help of a matrix concerning one of the areas of a summary index grouping together the "very important to medium importance" criteria, with a great deal of opacity on the determination of these criteria and their respective weighting) – the strategic centres being set aside (making it possible to save certain sites) – and, in another area, the hourly cost. The question of the hourly cost (apart from it also being part of the summary index) took a central position in the evaluation of the R&D centres.

The frontier between low cost countries and the others was set at a wage cost of €40 per hour. Most of the South-East Asian countries varying between €20 and €30/hr, China being estimated at €22/hr, whereas European countries are generally between €60 and €90/hr (some countries were nevertheless at €30/hr) and the United States at almost €100/hr. It became clear that developed countries would find it difficult to be competitive with such figures. Furthermore, the evaluation of these hourly rates queried not only the way in which they were calculated (for the French centre, which had taken into account the highest hourly rate on a specific project and which integrated certain fixed costs: evaluated at more than €60/hr, this rate could have been brought down to €45/hr after restatement), but also the activities they were based on: between two technological specialities there could be a difference of up to a factor of three in one given country.

Programme extensions are "captured" toady by emerging countries, given the wage differentials (for skilled labour activity). In upstream research the differences are:

- cost of a "busy" Chinese engineer[50]: from 30 to 40 000 euros per annum;
- cost of a "busy" French engineer: from 120 to 150 000 euros per annum.

Furthermore, given the progress in education in China and in India, a consequential cost difference and a considerable reservoir of resources in these countries, it is easier to invest massively.

However, a simple statistic analysis of these differentials needs putting into context, insofar as the wage increases in attractive regions are rapid. Furthermore, qualitative aspects (issues of intellectual property, cultural obstacles from totally internationalised organisations) are often largely underestimated.

More globally, companies internationalising their R&D functions look to gain a critical size throughout continents with a view to the geographic oscillation of major innovations (GSM in Europe, IP in the USA, general public electronics in Asia), with a sizing of each centre of between 300 and 500 people. Centres need to be maintained close to the "inevitable companies" in the sector (Intel, Microsoft, IBM, in the USA for example).

Potential evolution of R&D centres in Europe

European sites could therefore evolve progressively from R&D centres to centres for integration and R&D applied to customer personalisation.

The loss of value and jobs in hardware and software development (commoditisation of these activities) could be compensated for by the extension of value to the field of:

- systems integration, whose place is growing, insofar as it has become necessary to architect software which was not designed to communicate together;
- hardware and software maintenance and support.

However, this value is local and depends on client configuration, or even specific standards. The maintaining of jobs in Europe is in part linked to the capacity of these companies to keep their European clients or win new ones.

Furthermore, in the field of communications, the change from voice (where the systems are the same whatever the country) to digital data (where the systems depend on national configurations) could lead to the creation of local production systems (at the national level), based in particular on the securing of networks in B-to-B or B-to-C application or public service applications (particularly military and health).

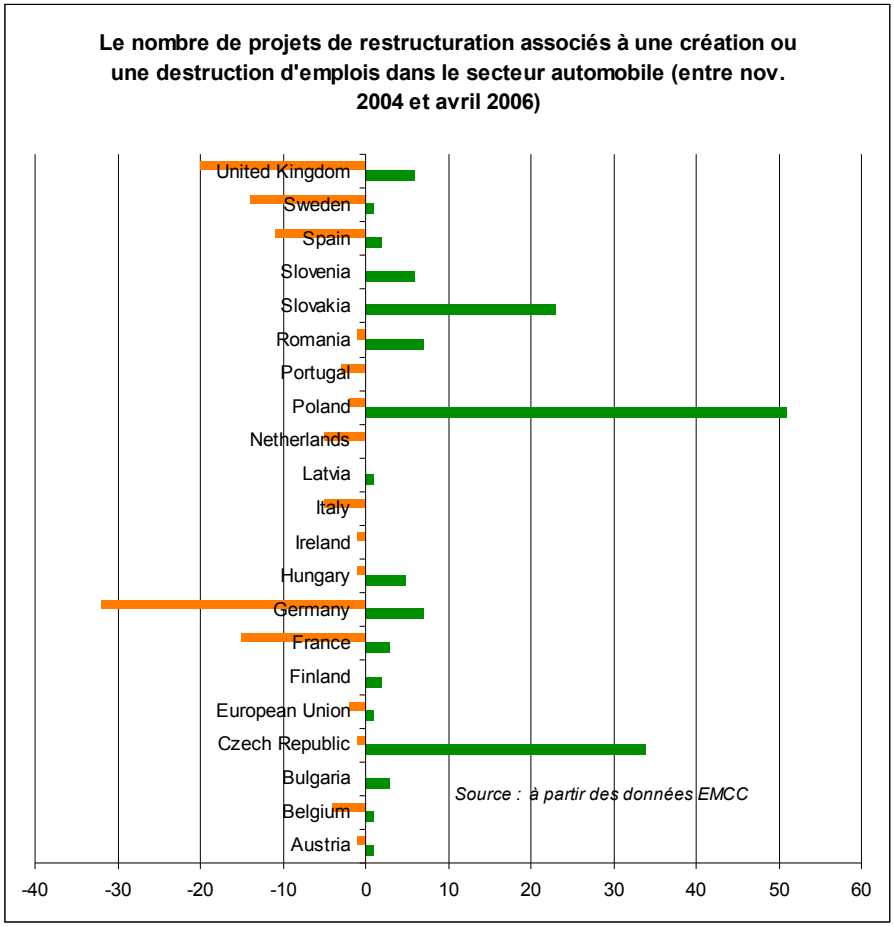
These local production systems could be based around the major OEM, with, gravitating around them, upstream research centres and start-ups (in support and integration). The share of the institutional environment in terms of location is stronger than the share of the unilateral decision …

[50] I.e. including environment: offices, IT, test materials, etc.

3. Automotives, an industry which remains regionalised

3.1. *What can be observed in the European automobile industry in terms of jobs and restructurings?*

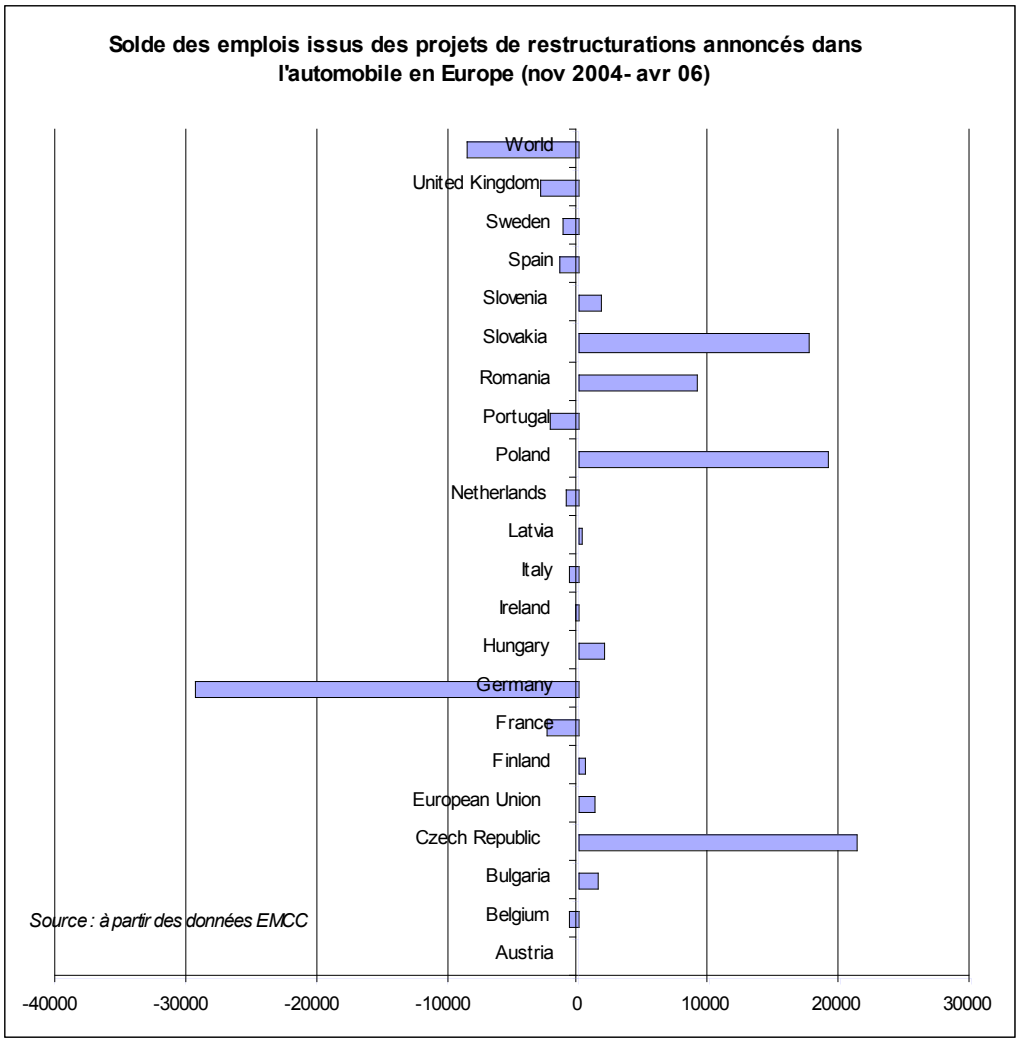
The number of restructuring projects in the automobile industry is consequential. As an indication, we have listed, on the basis of EMCC data, restructuring projects in the automobile industry giving rise to either the creation or the cutting of jobs (270 announcements of restructuring projects were counted, i.e. an average of 16 projects per month). We looked into the most recent period (end of 2004-beginning of 2006), for effective implementation between 2005 and around 2010.



The processing of this data shows that the majority of projects are associated with job creations (154), of which a large part goes to Poland (51 projects). Then there is the Czech Republic (31) and Slovakia (23). Projects associated with job cuts (119 over the period) mainly concern Germany (32), the UK (20), France (15), Sweden (14) and Spain (11).

Globally, the balance of jobs from these projects (with a variable horizon, going for some beyond 2010) is positive (+ 23 600).

It is very interesting to observe that the content in jobs of these various projects is highly variable. If we look at the net balance of jobs created, the Czech Republic (+ 21 200) is ahead of Poland (+ 19 000) and Slovakia (+ 17 600). Net losses of jobs in Germany (– 29 200) are considerable given the net job losses associated with the projects announced in the UK (– 2 700), France (– 2 400), Portugal (– 2 100), Spain (– 1 500) or Sweden (– 1 200).



Finally, restructuring programmes destroying jobs are, to a very large extent, internal restructuring project (78 % throughout European countries and 95 % for German projects). Relocation projects as such only represent 8 % of programmed job cuts.

These first observations, which contain certain limits (if only because Turkey is not included in the field of observation, whereas the Turkish automobile industry counts some 500 000 employees), highlight at least two points:

- restructurings underway in the automobile industry will concern almost 160 000 jobs in Europe in the next five years, i.e. a consequent number of jobs in relation to the current situation (around 6 %), and this is without counting natural wastage from retirement, which contributes to bringing down the headcount without there having to be a restructuring plan;
- these projects are globally favourable to employment… but are only beneficial to the CCEE (+ 73 000 as opposed to – 50 000 for Western European countries in net terms).

To gain a better understanding of the choices of location, it is important, firstly, to appreciate the particularities of the automobile sector (in relation to the other sectors studied), and, secondly, to look at the location strategies of the players that make up the sector (manufacturers, equipment manufacturers and sub-contractors).

3.2. *The specificities of the automobile sector*

The structuring of the automobile sector and the location strategies followed by the players in the sector come to a great extent from the specificities of automobile products and the range of components, the organisation of production that this supposes and the associated conditions for increasing value.

The structuring of the automobile sector comes firstly from the characteristics of automobile products

The automobile is a voluminous product. Not including niche vehicles, low volumes and relatively high process, logistics costs weigh sufficiently heavily for the export of relatively high volumes of series vehicles not be profitable in the term for "general" manufacturers. The equipment that make up automobiles, and more particularly small vehicles, are however highly subject to relocation risks.

The automobile is a complex product. The technologies and activities used in its production are numerous and varied. Their presence in one single space and the functioning of a supply chain which is broad and hierarchical with a high level of constrains (costs, lead times, quality) require conditions which can only be found in developed zones and with consequential scale effects. If parts which travel badly are produced close to the assembly plants, the growth in local integration remains dependent on the scale effects and the balancing of relative costs.

Public authorities (national & European) exercise a non-negligible role in this economy

National **tax rules** determine the valorisation conditions (new vehicles in particular) and the particularities of the product (cf. diesel).

Economic policies have an influence on the renewal cycles (the general economic situation and specific support policies).

The **definition of** (European) **standards** determines in part the evolution of the product (and associated R&D), particularly in terms of fuel consumption, pollution reduction and safety. Value accrual conditions are governed by these evolutions: R&D costs and product enrichment on the one hand, possibilities of commercial acceptance on the other, as opposed to extra productivity to be created.

Recent evolutions concerning **distribution and after-sales rules** for automobiles (Europe) have potentially modified the value accrual conditions. If manufacturers have adapted their networks (new contracts) to renew their control over sales and their preponderant share in the after-sales market, the recent change in European regulations on so-called "captive" parts will weigh on the manufacturers' economy…

The evolutions accentuate the issues of costs on the value chain and in relationships within the automobile system.

The evolution of automobile products towards greater technological diversity will lead to significant structural reconfiguration within the sector

The complexity of automobile products also comes form the actual or potential **massive technological choice**. These technological choices participate in the entry of new players and partners and the reorganisation of the automobile industrial system (and its industries), a strategic challenge for all the players, for Europe and its territories.

This structural reconfiguration has many dimensions:

- the automobile industrial system chain has evolved and will structure itself in an increasingly molecular way with the development of design and **production in a logic of sub-systems and modules** associating several skills and players;
- **co-design**, in other words the increased delegation of R&D and the capturing by manufacturers of the innovations of upper tier suppliers will be accentuated;
- the chain is broadening (new players) with the development of new features in vehicles and with the integration of social demands;
- the **quality of interactions** between manufacturers and equipment manufacturers is being confirmed as a major ingredient in the competitiveness of leading players, in a context of increasing cooperation and alliances in the upstream phases (R&D, vehicle programmes, manufacture).

The value captured by manufacturers results from their competitiveness in their model range, on sales operations and on automobile use markets

Manufacturers are very present in vehicle sales, financing and after-sales (servicing, repairs and selling of spare parts which it captures to a level of 52 %), from which they gain profitability. The challenge in the corresponding markets is therefore crucial for manufacturers, in a European context of changing rules in European distribution.

The new vehicle market has particularly low levels of remuneration in Europe (high competition, atomised taxation, economic constraints of standards). The more developed, high volume, markets are marked by a perspective of low annual growth and by tight value accrual conditions.

The search for lower costs of vehicles to integrate environmental demands, enrich features – and therefore vehicle equipment – and develop profitable growth structure product policies, throughout its life cycle. Varied concretisations appear in contexts marked, as much nationally as by the company, by evolving models.

Equipment manufacturers and sub-contracts in the automobile sector are subject to the pyramid framework imposed by manufacturers and have seen an erosion of profitability for generalists and sub-contractors

Highly de-integrated, manufacturers structure by a cascading supply chain in delegation to equipment manufacturers and suppliers

The system works concretely through vehicle or platform programmes (from the pre-project to the project and the series), where there is co-design, allocations and price conditions, which can, by definition, change throughout the life of the programme (drop in costs).

The drop in purchase costs for the same service is a constant objective (3 to 5 % per year in average) cascaded down, by delegation. These drops in prices result from two dynamics: sales price constraints of vehicles with enhanced content and spreading of the value. The evolution outlook of automobile products (standards…) could bring growth of 30 % of the potential value per vehicle (under current conditions) over ten years. But this means, for the current parts of the car, accentuated cost cut constraints, even the risk of parts and equipment disappearing.

Directed towards cost cuts this organisation has enabled manufacturers to find their competitive room for manoeuvre again… But, **this management strengthens the risks (quality costs, social costs), including loss of overall skill and structuring of innovation**, while increasing constraints. This contributes to inter-company relationships where knowledge of the final customer and the visibility of the lower tiers are low.

The profitability of equipment manufacturers and major suppliers, which for a long time was higher than that of manufacturers, has been shaken up by structural changes in the product, the chain and its relationships

Apart from the effects of competition and such or such a player being strategically and competitively out of step, the situation is characterised by **valorisation uncertainties** linked to changes in the product and in the way it is produced and supplied. Production of modules and/or innovative products in "coopetition" organisations are often not as well valued as more ordinary products produced by the same players. Leading first tier equipment manufacturers (including integrators, also called tier "0.5") often have results which are lower than more traditional specialists. But manufacturers (at least the French) are becoming aware of the need to reposition their relationships with suppliers who produce innovation (which is a differentiating factor, even if it is momentary).

The potential outlook opened up by developments and after-sales in Europe provide further areas for valorisation for major equipment manufacturers. But here again, the question of networks and cooperation to be developed is raised, with a need for increased multi-skilling (including logistics), and the arrival of newcomers in the markets of the equipment manufacturers, suppliers and sub-contractors with a high automobile "dependency" should be taken into account.

Lower tier equipment manufacturers, suppliers and sub-contractors are more affected by the changes and reconfigurations. If specialists control an area of competency and and/or are reactive and strategically suited benefit from the process, most find themselves in difficult situations, with lessened visibility and facilities which are all the more limited as reduction policies, via price cuts, are passed on down the line and without any cooperative process.

3.3. Manufacturers' location strategies

The development of investment, activity and employment in the CCEE (to which are added Turkey and Russia) fall within the development perspectives of the European market and the implementation of industrial systems which integrate new room for manoeuvre in terms of costs.

Manufacturers specialise their locations in the CCEE

Specialisation methods differentiated by manufacturer and product type

Manufacturers have structured a European industrial system where there are several approaches with a **combination of specialisations on models for the whole of Europe**:

- low end: Fiat (Panda, Fiat 500 and Ford Ka in Poland), Toyota and PSA (Aygo, C1 in the Czech Republic);
- vans: VAG (Caddy in Poland), Fiat (Doblo in Turkey, even in Russie), Ford (Transit, Connect in Turkey);
- niche vehicles: VAG (VW Touareg and Audi Q7 in Slovakia, TT in Hungary);

- plants producing vehicles without exclusivity in the lower segment (PSA with the 207);
- Renault combines specialisation on a bottom of the range vehicle for the whole of Europe (Slovenia) with the development and production of specific models adapted more to the CCEE and emerging country markets (saloon versions of the Clio and the Mégane in Turkey; Logan in Romania, then in Russia and outside Europe).

The choice of location of mechanical parts production by manufacturers is varied. Several manufacturers have developed production in the CCEE:

- Audi does all its European production there (Hungary), GM and Fiat in part;
- Toyota, VW and Renault produce parts in liaison with the assemblage activities;
- PSA, however, produces all its parts in France.

Thus, VAG, Fiat and Renault produce a relatively high share of their European production in Central and Eastern Europe:

- Fiat manufactures 30 % of its European production in the zone, i.e. the highest level among the Europeans… without this giving it any proven competitive advantage;
- with almost 24 % of its assembly production in Central and Eastern Europe, VAG has the second highest level;
- Renault, with almost 18 %, occupies the 4th place and is planning to renew capacity in Romania and start production in Russia;
- Toyota manufactures 23 % of its European production in Turkey.

Toyota (with PSA in the Czech Republic), PSA (alone in Slovakia) and Hyundai-Kia (in Slovakia) will increase their production in Central Europe with their new plants.

Implantation in the CCEE provides several levers for cutting costs

These strategies are based on the search for broadened capacity with the concern of limiting risks and costs on vehicle platforms which play to a new demand, particularly one for low prices. Implantation in low cost countries provides a possibility for several types of lever:

- negotiation on **the overall investment**: negotiating facilities with countries or regions, even with the management and employees, on limiting employee costs and/or working flexibility (cf. observations in Poland, Turkey…);
- the **reconstitution of a supply sector in low cost countries**. Manufacturers are looking to profit from local integration of the whole of their value chain (final assembly + modules + components) imposing the tracking of equipment manufacturers and sub-contractors. For instance, the manufacture of the Logan (Renault) in Eastern Europe (Romania firstly, at Dacia) does not enable low cost for the vehicle (5 000 euros for the simplest version) unless the gains in labour costs are made locally (or regionally) and as much as possible throughout the chain. Similarly, production of models in the PSA Trnava plant (Slovakia) is planned with a significant local content (50 % of value of purchases). PSA will benefit from implantations already made in the "central

oval". Tenders for allocations to programmes for models in the lower segment models integrate the need for Central Europe solutions from suppliers;

- **competition between production sites**. By setting up production under very competitive cost conditions in the CCEE, manufacturers have a means of pressure on the production costs and conditions in Western European countries. It is the main motive which emerges form the strategies of the German manufacturers (and the equipment manufacturers) observed.

Production volumes will continue to progress in Central and Eastern Europe... but in line with market progress

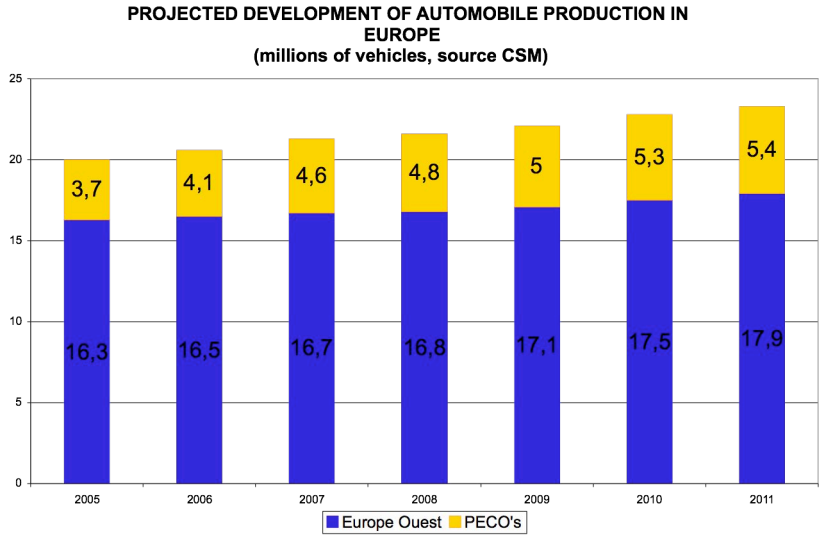
Central Europe produces more vehicles than it consumes, particularly in 2004 (+ 430 000 light vehicles, i.e. less than 3 % of registrations in the West), a year where registrations fell in Poland, the main market for the zone (big progress of used vehicles).

In 2004, light vehicle production in Central and Eastern Europe increased considerably (+ 30.4 %)[51]. Production capacity increased once again between 2004 and 2006, with the entry into production of several projects. The capacity installed, estimated at 3.3 million vehicles, was used 74 % in 2004, an average rate which rose strongly (57 % in 2002). This capacity should rise to **4.8 / 4.9 million vehicles by 2007** (new plants, extensions, productivity gains)[52].

[51] This progress comes mainly from Turkey (+ 55.3%) and Poland (+ 96.2%). Production dropped in Hungary and Slovakia. Recent and new models, produced solely in this region for Europe, are the main explanation for these evolutions (Panda for Fiat, Caddy for VW in Poland, Ignis for Suzuki in Hungary, Touareg for VW in Slovakia, Connect for Ford, Clio Thalia and Megane estate for Renault, and Doblo for Fiat in Turkey).

[52] An average use rate of 70 % in 2008 would signify production of more than 1.1 million vehicles over 2004. A rate of 80 % production of more than 1.6 million vehicles, i.e. 5 to 8 % of extra production in Europe (2004-2007).

Turkey is a new platform for most automobile manufacturers (production capacity of 1.1 million vehicles, of which 0.8 million vehicles in 2005). It is above all an export base (57 % of production was exported in 2005). This location is further away from the main European markets than Eastern European countries. It nevertheless benefits from relatively low costs and long experience in the automobile sector with its national manufacturers (Koc, Tofas), with which joint ventures have been signed[53]. Turkey recorded the effects of specialisation in light utility vehicles (vans) operated by Fiat (which has just signed an agreement with PSA to product a small van together) and Ford. It is possible that by 2010 capacity will be close to 2 million vehicles (of which 1.5 million will be exported).



Russia is an export market for the rest of Europe. Over recent years, imports have increased considerably. In 2004, local production increased by almost 11 %, with a growing share for non-Russian manufacturers, such as GM (and Chevrolet), Hyundai, Kia and Ford (i.e. 130 800 vehicles in total and 11.8 % of Russian production of private vehicles in 2004). Production capacity in Russia should continue to grow and increase by almost 250 000 vehicles by the 2010 (on top of the implantations of GM, Ford, BMW, Renault, the main projects concern VAG and Toyota, even Nissan). Manufacturers remain cautious on the subject of Russia: the local characteristics make it a particular country and one which is considered risky. The fabric of equipment manufacturers and suppliers is judged to be not dense enough and not up to level. But production capacities should go from almost 1.2 million vehicles in 2002 to 1.7 million towards the end of the decade, with restructuring of Russian manufacturers. Production should remain directed towards the local market.

[53] Examples: joint ventures between Ford and Koc, Hyundai and Assan, Tofas and Fiat or Oyak and Renault.

The perspectives for evolution of the location of jobs with manufacturers

In parallel to the rise production capacity in the East, the market should progress. If 2005 and 2006 seem slow, at least in the West, the need to renew the market is increasing. Development potential in the widened European market over the period 2006-2012 is in a reasonable range of 15 to 20 %.

Overall, all things being equal, **there is no heightened risk of an imbalance in the widened Europe… under certain conditions, though.** I.e.:

- the concretisation of the renewal of vehicles in the West and the development of an equipment rate of new vehicles in the East;
- the success of "model" specialisations and the relative successes of models manufactured in the West and the East.

Thus, volumes in the West could be lower than the overall productivity gains over the period, if the use rate in the East was favoured…

In all cases, however, the organisation perspectives of known work organisations (division of labour), the evolutions in vehicles and those in the supply chain will participate in the **relocation of jobs**:

- **more jobs close to the assembly plants at the suppliers** and/or suppliers' parks… but relatively less in the manufacturers' plants;
- **more jobs in equipment and supplies corresponding to technological evolutions and new features for models** (increased electronic and electrical systems and mectronics content, etc.)… but relatively less in equipment and supplies which have become commodities or which can be substituted;
- **more supplies and therefore jobs in production in low cost countries, for this type of equipment and supplies at least;**
- **risks more marked on lower range vehicles, even the lower segment.** A risk which will strengthen the competition of Chinese manufacturers;
- a big challenge concerning the evolution of the organisation of labour to cope with the ageing population in assembly plants in the West.

The strengthening of locations in Eastern Europe, with restructuring in the West, could be a long-term risk. This risk could be lessened if:

- economic conditions are more virtuous in Europe with, among other things, growth in purchasing power in Eastern Europe;
- the valorisation conditions and changes in the automobile product benefit from regulation policies involving the public authorities, and the players and social partners in the automobile system

3.4. Location strategies and equipment manufacturers

The location of equipment manufacturers: the fruit of dependency on the customer and the search for room for manoeuvre

The implantation of equipment manufacturers and suppliers in the CCEE is generally related to one of the three following reasons.

Gaining new markets

By locating in a foreign market, it is possible to capture new manufacturing opportunities.

Following customers (demand for "local content" from manufacturers)

Recent implantations of equipment manufacturers in Romania can be justified to a large extent by the supply potential of the Logan. This argument is based firstly on the advantages brought by proximity. In this case, proximity plays mainly on two registers: that of the ease of transport and logistics costs and that of local integration and transaction costs.

The more voluminous the parts and equipment (and even more so for sub-assemblies), the more their location close to the final plants is constrained. Case studies reveal that external bodywork parts a little cheaper in a Central European solution – at factory gate prices – prove to be more costly if transport to the final manufacturer plants is taken into account (taking into account of downstream logistics costs taken on by the manufacturer).

Local integration can also be a location asset, thanks to competitive synergies, the integrated control of costs on the chain or the reactivity and reduction of transaction costs that it allows. This register works all the more if the prime contractors carry them and if the territorial and/or professional dynamics drive it and embody it (cf. clusters…).

However, proximity to the customer has less impact when equipment manufacturers have a product with a high added value with a differentiating technological content. For this type of product, transport and storage have little weight in the total cost. In this case, equipment makers seem to have more room for manoeuvre to spread production over their various sites.

Cost optimisation on programmes and, more widely, on the European offer

This optimisation is set in place on the initiative of the supplier and/or on the client's demand. Several examples of this type were studied.

TRW Motor Components will manufacturer valves for a future PSA-BMW engine combining production in France and in the Czech Republic, where there will be capacity investment. This decision, taken to supply a customer plant located in France, made it possible to win the market and should enable TRW to optimise its programme thanks to a cost mix. Since then, TRW has conditioned this organisation to the drop in labour costs in its Western European plants, to reach profitability levels which are even higher (impact of financialisation of the group).

In the **Bosch Diesel System** division, relocation in France of part of the production initially destined for the Czech Republic was made possible following an alignment of the economy of the project and negotiations on working conditions in France.

The search for **gains in employee costs** is a variant which most often accompanies the transfer of existing production or development of capacity called to substitute that implanted in the West.

More globally at **Bosch,** low cost implantations were introduced in the main segments of activity, with the evolution of the spreading of skills between different sites. Product development and innovation were to serve as a basis for development in other sites, low cost sites being price references making it possible to fuel internal benchmarking and push costs downwards.

In **braking** activities – a highly competitive market – apart from units located near manufacturers (e.g. Bosch in Turkey, near RSA…), low cost supply sites have been set in place for parts which can be transported easily.

In several of its areas of activity, **Valeo** deploys locations in low cost countries on its direct-labour intensive activities and maintains automated production in Western European countries.

Finally, **specialisation of European implantations on the value chain or between products** is happening with several suppliers. It can be combined with the production of other equipment for local clients. For instance, the Turkish O plant keeps production destined for local client plants, despite its specialisation in handbrakes and jacks for the Western European market. These specialisations, which sometimes give rise to significant changes in the process, are nevertheless not without risks. We observed, at BF, an attempt at specialisation of its Europe sites, but this was brought into question two years later.

Automobiles products: products with numerous, specific constraints, e.g.

Domain	*Product family*	*Product characteristics*	*Location strategies observed*
Chassis	Braking	Product changing, increased electronisation (more automation, process adaptation. Increase in equipment levels of all types of braking products.	Low cost implications, but where the size depends on the players, unless complex products.
Engine	Injection systems	Complex product. Multiplicity of operations, easily transportable. Growth in equipment levels of new types of Injection systems.	Local sites and develop alongside existing sites in high cost countries on the same product lines.
Electrical and electronic systems	Software	Elements across the board to automobile applications. High content in labour and standardised tasks.	Activities are significantly affected by relocation to low-cost countries.
	Small electronics	Complex product in standardisation phase in some cases. High automation. Low direct labour costs. Process adaptation.	Development of activities with higher direct labour content and/or less complex processes in plants in the low-cost countries.
	Switching	Products of varying complexity, with varying direct labour share. Evolution process started with a view to increasing automation.	Products with high direct labour content are produced in the low cost countries. Production which can be automated is maintained in high-cost countries.
	Sensors	Big automation of production. Development of products, downstream from design process (need for proximity).	Few relocations. Need for high proximity and benefits from high automation.
	Opening systems	Product easy to transport. High security aspect with some distinctions: bolts are a shrinking market and electronic locks are developing strongly. Increasing importance of technological content.	Part of production of each product remains in high cost countries are questions of coming and going with R&D, and to supply customer plants. High volumes are being relocated to low-cost countries. For the time being, or anti-theft and end of life products are maintained.
	Cabling	Products with high direct labour content. Development of new products.	Activities which have been significantly relocated.
Vehicle interior	Dashboard	Bulky product, needs proximity. Difficult to manage, due to integrated functions (Information Systems, airbag, storage area, ventilation, heating, air-conditioning, defrosting). Challenge in terms of vehicle image.	Development of local supply is near to the manufacturers' sites in the CCEE.
	Heating systems	Air-conditioning systems: product in development and changing (standards on greenhouse gas emissions). Probable change to $C0_2$. Increased complexity. Evolution of compressors at stake.	All players have sites in the CCEE. Relocation of production (standard) to low-cost countries.
		Heating systems = product in development and changing. High quality demands. Constraints relating to changes in engine power.	
		Ventilation system: high quality demands (challenges of comfort, reduced noise levels). Individualisation and connection /heating system/air-conditioning. Improvements in progress/air filtering systems.	
Body structure	Stamping	Distinction between small parts and large parts. Distinction in the level of complexity of the work to be carried out (multiplicity of operations). Large parts difficult to transport.	Players currently looking for locations in low-cost countries for small stamped parts (presses under 500 tonnes).

Competition between sites

We have seen that today the optimisation of programmes on cost mixes (West and East) is often brought into question. Restructuring of activity in low cost countries have been launched or are programmed. Their corollary is a revision downwards of load perspectives for plants and site closures in Western Europe and France. These projects are increasingly put in the balance with an agreement on labour cost cuts (particularly the querying of working time reductions), sometimes playing on the age pyramid and its expected evolutions (cf. strategy evoked by manufacturers).

Intensification of risks on upstream industrial activities and standard products

It has been observed that a certain number of parts have been considerably affected by relocations (cf. table opposite):

- engine and auxiliary components (injectors, water pumps, oil pumps, tanks, exhausts, etc.): exports and proximity to the manufacturer on new implantations are being combined;
- electrical and electronic systems and components (various functions) and cabling: the export logic is particularly strong;
- interior equipment:
  - ⇨ for dashboards or rooves, proximity is important,
  - ⇨ for seat rails, seat belts and safety components, export is predominant.

Several factors come into play in decisions on the location of this equipment:

- **the nature of the product**: its level of complexity, its volume and the need for proximity or not of R&D and/or final assembly;
- **labour-intensity** in the product;
- **the overall economy of the relocation project**;
- the **company's strategy** and its **negotiating power** in relation to the customer.

In this context, lower tier equipment manufacturers and suppliers positioned on products and activities which are low tech, low added value, and not in the strategic and managerial core and with limited negotiating power seem particularly threatened. The context of increased prices in raw materials accentuates the phenomenon.

Suppliers suffer the cascading of manufacturer and first tier equipment manufacturer purchasing policies searching for extra room for manoeuvre (e.g. Valeo stating the intention to have 80 % of its purchases in low cost countries).

However, the search for purchases in low cost countries and the setting up of R&D activities off-shore have been sped up.

3.5. Conclusions

At the end of the day, several elements limit the movement of a certain number of productions of automobile parts and vehicles.

Nevertheless, changes in the market, in standards, in the intensity of the competition and financial strategies force **manufacturers** to develop their production and value creation systems. The location of sites internationally and in low cost countries is one answer (increasing market share internationally while benefiting from lower costs).

Equipment manufacturers and sub-contractors looking for markets and room for manoeuvre tend to follow the manufacturers' movement, or even amplify it. Large parts of activities undergo significant restructurings, the first inline being the lower tier players.

Finally, the contribution of **European public authorities** is focused on environmental or support policies (particularly in pre-competitive R&D) and remains segmented, scattered and not of a sufficiently European dimension, with a low impulse behind it. Major firms develop cooperative processes and alliances, but remain prisoners of their own realities and individual objectives. This situation is insufficient to cope, with a view to positive development, with the challenges of sustainable development and the changes in the sector, and also with the skills and employment development challenges within companies in the lower tiers.

4. European plastics in the face of the competition

The phenomenon of relocations seems protean, as much in its nature as in its size. A reminder must be given of the major characteristics of the plastics industry in European it is then necessary to identify the main areas of development in the industry so as to understand the choice determinants in terms of location of activities.

4.1. The characteristics of the plastics industry in Europe

After a decade of high growth, European plastics have now reached a plateau, under the effect of the global slow-down in the economy and competition from new production zones.

Plastics, a material at the crossroads of many outlets

With a turnover of 180 billion euros, Europe is the second zone in the world for the transformation of plastics, behind the USA and ahead of Japan.

European plastics has had a decade of strong growth, with an average annual rate of 6 %, driven by the development of packaging products, construction and the automobile industry. Current plastics, although largely in a majority, have nevertheless had lower growth than technical and special plastics.

Over the recent period[54], European plastics reached a phase of maturity, with an annual rate of progress limited to 2 %.

Plastics applications are many and diverse (packaging, construction[55], automobile, aeronautics and aerospace, the rails industry, marine, electricity and electronics, medical, games and toys, sports articles…).

[54] Source: Sessi, over the period 2000-2004.
[55] Fields of application in construction: pipes, tubes, cable sheaths, profiles for doors and windows, insulating foam, toilets, …

In terms of the industrial function, the nature and size of the movement can be appreciated differently depending on the situation. In effect, the constraints in relation to the phenomenon of relocation depend highly on the place of the company in its sector and the nature of its products:

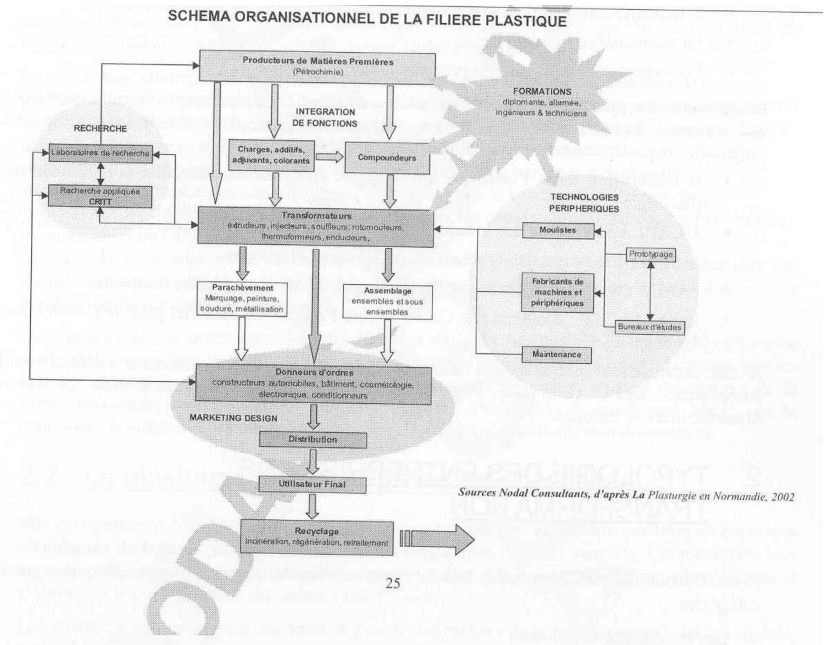
- for international manufacturers, the relocation phenomenon is already largely underway, but not completed (e.g. games and toys);
- for sub-contractors integrated in an industrial sector (automobile, construction, packaging, etc.), the nature and size of the phenomenon depends on the policies of the prime contractors.

The rapports de force are structurally imbalanced within the industry and plastics processors are trapped between:

- a raw materials manufacturing sector highly concentrated upstream;
- prime contractors (packaging, automobile, construction…) whose demand is more complex and is accompanied by strong pressure on prices, downstream.

The plastics transformation industries alone only partially take the economic importance of the industry into account. In effect, a large number of integrated processing companies, with a core business, for instance, in the automobile, electrical and electronics or construction industries, incorporate integrated plastics processing activities in the value of other products without it being valued economically in a distinct way.

The industrial plastics sector is therefore highly complex as it involves the participation of a large number of businesses, situated upstream or downstream, in secondary or tertiary sectors which make up, in the broad sense, the plastics industry.



Processing sub-contractors: pincer movement between an upstream piloted by plastics producers and a downstream controlled by prime contractors

The rapports de force are structurally and chronically unfavourable to plastics processors. The latter suffer from being very fragmented particularly in France[56]. These players are faced with:

- **downstream** characterised by the strong concentration of plastics production companies belonging to the chemicals industry (such as Atofina, Bayer, BASF, Solvay…), who are less and less involved in the downstream of the industry[57]. Faced with the lack of stability in plastics prices and the sustainable inflation of oil prices, plastics processors have very few substitution materials[58] and suffer the pressure of plastics producers and fluctuations in the prices of the raw materials they use;
- **a downstream** characterised by companies which are often very powerful, who develop a target price system leading to downward pressure on prices, a factor leading to a drain of activities, jobs and technologies. In many cases, these companies have substitute materials on which they play to bring processes of these various materials (metal/plastics/cardboard in packaging, metal/technical plastics in other domains) into competition.

The "dictatorship" of prices, which generally concerns all outsourcing markets, weighs particularly on the profitability of plastics processors in this period of rocketing oil prices.

In this context, processing company strategies are of three types:

- **growth by volume** of products of low added value but with high capitalistic intensity. This strategy is based on the strengthening of the rapport de force in relation to suppliers and customers and lead to a size effect which can enable better margin rates. Tube and profile extrusion use these types of strategy;
- **specialities based on a technological advantage**, which must be supported by on-going investment in research and development enabling the company to maintain its differentiation in relation to competitors. This strategy supposes a strategic partnership with prime contractors. In the automobile industry, for instance, the Sogaplast Group (300 people) and Peugeot are in association to produce innovative parts in technical plastics taking the place of traditional use of metal parts. In food packaging, Tetra Pak and Saint-Louis have designed packaging for cane sugar;
- **niche markets** cover products with a high added value. This strategy can, for instance, develop in the medical material market (with plastics as part of bio-assimilable prostheses) or for sports and leisure. It can also cover products with

[56] The average number of employees in companies is 117 in Germany, 99 in the UK, 96 in France, 55 in Italy, 20 in Spain (source: Eurostat).
[57] In metalworking, raw materials producers are involved throughout the industry.
[58] Even if substitutions between plastics are technically possible, they are relatively costs to implement (adjustment and finalisation) and cannot, on account of this, be used for short-term optimisation.

considerable demands (plastics for the medical industry), high tech products (aeronautics, electronics) or luxury items (cosmetics packaging, champagne, wellbeing products, etc.).

International manufacturers: competition of low cost production zones exacerbated by direct supply of mass retail

Like the textile-apparel sector, many companies manufacture plastic products have been facing, for a long time, competition from zones with low cost production.

Eastern Europe, North Africa or South America, which are traditional areas for transferring production facilities for low added value plastic products, are today being supplanted by Asian countries, whenever the economic equation allows it (cf. savings on labour costs in relation to extra transport costs).

The emergence of Asian players covers all the segments of the market in low added value plastic products and where the major outlet is mass retail.

In the games and toys sector, the direct supply of distributors from Asian sub-contractors contributes to the development of distributor brands in many market segments and amplifies the direct competition of Asian players.

4.2. *The main hindrance to relocation rests in the type of products transformed*

Studies on the transporting of industrial products has shown that plastic products are mainly transported by road and, to a lesser extent, by sea or river. The lower the bulkiness and the added value, the higher the impact of transport costs (expressed in cost structure share).

The attractiveness of low cost countries (CCEE, or even outside the European Economic Area) is particularly strong in companies which continue volume strategies and where the nature of products lends itself to relocation. The member States of the European Union have been the main direct foreign investors in the CCEE, up to 86 % of direct foreign investment in the Czech Republic and 80 % in Poland.

Swedish, Finnish and Danish companies are present in Baltic countries, whereas Austrian and German companies are in Slovenia and Slovakia. Dutch, German and French plastics companies have focused more on Poland.

The major inconveniences of outsourcing in the CCEE, even beyond, reside mainly in **the very nature of the products manufactured.** The imperatives of proximity in relation to the market and costs (transport and logistics costs) are a powerful factor in limiting the phenomenon of relocation.

4.3. Innovation, which is urgent in differentiation strategies, but difficult to finance for SMEs, is nevertheless particularly representative of the European plastics industry

The outlook for growth in the world market, in a context of the emergence of new geographic consumption areas, extends the trend currently observed for direct implantations abroad. The strong competition of the CCEE and South Asia mean that high added value products must be made to maintain production in Western Europe.

Financial efforts in R&D are mainly directed towards the development of new transformation processes quick tools, digital simulation, cycle times, etc.), which will optimise production facilities and cut costs. The development of new niche processes, with a high added value, is also a powerful differentiation factor (rotational moulding, thermoforming, bi-orientation technology, water injection).

In terms of new products, innovations are rarer than in the past, but it is nevertheless possible to mention innovations in the field of packaging, and "intelligent" packaging, which inform clients of the freshness of a product thanks to a chip, or "active" packaging, which extend the shelf-life of the contents.

SMEs, particularly represented in the French economic fabric of the industry, are however rather marginalised in the face of this demand for innovation. They are particularly threatened if they are not in collective intelligence systems, if they do not have a platform in technical skills centres or if they have not managed to create differentiation.

The development of organic plastics has significant development perspectives for plastics and evolution in the industry:

- biodegradable polymers are likely to develop greatly in the packaging sector;
- polymer alloys enable new characteristics for the final product (permeability to odours, temperature resistance, etc.);
- memory polymers can find applications in many areas making it possible to restore the original shape of something with a simple change in temperature (medical, toys, electronic seals, etc.);
- nanopolymers could, for example, contribute to lightening and improving vehicle safety.

The development of the environmental value, through increased "recyclability" of products, can be an asset for the European plastics industry in the face of competition from Asia. In food packaging, Tetra Pak has developed, for instance, environmental programmes, awareness raising programmes for children in schools (collections, recycling of products after use).

Part 3
The weakness of social dialogue

1. The European framework does not provide a suitable mechanism in the face of relocations

The economic globalisation of the past thirty years is translated notably by increased transnationalisation of companies through stakeholdings (fusion-acquisition effects) or setting up companies from scratch (so-called greenfield investments).

The structuring of companies is often characterised by matrix organisations (functions-products) which are managed on an international basis. Transnational groups are managed by divisions, which cover many areas. Decisions and major directions concerning the location of the company's functions (production, R&D, support functions), investments and profits are taken at a worldwide level. Companies in the legal sense of the terms in such or such a country are often simply local units of a major enterprise without any real autonomy.

This steering of organisations at the worldwide level often brings a lack of "unity of place" between decision-making levels and employee representation bodies. This distortion between the place of decision and representation are an obstacle to a social dialogue founded on a sharing of information in a timely fashion to be able to get a grasp of the situations of companies and their strategies. The places where decisions are made are often far away and unattainable for the employees.

Over recent years, relocation blackmail has developed and has concerned groups installed in France and in Germany, groups whose origins can be German (Siemens, Mercedes), Italian (Vetroarredo, Gomma) or American (TRW). This pressure has

often engendered a questioning of the status of the employees in terms of collective working times or remunation, along with increased flexibility. Relocation blackmail, even in cases where this was not seriously envisaged, was enough to frighten employees and weaken their bargaining position.

The emergence of a framework encouraging social dialogue and the involvement of employees within the European Union was meant to bring answers to the rapid expansion of companies, this has proved insufficient for the time being.

In parallel, the globalisation of companies also brings into question the framework for national social dialogue in the «source" countries. This situation applies as much to countries with a tradition of "rich" social dialogue (Germany, Finland) as countries where this characteristic is less practiced (France, Italy). As for the destination countries, they have industrial relations systems where the employee representatives have a bargaining power which is even weaker than in the source countries.

1.1. *Weaknesses in the effective implementation of European social dialogue*

The widening of the Union turned European social dialogue upside down, introducing very big differences in terms, in particular, of wages and working conditions and, more widely, in living standards. Although the gaps are tending to shrink, if current trends continue, the standards of living of the old countries is likely to take quite some time to catch up the old countries, as can be seen with current evolutions.

The framework for action for European unionism has also changed, not only on account of changes in companies, but also on account of European integration which has been concretised by the recognition of European social dialogue in the Amsterdam treaty[59]. The European Union's social policy has several instruments: legislation, structural funds, social charters, open coordination and European social dialogue. The latter is meant to be the last stage of a building which exists in each of the member States. Social dialogue is considered as a governance tool within the European Union.

In this context bi-partite European social dialogue on the inter-professional and sectoral fronts has been set up.

On the inter-professional front it is a question of mandatory consultation of the European social partners in terms of social legislation, and the possibility of negotiating framework agreements which are then transposed into directives on the proposal of the Commission and after a vote in the Council. Collective negotiation becomes, in this last case, a source of legislation.

For the time being, numerous **consultations of the social partners** have enabled the Commission to forge an opinion on many subjects. But they have not led to the joint development of directives.

[59] The measures in articles 138 and 139 were initially included in the social partners agreement of 1991, and then taken up in protocol 14 appended to the Maastricht treaty.

The inter-professional social dialogue committee is above all the source of around 40 joint texts, which are opinions, recommendations or even guidelines. At the moment, six agreements have been the transformed into a directive: three agreements are inter-professional (parental leave in 1995, part-time work in 1997 and term employment in1999). Three others are the fruit of sectoral social dialogue (on the seamen's working times in 1998, on working times in civil aviation, and on the working conditions of mobile workers in 2004).

Sectoral social dialogue, in its current form, has its origins in the Commission communication of 1998 which is designed to created European sectoral dialogue committees, replacing the joint committees which existed before. These bodies were the source of the production of a number of texts, joint opinions, recommendations, etc. The multiplicity of all these different instruments has led the Commission to want to have a clear vision on these instruments, while regretting the limited results of sectoral social dialogue. This opinion was taken up by the European Social and Economic Council. More generally, the Commission would like to get concrete results.

Globally, UNICE is highly reticent about the adoption of any restrictive texts and prefers to stick with the production of non-restrictive texts such as guidelines. This explains the mixed results of sectoral and inter-professional social dialogue at the European level.

1.2. *The limits of directives on the involvement of workers*

European legislation has looked into the involvement of employees in companies, which has been concretised by laws in this direction. After the failure of negotiations between the social partners, it is through a directive of 1994 that European Works Councils were set up (94/45 EC). The EWC is a forum for transnational social dialogue which takes into account evolutions in progress within companies. More than ten years on, it has to be admitted that the directive needs overhauling: the little enthusiasm of many companies and the absence of coercion if the measures are not observed mean that a stricter framework needs to be adopted. As for directives concerning the European company or the European cooperative, they remain, for the time being, largely underused by companies (a handful of companies concerned), or are not even transposed everywhere, for cooperatives.

A limited number if EWC in relation to the potential

Among the companies we have analysed during our study, many of them do not have a European Works Council, even though they are meant to. In our sample of companies, we noted the lack of a EWC in half the cases. These figures should be compared with the 750 EWC in place in the European Union, out of a total of 2 200 potential companies. This data shows that companies hesitate in setting up a EWC. In some cases, the strong opposition encountered by employee representative can necessitate a recourse to the courts, as has been the case in several affairs involving companies in Germany which have been concretised by favourable decisions of the European Court of Justice and the German Federal Labour Court (ADS Anker, Kühne + Nager[60]).

The operating of existing EWC has encountered obvious limits

There is a consensus on the fact that EWC are a means of accessing minimal information for a number of employee representatives and enables better coordination between representatives from member States. In this they represent an asset, which is a point of view which is broadly shared. This body nevertheless comes up against operating problems which were often mentioned during the interviews carried out:

- culture, operating and representation methods vary differently depending on the countries;
- attempts at international cooperation work badly and at best remain limited to countries where social conditions are similar;
- difficulties remain in integrating employee representatives from the new member States;
- EWC meetings are not very frequent: one or two a year at best;
- few facilities are provided for translation, interpreting and training.

Furthermore, information and consultation procedures are not carried out satisfactorily.

Real progress needs to be made in terms of transmitting appropriate information. In several companies, choices of location of activities are barely covered, if at all. Questions of restructuring or relocations show that very few EWC are really involved in decisions, or even in discussions on these subjects. None of the companies studied is close to "good practice" generally given as an example such as the EWC of General Motors and Ford.

In the case of IBM, the EWC was not involved when the group decided to cut 18 000 jobs in so-called "high cost" countries and create as many in India.

In the case of Celestica and its decision to stop virtually all its activity in Western Europe, the EWC, once again, only had a minor role to play and did not manage to structure relationships between the European Councils concerned by the decisions.

[60] European Court of Justice, Ruling of 15 July 2004, affair C-349/01. European Court of Justice, Ruling of 13 January 2004, affair C-440/00 and German Federal Labour Court, decision of 29 June 2004, affair 1 ABR 32/99.

In a company located in Finland, China and Thailand and which no longer had a EWC following the disposal of its activity in France, the Finnish employee representatives showed that they were very dissatisfied with the EWC when it did exist. After having asked a question concerning the future of employment on its site during a EWC meeting – and the management replied that there were no worries to be had -, the French representative on the EWC learned, a month later, that production was being totally closed down in France.

Without being as much of a caricature, the case of Alcatel also reflects the weakness of the EWC which, during a period of massive restructurings experienced by the group between 2001 and 2004, was just a forum for information and exchanges, whereas the unions had been put before a fait accompli and were negotiating support measures at the national level.

At B, a German automobile parts manufacturer, social dialogue had a recognised institutional place. The EWC is clearly a forum for information, but it is finding it difficult to become a forum for negotiation, on account of the difficulty of its members to think through restructurings together at the European level and seize the opportunities provided by this body… Negotiation remains managed at the level of each of the sites.

Generally speaking, we cannot consider that consultations are really organised in the companies studied:

- at worst, annual meetings of the EWC are just ceremonies without any scope;
- at best, there are exchanges between the management and employee representatives.

These observations converge with those studied previously[61].

They confirm the need to revise the directive on EWC. German representatives very widely regret the few powers possessed by EWC, whereas German bodies are much stronger. They note that EWC are, at best, only consultative bodies and that their opinion is not taken seriously. In their eyes, for the time being, they do not appear to be forums for genuine cooperation between employees. Finnish unionists have made similar observations and can make a comparison with their own industrial relations system. All employee representatives from source countries agree to hope for more powerful EWC, with more prerogatives and means so that they can be genuine forums for information and consultation likely to influence the taking of decisions within the company.

1.3. Development of agreements at the transnational scale

The boom in the phenomenon of corporate social responsibility, through a multitude of initiatives from multi-nationals in the form of unilateral declarations or charters, shows the need for companies to be regulated. Around a hundred agreements have been signed by multi-nationals and employee representatives.

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[61] *Le rôle des CEE dans la maîtrise des mutations économiques, financières et sociales dans des groupes d'entreprises transnationales*, Syndex, 2005. *Évolutions relatives aux comités d'entreprise européens,* 2005. *The Impact of European Works Councils on Management Decision-Making*, *British Journal of Industrial Relations*, 2005.

Half of them are international framework agreements (IFA). They are signed between a multi-national and an international union federation. In a series of cases (Volkswagen, DaimlerChrysler, SKF…), the EWC – this is the case in all the agreements in the metal industry – is associated in the approach. In other agreements, national federations of the country of the head office are involved. European federations have signed some agreements, such as the EMF with GEA, Rheinmetall and SKF… In other companies (Merloni, EDF, etc.), national organisation have been associated as well. The configurations on the side of the employee representatives are highly varied. They highlight the delicate question of the legitimacy of those signing such agreements and the different configurations used to try to respond in a satisfactory way.

The majority of these companies have their head office in a European Union country (Germany, France and Sweden have the most companies). Among the signatory companies Renault, Bosch and Volkswagen are in the sample encountered for this study.

A good part of the 40 or so existing IFA concern the issue of respecting the standards of the ILO. Many of these agreements concern a commitment from the multi-national to observe the main standards (rights of association, union freedom, collective bargaining rights, banning of child labour, etc.). Most agreements also concern working conditions, and more particularly the observance of minimum standards in terms of wages and working times. Other agreements concern questions of health and safety. However, there are very few which look at questions of restructuring.

The weakness of these agreements resides in their unrestrictive nature for companies and the few means and methods which exist for employee representatives to ensure the following up on commitments made. In most cases, application and monitoring are done by committees made up of the management and employee representatives, whereas certain agreements associate their worldwide group council or the European Council. Only a handful of signatory companies use outside evaluation procedures.

If certain agreements evoke sub-contractors and suppliers, they have even less scope and effective consequences, even if the conditions imposed by the prime contractors can be determinant for the survival of these companies.

These IFA represent interesting progress. It should nevertheless not be forgotten that despite their negotiated and contractual character, they do not have a restrictive character, apart from a few exceptions.

2. The limits of social dialogue in "source" countries

2.1. *Limits in countries with traditions of "rich social dialogue" (Finland and Germany)*

The existing framework in Germany seems insufficient faced with attempts by company managements to gain more flexibility and lower costs

Generally speaking, employee representation organisations in Germany have significant weight in social dialogue and in the definition of working conditions and wags. In effect, only minimum standards around the protection of jobs, redundancies and working times are governed by the law. Most working conditions and all wage issues are governed by collective bargaining agreements (*Tarifverträge*) between the unions on the one hand and on the other the employer (for a single company, *Haustarifverträge*) or a federation of employers (for a sector and a geographic zone, *Branchentarifverträge*).

In the company itself, the employees are represented by the Works Council, which is elected and is not officially linked to the unions, even if very often it is unionists who sit on it. The Works Council is responsible for co-determination (*Mitbestimmung*), i.e. it has a series of rights which enable it to be informed and assert the employees' interests in the company strategy. These rights are laid out in the law on Works Councils (*Betriebsverfassungsgesetz*): the Works Council must be informed "in a timely and complete fashion" on the company's present and future staffing needs and on its plans on the issue. It must be consulted for each redundancy.

The legislative framework for social dialogue in Germany provides fairly strong stability for employees. The law on Works Councils specifies that collective bargaining agreement have precedence in principle over internal agreements in a company (*Betriebsvereinbarungen*) or a site: wages or working conditions defined by a collective bargaining agreement cannot be subject to an internal agreement within a company. However, when a collective bargaining agreement is concluded, the parties can decide to include an "openness clause" (*Öffnungsklausel*) allowing internal agreements specific to certain companies in certain areas. Currently, this possibility is being increasingly used. In effect, companies looking to escape increasingly from the framework of collective bargaining agreements by making them as flexible as possible. It was at the beginning of the 1990s that agreements began to be made between the social partners to maintain jobs in Germany, which included these "openness clauses" with the aim of maintaining and developing jobs in Germany. A first type of openness clause should enable companies to flexibilise the working time of their employees – and with this the employees themselves – in line with the company's needs. A second type enables companies to directly reduce the number of employees for a limited period. The first clauses of this type were only to be used should the company be in

acute economic difficulties, to avoid bankruptcy. They have been used in sectors subject to considerable restructurings, such as iron and steel and shipbuilding. The possibility of using such measures outside a direct threat on jobs was introduced for the first time by an openness clause in the chemical industry collective bargaining agreement in 1997. Companies are still continuing to want to develop the use of this type of agreement. The argument of possible relocation is often used to get across their demand for flexibility in collective bargaining agreements negotiation of less favourable conditions for employees.

Employees and their representatives are today in a position to fully play the game of international competition between employees, as is the case in Flextronics in Paderborn, where income limits were accepted for the company to provide training for employees giving them the opportunity to gain a big order in the plant. At TRW in Krefeld, the employee representatives managed to negotiate a reduction in costs which was higher than what was originally asked for by the management. But this seems to be an exception. For Siemens' – loss-making – mobile phone division at the Bocholt and Kamp-Lintfort sites, the adoption of a 40-hour working week without any counterpart for the employees could not be avoided. Generally, Works Councils and the Unions most often resign themselves to making the savings asked for by the management, but try to get investment guarantees in return, to maintain the site for several years and to get training for the employees, so that the temptation to relocate does not reappear too quickly.

The high level of qualifications and productivity of German employees is naturally an argument which is often used by employee representatives to make their claims heard (for example at TRW or Siemens VDO). But even this advantage tends to be queried by the management (of Siemens for example), which insists on the fact that a skills transfer, and therefore a transfer of a great part of productivity, is possible to a country with lower wage costs, and that the new member states of the European Union are developing interesting capacity in terms of research and development.

Similarly, for the past five years, the VG group – with a strong base in Germany, but also very present in the CCEE and in China – are looking to substantially cut cost prices on its vehicles and is trying, in order to do this, to activate several levers: in 2005, all parties accepted to bring into question (within certain limits) wage conditions in relation to cost prices that can be obtained in other sites in lower cost countries in Europe. The policy pursued by the group in its low cost sites appears as a mirror of what the VG group is looking to find in Germany

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This is at least what has been observed in the group's Polish and Turkish sites, i.e.:

- lower production cost standards, but with the assurance of good levels of quality. On this, the group is involved in regions and on sites which generally have a strong automobile culture. This means that they can ensure real competition;
- the search for a limit to the rise in the payroll (containing wage rises, failing this, cut job numbers) and the threat of locating in sites where costs are even lower. In this case, in Turkey, divestments have been observed by the group.

The Finnish framework also suffers from limits despite the significant weight of the unions

In Finland, employee representation bodies have significant powers. A law on information and cooperation between employers and employees has existed since 1978. Employee representatives all expressed their discontent concerning the way cooperation worked, and they showed that they were not very satisfied by the information they received. Even if these were not surprises, all the employee representatives would have liked to get information more upstream.

In one of the companies studied, in the field of ITC, which has its head office in the UK, we can even say that procedures were barely respected from a formal point of view and, above all, totally emptied of their spirit. Firstly, the start up of a production unit in Hungary – which was explained for capacity needs – was announced, combined with a promise that this would not affect work in Finland. However, six months later, the decision was taken at the head office to cut 150 jobs, which took the employee representatives totally by surprise. Transfers of production lines were carried out without the employee representatives being informed, information only being given during the consultation on the drop in headcount. They thus had the impression that the decision had been taken and that they could not do anything to change it.

In another company in the ITC sector located in Finland, the decision to relocate to Poland was taken in the United States, whereas the employee representatives were firstly informed that there was going to be a transfer with minimum impact. Six months later, the employees learned that there whole production unit was to close. Here again, the point of view of the personnel was not taken into account.

A Finnish textiles company was delocated to Estonia in several stages. It was firstly merged with another company, and production in Estonia increased. A second merger took place and use of outsourcing to Estonia increased again. The employee representatives were in no way involved in the decision-making process, nor warned in advance. They were simply informed during the consultation procedure which took place for the closure of the unit.

Counter example: the case of negotiation of relocation from the East to the West

The plant concerned in France manufactured mature products whose end of life is programmed in the short to medium term. All the officials, from all organisations, have been warning the group for the past 10 years, through various bodies, about issues concerning the sustainability of the site.

The group, and the division the site belongs to, have considerably developed their industrial facilities in emerging countries.

The manufacturing lines in the division have developed significantly. The start-up of a new family of products was planned for 2004, investments were naturally directed towards sites which were already used for the manufacture of previous generations, i.e. the Italian site and the Czech site.

On analysing the French company's medium-term plan, the potential reduction in headcount of around 300 people was brought to light. The perspective of such a restructuring brought the headcount to a little over 400 people with full term contracts, i.e. the bottom end of the limit over which fixed charges for the site are no longer covered and where closure of the site becomes a tangible hypothesis in the short term.

The arrival of new manufacturing therefore became urgent and essential to ensure the sustainability of the site and its jobs. It is in this context that the site's employee representatives questioned the management of the group, during an EWC meeting, on the conditions necessary for the plants to receive all or part of the production line of the new generation of products. An answer was given by the management, accepting the possibility of changing the location of part of the production in return for a cut in the average hourly labour costs. The challenge for the direction was to maintain its plant cost price, whatever the location. However, the setting up of a full line on the site meant, all things being equal, an increase in the plant cost price of 20 %.

The negotiations led to the acceptance of a facial drop in the hourly rate of 12.1 %. This was valid not only for people manufacturing the new product line but the whole of the plant, it was thus possible to align with the Czech Republic cost prices.

The prior conditions to any agreement for the organisations were respected, i.e. that the net wages of the employees would remain unchanged. The drop in the hourly cost came mainly through limiting wage increases to 1 % per year three years, the acceptance of one hour's extra work (i.e. the removal of 6 days of working time reduction leave at the 20), and the removal of profit sharing for three years.

It should be noted that the wages of the workers in the factory are higher than average in the metalworking sector in the department. The agreement remains within the context laid down by the working time reduction agreement and has a full social and economic assessment clause for the end of the three-year period which makes it possible, if necessary, to make adjustments. Finally, the agreement is not one way. In return, the group has undertaken to transfer an assembly line for its new generation of products to the site initially planned for the Czech Republic to France, i.e. an investment of €18 million (which, incidentally, has been exceeded). The site must satisfy increased constraints in terms of lead times and quality (which has given rise to a significant training programme) and position itself in a direct relationship with the final customer. This relocation to a site in the West of Europe meant that the site could find a new dynamic for growth, giving it future opportunities which could not even have been envisaged if the previous step had not been taken.

In Germany and in Finland, where the weight of the unions is significant as much from the point of view of union membership as the existence of a co-management system, the results of our study underline difficulties for employee representatives:

- in being really informed and consulted on the choice of location by management;
- in being able to influence any decisions.

A "fallback" to traditional forums for national social dialogue

These forums nevertheless have their limits in the face of transnational reconfigurations.

These situations also apply whatever the origin of the capital ownership of the firms concerned.

For companies with national capital, the frameworks for national social dialogue come up again managements' attempts to question their obligations concerning employee representatives on account of:

- the refusal of managements to present their outlook on a sufficient framework (i.e. beyond the country itself);
- being presented with a fait accompli: at best information once the decision has been taken, at worst denials of decisions taken by managements, despite evidence brought by employee representatives;
- a strategy of getting around legal bodies through the setting up of forums for "informal social dialogue" or the creation of "in-house unions";
- concessions asked for (and often obtained) in terms of working times, wage developments and, more globally, working conditions.

For companies with foreign capital[62], and beyond the aspects described above which also apply, the efficiency of co-management systems is weakened by the internationalisation of the controlling of companies: employee representatives are faced directly with the distance from the places where the decisions are taken.

In other words, employee representatives are often faced with people from management who are "simply carrying out orders. The employees power of influence is confined to the way in which a decision will be applied and not the decision itself.

[62] Two cases studied in Finland and two others in Germany.

2.2. The limits of the legal framework in France and in Italy

The difficulties encountered by French and Italian employee representatives in relation to the way transnational dialogue bodies such as EWC work are the same as those given by their German or Finnish counterparts.

The disappointment is even greater as they have often looked to these bodies to go beyond the limits encountered at the national level. They have thought, in particular, that the "strength" of unions in Northern or German-speaking countries could strengthen their own capacity for dialogue at the level of decisions taken in their country of origin… The example of Trelleborg is emblematic for this for the French representatives on this company's EWC.

This need to find "dialogue" relays was strengthened by the end of a certain "State" regulation of the effects of company reorganisations.

The French automobile group VA is constantly changing is scope of consolidation) closures, acquisitions, reorganisations…). Despite similar practices widely experimented by other sites – each at their own level -, employee representatives at the European level only have a very poor vision of the group, and more particularly of jobs at the site level and the cascading down of the group's strategy in terms of the loading of the various sites. However, the representative we met considered that they were well-informed on economic and financial elements.

As much in France as in Italy, public funding given to early retirement systems or "support" for this way of leaving the labour market has considerably softened the consequences of the restructurings of the past 20 years: programmed early retirements or national employment funds in France, *Casa integrazione* in Italy.

Although these systems came to an end at the beginning of the 2000s, and similar systems set up by major companies took over from them temporarily, this is no longer the case today.

Employee representatives are now faced with « hard » management of the consequences of restructurings and must shift their centres of interest from the downstream (accompanying redundancies) to the upstream (influencing decision-making and counter-proposals).

Furthermore, the ownership of major companies in France[63] and in Italy[64] by foreign investors accentuates the need to find an appropriate framework to weigh on decision often taken at a transnational level.

[63] 40 % French employees in industry work for a "foreign" company.

[64] Where "national" companies are mainly SMEs.

The current characteristics of social dialogue in France and Italy are mainly concretised, during restructuring processes, by:

- an obligation "of means" in terms of gathering the opinion of employee representatives and not an "obligation of results" concerning the actual taking into account of their remarks, suggestions or proposals;
- a formal absence of the transnational dimensions of the latter being taken into account.

2.3. *Lack of the useful effect of information and consultation procedures*

The result of our interviews in four countries shows that the terms of the European directives on the information and consultation of employees on the choices of location in the "outgoing" countries are not respected.

We would remind you that, according to European directive 94/45/EC which set up EWC:

- *"information takes place at a time and in a way and with an appropriate content likely to enable employee representatives to examine it and prepare consultation"* and that *"the methods for information and consultation are defined and implemented (…) to ensure the useful effect of the process"*;
- *"consultation takes in such a way as to enable employee representatives to meet with the employer and obtain a justified response to any opinion they put forward and with a view to coming to an agreement on decisions falling within the powers of the employer" "the methods for information and consultation are defined and implemented (…) to ensure the useful effect of the process".*

Social dialogue at the country level does not make it possible to grasp location choices in their transnational dimension with the lack of information communication at the time when managements' projects emerge. This stops employee representatives:

- from being able to propose alternative strategies;
- understanding the "reception conditions" in the destination countries, as much on the economic and technical feasibility aspects as the social conditions given to employees.

Pressure exercised through "relocation blackmail" confines, most of the time, negotiations in the source country to an arrangement of employees' statuses (to the benefit of company managements), so as to maintain the maximum number of jobs.

3. The limits of social dialogue in destination countries

The so-called "arrival" countries are subject to the same questioning as the source countries. Depending on the country and the sector, trends are clearly differentiated between the outgoing and the destination countries, and also between destination countries themselves. The same applies for the central nature of the question of relocations. However, in the three destination countries, the fear of relocation, the pressure that they exercise on social dialogue and the claims are quite comparable to what can be encountered in the source countries. This pressure is all the stronger as social dialogue and control methods available to employee organisation are in fact very limited in this.

3.1. *The legal framework for employee representation and forums for social dialogue*

Social dialogue which is not very developed and mainly confined to the company level

The unions, although numerically fairly high, have fairly limited mobilisation and claims capacities.

In Poland, the pressure of unemployment enables employers to impose working and wage conditions which are fairly unfavourable.

In Turkey, one of the main problems remains that of respecting union freedom: in effect, legislation maintains restrictions inherited from the dictatorship. Generally, working conditions in relocated sites in Turkey appear as "models", even though they are much less favourable than those in the source countries. They cannot be considered as benefits, given the competition between sites. Like working conditions, social dialogue also appears relatively better organised in relocated sites than in companies in the destination country. There is nevertheless the goodwill of the managements, the national legal frameworks being relatively un-coercive.

In Baltic countries, there is a similar situation, i.e. companies of Scandinavian origin have signed more agreements proportionally than those from the destination country (and with a higher level of union membership).

A population which is not highly unionised

In Poland, rates of union membership are fairly low. According to a survey by the CBOS Institute, there are no unions in 61 % of companies[65].

However, in companies where there are unions, 54 % of the employees are members.

The union tradition is strong in Poland in State-owned companies, but it comes up against real resistance in the private sector. And even if the unions are nevertheless present in a large number of private companies, employers generally attempt to limit their influence. The high rate of unemployment often contributes to dissuading employees from joining a union, fearing that the employer will sack them as a consequence.

Similarly in Turkey, according to statistics form the Ministry of Employment, the country has 2.7 million union members (not including public service workers), i.e. around 10 % of the workforce. This figure is contested by the Erbert Stiftung Foundation which considers it closer to 1 million.

Similarly, the social partners in Estonia are not very institutionalised. On the employees side, the affiliation rate of 14 % is shrinking on a regular basis (it was almost 100 % at the end of the 1980s[66], and 21 % in 1996), and some sectors have no union representation.

National social dialogue in gestation

Generally speaking in the three countries, although often very involved at the level of national social dialogue, employers' organisations remain not very representative, which poses real problems at the level of sectoral social dialogue.

In Poland, reactivation of a tripartite commission in 2002 bringing together employers' organisations, employees unions and government representatives hides in reality a very low level of collective negotiation at the national level. On 30 May 2003, there were 157branch or sector agreement concerning 4 300 companies and 1 million employees (source: Ministry of the Economy and Social Affairs). At the end of 2002, there were 155 national agreements, but 183 of them concerned non-teaching staff in local authority managed schools. Only 17 agreements concerned the private sector[67].

In Turkey, the impact of the tripartite system at the national level is also minor. The State, as well as employee and employer representatives sit on several tripartite or multipartite bodies, the most important of which in terms of social dialogue is the Social and Economic Committee, set up in 1995. The tripartite process is consultative and is characterised by the very large representation of the government.

However, tripartite negotiations are significantly more developed in Estonia where, despite the signing of the first tripartite agreement in 1992, around 20 texts were adopted by representatives from the unions, the employers and the government on

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[65] *Przestrzeganie praw pracowniczych i „szara strefa" w zatrudnieniu. Związki zawodowe w przedsiębiorstwach*, Komunikat z badan, Styczeń 2005, Warszawa, CBOS, 2005.

[66] It should not be forgotten that it was obligatory to belong to a union under the Soviet system.

[67] Stelina J, *Collective Bargaining in Poland*, 2003, ETUI.

issues such as the minimum wage, health and safety, the complementary insurance system, continuing training, etc.

3.2. National frameworks of social dialogue

In Poland

Social dialogue at the company level

Up until now, the possibility of social dialogue at the level of a company in Poland depended entirely on union presence within the company itself. Polish law provides, in effect, for the possibility of negotiating collective agreement on working conditions, wages or social benefits, at the level of the company or at the sectoral, regional, or even national level. But, apart from a few exceptions, the only parties authorised to conclude these agreements on behalf of employees are the unions. It is generally at the company level that negotiations on wages and working conditions take place. Consequently, in the case of foreign investments, the unions have no other choice but to try to establish themselves in the newly created companies if they want to be able to dialogue with the investor. An improvement could no doubt be made to the law on Works Councils which was adopted in Poland on 7 April 2006. It introduced the obligatory election of Works Councils in companies of more than 50 employees (1OO employees during a transition period of 2 years), which will have new rights, including the right to information on current and forecast activities and the company's financial situation. The central role of the unions is maintained, since candidates for the Works Council should be put forward by the unions. But should there be no unions in a company, candidates can put themselves forward if they are supported by a group of 10 employees.

At the regional level: regional commissions for social dialogue (WKDS)

Regional commissions can invite a number of competent players on issues concerning them to take part in their meetings (local authorities, NGOs, the labour inspectorate, employee or employer organisations not represented in the commission, government on the commission, members of the government, etc.). The EWC of a company wishing to relocate to Poland could then contact the regional commission so that it can try to establish a dialogue with the investor.

At the European level: Polish participation in European Works Councils

The law of 5 April 2002 on European Works Councils introduced the possibility of Polish employee representatives to take part in EWC even if, in fact, some had already been present for several years (there were already 80 cases of Polish representatives taking part before Poland joined the European Union). In 2004, 72 EWC counted at least one Polish representative. Participation in EWC is one of the rare forms of extra-union employee representation in Poland (union representatives only represented 60% of all Polish representatives present in EWC overall).

Estonia

Bilateral social dialogue is low and no collective agreements have been negotiated either at the national or the regional level. Social dialogue also remains low at the branch level where only 130 collective agreements have been concluded (April 2003), whereas 570 agreements have been signed at the company level (out of 70 000 existing companies).

In Estonia, negotiations take place essentially at the company level and at the national level. But they can serve as a reference for negotiations between the social partners at other levels.

Bilateral negotiations take place between:

- employers and union confederations;
- the government and the unions;
- the government and organisations which are investing.

The law provides two options for employee representation:

- representatives elected by union members;
- representatives elected by a general assembly of employees who are not in a union.

Employee representatives have access to all information that they could need to carry out their duties, which includes information concerning industrial action, site closures, restructurings and collective redundancies, as well as the field of intervention of employee representatives. In the last case, they also have the authority to negotiate.

The right to consultation exists in the case of collective redundancies, site closures, restructuring and the field of intervention of employee representatives. Employee representatives can take part in negotiations on wages, working conditions, working times, training and further benefits.

Turkey

In Turkey, collective negotiation takes place at the company and the sector level and includes negotiations with multiple employers. According to the Collective Labour Agreements, Strike and Lockouts Act, a collective agreement can be concluded at the level of an establishment, of several establishments belong to the same company or at the company level. The agreement can also cover more than one establishment in the same sector of activity (i.e. an agreement between several employers or a group agreement). Most agreements in the private sector are concluded at the establishment level, whereas in the public sector, they are concluded for several sites or several employers. Agreements are generally valid for two years. To be authorised to conclude a collective agreement, the unions must fulfil the following conditions: represent at least 10 % of employees in the sector in which they are active and at least 50 % of the employees in the company (or the group, if necessary). National confederations are not authorised to conclude collective agreements. Collective agreements are only applied to union members and employees who are not members but who have pay a "solidarity contribution" every month.

Collective negotiations mainly concern wages (including payment in kind and social benefits), redundancy pay, job security and arbitration in disputes. With the absence of a participation system in Turkey, collective negotiation seems to have served as a context for limited employee participation, but the extension of collective negotiations to themes such as training, productivity, quality, work station enhancement and organisation of work has given encouraging results. However, wages remain at the heart of negotiations.

Above and beyond collective negotiation mechanisms, the unions and employers' associations have set up "joint committees" which look into problems concerning health and safety at work, training and productivity.

Union freedom and collective negotiation rights, including the right to strike, are still subject to big restrictions. Turkey has still not accepted article 5 ("union rights") and article 6 ("collective negotiation rights", including the right to strike) of the European Social Charter.

Concerning the unions, heavy constraints still weigh on union rights and the right to collective negotiation, particularly the right to strike. Furthermore, Turley does still not observe the standards of the ILO.

In the private sector, procedures for joining a union are cumbersome and expensive. For a union to be able to take part in collective negotiation, it must count among its members at least 50 % of the company's employees and 10 % of the workers in the sector concerned at the national level.

3.3. *The reality of social dialogue at company level*

Low integration of representatives of destination countries in European structures

In effect, Turkish representatives are not integrated into EWC as observers, and Estonia only has five EWC, including two from the companies we selected. The question is therefore mainly one of representatives. Even if in V in Poland and Autoliv Norma in Estonia, union representatives are fully integrated into the European Works Council, the inclusion of representatives from the new member states generally seems problematic. However, European, or even worldwide, structures, such as the case of V in Poland, are essential vehicles for access to information in groups where the centralisation of decision-making bodies is manifest.

It is interesting to note that in Poland, in the company with the highest level of integration of employees in extra-national consultation structures, decisions concerning working and remuneration conditions are taken at the local level, unlike other companies where these decisions are generally very largely governed by central managements. With the support of a EWC which works well, union representatives from V would like annual wage negotiations to take place in a centralised fashion, so as to be able to benefit from the rapport de force built up by the unions in the country of origin (Germany). Whereas in most companies, the unions seem all powerful in terms of wage negotiations, it would seem that in the case of V, faced with a fairly

strong EWC, decentralisation is way of bringing into competition various national establishments, avoiding the question of wages being brought up at the group level.

In the case of V in Poland, with the absence of centralised negotiation, the unions use the networks of the EWC to share information on the results of local negotiations and gain support during their own negotiations. At this level, international cooperation seems more developed that the cooperation between the structures of the two Polish belonging to the same group. When there is no EWC or when the EWC does not function well (L in Poland), the centralisation of wage decisions considerably limits union activity at a local. Economic theory has shown many times that centralised negotiations are more favourable to employees, but this implies negotiation which in fact never takes place at the group level. When negotiation forums do exist and operate (EWC), they find this negotiation aspect confiscated to be replaced by the local level. When the structures do not exist, social dialogue at the local level is totally fixed by directives from the unions. There seems to be a need to develop an obligatory wage negotiation framework at the group level, while leaving room for manoeuvre and a local negotiation forum which could, for example, take place consultatively prior to central negotiations. This would make it possible to reduce the scope of the competition between sites, which puts considerable pressure on union claims (see below).

But before developing the EWC as real negotiation areas, it would seem important to ensure they function. In effect, in a number of companies or destination countries, employee representatives are not associated in the work of the EWC, even when their company is the biggest establishment in the group, as is the case of L in Poland. We could therefore analyse companies, in Poland, where the representative of the site was delegated by the management without the unions being informed and in breach of Polish legislation.

Turkish representatives of major international companies have generally taken part for many years in European or World Councils, which has enabled them to share information on the group's situation and to exchange with their opposite numbers abroad. On of the representatives found that social rights are better in Turkey, given the meals they are served or the existence of a bus service… whereas others from Oyak Renault, for instance, find it interesting to solve problems they can solve with the plant managers with group executives.

European branch union federations have an increasingly important role to play in organising meetings between establishment unions or in facilitating exchanges – particularly translations – ensuring training which, in several cases, has proved to be one of the determining elements of EWC integration, or even EWC creation. There are many barriers to full participation in the EWC:

- opacity of information (difficulties in getting EWC agreements, no publicity of EWC meetings);
- language barriers. If EWC meetings are generally translated into all the languages of the countries where the group is located, the same does definitely not apply to documents and information, which, at best, is circulated in English, but most often only in French or German. Few unions have real

linguistic support facilities, be it for contacts with other unions from establishments in the group or contacts with the union organisation;

- not enough collaboration between the departure countries and the destination countries in the unions, some union members have even talked of a certain reticence on their colleagues' behalf in the departure countries.

Concerning EWC, the case of Turkey is very particular. Although companies have no obligation to associate Turkish employee representatives, three companies in the automobile sector from our sample accepted the participation of Turkish representatives as observers (Renault, Volkswagen and Bosch), whereas in the case of Renault and Bosch, thee is also a group council organised on a worldwide scale. This involvement of employees in extra-national representation structures, is a double asset for the Turkish employee representatives. It enables them on the one hand to have access to information they do not have at the site level, and on the other, to have a better grasp of the margins for negotiation, risks and opportunities for their site in the group. Furthermore, meetings of these councils are examples of good practice in terms of information enabling Turkish employees, without being able to really influence the decisions taken in their company, to be able to call for comparable structures to be set up at their sites.

Forms of social dialogue at the company level: from corporate culture to personal initiatives

At company level, social dialogue practices are extremely variable depending on the establishment and the country. National legal frameworks are not very coercive in terms of information and consultation (or even inexistent in Turkey). They do not found a uniform system and thus give primacy to group culture on the one hand and personal initiatives on the other.

In most companies, access to social and economic information is limited, when it is not totally inexistent. There are nevertheless exceptions to this, such as the case of V in Poland, Autoliv Norma in Estonia or Sahinler in Turkey, where the unions have all the information they want, and to a lesser degree the case of Mercedes Benz and Bosch Siemens in Turkey. In many cases, the information is reduced to a fairly vague presentation of data on the company made by the director once or twice a year, sometimes only in English. At F, in Poland, for example, information is quite simply inexistent.

In some companies, union representatives are not sent the information, and local representation structures are set in place (L in Poland) without the law allowing them to use this information to carry through negotiations.

However, generally, foreign companies seem less reluctant to transmit information than national companies. Some companies can thus appear models on the national level. This is true concerning social dialogue, and also working conditions.

Model companies at the national level but far from being model companies at the group level

Confirming macroeconomic statistic, the companies analysed in the context of this study generally provide working and pay conditions which are better than most

national companies. There are obviously exceptions to this. However, these conditions are generally clealrly inferior to those offered by employees in the departure country. The biggest problems in Poland, Estonia and Turkey concern wages, working contract and working times. Added to this in Turkey is the question of union freedom. Cost pressure – particularly the cost of labour – is omnipresent, even in activities which are highly capitalistic. This pressure on wages and working conditions is part of a very high climate of fear of relocations. As is underlined by the HR manager of a company in the automobile sector in Poland "it is easier to close a company of 1 000 people in Poland than a workshop of 100 people in Germany".

The motivation for mobilisation is far from evident, and it appears difficult for employee representatives to be able to count on the local authorities and political powers to support them should they encounter difficulties. The main impression is that "you can only count on yourself".

In negotiations, local representatives seem to have fully integrated this constraint and are ready to accept measures which would no doubt generate protests in the departure countries. The same applies to the annualisation of working time (V in Poland), of generalised part-time work (F in Poland) or health and safety conditions (L in Poland). This situation is nevertheless not inevitable, as can be seen from the resistance to the flexibilising of working time in many foreign companies in the automobile sector in Turkey.

Strong competition between sites

In all the companies visited, in all the sectors and in every country, competition is a reality. It takes varied forms going from information on benchmarking clearly displayed in the company – particularly when the information is unfavourable – to downwards auctions in the Group (V and L in Poland, Mercedes Benz, Volkswagen and Bosch Siemens in Turkey).

The argument of bringing companies into competition is also present in the four Turkish companies. These companies all insist on the increase in the cost of labour and the weight of taxes in Turkey. In two of the cases, threats or effective relocations to the benefit of the Balkans or Eastern Europe have occurred. However, in one of the cases, the logic of proximity to the market prevailed over a relocation to the Czech Republic. These divestments can give rise to job-saving type negotiations in return for a limit to wage rises.

In three of the cases, flexibility of work is a lever. Depending on the case, flexibility rests on the variability of employees' working time (Bosch, Volkswagen), on the use of temps or subcontractors (Oyak Renault).

This competition is clearly all the stronger as production in one establishment can be replaced by another and there are low exit barriers. The case of Turkish textiles is illustrative: companies are capable of starting negotiations for 15 cents. In this case, production can go to Egypt or Romania. There is also return on investment in textiles (the case of production limits via quotas). The position of employee representatives concerning divestments and therefore job cuts is to accept limits in wage rises to bring down the overall wage costs in return for limits on job cuts.

This logic of competition seems to have gone through the whole of social dialogue, including the union discourse. Examples of coordination between union structures from various establishments aiming, by harmonising their claims, to counter the bringing of entities into competition by management are not very numerous. The result of this competition is relationships which are sometimes singular between local managements and union organisations, called to find solutions together enabling greater competitiveness and therefore greater attractiveness within the group. In this case, the good functioning of EWC is not enough, as can be seen by the case of the automobile industry. The attributions of the EWC do not enable it in effect to be a converging point of diverging interests in the context of global negotiation aiming to optimise working and remuneration conditions of the all the workers in the group.

4. Conclusion

4.1. Questioning of the negotiating power of employee representatives

The fears caused by relocations are formidable: the French and the Germans fear relocations to Poland, the Polish fear relocations to Ukraine, the Turks are afraid of Romanian and Bulgarian competition and everyone is afraid of the Chinese. The use of blackmail is all the more efficient if it fuels the lack of information on the group's situation and its long-term strategy, but also the conditions of competition at the worldwide level, of the centrality of the argument of the low cost of labour in the logic of competitiveness and, finally, because it stated by foreign investors of whom it believed that not a lot would keep them in the country. It is through this fear of relocation that the union teams, becoming aware of the risks of a short-term strategy, developing a critique of competitiveness founded only on a logic of the lowest cost and expressing the need to reinforce transnational negotiation tools to set up real incentives to moving social harmonisation upwards based on strategic and technological choices ensuring the ascent of the industry… This evolution is still nevertheless often virtual today…

In a context where company decisions are taken in an ever-larger framework, the negotiating power of employee representatives, even if it is strong in a national context, is shrinking considerably.

- the unions do not have a means of pressure to balance blackmail and relocation decisions;
- concretely, the emergence of solidarity within the EWC, even though it is a prerequisite to the construction of a collective strategy, is difficult. In effect, the EWC must tend towards a conciliation of potentially contradictory interests[68].

Concretely, the employees undergo decisions for which they can at best accept concessions in exchange for maintaining jobs. This is how work councils and unions of resign themselves most often to the savings asked for by the management. They sometimes try to obtain, in return, guarantees on investments or the maintaining of the site for a few years and employee training, so that the temptation to relocate to not reappear too quickly.

[68] Observations going in the same sense also come out of a survey carried out by the EWC Team of IG Metall, "How do EWCs deal with transnational restructuring?", document presented during the Company Policy Committee, 27-28 October 2005, Luxembourg.

4.2. Recommendations for action

Faced with restructuring and even more so with relocations, there is clearly no miracle recipe. Real information and consultation procedures must take place systematically in the case of restructuring or relocation, which is far from being the case. These could be followed by a public debate with all the parties concerned.

The setting up of a transnational collective negotiation procedure can complete the legal edifice, given the limits of the tools available.

Procedure for information-consultation and broadening the debate during relocations

When a company plans to relocate an activity, there must first of all be an information-consultation procedure with the employee representatives to open up a discussion and negotiations on the decision, and on the effects it could produce. The useful effect of consultation is far from being recognised in many situations.

This is how it could be possible to envisage, during relocation projects, setting up a European information-consultation between the social partners on the project and its effects with, for instance:

- an assessment beforehand of the impact on jobs in the sites concerned;
- an analysis beforehand and afterwards of the tax impact;
- information on public aid received by each site, particularly aid from European funds.

Following the information-consultation procedure, there should be a genuine public debate making it possible to take into account all the parties concerned beyond the walls of the company. The public authorities are the first concerned, but others are too: subcontractors affected by the decision, the local authorities, banks which could help in the start-up of new activities, those involved re-training employees and re-industrialising territories, universities or research and training centres to accompany re-classification, re-employment and training.

A framework for transnational collective negotiation

For the time being, the European Union does not have a suitable framework to cope with transnational events. Restructurings, and particularly relocations, stress the legal limits of the legal framework as much at the European level as the national level. In parallel, major multinational companies are increasingly signing transnational agreements.

All this illustrates the need for a framework for transnational social dialogue. A project could see the day thanks the development of a directive with a view to encouraging transnational collective negotiation with binding effects for the signatories. Consultations with the social partners were started with the European Commission in 2005.

The setting in place of a framework enabling transnational collective negotiation would raise a series of questions, as soon as it is an issue of going beyond simple declarations and negotiation agreement which must have a binding value for the signatories and that must be applied.

Who can sign a transnational framework agreement?

The first question is one of the quality of the signatories. Who can sign a transnational agreement? If, on the employers side, the answer is simple, a suitable system must enable the representative unions to be able to sign such an agreement. The directive should mention the criteria.

In the proposals made to by the European Commission's experts group, the transnational framework could be used if such a decision is taken:

- jointly and voluntarily by the ETUC and the employers' organisations at the sector or inter-professional level;
- jointly by the European social partners at the sector level:
  - ⇨ on the request of at least two national employees' and employers' organisations from two distinct countries and belonging to the same sector;
  - ⇨ on the request of the EWC and the company management;
- unilaterally by the ETUC (or another European union federation), on the joint request of a EWC and the management or of the management alone.

A social non-regression clause

The social non-regression clause is a key issue. In effect, transnational agreement cannot be less favourable than agreements signed at a national level. Such agreements complete collective agreements which already exist at the national level and must observe standards and agreements already in application.

Which controls and what monitoring of the agreements?

Other fundamental questions: methods for monitoring and controlling the agreements. If joint committees or EWC are planned for in a series of IFA, there are only a few companies where employee representatives have the internal facilities and/or external expertise to assess the implementation of the agreement.

The employee representation bodies have a role to play in the monitoring of these agreements, but they must have the facilities to be able to appreciate their implementation.

How can we hope to verify the correct application of ILO standards in all the group's subsidiaries of a group without specialist help? The task is even harder if it is a question of making sure that subcontractors are also applying the ILO standards provided for in the agreement.

What recourse is possible and in which jurisdiction?

Currently, in most agreements, nothing is planned in the case of a divergence between the parties. A recourse procedure must be defined.

The strengthening of mechanisms designed to ensure the participation of employee representatives in decisions taken by companies is not the only answer to the challenge posed by relocations. A series of reforms would contribute to improving growth, jobs and wages:

1. **A more balanced macroeconomic policy regime:** coordination of national budgetary policies serving growth and R&D. A reviewing of the status and the objectives of the European Central Bank, so that growth and employment can become priority objectives alongside inflation and that it should be accountable to the European Parliament. The management of exchange rates should be done in line with treaties and no longer be the responsibility of the ECB.
2. **An ambitious industrial policy** financed by a loan (major works, structural programmes, R&D support) serving sustainable growth and the creation of new activities and quality jobs (clean cars, renewable energy, public transport, etc.). Strategic sectors must be targeted (aerospace, telecoms, biotechnologies, etc.) and benefit from funding through major structuring programmes, like the four Franco-German projects launched in the spring of 2005.
3. The **subordination of competition policy** to industrial policy and inclusion of a social clause.
4. Increased us of **European Union structural funds** designed to reduce gaps and encourage rapid convergence – which is far from being the case for the time being –, accompanies by **progressive harmonisation of social standards and taxation**.
5. **Social dialogue mechanisms** making it possible to anticipate changes. The lessons we can learn from the operating of the ECSC over several years are rich in terms of possibilities which exist for socially responsible management

of changes in the sector. As the European Social and Economic Council has pointed out, success in changes in industrial processes is not just measured in terms of competitiveness of companies or a sector, but also in terms of saving jobs and the good social management of negative fallout.

6. Strengthened involvement of employees comes through the **revision of directive 94/45/EC** and a re-evaluation of the implementation of directive 2002/14/CE.
7. The raising of existing restrictions on methods for obtaining the benefits of the "European Globalisation Adjustment Fund" reserved for restructurings affecting more than 1 000 employees) and an increase in its volume (limited today to €500 M).
8. The need for a **legal framework for information in the destination country** to fight against territorial dumping in the European Union – in the context of the transparency of public funding – and which would include the social partners, representatives from the local public authorities, departments in charge of employment.
9. **Securing of professional paths** through permanent reconversion, training and reclassification policies.

The experience carried out by the Finnish SAK is an exemplary case of union intervention which deserves extending to other countries. The proximity of Finland to Estonia led the Finnish SAK to open an office in Tallin to inform Estonian candidates of the rules in Finland on work, contract, working time and wage conditions in application in the Finnish labour market. The office encountered a great success in terms of visitors and proportionally to the number of Estonians already present in Finland. Such an initiative is a practice which deserves to be generalisation.

Projects from unions in departure countries could also help union membership in companies in the country of origin who are investing in the destination countries support the unions and employees in the destination country.

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