INTERNATIONAL INVESTMENT IN LOGISTICS: SITUATION AND TRENDS IN EUROPE

by Fabrice Hatem
Head of International Investment Studies Centre, Invest in France Agency (AFII)
Associate professor at the Normandy Business School

RESUME

Le développement international des entreprises ne passe pas seulement par l'implantation à l'étranger de sites de production, mais également de fonctions tertiaires d'appui : R&D, distribution, quartiers généraux, centres d'appel et bien entendu logistique. L'analyse des bases de données de l'Agence française des investissements internationaux (AFII, voir encadré 1) montre qu'aujourd'hui ces fonctions tertiaires d'entreprise représentent 57,5 % des projets « mobiles » et le quart des emplois créés en Europe par les investisseurs internationaux entre 2002 et 2004.

Quant aux projets logistiques, ils contribuent, d'après la même source, à environ 6 % des investissements internationaux « mobiles » sur le Vieux Continent. D'origine essentiellement européenne, ils sont réalisés par trois types d'entreprises : des firmes manufacturières gérant elles-mêmes leur chaîne d'approvisionnement ; des entreprises de grande distribution qui développent leurs réseaux logistiques pour approvisionner leurs points de vente ; des prestataires de services logistiques qui cherchent à se rapprocher de leurs clients industriels et à adapter la configuration de leurs réseaux aux tendances de la demande. Si les pays d'Europe du nord-ouest et la France attirent toujours la majorité des projets réalisés sur le Vieux Continent, on note également une montée des projets vers l'Europe de l'est (où la logistique suit la relocalisation de la production manufacturière).

La localisation des sites logistiques obéit à un processus d'optimisation complexe tenant compte à la fois de la configuration du réseau des sites de production, de la répartition spatiale de la demande finale, et des avantages offerts par les différents lieux d'accueil potentiels (infrastructures de transport, main d'œuvre qualifiée, disponibilité foncière..). Le poids respectif de ces différents types de critères sera plus ou moins important selon le type de projet : magasin d'approvisionnement des usines, « hub » logistique jouant un rôle pivot dans le fonctionnement de la chaîne d'approvisionnement, site de réception/stockage à proximité des points de ventes.

INTRODUCTION AND SUMMARY

The international development of companies is not just a matter of setting up production facilities abroad. It also involves the settlement of services support functions. : R&D, distribution, headquarters, call centres and of course logistical facilities. The analysis of the AFII data base (see box 1) shows that those activities have accounted for 57,5 % of the number of "internationally mobile projects" and 25 % of the jobs created through those projects between 2002 and 2004.

As for projects in logistics, they account for around 6 % of "internationally mobile investments" in Europe (both for the number of projects and the creation of jobs). They are mainly carried out by European companies, with three major categories of investors: manufacturing companies managing internally the « supply chain »; retailing companies which set up logistical networks in order to supply their stores; and external services providers in logistics, which try to get closer to their customers and to adapt the configuration of their networks to the spatial evolution of their markets. Whereas North-western European countries and France still attract the major part of projects, a rise of international investment has been observed during the recent years towards Eastern Europe, where logistics follow the relocation of manufacturing facilities.

The location of logistical facilities involves a complex optimisation process taking into account the configuration of the network of production facilities, the spatial location of the customers and markets, and the relative attractiveness of competing potential location sites (accessibility through transport infrastructure, availability of qualified manpower, land and dedicated building…). The weight of those various categories of criteria will change depending on the nature of the project: production-support logistics, distribution-support logistics, logistical "hubs" playing a key pivotal role in the supply chain…

Box 1
The AFII data bases on international projects in Europe

Set up by the AFII Economic intelligence unit in 2001, those data base collect data on all the "international mobile projects" (e.g. the location of which may involve a competition between various sites) announced by multinational companies in Europe, excluding their home countries. Are thus excluded from this data base the projects the location of which is predetermined by that of the resources (ex: mining…) or of the final market (retailing stores, retail banking offices, the majority of hotels and restaurants.). The geographical scope extends to all European host countries, with the exception of Malta, Cyprus and Turkey.

The main sources are: 1) the international economic press ; 2) the web (news agencies, companies' web sites,…); 3) information provided by AFII offices abroad or by regional promotions agencies. Each project is described by around 20 criteria (date of announcement, sector, investing company, corporate function involved, home country, host country, number of jobs created, amount of financial investment, etc.). Nevertheless, the amount of investment and the number of jobs is not known for all projects. .

This article deals only with greenfield and brownfield projects, excluding merger-acquisitions, partnerships or sub-contracting. The data are « gross », as they deal only with the creation of new business, and do not include the negative impact of downsizing and closure projects. The comparison with others tools of the same kind (*European investment Monitor* by Ernst and Young [E&Y, 2005], world data base *Gild by* IBM/PLI *[IBM/PLI, 2005]*) show a rather good comparability of results. On the other hand, no comparison is possible with financial data on foreign direct investment, the goal of which is not to give a measurement of physical investment.

I. GLOBAL TRENDS IN THE INTERNATIONAL DEVELOPMENT OF LOGISTICS SUPPORT FUNCTIONS

11. Support services : a strategic segment in international investment

Several separate functions are needed to run a company. These include goods and services production, of course, but also R&D, administration, HQ functions, logistics and distribution, call centres, remote services, and so on. Multinational corporations may manage such functions in-house or, as is increasingly the case, outsource them to external providers. In both instances, they generate investment and create jobs in those activities, both at home and abroad.

Some of these activities have to be situated close to where the associated services are going to be provided. This is true for sales outlets, which (aside from online selling) are by definition located near to the final consumer. But in other cases, services can be consumed remotely[1]. These services are thus internationally tradable and can therefore be based in many different sites and countries. This creates "internationally mobile" investments that different host countries can compete for.

Those functions account for a large share of the firm's investments, not only in the home country, but also for the international part of their activities: projects of R&D centres, administrative offices, storage centre, etc. (See [Unctad, 2004]). According to the AFII data base, this kind of projects amounted for 57,5 % of the total number of projects and for 25 % of jobs in Europe in 2002-2004 (table 1). Smaller (in terms of financial investment and jobs creation) than the manufacturing facilities, those projects also have a higher content in qualified jobs and par capita added value. In opposition to manufacturing project which locate in majority in Eastern Europe, most of those services projects locate in Western Europe (see [Hatem, 2005a], [Hatem, 2005b], and appendix 1). They are thus viewed by the promotion agencies of those countries as a way to partially balance the loss of attractiveness of Western Europe for large manufacturing facilities.

Table 1
Foreign investment projects by function and year in Europe 2002-2004

	Number of projects					Jobs created			
	2002	**2003**	**2004**	**Total**	**%**	**Numb. (thds)**	**%**	**Rate of inform.**	**Average Size**
Other services	181	62	94	337	4,8	19,4	3,9	45,7	126,0
Commercial offices	585	739	835	2159	31,0	10,6	2,1	13,0	37,6
R&D centres	113	121	106	340	4,9	14,0	2,8	44,7	91,9
Call centres	28	57	53	138	2,0	24,5	4,9	77,5	228,7
Logistics, distribution	164	136	138	438	6,3	29,6	5,4	41,8	161,9
Internal adm. service or headquart.	167	250	177	594	8,5	26,7	5,9	38,7	116,1
Services functions	**1238**	**1365**	**1403**	**4006**	**57,5**	**124,7**	**25,0**	**27,6**	**112,6**
Production function	**856**	**1105**	**1000**	**2961**	**42,5**	**373,9**	**75,0**	**53,7**	**235,1**
Total	**2094**	**2470**	**2403**	**6967**	**100,0**	**498,5**	**100,0**	**38,7**	**184,9**

Source : AFII

[1] Say an R&D centre develops an innovative solution. This improvement can then be used to upgrade production processes in all the firm's plants worldwide. Another example: a remote IT service desk can troubleshoot for every workstation in the company, including ones in a different country.

12. International investment in logistics

Projects in logistics[2] account for a good share of those services support projects. As a matter of facts, this function has gone through a sustained development as the question of the management of increasingly complex production and distribution networks[3] has got more and more central for the companies. Multinational corporations, present by definition in many countries, and operating large-scale production/distribution networks, are of course especially sensitive to this question. Consequently, a large flow of investments in logistics projects has been observed in the recent years in Europe. Those projects, as censed by the AFII data base, accounted for around 6 % of internationally mobile projects in Europe in 2002-2004 (table 1), and for around 6 % of job creation by international investors in France in 2004 [AFII, 2005].

Among the main reasons leading multinational corporations to invest in logistic facilities in Europe, on can mention, at the various steps of the supply chain (upstream or production-support, mid-stream or transport-support, downstream or distribution-support, see also box 2):

- Upstream, the search for an improved coordination of the production chain, including suppliers and sub-contractors: just-in-time supply of assembly lines, minimisation of the stock of final products…. This has involved, in particular, many projects of logistical sites located in the near proximity of the big factories, either to take delivery of components (Advanced Suppliers Warehouse), or to storage and dispatch finished products (General Selling Warehouse)[4].

- Mid-stream, the search for an optimization of the global structure of the network. This has involved, in the past years, an in-depth re-engineering of their European logistics by many multinational corporations. The former organisation, relatively fragmented by countries and inherited from the history of the step-by -step development of the company on the continent, has been replaced by new European-wide ”hub and spokes” networks, where primary hubs are dedicated to the recollection of products and their re-dispatching to secondary hubs and final retailing points or customers[5]. A large “market” has thus developed for the location of those “hubs”[6].

- Downstream, the search for a more efficient access to the final customer in terms of costs, time of delivery, reliability, either for products manufactured in Europe or for imported goods. This has paved the way for many projects in regional “secondary hubs” dedicated to the reception and storage of products delivered by the major hubs and their re-dispatching to final selling points. Large logistic sites dedicated to the reception and storage of finished products are also located directly on the spot of big retailing facilities (such as supermarket, hypermarkets…).

---

[2] Logistics will be defined here as the activity consisting in the conception, operation and control of the traffic and storage of products from their original production site, to their final retailing centre, including intermediary transformation steps.

[3] E.g. involving a growing number of inter-operating production facilities, aiming at supplying a growing number of retailing locations or final customers, while the whole network is extending and covers a growing area.

[4] See in box 4 the case of the Gefco project in the PSA/Toyota automotive assembly factory in Kolin, Czech Rep.

[5] Logistic sites in harbours, dedicated to the export/import of products by sea link, can be considered as a special category of “hub” projects.

[6] See infra the case of the Office Depot hub project for southern Europe in Saint-Martin-de-Crau, France.

Box 2
Example of recent logistical projects by category (Source: AFII data base)

Production-support logistics

June 2002. The german automotive manufacturer Volkswagen builds a new logistics centre and welding facilities for its polish subsidiary, for a amount of 53 million euros. This project should lead by 2005 to the creation of 1500 jobs, after the completion of a second series of investment.

Distribution-support logistics

March 2002. French Centros Comerciales Carrefour SA opens a new logistic centre in Sevilla (Spain), for an amount of 15 mln eur. The centre will prepare and distribute fresh food products to Carrefour supermarkets in southern Spain. The group should hire 1,300 staff by the end of the year.

Logistical hubs (transport-support logistics)

August 2003. Singapore-based electronics manufacturer Flextronics, is to expand its distribution centre in Venray, Netherlands and will create 300 additional jobs. The distribution centre, where 500 people are currently employed, will expand by 25,000 sq m, mainly due to a contract with a new client.

January 2003. The transport companies Ewals Cargo Care and Cobelfret are to create a new logistics center in Bilzen (Limbourg), aimed at stimulating the fluvial transport along the Albert Canal. This investissement of 34 millions d'euros should generate the creation of 450 emplois. The Centre should be operational in 2004.

July 2004. Fabric importer Europai Divat Szolgaltato will build a HUF 8bn packaging and logistics base in the Papa industrial park, in Hungary. The new centre will employ 600 people. Europai Divat is owned by US, Israeli and German investors.

June 2002. British company Tesco has invested 20-24 mln dollars for the construction of a 20,000 square meter logistics center in Herceghalom, Hungary. The company plans to double the size of the facility next year. 300-400 people will be employed when the logistics center reaches 100% capacity in September, and staff number will double once the expansion is completed.

November 2002. German foodstuff retail chain Lidl will invest 20.98 mln euro in a 30,000 sq m logistics centre in Szekesfehervar, Hungary, where it will employ 600 people.

Re-engineering of the whole logistical network

June 2003. UK supermarket giant ASDA, a subsidiary of US-based retailer Wal-Mart, is to create 1,200 new jobs with investments in its distribution network, it has been announced. New facilities are planned, along with a revamp of existing depots and service centres. ASDA, which employs 120,000 people, says the investment will create work in several areas of the UK including Scotland, Yorkshire, Lancashire and Leicestershire. Distribution director David Gibbons said the revamp will "revolutionise" the company's distribution network. He added that technology from the company's parent firm Wal-Mart means ASDA's 260 stores will receive products faster and more efficiently. The new jobs will include 500 at a new distribution centre in Lutterworth, Leicestershire; 400 at a depot in Grangemouth; 200 at a new depot in Falkirk and 100 at new recycling sites in Wigan and Wakefield. Around 500 workers will transfer from a depot in Wigan to a new distribution centre opening in Skelmersdale later in 2003. The Leeds-based company said cardboard and plastic waste from stores will be recycled at its new dedicated sites. ASDA became part of the Wal-Mart family in June 1999. ASDA now has 259 stores and 19 depots across the UK, employing 122,000 staff.

Three other main trends also involve growing needs in logistics:

- The evolution of the geographical location of economic activities in Europe (e.g. new markets and production capacities in Eastern Europe) makes necessary the creation "ex nihilo" of logistical networks in those emerging regions.

- The trend of externalization, which boosts the activity of the external services providers, makes necessary for them to strengthen and extend their own transportation, storage and conditioning facilities in order to cover more efficiently the European market and follow their customers on their new locations. The consequence is that those logistics companies turn themselves into multinational corporations.

- The rising diversity of the services provided (not only transport, but also storage, conditioning, packaging, collection and follow-up of orders, etc.), the growing technical content of the activity (ex: dynamic standardized storage, see infra the case of office supply, box 3), involve growing needs in capital (dedicated buildings and equipments) and qualified manpower (specialists in operational research, lawyers, data processing specialists...). This trend also feeds a flow of projects in data processing and storage centres, call centres, shared services centres, etc.

II. RECENT TRENDS IN INTERNATIONAL LOGISTICS PROJECTS IN EUROPE

21. Industry and company profile

As shown in table 2, it is possible to distinguish three main categories of investors in logistics : services providers, retailing companies and manufacturing firm.

Companies active in the distribution sector (wholesale and retail) still handle internally a large share of theirs logistics, especially in the case of chain stores[7]. They accounted for around 16 % of projects and 30 % of job creation in European international logistics in 2002-2004. Big chain store companies, such as Carrrefour, Auchan Wall-Mart, Aldi, Lidl, and Office Depot, rank among the top logistical investors (table 3).

By nature positioned on the downstream of the supply chain, those firms have to take delivery of the finished products, storage them, eventually condition and package them, then rebook them toward the selling point or the final customer. Their main stakes are to limit the level of stocks while ensuring the continuity and speed of delivery, under many strong constraints such as: high rate of stocks turnover, high variety of products and delivery points, and finally perishable nature of many products (fresh food…).

[7] Independent retailers also try to share their logistics in order to cut costs and face the competition of large chain stores companies.

Box 2
Logistics in the office supplies sector

With a total turnover of around 35 billion euros in Western Europe, the industry of offices supplies (paper, ink for printers, pencils, furniture, etc.) relies heavily on mail orders trading, with customer relation centres receiving the orders and having them prepared and sent. The quickness and reliability of delivery represent a basic factor of competitiveness. Logistics are thus given much importance, more especially as the growing scattering of customers involves new stakes : formerly very concentrated on some very big customers located in large cities, demand is scattering as more and more SME, often located in medium and small urban centres, equip themselves in data processing capabilities, involving growing needs in office supplies.

Various kinds of distribution network coexist: the "very-short" circuit connects directly the supplier to its main customers, which are generally big companies. The « short » circuit involves the intervention of a middleman specialized in wholesales. The « long » circuit, which involves wholesalers and retailers, is aimed at delivering small-sized orders, generally to SMCs.

Among the main technical on-going trends, one can mention the automation of orders (especially among big customers), the increasing role of customer relation centres and the "dynamic standardized storage" (automation of stocks management and handling, implying a standardization of products).

The Office Depot hub project in Saint-Martin-de-Crau gives a good example of the location logics at work in this activity. To supply the expanding markets of Southern Europe, the implantation of a regional hub south of the River Loire seemed necessary in order to balance the existing hub in the Paris area, to get closer to the final customer, and to reduce the delays and supply costs. Two brother projects have thus been set up to met this stake. First, a new customer relation centre has been set up in Nîmes, southern France. Second an order treatment centre has been set up in Saint-Martin-de-Crau. The choice of this last location has been made through a two-steps decision process. First, a triangle Avignon/Montpellier Marseille has been determined as a target, for reasons linked to the geographical situation of the region (at the centre of the Southern European markets), to the configuration of transport networks (communication node between Northern Europe, Italy and Spain, with many highways, railways, sea and fluvial harbours). Second, the choice of Saint-Martin-de-Crau, is justified by the existence of a large availability of suitable land, the existence of an already large logistic activity on the site (Castorama, Mareva, Metro), the immediate proximity of major transport facilities (Marignane Airport, Marseille sea Harbour, Arles fluvial harbour, access to many highways such as Marseille/Montpellier, Marseille-Nîmes, to a modern railways network) and the grant of incentives. When in full activity, the site should generate 150 jobs for a total investment of 15 millions euros.

Table 2
Investments in logistics by sectors in 2002-2004

	Projects		Jobs	
	Total	**%**	**Total**	**%**
Other commercial and financial services[8]	69	15,8	9036	30,5
Business services[9]	64	14,6	5658	19,1
Transport, storage	47	10,7	2378	8
Automotive	41	9,4	3015	10,2
Electric and electronic appliances	40	9,1	917	3,1
Agrifood	37	8,4	1128	3,8
Furniture and home equipment	27	6,2	4100	13,8
Textile, clothing	19	4,3	1070	3,6
Chemicals, biochemcals, plastics	18	4,1	105	0,4
Other materials	15	3,4	242	0,8
Pharmaceuticals	13	3	950	3,2
Metallurgy	11	2,5	186	0,6
Others	11	2,5	414	1,4
Machines and mechanical equipments	7	1,6	36	0,1
Households electronics	6	1,4	90	0,3
Other transportation equipments	5	1,1	60	0,2
Energy	5	1,1	74	0,2
Sofware and dataprocessing services	2	0,5	80	0,3
Electronic components	1	0,2	80	0,3
Total	438	100	29619	100

Source : AFII

- Many large companies in the manufacturing sector still manage their logistics internally or through a specialized subsidiary. Previously focused on production support, their activity in logistics tends to extend downstream in the context of an integrated approach of the supply chain (see box 4, case of the automotive sector). They accounted for almost 40 % of jobs and 60 % of projects in 2002-2004 (table 2). The automotive and furniture sectors, followed by agro-business and electric and electronic equipments, concentrate most of the project, those four sectors alone accounting for more than 30 % of jobs creation. Volkswagen, Daimler, Cadbury Schweppes, Flextronics, Ricoh were among the major investors (table 3).

[8] Mainly retailers (chain stores) and wholesalers
[9] Mainly logistic services providers.

Box 4
Logistics in the automotive sector

Overview. Formerly focused on the upstream circuit (supply of assembly lines), automotive logistics today cover the whole of the "supply chain", from the supply of components the assembly lines to the final delivery of the vehicle to the customer. Inside this enlarged framework, it includes four major steps: 1) upstream circuit (supply of assembly lines; 2) the delivery of finished vehicles; 3) the distribution of spares parts; 4) reverse logistics and recycling. Those various steps are of course deeply interactive.

The majors stakes are : 1) the high number of components included in a vehicle and the high number of suppliers, which makes necessary a precise coordination of the equipment delivery in order to avoid either an excessive storage level or a break in the production process due to a shortage for a specific component; 2) the spatial scattering of selling points and customers, who have to be supplied from a very small number of large assembly factories; 3) the unpredictable fluctuations in final demand, which impact the load plan of the production sites in an erratic way.

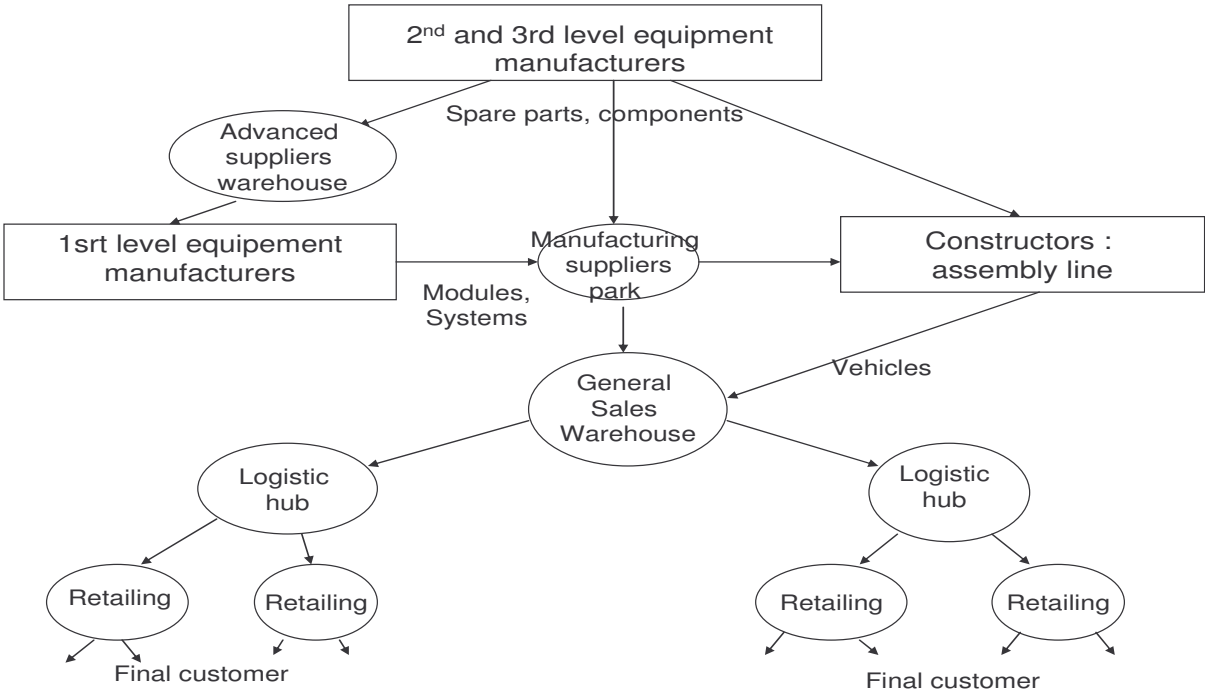
A focus on the upstream circuit. The car-makers get most of their supplies from privileged equipment manufacturers, called « first level ». Those manufacturers integrate themselves components delivered by second and third-level suppliers into finished modules and systems. The car-makers try to rationalise their relations with their suppliers, on the one hand through a reduction in the number of those suppliers, and on the other hand through a better efficiency of the logistical supplies networks (zero-stocks and zero-delay systems). Logistics has thus become a key component in the relation between constructors and equipment suppliers.

The short delivery delay demanded to the suppliers (between some hours and some days depending on the product) implies the setting up of efficient systems of supply management and shared information, but also an increased proximity of the first-level equipment manufacturers to the assembly lines. Those equipment makers are thus incited to follow the location strategies of their main customers and set up new factory close the assembly lines.

The production-support logistical chain may includes two kinds of interface ; 1) upstream of the assembly line, the *Advanced Suppliers Warehouse* takes delivery and storages the supplies of component delivered mainly by the second and third-level equipment manufacturers. Those components are then integrated into systems by those of the first-level equipment manufacturers who are located at the immediate proximity of the assembly factory on the *Manufacturing Suppliers Park*; Finished systems and modules are then delivered to the assembly line nearby, in order to be directly integrated on the vehicle, with practically no storage. 2) Downstream of the assembly line, the General Sales Warehouse takes delivery, storages, conditions and dispatches the finished vehicles and also spare parts for repair (figure 1).

The case of the Gefco project in Kölin. This logistical site is located in the immediate proximity of the vehicle assembly facility managed in JV by Toyota and PSA in the Czech Republic. When fully operative, this factory will produce 300 000 bottom-of-the-range vehicles. The components come from Germany, Eastern Europe, France and Portugal, but some equipment makers also operate in an industrial park close to the assembly line. PSA has committed its subsidiary Gefco for the management of the site's logistics and especially for the downstream logistics. Gefco has thus built a regional distribution centre composed of two units : 1) A storage and sales warehouse which receives the vehicles produced by the factory, storages them, prepares and dispatches them ; 2) A regional HUB, partly supplied by the Kölin factory and partly by imported vehicles produced in other factories, and aimed at servicing the Eastern European market..

Figure 1. Organization of the supply chain: the example of the automotive sector



Finally, firms specialized in transports and logistics account for around 30 % of job creation and 25 % of projects (table 2). They take benefit of the trend to externalization at work in the logistical function (see also box 5). Formerly limited to the mere "transport function", this phenomenon has progressively extended to a larger range of activities such as storage, management of flows and work loads, data processing, conditioning and packaging, collection and treatment of orders, etc. This has given rise to a new kind of businesses, that of "integrated logistical services provider".

The logistic services providers belong to four main categories depending on their own history and their main activity : 1) firms specialized in the transportation of mail and parcels, which try to diversify in other kinds of logistics (Fedex, DHL-Danzas …) ; 2) Road and sea conveyors (Norbert Dentressangle…), which are transforming themselves into integrated logisticians through the enlargement of the range of services offered to their customers while increasingly sub-contracting the mere transport activity to order-takers; 3) former logistical departments of big manufacturing companies, which after having been turned into subsidiaries, try to diversify and enlarge their customer base beyond their parent company (Gefco, subsidiary of PSA ; CAT, subsidiary of Renault ; Caterpillar logistics) ; 4) finally, pure logisticians which have directly developed their activities on this new market (Hays Logistics).

22. Concentration of projects among a relatively small number of investors

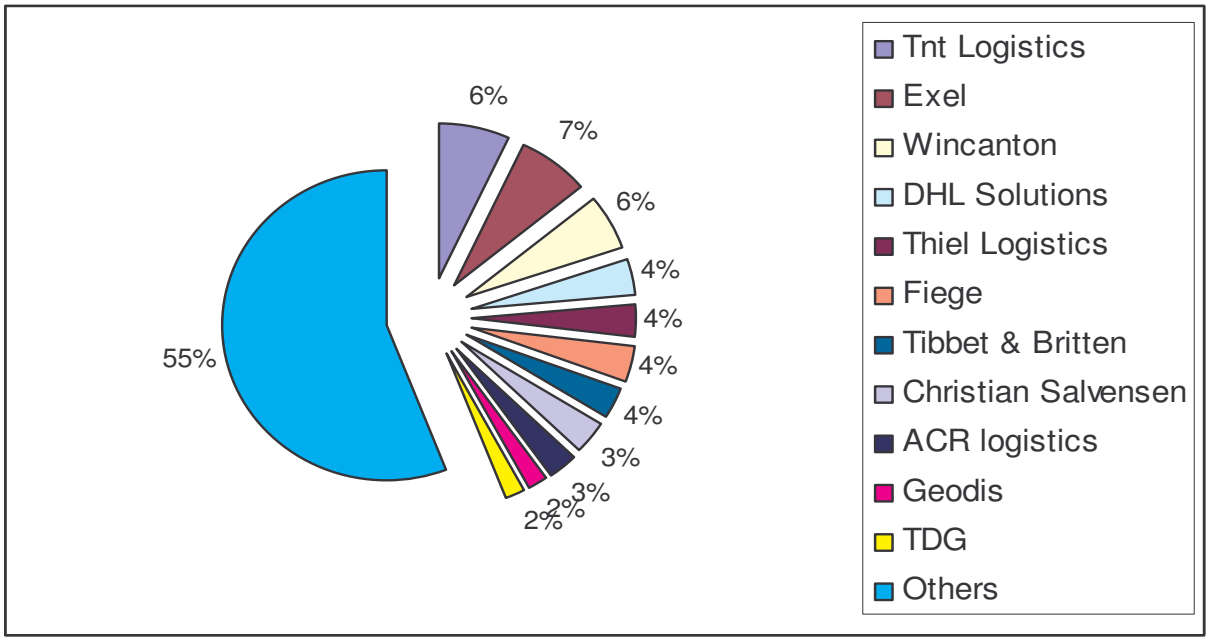
A limited number of investors account for a large share of projects. For the 2002-2004, the 5 first investors accounted for 40 % of jobs creation, the 10 first for around 56 % and the 50 first, for 85 % (table 3). This high level of concentration can be explained by two main sets of reasons: on the one hand, only some very big European companies have the means to set up large investment projects to take care internally of their own logistics; on the other hand, the supply in logistic services is rather concentrated among a handful of large companies (TNT,

Exel, Hays Logistics, etc.). Recent events, such as the acquisition of Exel by Deutsche Post, show that this concentration of supply could increase in the coming years (box 5 and graph 1).

Box 5
The logistics services providers in Europe

The European market for logistic services (excluding mail and parcels[10]) was estimated at around 40 billion euros in 2003 [Logistiques Magazine, 2004]. It is going through a steady development process, fed by the externalization strategies carried out by manufacturing and distribution companies. It is also rather concentrated: the 5 first suppliers (TNT Logistics, Exel/T&B, Wincanton, Thiel Logistics, DHL solutions) control 30 % of the market (graph 1). This concentration could increase in the coming years, through many merger-acquisitions (acquisition of Tibbett and Britten by Exel in 2004, of Exel by Deutche Post in 2005).

Graph 1
Main logistic services providers on the European market, 2003



Source : Logistiques magazine, 2004

[10] As for the express parcels and mail transport market, its size was estimated in Europe at 45 bln euros in 2003 (source : Logistiques magazine, 2004)

Table 3: Jobs created and number of projects by company, 2002-2004

Company	Secteur	Projets	Emploi	Empl. Cumulés	% Emp. total
Ikea	Furnishing	19	2890	2890	9,8
Lidl	Retail	13	2505	5395	18,2
Tesco	Retail	5	2300	7695	26,0
Carrefour	Retail	8	2195	9890	33,4
ASDA ; Wal-Mart	Retail	2	1700	11590	39,1
Volkswagen	Automotive	1	1500	13090	44,2
Kaufland	Furnishing	1	1200	14290	48,2
Aldi	Retail	10	1145	15435	52,1
Europai Divat Szolgaltato	Textile/garments	1	600	16035	54,1
Würth	Automotive	2	500	16535	55,8
Ewals Cargo Care ; Cobelfret	Transport/Logistics	1	450	16985	57,3
Zur Rose	Pharmaceuticals	1	400	17385	58,7
Auchan	Retail	2	350	17735	59,9
Amazon	Retail	2	340	18075	61,0
DaimlerChrysler	Automotive	3	332	18407	62,1
Metro	Retail	3	320	18727	63,2
Aldis services plus ; Metro	Retail	1	300	19027	64,2
Flextronics	Electronic appliances	1	300	19327	65,3
Hays Logistics ; Sara Lee	Transport/Logistics	1	300	19627	66,3
Olympus	Electronic appliances	1	300	19927	67,3
Philip Morris International	Agro-alimentaire	1	300	20227	68,3
Ricoh	Electronic appliances	1	275	20502	69,2
Skechers	Furnishing	2	260	20762	70,1
Centrum Transport	Transport/Logistics	1	250	21012	70,9
Hagemeyer	Transport/Logistics	1	250	21262	71,8
Raben	Transport/Logistics	1	250	21512	72,6
Intermarché	Retail	1	210	21722	73,3
Hilton Food Group	Agrifood	1	200	21922	74,0
Katoen	Transport/Logistics	1	200	22122	74,7
Kodak	Electronic appliances	1	200	22322	75,4
Lyreco	Transport/Logistics	1	200	22522	76,0
Norgine	Pharmaceuticals	1	200	22722	76,7
Tiner	Transport/Logistics	1	200	22922	77,4
Transports Nicolas ; TNT	Transport/Logistics	1	200	23122	78,1
ABX Logistics	Transport/Logistics	2	170	23292	78,6
Federal Express	Transport/Logistics	1	160	23452	79,2
Office Dépot	Retail	1	160	23612	79,7
ArvinMeritor	Automotive	1	150	23762	80,2
Cadbury Schweppes	Agrifood	1	150	23912	80,7
Caterpillar	Electronic appliances	1	150	24062	81,2
Deli XL ; Ahold	Retail	1	150	24212	81,7
Eagle Global Logistics ; EGL	Transport/Logistics	1	150	24362	82,3
GMP ; P&O Parts	Transport/Logistics	1	150	24512	82,8
Hays Logistique	Transport/Logistics	1	150	24662	83,3
Office Depot	Retail	1	150	24812	83,8
Senoble	Agriofood	1	150	24962	84,3
Axial ; Walon	Automotive	1	140	25102	84,7
Hays Logistics ; Système U	Transport/Logistics	1	130	25232	85,2
Gefco	Transport/Logistics	2	110	25342	85,6
Darfeuille ; Christian Salvesen	Transport/Logistics	3	110	25452	85,9
Total		438	29619		

Source : AFII

Box 6
A relatively large size of projects

The average amount of jobs created by logistical projects is relatively high, as compared to other services support activities (more than 160 jobs on average, see table 1). A handful of very large projects with more than 500 jobs (involving in general the creation of a whole network of sites on the downstream of the supply chain) accounts for more than 30 % of total jobs creation (tables 4 and 5). Nevertheless, the majority of jobs (56,5 %) are created in medium-sized projects (100 to 499 jobs) .Finally, small projects (less than 50 jobs) represent only a marginal part of job creation, although they account for a majority of projects.

Table 4
Main projects in logistics in Europe (2002-2004)

Year	Company	Job creation	Home country	Host country	Sector	Project
2002	Volkswagen	1500	Germany	Poland	Automotive	Creation
2003	Tesco	1500	United Kingdom	Ireland	Other commercial and financial services	Creation
2002	Carrefour	1300	France	Spain	Business services	Creation
2003	ASDA ; Wal-Mart	1200	United States	United Kingdom	Other commercial and financial services	Creation
2004	Kaufland	1200	Germany	Bulgary	Furnishing	Creation
2002	Tesco	800	United Kingdom	Hungary	Business services	Creation
2002	Lidl	600	Germany	Hungary	Other commercial and financial services	Creation
2004	Europai Divat Szolgaltato	600	United States	Hungary	Textile, garments	Creation
2003	Asda ; Wal-Mart	500	United States	United Kingdom	Other commercial and financial services	Creation
2003	Ewals Cargo Care ; Cobelfret	450	The Netherlands	Belgium	Transport, stockage, BTP	Creation
2003	Ikea	450	Sweden	Spain	Furnishing	Creation
2003	Ikea	450	Sweden	Spain	Furnishing	Creation
2003	Lidl	400	Germany	Sweden	Other commercial and financial services	Creation
2004	Zur Rose	400	Switzerland	Germany	Pharmaceuticals	Creation
2004	Lidl	400	Germany	Switzerland	Other commercial and financial services	Creation
2003	Carrefour	350	France	Spain	Other commercial and financial services	Creation
2003	Lidl	350	Germany	The Netherlands	Other commercial and financial services	Creation

Source : AFII

Table 5
Breakdown of projects by size (number of jobs created)

%	Projects	Jobs
1000 and more	0,011	0,226
500 to 999	0,009	0,084
300 to 499	0,043	0,221
100 to 299	0,137	0,344
50 to 99	0,073	0,069
1 to 49	0,144	0,055
Information not available	0,582	0
Total	1	1

Source : AFII

22. Origin and destination of investment flows

The origin of flows

By regions, European investors account for more than three-quarters of total job creation, followed, very far away, by the American companies. Asia investors only hold a marginal position (table 6).

Table 6
Projects and jobs by home countries 2002-2004

	Number of projects					Job creation	
	2002	2003	2004	Number	%	Number	%
Northern America	25	24	21	70	16	5438	18,4
Asia	12	22	13	47	10,7	1380	4,7
Others	5	2	2	9	2,1	224	0;7
Europe	122	88	102	312	71,2	22577	76,2
Total	164	136	138	438	100	29619	100

Source : AFII

By country, the contribution of German investors, which have been the first providers of logistical projects in Europe during the three last years, is especially strong (table 7). They are followed by US and French investors. Those three home countries alone account for more than 50 % of the total jobs creation.

Table 7
Projects and jobs by home country 2002-2004

	Projects		Jobs	
	Number	%	Number	%
Germany	81	0,185	8585	0,29
United states	68	0,155	5338	0,18
France	54	0,123	3531	0,119
Japan	33	0,075	1000	0,034
The Netherlands	29	0,066	2227	0,075
United Kingdom	29	0,066	3560	0,12
Sweden	27	0,062	3005	0,101
Spain	14	0,032	30	0,001
Switzerland	14	0,032	561	0,019
Belgium	12	0,027	462	0,016
Italy	12	0,027	100	0,003
Autrich	10	0,023	60	0,002
Finland	7	0,016	80	0,003
Danmark	6	0,014	30	0,001
Taïwan	4	0,009	0	0
Other	38	0,087	1050	0,035
Total	438	1	29619	1

Source :AFII

The destination of flows

Investments remain very concentrated in Western European countries, which account for around 80 % of project and job creation. One should nevertheless note the existence of a significant number of projects in some eastern European countries. The main host countries are, in terms of projects, France, Spain, Belgium, Germany and United Kingdom and Hungary; and in terms of jobs creation Spain, France, United Kingdom, Hungary, Belgium, and Poland (tables 8 and 9).

Table 8
Project by region of origin and destination, 2002-2004

Origin / Destination	North. America	United States	Asia	Japon	Others	Europe	Germany	France	United Kingdom	Total
France	**25,7**	26,5	**14,9**	21,2	**0**	**21,5**	22,2	1,9	51,7	21
Spain	**7,1**	7,4	**10,6**	12,1	**33,4**	**18,6**	16	40,7	10,3	16,2
Belgium	**12,9**	13,2	**17**	15,2	**11,1**	**6,7**	6,2	13	3,4	8,9
Germany	**8,6**	8,8	**17**	18,2	**0**	**7,7**	2,5	3,7	3,4	8,7
United kingdom	**21,4**	20,6	**6,4**	6,1	**22,2**	**4,8**	3,7	1,9	0	8
Hungary	**5,7**	4,4	**2,1**	0	**0**	**8,7**	11,1	9,3	13,8	7,3
The Netherlands	**8,6**	8,8	**17**	15,2	**0**	**2,2**	2,5	0	0	4,8
Poland	**0**	0	**2,1**	3	**0**	**4,5**	4,9	3,7	6,9	3,4
Portugal	**0**	0	**0**	0	**11,1**	**3,8**	3,7	7,4	0	3
Switzerland	**1,4**	1,5	**0**	0	**11,1**	**3,5**	6,2	5,6	0	3
Sweden	**4,3**	4,4	**4,3**	3	**0**	**1,6**	3,7	0	0	2,3
Austria	**0**	0	**0**	0	**0**	**2,9**	7,4	1,9	0	2,1
Romania	**0**	0	**0**	0	**0**	**2,9**	1,2	3,7	0	2,1
Bulgary	**0**	0	**0**	0	**0**	**2,6**	3,7	1,9	0	1,8
Tchèque, République	**2,9**	2,9	**4,3**	3	**0**	**1**	1,2	0	0	1,6
Danmark	**0**	0	**2,1**	0	**0**	**1**	0	0	0	0,9
Ireland	**1,4**	1,5	**0**	0	**0**	**1**	0	0	10,3	0,9
Italy	**0**	0	**2,1**	3	**0**	**1**	0	1,9	0	0,9
Finland	**0**	0	**0**	0	**0**	**1**	1,2	1,9	0	0,7
Lettonia	**0**	0	**0**	0	**0**	**1**	0	0	0	0,7
Slovaquia	**0**	0	**0**	0	**0**	**1**	2,5	0	0	0,7
Estonia	**0**	0	**0**	0	**0**	**0,6**	0	0	0	0,5
Lituania	**0**	0	**0**	0	**0**	**0,3**	0	0	0	0,2
Norway	**0**	0	**0**	0	**0**	**0,3**	0	1,9	0	0,2
Slovénia	**0**	0	**0**	0	**11,1**	**0**	0	0	0	0,2
Total	**100**	100	**100**	100	**100**	**100**	100	100	100	100

Source : AFII

Cross-analysis

A cross-analysis suggests the existence of specific location strategies depending on the companies' home countries:

- The still limited rise of project towards eastern Europe is largely due to north-European and notably German manufacturing companies, which had to complete large investments in logistics in order to support and accompany the trend to relocation of their industrial

production activity towards those countries (especially in the automotive sector)[11]. The rise of the EEC markets also makes necessary the local development of downstream distribution networks.

- The good performances of Spain over the three last years is explained by the completion of major projects in the downstream of the supply chain, carried out by Western European (and notably French) companies in such activities as retailing (Carrefour) or furniture (Ikea).

Table 10
Job creation by home and host country, 2002-2004

	North. America	United States	Asia	Japan	Others	Europe	Germany	France	United Kingdom	Total
Spain	1,3	1,3	2,3	3,2	100	22,4	8,9	72,7	4,2	18,2
France	15,3	15,5	7,8	10,7	0	17,9	15,1	4,2	25,6	16,8
United Kingdom	43,9	43,6	3,6	2	0	4,6	2,6	0,3	0	11,8
Hungary	17,3	16,9	0	0	0	7,2	8	4,2	22,5	8,7
Belgium	12,4	12,6	5,5	2,6	0	6,3	1,9	8,9	0	7,3
Poland	0	0	0	0	0	8,9	18,1	0	0	6,8
Ireland	1,2	1,2	0	0	0	7,5	0	0	47,8	6
Germany	1,5	1,5	31,9	44	0	4,9	1,8	3,1	0	5,5
The Netherlands	4,6	4,7	48,9	37,5	0	2,8	7	0	0	5,3
Bulgaria	0	0	0	0	0	5,5	14	0	0	4,2
Switzerland	0	0	0	0	0	3,5	8,3	0,8	0	2,7
Portugal	0	0	0	0	0	2,9	2,3	5,7	0	2,2
Sweden	0,4	0,4	0	0	0	1,9	5	0	0	1,5
Austria	0	0	0	0	0	1,5	3,8	0	0	1,1
Slovaquia	0	0	0	0	0	1,2	3,3	0	0	0,9
Czech Republic	2,2	2,3	0	0	0	0	0	0	0	0,4
Italy	0	0	0	0	0	0,4	0	0	0	0,3
Estonia	0	0	0	0	0	0,1	0	0	0	0,1
Romania	0	0	0	0	0	0,2	0	0	0	0,1
Danmark	0	0	0	0	0	0	0	0	0	0
Finland	0	0	0	0	0	0	0	0	0	0
Lettonia	0	0	0	0	0	0	0	0	0	0
Lituania	0	0	0	0	0	0	0	0	0	0
Norwy	0	0	0	0	0	0	0	0	0	0
Slovenia	0	0	0	0	0	0	0	0	0	0
Total	100	100	100	100	100	100	100	100	100	100

Source : AFII

- The Britannic islands, and, to a former extend, the Benelux countries are favoured regions for the location American investments in Europe. On the other hand, US investments in logistics are not very developed in Eastern Europe. This can be easily explained by the fact that the relocation of US European subsidiaries towards eastern European countries has been less extensive that that of German or Scandinavian companies, implying lesser needs in industrial logistics. As a matter of facts, US investments in Europe are very oriented towards services and high tech sectors, which are, on the one hand, less prone than other to relocate to

[11] Depending on the case, the goal is to supply assembly lines located in Eastern Europe with components manufactured in Western Europe or the opposite.

Western Europe, and, on the other hand, do not imply such massive needs in logistics as, for instance, the automotive sector [12]. Finally, the presence of big US logistics services providers, such as Ryder, remains limited in Europe.

- Finally, logistic investments from Asia remain very concentrated in Northern Europe, for reasons of market-access-seeking. The large proportion of projects locating in Benelux countries seem to show that this region is considered as the main logistical base for the supply of the European market, especially with products imported through the harbours of the Northern Sea.

This analysis reveals the existence of various logics of location for logistical centres (see also infra): follow the relocation of manufacturing facilities in Eastern Europe; supply mature (ex: Germany) or growing (ex : Spain) markets. ; take benefit of the existence of appropriate infrastructure (road, harbour) or of the centrality in Europe for the location of logistical hubs (ex : France, United Kingdom, Benelux Countries) (see also box .

Box 4
Location criteria in logistical projects

Various survey among companies (see [AFII, 2003] show the existence of three main groups o location criteria for projects in logistics: 1) geographical proximity, depending on the case either to the production facilities or to the final market: 2) Accessibility: proximity and quality of transport infrastructure; 3) local environment criteria: good price/quality ratio for land and real estate local supply, existence of qualified manpower... The hierarchy of those criteria will vary depending on the nature of the project:

- The production support facilities (advanced suppliers warehouse on the upstream, general sales warehouse on the downstream), are by definition located very close to the factory (see the case of automotive assembly, box 4).Their location is thus over-determined but that of the production facility (which itself integrates criteria linked to logistics: accessibility, proximity to transport networks, etc.).

- For the logistical hubs dedicated to the pooling and dispatching of products towards a large number of final selling points (see box 3, the case of office supplies)., all the criteria mentioned supra will be taken into account, in the context of a two-steps decision process: 1) global choice of the region where the project has to be located, depending upon he general geographic location, and the availability of infrastructure; 2) final choice of the location, depending upon criteria such as the accessibility through transportation networks, the availability of land and qualified manpower, the presence of sub-contractor and services providers…

- For the logistical facilities dedicated to the support of one only large retailing point (e.g. reception and storage of goods before selling in the super or hypermarket), the location will of course be over-determined by that of the selling point itself.

[12] . Another reasons is that, for US manufacturing companies, majors relocation area are located Asia and Central America, Whereas eastern Europe play this role for German companies.

Bibliography

AFII, 2005, *Bilan des investissements étrangers en France en 2004,* www.investinfrane.org

AFII, 2003, *La France au cœur de la logistique européenne*, ronéo

Artous A. 2004, *Vers des stratégies globales*, Logistiques Magazine, n°193, décembre

Cnuced, 2004, *World investmement Report 2004*, Genève

Ernst and young, 2005, *European Attractiveneness Survey : Emerging Economies Take their Claim", www.Ey.com/GLOBAL/Content.nsf/International/RECH_-_Press-Release_-_European _Attractiveness_Survey_2005*

Hatem, F, 2004a, *Investissement international et politiques d'attractivité*, Economica

Hatem F. 2004b, Call centres and shared services centres in the Euromed region, Anima Studies n°10, www.animaweb.org

Hatem F., 2005a, *Le marché européen de l'investissement international : tendances récentes*, Les notes bleues de Berçy, n°287, 16 au 31 Mars, www.lesnotesbleues.org.

F. Hatem, 2005b, *Fonctions tertiaires d'entreprise : Une composante-clé de l'investissement international*, Notes bleues de Berçy, n°295, 29 au 31 juillet, www.lesnotesbleues.org

Huygues S., 2003*, L'attractivité de la France pour les quartiers généraux,* rapport au premier ministre, Ronéo, Oct.

IBM/PLI, 2005, *Global investment trends 2004* Mars, ronéo

APPENDIX
DATA ON INTERNATIONAL PROJECTS
IN SERVICES SUPPORT FUNCTIONS IN EUROPE
2002-2004

Table 11
Number of projects by kind of functions and industry, 2002-2004

	Other services	Com. offices	R&D centres	Call centres	Logist., distrib.	Adm. serv. HQ	Total Serv.	Prod.	Total
Agrifood	12	52	9	2	37	27	139	249	388
Furnitures and home appliances	2	25	2	0	27	9	65	73	138
Others	11	32	4	0	11	8	66	36	102
Other commerc., financ. services	40	162	1	36	69	52	360	24	384
Chemicals, plastics, biotech.	7	45	39	3	18	36	148	316	464
Electronic components	1	16	22	1	1	4	45	52	97
Business services	73	328	13	31	64	47	556	68	624
Automotive	13	59	39	2	41	41	195	633	828
Consumer electronics	3	25	7	4	6	12	57	62	119
Energy	5	31	3	1	5	9	54	86	140
Electric and IT equipments	84	378	80	12	40	108	702	270	972
Softwares, data proc. services	24	680	53	29	2	135	923	51	974
Machines and mechanical equipts	4	56	7	1	7	17	92	153	245
Other transport equipments	13	10	4	0	5	4	36	51	87
Pharmaceuticals	1	54	50	0	13	27	145	178	323
Metal works	2	24	1	0	11	6	44	149	193
Telecom an internet operators	4	30	4	11	0	9	58	4	62
Textile, clothing	0	24	0	0	19	11	54	64	118
Transport, storage	32	92	0	5	47	27	203	205	408
Other heavy industries	6	36	2	0	15	5	64	237	301
Total	337	2159	340	138	438	594	4006	2961	6967

Source : AFII

Table 12
Creation of jobs par kind of function and industry 2002-2004

(Thousands)	Other services	Com. offices	R&D centres	Call centres	Logist., distrib.	Adm. serv. HQ	Total Serv.	Prod.	Total
Agrifood	0,8	0,1	0,3	0,4	1,1	1,1	3,9	9,5	13,4
Furnitures and home appliances	0,1	0,0	0,0	0,0	4,1	0,1	4,3	13,8	18,1
Others	1,6	0,4	0,4	0,0	0,4	0,4	3,2	6,5	9,7
Other commerc., financ. services	1,7	2,7	0,0	8,4	9,0	3,2	25,0	1,4	26,4
Chemicals, plastics, biotech.	0,1	0,0	0,8	0,4	0,1	0,7	2,3	14,5	16,8
Electronic components	0,0	0,1	0,6	0,0	0,1	0,1	0,9	7,5	8,4
Business services	6,1	2,4	0,3	5,4	5,7	3,1	23,0	5,5	28,4
Automotive	0,4	0,2	2,1	0,1	3,0	2,4	8,2	150,7	158,8
Consumer electronics	0,7	0,1	0,3	0,1	0,1	0,6	1,8	14,2	16,0
Energy	0,1	0,1	0,0	0,4	0,1	0,4	1,1	2,4	3,4
Electric and IT equipments	4,6	1,7	3,0	1,8	0,9	4,0	16,0	37,3	53,3
Softwares, data proc. services	0,3	2,2	1,6	4,1	0,1	4,9	13,1	5,1	18,2
Machines and mechanical equipts	0,0	0,1	0,3	0,1	0,0	0,2	0,8	13,9	14,7
Other transport equipments	0,6	0,0	0,5	0,0	0,1	0,0	1,2	18,8	19,9
Pharmaceuticals	0,1	0,1	3,6	0,0	1,0	1,9	6,5	18,4	25,0
Metal works	0,1	0,0	0,1	0,0	0,2	0,3	0,7	14,3	15,0
Telecom an internet operators	1,0	0,1	0,0	2,6	0,0	1,3	5,0	0,0	5,0
Textile, clothing	0,0	0,0	0,0	0,0	1,1	0,3	1,4	12,2	13,6
Transport, storage	0,9	0,2	0,0	0,7	2,4	1,8	6,0	11,3	17,2
Other heavy industries	0,1	0,1	0,0	0,0	0,2	0,0	0,4	16,7	17,1
Total	19,4	10,6	14,0	24,5	29,6	26,7	124,7	373,9	498,5

Source : AFII

Table13
Number of projects by home country and kind of function 2002-2004

	Other services	Com. offices	R&D centres	Call centres	Logist., distrib.	Adm. serv. HQ	Total services	Product.	Total
Northern America	**137**	**893**	**149**	**65**	**70**	**329**	**1643**	**630**	**2273**
- United States	126	833	143	61	68	312	1543	569	2112
Western Europe	**160**	**930**	**142**	**62**	**312**	**180**	**1786**	**1882**	**3668**
- Germany	36	124	36	16	81	47	340	463	803
- France	16	150	28	8	54	28	284	237	521
- United Kingdom	35	145	26	10	29	21	266	145	411
- Sweden	6	61	7	6	27	7	114	83	197
Asia	**30**	**247**	**41**	**8**	**47**	**63**	**436**	**334**	**770**
- Japan	20	128	29	3	33	34	247	242	489
Others	**10**	**89**	**8**	**3**	**9**	**22**	**141**	**115**	**256**
Total	**337**	**2159**	**340**	**138**	**438**	**594**	**4006**	**2961**	**6967**
%	4,8	31,0	4,9	2,0	6,3	8,5	57,5	42,5	100,0

Source : AFII

Table 14
Creation of jobs par home country and type of function 2002-2004

(Thousands)	Other services	Com. offices	R&D centres	Call centres	Logist., distrib.	Adm. serv. HQ	Total services	Product.	Total
Northern America	**7,3**	**4,3**	**7,1**	**13,3**	**5,4**	**12,6**	**50,1**	**79,3**	**129,3**
- United States	6,5	4,1	6,8	12,9	5,3	12,5	48,2	72,0	120,2
Western Europe	**10,4**	**4,9**	**6,1**	**9,8**	**22,6**	**11,2**	**65,1**	**221,8**	**286,9**
- Germany	2,9	0,3	1,9	1,9	8,6	3,9	19,6	83,0	102,6
- France	1,6	0,8	1,2	1,1	3,5	0,8	9,1	43,9	53,0
- United Kingdom	3,5	0,4	1,2	1,3	3,6	1,9	11,8	8,9	20,7
- Sweden	0,0	0,5	0,3	1,0	3,0	0,3	5,1	7,8	
Asia	**1,1**	**1,0**	**0,7**	**1,3**	**1,4**	**1,9**	**7,4**	**61,5**	**68,9**
- Japan	0,3	0,4	0,5	0,1	1,0	0,9	3,1	36,1	39,3
Others	**0,5**	**0,4**	**0,0**	**0,1**	**0,2**	**0,9**	**2,1**	**11,3**	**13,4**
Total	**19,4**	**10,6**	**14,0**	**24,5**	**29,6**	**26,7**	**124,7**	**373,9**	**498,5**

Source : AFII

Table 15
Creation of jobs by function and host country 2002-2004

	Other services	Com. offices	R&D centres	Call centres	Logist., distrib.	Adm. serv. HQ	Total services	Product.	Total
Western Europe	**14,4**	**8,4**	**10,9**	**17,5**	**23,3**	**20,8**	**95,3**	**133,2**	**228,5**
-United Kingdom	2,7	1,9	1,4	7,2	3,5	5,4	22,1	19,0	41,1
-Spain	0,7	0,9	0,7	3,1	5,4	1,6	12,5	25,4	37,9
-France	3,6	1,3	2,2	2,4	5,0	2,1	16,6	19,5	36,1
-Germany	3,0	0,4	2,0	0,9	1,6	2,5	10,5	18,2	28,6
-Ireland	3,2	1,7	1,6	2,3	1,8	4,4	15,0	12,8	27,8
-Sweden	0,5	0,2	0,3	0,2	0,4	0,3	1,9	5,7	7,6
-Switzerland	0,1	0,1	0,4	0,0	0,8	1,2	2,6	1,6	4,2
Eastern Europe	**4,9**	**2,2**	**3,1**	**7,0**	**6,3**	**5,9**	**29,4**	**240,7**	**270,1**
-Czech Rép.	1,7	0,1	1,6	0,8	0,1	3,6	7,9	63,9	71,8
-Hungary	1,0	0,3	0,9	1,9	2,6	0,6	7,3	38,5	45,8
-Poland	0,5	1,4	0,4	0,5	2,0	1,5	6,3	42,2	48,5
-Romania	0,2	0,1	0,0	1,1	0,0	0,0	1,5	34,7	36,2
-Slovakia	0,0	0,1	0,0	1,1	0,3	0,0	1,6	35,4	37,0
Total	**19,4**	**10,6**	**14,0**	**24,5**	**29,6**	**26,7**	**124,7**	**373,9**	**498,5**

Source : AFII

Table 16
Number of projects by function and home country 2002-2004

	Other services	Com. offices	R&D centres	Call centres	Logist., distrib.	Adm. serv. HQ	Total services	Product.	Total
Western Europe	**289**	**1908**	**294**	**107**	**357**	**557**	**3512**	**1700**	**5212**
-United Kingdom	45	464	49	38	35	151	782	243	1025
-Spain	85	283	41	19	92	70	590	387	977
-France	35	181	38	8	71	53	386	282	668
-Germany	32	285	48	6	38	53	462	189	651
-Ireland	21	49	16	17	4	46	153	85	238
-Sweden	9	80	21	5	10	17	142	47	189
-Switzerland	12	66	8	2	13	54	155	31	186
Eastern Europe	**48**	**251**	**46**	**31**	**81**	**37**	**494**	**1261**	**1755**
-Czech Rép.	15	41	15	9	32	11	123	263	386
-Hungary	10	34	16	6	7	11	84	283	367
-Poland	5	62	5	2	15	7	96	214	310
-Romania	3	37	4	2	9	4	59	179	238
-Slovakia	2	13	1	6	3	1	26	112	138
Total	**337**	**2159**	**340**	**138**	**438**	**594**	**4006**	**2961**	**6967**

Source : AFII

ERROR: syntaxerror
OFFENDING COMMAND: --nostringval--

STACK:

/Title
()
/Subject
(D:20051027171309)
/ModDate
()
/Keywords
(PDFCreator Version 0.8.0)
/Creator
(D:20051027171309)
/CreationDate
(fabrice.hatem)
/Author
-mark-