International investment in Europe : an analysis of 2002-2006 trends

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SUMMARY

The year 2006 has been characterized by a new increase in international direct investment flows, which have reached 1230 billion dollars, coming close to the peak attained in 2000.

Despite the growing competition by emerging and transition economies, this increase has been especially beneficial to developed countries and especially to western Europe. The record level of international M&A, the major share of which involves target companies from developed countries, but also the increase in international greenfield projects towards Western Europe, explain those good performances.

Inside Europe, the analysis of the data collected by the Invest in France Agency's "European International Investment Monitor" lead to the following conclusions:

- 1. The mobile FDI market in Europe accounted for 2 800 development projects and a minimum of 180 000 jobs per year. There was a significant increase in the number of projects from 2002 onwards, and the numbers of jobs created increased in 2005 and 2006 after three years stability.
- 2. The biggest source of investment projects, again in numbers of jobs created, is by far Western Europe, followed by North America. The contribution in terms of job creation resulting from investment from Asia is more limited, but showed a significant increase since 2005. There is a certain amount of diversity in investment profiles according to the country of origin: the trend towards massive relocation to Eastern European countries by the German manufacturing industry, is in contrast for example to the sustained high levels of investment in Western Europe by American companies based in the services and high tech industries.
- 3. In terms of job creation, investment is dominated by development projects in manufacturing and production (68,0 % in total). However, the tertiary support services sector rates higher in terms of project numbers (64,9 %). The difference between the two figures can be explained by the much larger unit size of development projects in the production sectors.
- 4. The manufacturing sectors amount for the largest share of jobs creation (78,3 %), with the automotive and electric/electronic equipment sectors amounting alone for 37,3 % of the total. However, in recent years this contribution has declined in favour of the services sector and software industries.
- 5. Countries in Western Europe won more that three quarters of TNC investment projects in Europe between 2002 and 2006. These countries maintain a strong position with regards to high value added services and innovative sectors, as well as activities where location is dependent on geographical proximity to the market served.
- 6. Eastern European countries have benefited from increased numbers of manufacturing and production development projects, particularly in the automotive and other manpower-intense industries. Subsequently, these countries attracted more than half of the international jobs created by TNCs in Europe between 2002 and 2006. This high proportion should however be offset against the fact that the average content of these jobs in terms of qualifications and value added is significantly less than for jobs created in Western Europe (factory worker v. engineers, researchers and executives). A quick rise in the technological level of projects can nevertheless be noticed in such countries as Hungary and the Czech Republic.

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² On the basis of partial accounting of jobs created per project. Surveys and evaluations carried out lead to an estimation of a 50% cover rate by the monitors in terms of jobs.

2006 : CONTINUATION OF POSITIVE TRENDS IN INTERNATIONAL INVESTMENT

2006 saw further increases in international investment flows, according to all the indicators: FDI statistics compiled from balances of payments, international mergers and acquisitions, greenfield projects and the numbers of jobs created abroad.

A FAVOURABLE ECONOMIC ENVIRONMENT

This positive trend is due to the combined effects of several different factors which are favourable to investment:

- A positive macroeconomic trend, with sustained levels of global economic growth for the 4th year running (+5.1% in 2006 according to the IMF). This level of growth, which mainly results from dynamic business activity in developing countries (7.3%), also benefited from positive trends in industrialised countries (+3.1%), despite the decline in US growth rates for the second half of the year.
- **Favourable financial conditions**: reestablishment of margins and increases in profits (particularly in the euro zone); low rates of interest (despite a tightening of US monetary policy towards the end of the year); wealth of cash flow availability.

A SUSTAINED INVESTMENT EFFORT

These factors have favoured the continued investment effort on the part of businesses, in both their internal and external growth operations. The level of physical investments continued to rise in 2006 at a sustained rate: +4.1% in industrialised countries, compared with 4.9% in 2005. Acquisitions and mergers, which have been bolstered by increases in industrial restructuring (for example in the energy and telecom sectors) and the increase in market capitalisation, reached record levels: 3 610 billion dollars according to data published by Thomson Financial at the end of December 2006.

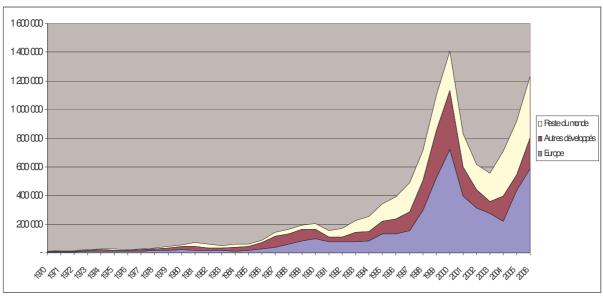
Moreover, several specific factors have played a role in the development of international investment flows: continuation of the movement towards opening up national economies to foreign firms; increasingly strong multinationals from emerging countries; rapid development on an international scale of new sectors (biotechnologies, environment...), increasingly important role of new forms of investment (private equity, hedge funds, pension funds...). Consequently, all the various indicators show a significant increase in international investment transactions.

FURTHER INCREASES IN FOREIGN DIRECT INVESTMENT FLOWS

The flows of FDI (Foreign direct investment) continued and even showed increases in the rates observed over the past three years, reaching 1 230 billion dollars (see Graph 1). Flows

have reached levels similar to all time highs observed in the year 2000 (i.e. 1 600 billion dollars), prior to the declines in 2001 and 2002.

Graph 1 World FDI inflows (million US dollars)



Source: Unctad

In terms of destination (see Table 1), the US and Western Europe in particular show the highest levels of increase in foreign direct investment flows (+78 and +123 billion dollars respectively), mainly due to record levels of mergers and acquisitions (see below).

Table 1 FDI inflows by host region (billion dollars)

Host region/economy	2004	2005	2006	Growth rate 2006/2005 (%)
World	710,8	916,3	1 230,4	34,3
Developed economies	396,1	542,3	800,7	47,7
Europe	217,7	433,6	589,8	36,0
European Union	213,7	421,9	549,0	30,1
EU-15	185,2	387,9	510,7	31,7
New 10 EU member states	28,5	34,0	38,4	12,8
United States	122,4	99,4	177,3	78,2
Japan	7,8	2,8	- 8,2	- 395,5
Developing economies	275,0	334,3	367,7	10,0
Africa	17,2	30,7	38,8	26,5
Latin America and the Caribbean	100,5	103,7	99,0	- 4,5
Asia and Oceania	157,3	200,0	229,9	15,0
West Asia	18,6	34,5	43,3	25,5
South, East and South-East Asia	138,0	165,1	186,7	13,1
China	60,6	72,4	70,0	- 3,3
Hong Kong, China	34,0	35,9	41,4	15,4
Singapore	14,8	20,1	31,9	58,8
South-East Europe and CIS	39,6	39,7	62,0	56,2

Source: Unctad - provisional estimates for 2006

Increases in investment flows in developing economies are more modest (+10%). Inward investment flows into Asia showed a slight increase - on a level which was already high – as was the case for emerging Eastern European and African countries. Flows significantly increased in ex-CEI countries and Turkey. However, investment flows into Latin America declined, perhaps due to a political climate which is less favourable to foreign investment.

RECORD LEVELS OF INTERNATIONAL MERGERS AND ACQUISITIONS

This increase in FDI flows can itself be largely explained by increases in the numbers of international mergers and acquisitions, which reached the record level of 1 314 billion dollars (see Graph 2). There is a heavy concentration of transactions in two particular regions: Europe and the United States, where acquisitions of local companies by non-residents reached the record levels of 744.4 and 215.2 billion dollars respectively.

1 400 000,0 14 000 12 000 1 200 000.0 1 000 000.0 10 000 800 000.0 8 000 Amounts (million dollars) Numbers 600 000,0 6 000 400 000.0 4 000 200 000,0 2 000 0, 1996 1997 1998 1999 2000 2001 2002 2003 2004 2005 2006

Graph 2
International merger-acquisitions in the world since 1996

Source: Thomson Financial

Sectors which experienced the highest levels of transactions in 2006 included: the energy industry (electricity in particular), metals, raw materials, chemicals, transport, and communications and transport equipment (see a list of the main operations initiated in 2006 in Table 2).

Table 2
Main international merger-acquisitions initiated in 2006

Rank Value (\$mil)	Target Name	Target Industry Sector	Target Nation	Acquiror Name	Acquiror Industry Sector	Acquiror Nation
71,4	Endesa SA	Electric, Gas, and Water Distribution	Spain	E ON AG	Electric, Gas, and Water Distribution	Germany
39,5	Arcelor SA	Metal and Metal Products	Luxembourg	Mittal Steel Co NV	Metal and Metal Products	Netherlands
30,2	BAA PLC	Air Transportation and Shipping	United Kingdom	Grupo Ferrovial SA Caisse de Depot et Placement GIC Special Invest Pte Ltd	Investment & Commodity Firms, Dealers, Exchanges	Spain
26,6	Scottish Power PLC	Electric, Gas, and Water Distribution	United Kingdom	Iberdrola SA	Electric, Gas, and Water Distribution	Spain
18,8	Gallaher Group PLC	Tobacco Products	United Kingdom	JTI(UK)Management Ltd	Investment & Commodity Firms, Dealers, Exchanges	United Kingdom
18,2	Falconbridge Ltd	Mining	Canada	Xstrata PLC	Mining	Switzerland
18,0	Inco Ltd	Mining	Canada	Cia Vale do Rio Doce SA	Mining	Brazil
15,5	BOC Group PLC	Chemicals and Allied Products	United Kingdom	Linde AG	Machinery	Germany
14,7	Lucent Technologies Inc	Communications Equipment	United States	Alcatel SA	Communications Equipment	France
14,6	Scania AB	Transportation Equipment	Sweden	MAN AG	Transportation Equipment	Germany

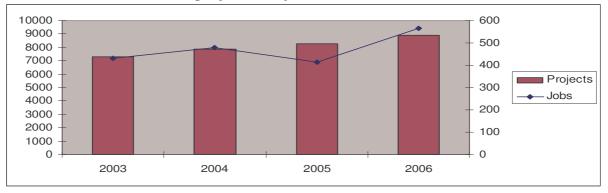
Source: Thomson Financial

Nb: some of those operations were still pending at the beginning of 2007

Increase in greenfield projects and job creation abroad

There was also a significant increase in the other component of international investment flows, physical projects also known as "greenfield" projects. According to OCO Consulting, the number of internationally mobile greenfield projects announced around the world could number 9 000 for 2006, which is an increase of 7.3% compared to 2005. The increase in the number of jobs created could be even higher (+34.6%), and reach a record level of 566 000 (see Graph 3).

Graph 3
Number of international projects and jobs created abroad in the world 2003-2006



Source: OCO consulting (estimates for 2006). Statistics on employment remain uncomplete due to missing informations.

The IT sectors (including electronics) and financial services sectors both experienced particularly high levels of increase. In terms of nature of business activity, the large increase in numbers of projects in the "business services" sector (logistics, distribution, call centres and R&D) is in contrast to the more modest increase in the numbers of production facilities.

These positive trends have been beneficial to Western Europe in particular, where job creation linked to greenfield projects increased by almost 35% in 2006, according to OCO Consulting, despite ever strong competition from emerging countries in Asia and transitional East European countries. The size of the European market and the attractiveness of Europe for high added value activities which require highly qualified manpower, explain this strong performance.

Globaly, western European countries are nevertheless outpassed by Asia, and even by eastern Europe in terms of job creation by foreign companies (see Box 1)

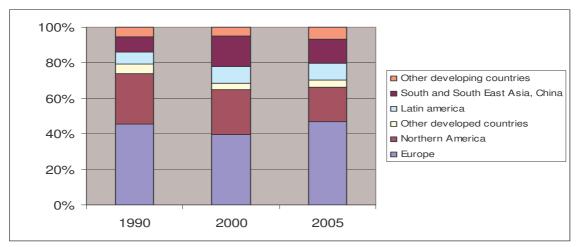
Box 1

Western Europe : Predominance in terms of FDI flows, but not in terms of job creation or greenfield projects

Developed countries, especially in Europe, remain by far the biggest recipients of FDI flows, despite the fact that these are increasingly in the form of acquisitions and mergers, compared with developing countries. This predominance is particularly evident in FDI stocks, but also, as seen before, on recent flows (see Graph 4).

It remains that these statistics, including movement of capital and Mergers and Acquisitions, are badly adapted to measuring productive investment in real terms. The data bases which are collated to this effect by consultants and promotion agencies (IBM/PLI, Ernst & Young) provide conclusions which are significantly convergent, and not very encouraging for Western Europe. IBM/PLI statistics for example show that, for the past several years, international projects globally tend to create a much higher number of jobs in Asia (China, India), and to a lesser extent in Eastern Europe, than in Western Europe, despite a sharp increase of job creation in this regions in 2006 (see Table 3).

Graph 4
Breakdown of world FDI inward stocks by home region



Source: Unctad, World Investment Report 2006

Table 3
Breakdown of job creation abroad in the main host regions by international investors

	Source					
Region	OCO Consulting(*)	IBM/PLI (**)				
Africa	3,0	2,0				
Middle East	1,0	1 ,0				
Developing Asia-Pacific	40,7	44,5				
Developed Asia-Pacific	2,6	2 ,0				
Western Europe	12,7	11 ,0				
Central and Eastern Europe	22,2	16,5				
Northern America	8,9	15,0				
Latin Amerique Latine & Caraïbean	9,0	8,0				
World total	100,0	100,0				

(*) 2003-2006 data. For 2006: three first quarters. (**) 2004-2005 data.

II – THE EUROPEAN INTERNATIONAL PROJECTS MARKET: UPTURN CONFIRMED IN 2006

General trends

Regarding Europe, the IFA Monitor statistics show a significant increase in the flow of job created abroad during this period: from 161 0000 in 2002 to more than 225 000 in 2006 (see Table 4). The progression has even been quicker in terms of projects: from 2100 to 3885 for all the projects, and from 862 to 1280 for the projects with informations on jobs.

Table 4
Number of international projects and jobs created in Europe (2002-2006)

	2002	2003	2004	2005	2006
Projects	2103	2476	2383	3056	3885
Among which: with informations on jobs	862	930	912	1136	1280
Jobs created abroad (thousands)	164,6	158,1	161,0	180,6	226,8
Average size (projects with informations on jobs)	190,9	170,0	176,6	159,0	177,2

Source : AFII

Box 2 The IFA European international investment monitor

This "Monitor" was set up in 2001 by the IFA "Economic Intelligence" team, and are used to collect information on all "internationally mobile" development projects (ie. development projects which are susceptible to be competed for by potential host countries), announced by trans-national corporations (TNC's) in Europe, outside their national territory.

Information is gathered by reviewing the international economic press and the wide variety of information available on the Internet (press agencies, company websites...). The data collection covers all European countries, including the Baltic States, but excluding other ex-CIS countries, Malta, Cyprus and Turkey. Each project is reviewed using around twenty criteria (date of announcement, sector, investment company, sector/industry, country of origin and country of departure, number of jobs being created, level of capital being invested, etc.). However, information on the amounts of capital being invested and numbers of jobs involved is not always available for each project.

The review presented in this article only covers new developments and extension projects, and does not include mergers and acquisitions (M&A's), partnerships or sub-contracting. The statistics are "raw" to the extent that only new developments and extension projects are taken into account, and site closures and reductions in employment are not. Comparisons with other similar market tools (Ernst & Young's "European Investment Monitor", IBM/PLI "Gild" global base) demonstrate a rather good level of compatibility of results. However, comparison is not possible with FDI financial statistics which are not geared to measuring concrete investment projects.

A predominant role of manufacturing, but a rising contribution of services

Manufacturing activities still amount for the major share of jobs creation abroad in Europe linked to "internationaly mobile » projects, with 78.3 % of the total for the 2002-2006 period. Two activities – automotive and electric/electronic equipment – amount alone for 37.3 % of jobs creation (see Table 5). Nevertheless, due to a relatively high average size of projects in terms of jobs, the share of the manufacturing activities is lower in terms of projects (40.2 %).

Two trends can nevertheless be observed (see Graph 5):

- A rise in services activities (software, logistics, financial and commercial services among others), the share of which in jobs creation has risen from 15,8 % et 26,3 % between 2002 and 2006.
- A rise in the share of high added value and innovation-intensive activities. If we put together, for instance, on the one hand the five manufacturing sectors and on the other hand the two services sectors with the highest added value per capita, the share of those two groups in the total job creation abroad in Europe has significantly risen between 2002 and 2006: respectively from 18,4 % to 22,8 % and from 9,2 % to 14,3 %. On the opposite, the share of mid and low-tech manufacturing sectors has declined, from 65.7% to 50.9 %

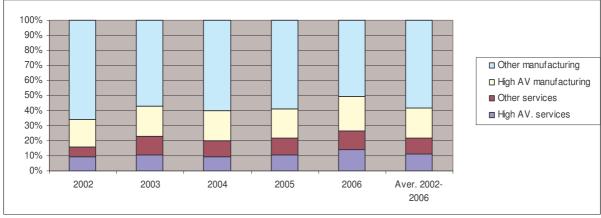
Those two trends can be explained by three main reasons: 1) a rising share of services and innovation activities in the world GDP; 2) the quick internationalization path of many services companies; 3) the fact that western Europe is especially attractive, as compared to other regions in the world, to projects in those activities.

Table 5
Sectoral breakdown of projects and job creation abroad in Europe 2002-2006 (%)

Sector	Jobs	Projects
Agro-food	3,2	4,8
Home appliances, consumer goods	2,8	2,1
Biotechnologies	0,7	0,9
Chemicals, plastics	2,7	5,4
Electronic components	2,7	1,7
Automotive	28,0	9,9
Consumers electronics	6,1	2,2
Energy, other utilitie	1,5	3,0
Electrics and electronic equipments, computers	9,3	9,8
Machines and mechanical equipments	3,9	4,6
Other transportation materials	3,8	1,4
Health products and cosmetics	3,9	4,0
Metal works	2,8	2,9
Textile, garments	2,6	1,7
Other heavy industries, printing	4,3	5,5
Total Manufacturing	78,3	59,8
Other financial and services activities	5,3	8,3
Other services to business	6,1	8,7
Software and information services	4,9	15,8
Telecom operators, internet	1,4	1,3
Transport and warehousing	3,9	6,2
Total Services	21,7	40,2
Total	100,0	100,0

Source: Invest in France Agency

Graph 5
Breakdown of jobs creation in Europe by activity



Source: Invest in France Agency. High AV manufacturing: electronic components, electric and electronic equipments, aerospace, pharmaceutical products, biotechnologies; High AV services: ingeneering and consulting, software and IT services

The rising Importance of the « production » function

A company does not simply invest in the direct production of the goods or services that it sells. It must also set up "tertiary support" activities: R&D centres, administrative offices, company headquarters, sales offices, logistics and distribution... A review of the IFA data (see Table 6) shows that the majority of projects (64.5 %) are linked to these activities (sales offices in particular). However, given the relatively small average unit size, contributions in terms of job creation remain limited in these sectors. Production is still by far the main source of job creation abroad (68.1 %).

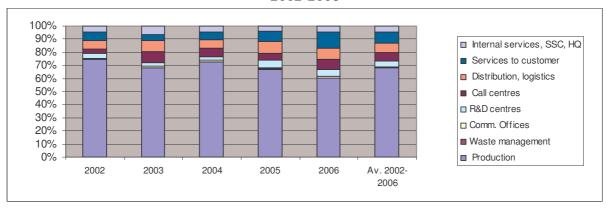
Table 6
Breakdown of projects and jobs creation abroad by business function in Europe 2002-2006

Function	Jobs	Projects
Production	68,0	35,1
Waste management	0,1	0,4
Total Production	68,1	35,5
Comm. offices	1,0	33,7
R&D centres	4,2	5,3
Call centers	6,3	2,2
Distribution, logistics	7,6	7,6
Services to customer	8,0	9,0
Internal services, SSC, HQ	4,6	6,7
Total services	31,9	64,5
Total	100,0	100,0

Source: Invest in France Agency.

A structural upward trend in service activities should however be noted: their share in jobs creation rose from 25,4 % in 2002 to 39,7 % in 2006: this trend can be noted in all functions, but especially noticeable in services to customer and all centres (see Graph 6).

Graph 6 Number of jobs created abroad by function in Europe, 2002-2006



Source: Invest in France Agency.

A rather concentrated market in terms of job creation, but with many small projects

Dualism of the market

The FDI "market" is divided between a segment made up of a relatively small number of large-scale projects (generally linked to manufacturing production sites), and a segment made up of a large number of small-scale projects (generally linked to the service industry, for instance sales offices).

This duality becomes clearly evident when comparing the distribution of development projects and job creation according to project size (see Table 7): although the percentage of medium and small sized projects (less than 100 jobs created) is largely dominant (62,8 % of total), more than 40% of job creation is linked to large-scale projects (more than 500 jobs created).

Table 7
Breakdown of international projects and jobs creation abroad by size of project, 2002-2006

Size of projects (number of jobs)	Jobs	Projects
1 to 25	2,1	25,7
26 to 50	4,3	18,5
51 to 100	9,0	18,6
101 to 250	19,5	19,2
251 to 500	24,5	11,5
501 to 1000	20,4	4,5
1001 and +	20,3	1,9
Total	100,0	100,0

Source: Invest in France Agency

Rather strong concentration

In general, the market can be considered as being rather concentrated, either in terms of development projects or actual companies. For example, 5% of the largest projects account for some 35.8 % of job creation. However, 30% of projects (the smallest) account for less than 3 % of job creation (see Table 8).

This concentration pattern applies to all activities, although it is slightly less pronounced in some tertiary activities such as commercial offices (job creation being divided between a high number of small-scale projects) and call centres (small variance in terms of project size).

Variable size of projects depending on sectors and functions

Project size varies according to the sector and function concerned:

- *Functions*. The average size of manufacturing production sites (automotive, electrical goods, textiles and clothing in particular) is significantly higher than sites linked to tertiary activities with the exception of call centres (See Table 9).
- Sectors. There are also major variations between different sectors: chemical production, other base industries and the agro-food industries for example, have facilities which are significantly smaller than the average size of factory units (see Table 10).

Table 8
Cumulated number of jobs created abroad in Europe by decreasing size of projects, 2002-2006

% of projects	% of jobs
1,0	13,3
5,0	35,8
10,0	50,2
20,0	68,1
30,0	79,2
50,0	91,6
70,0	97,2
90,0	99,5
100,0	100,0

Source: Invest in France Agency.

Table 9
Average size of international projets in Europe by business function, 2002-2006

	-
Function	Total
Production	226,8
Waste management	40,8
Total Production	225,5
Comm. Offices	18,6
R&D centres	97,7
Call centers	234,8
Distribution, logistics	160,7
Services to customer	133,8
Internal services, SSC, HQ	116,9
Total services	117,0
Total	174,0

Source: Invest in France Agency.

Table 10 Average size of international projects in Europe by sector 2002-2006

Sector	Average size
Agro-food	110,3
Home appliances, consumer goods	184,0
Biotechnologies	121,8
Chemicals, plastics	83,6
Electronic components	192,6
Automotive	302,5
Consumers electronics	376,2
Energy, other utilitie	154,7
Electrics and electronic equipments, computers	165,7
Machines and mechanical equipments	121,8
Other transportation materials	352,9
Health products and cosmetics	143,8
Metal works	134,4
Textile, garments	224,8
Other heavy industries, printing	121,9
Total Manufacturing	191,6
Other financial and services activities	149,8
Other services to business	140,5
Software and information services	99,0
Telecom operators, internet	182,7
Transport and warehousing	133,2
Total Services	130,7
Total	174,0

The dominant role of european investors

European companies account for the highest proportion of foreign job creation on the continent: 55.45% compared to only 26.5% created by North American companies and 16,3% by Asian companies (see Table 11). Not only are businesses originating from the continent by far the largest outward investors in the world (see Box 3), but they also concentrate their international investment developments around their home territory, as can be seen from the example of Germany (see Graphs 9 and 10). Among the FDI source countries, Germany is clearly ahead followed by France, and then the UK.

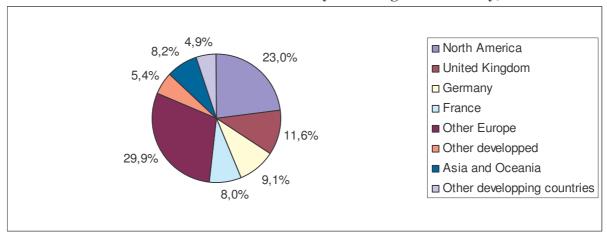
Table 11
Breakdown of job creation abroad in Europe by home region

Region	2002	2003	2004	2005	2006	Total jobs	Total projects
Northern America	27,5	23,1	29,7	21,5	29,7	26,5	31,3
Other Asia	2,9	7,2	7,0	15,0	9,7	8,6	4,5
Japan	8,1	8,7	7,6	5,8	7,6	7,5	6,1
Oceania	0,0	0,1	0,6	0,2	0,2	0,2	0,7
Asia	11,0	16,0	15,2	21,0	17,5	16,3	11,4
Others	4,4	1,6	1,8	1,2	0,7	1,8	2,4
Benelux	4,3	5,5	4,1	2,5	5,3	4,4	5,5
Eastern Europe	1,2	0,3	0,6	0,7	0,8	0,7	2,5
Northern Europe	5,5	4,7	6,7	7,4	5,7	6,0	7,1
Southern Europe	4,4	7,2	5,8	6,8	5,6	5,9	7,1
France	9,2	12,2	7,4	10,0	4,3	8,3	7,1
Britain Islands	4,8	5,7	6,9	7,1	7,2	6,4	7,4
Germ. countries, Sw.	27,8	23,8	21,8	21,7	23,1	23,6	18,4
Europe	57,2	59,3	53,3	56,3	52,0	55,4	54,9
Total	100,0	100,0	100,0	100,0	100,0	100,0	100,0

Box 3 European companies, world leaders in international investment

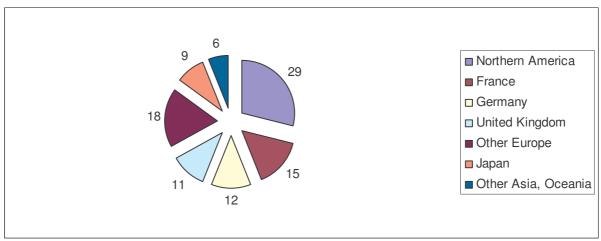
Western Europe remains by far the world's leading provider of outward FDI today. In 2005 it accounted alone for some 58.7% of FDI outward stocks and some 56 of the 100 largest Trans-National Corporations (TNC's), outstripping North America and North Asia (see Graphs 7 and 8). Germany, France and UK together account for 43.7% of worldwide outward FDI stocks and 38 of the 100 largest TNC's.

Graph 7
Breakdown of FDI outward stocks by home region or country, 2005



Source: Unctad, World Investment Report, 2006

Graph 8
Breakdown of the 100 major multinational companies by home country, 2005

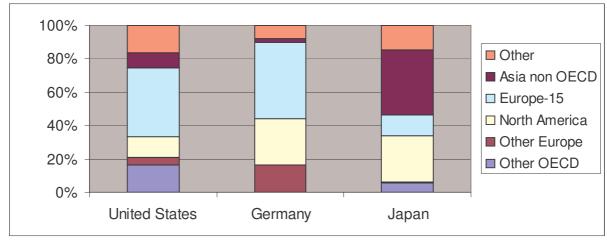


Source: Unctad, World Investment Report, 2006

North America is in second position with 31.3% of development projects and 26.5% of jobs created (the US being by far the leading investor). American companies, which represent a quarter of total worldwide FDI stock outflow, continue to strongly favour Europe in terms of their international development strategy (see Graphs 9 and 10). However, the flow of projects varies from year to year, with a slowdown in 2005 followed by a sharp upturn in 2006.

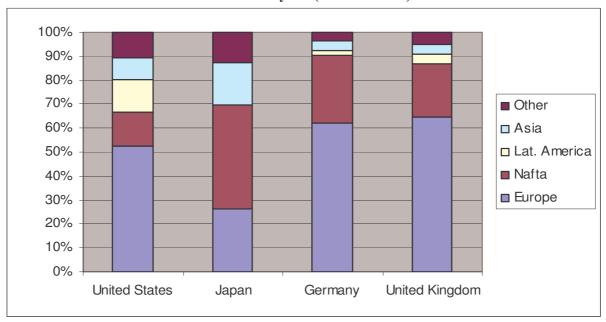
Finally, Asian firms still only account for a limited proportion of FDI in Europe, with 11.4% of development projects and 16.3% of jobs created. This marginal situation can be explained by the relatively low level of Asian FDI outflow and the relatively low priority given to European locations in Far Eastern companies' international development strategies: they tend to favour their home region, followed by North America, as can be seen from the example of Japan (see Graphs 9 and 10). IFA data monitors show, however, a growth of FDI projects from the "other Asia" region (notably from Korea, and, to a lesser extend, Peoples' Republic of China, India and other South-east Asian countries).

Graph 9
Geographical breakdown of jobs abroad for three countries of origin



Source: OECD, 2001

Graph 10
Breakdown of FDI outward stocks depending on the home country
Last known year (2002 or 2003)



Source: OCDE, 2004

The category « others » includes Latin America for japanese outward FDI.

Various investment profiles according to the home region or country

Company strategies for development locations vary widely according to regions and countries of origin (see also Tables 12 and 13):

North American investment outflows are clearly more geographically orientated towards Western Europe (57.5 % of jobs created) than the average. There are two main reasons for this:

- 1) Levels of investment in tertiary and "high tech" activities which are more likely to be located in Western Europe than in Central and Eastern European countries (CEC's) are particularly high in American companies. If the traditional service sectors (software, consulting, transport, etc.) are combined with company in-house tertiary activities (R&D centres, headquarters, logistics networks, call centres, etc.), together they account for half of all jobs created by US companies on the continent: this is a much higher proportion than European multinationals. The biotechnology, IT and pharmaceuticals sectors also account for a high percentage of North American investment flows.
- 2) In the traditional manufacturing industries, US TNC's also follow the trend of relocating production to Eastern European countries. However, not to the same extent as say the German automotive industry. To reduce production costs, US companies naturally turn to Asia or Mexico. When they do choose to manufacture in Europe, it is usually in order to get access toquality resources or to be close to their markets, and these criteria generally favour Western Europe.

Investments from Germanic countries and Swizerland are dominated by the manufacturing industries (automotive, electrical and electronic equipment, etc.). Companies in this sector have developed large-scale relocation strategies towards Eastern Europe in order to benefit from national compatibilities with Germany (low manpower costs) and, to a lesser extent, to access the local market. This explains the high level of Germanic investments in Eastern European countries (which have hosted 67.9% of jobs created in Europe by those firms between 2002 and 2006).

Japanese and Korean companies have also focused to Eastern European countries their European investments in manufacturing production activities, in order to set up low cost production sites to supply the continent as a whole. For example, 74.3% of jobs created by Asian companies in Europe between 2002 and 2006 have been based in Eastern European countries.

British investment outflows, which are highly service industry based due to the importance of English TNC's in these sectors (and their weakness in the manufacturing industries) have, like American TNC's, an above-average density in Western Europe: 65.05% of British job creation between 2002 and 206 has been concentrated in Western Europe, primarily in the service industries

Table 12
Geographical breakdown of job creation abroad in Europe depending on the home region, 2002-2006

Destination Origine	Other eastern Europe	Central- Eastern Europe	Total East	Benelux	Northern Europe	Southern Europe	France	Brit. Islands	Germ. Count., SW	Total West	Total
Northern America	13,6	29,0	42,5	3,7	3,3	6,7	8,0	25,6	10,2	57,5	100,0
Other Asia	16,2	64,3	80,5	2,5	0,7	3,6	2,4	6,0	4,4	19,5	100,0
Japan	18,6	50,5	69,0	2,6	1,2	8,9	5,2	9,3	3,8	31,0	100,0
Oceania	21,7	0,0	21,7	0,0	0,0	1,6	9,9	38,1	28,7	78,3	100,0
Asia	17,3	57,1	74,5	2,5	0,9	6,0	3,8	8,0	4,4	25,5	100,0
Others	39,5	29,5	69,0	1,1	0,2	16,0	2,4	8,6	2,8	31,0	100,0
Benelux	14,4	24,2	38,7	7,5	0,4	13,0	13,4	14,6	12,4	61,3	100,0
Eastern Europe	47,1	44,6	91,7	0,6	0,6	0,5	0,6	3,6	2,3	8,3	100,0
Northern Europe	18,6	39,5	58,1	2,4	6,7	9,8	9,1	5,8	8,0	41,9	100,0
Southern Europe	31,4	36,7	68,2	1,2	0,1	10,1	11,5	2,9	6,0	31,8	100,0
France	29,0	19,8	48,8	3,3	1,2	24,9	1,7	7,5	12,6	51,2	100,0
Britain Islands	9,5	25,5	35,0	13,6	3,6	11,6	9,6	17,9	8,8	65,0	100,0
Germ. countries, Sw.	25,1	42,9	67,9	2,0	0,9	8,1	8,2	5,8	7,2	32,1	100,0
Europe	23,3	34,9	58,2	3,9	1,7	11,7	8,1	7,8	8,5	41,8	100,0
Total	20,0	36,9	56,9	3,6	2,0	9,5	7,3	12,6	8,2	43,1	100,0

Source: Invest in France Agency

Table 13 Breakdown of job creation abroad by sector in Europe depending on the home region, 2002- $2006\,$

	North. Am.	Other Asia	Japan	Total Asia	Benel	North. Europe	Southern Europe	France	Brit. islands	Germ count., Sw.	Europe	Total
Agro-food	2,6	0,6	0,4	0,5	11,0	3,9	4,2	3,6	8,2	1,8	4,2	3,2
Home appl., consumer goods	2,1	1,0	0,1	0,7	6,7	13,9	4,8	0,5	0,3	2,1	3,7	2,8
Biotechnologies	2,2	0,0	0,0	0,0	1,3	0,1	0,2	0,0	0,1	0,0	0,2	0,7
Chemicals, plastics	2,7	0,9	1,9	1,4	3,7	4,1	3,6	1,5	3,3	2,7	2,9	2,7
Electronic components	4,3	3,7	1,6	2,9	5,1	1,8	0,7	0,6	1,1	2,3	1,9	2,7
Automotive	20,3	20,3	62,2	39,5	7,1	12,2	27,3	37,3	5,1	42,1	29,0	28,0
Consumers electronics	1,1	29,9	14,3	22,3	4,5	9,4	13,9	2,4	0,0	1,1	3,7	6,1
Energy, other utilitie	1,1	0,1	0,0	0,1	5,1	1,9	4,0	0,4	0,4	2,4	2,2	1,5
Electric/lectronic eq., comput.	12,9	23,5	6,2	15,6	2,6	10,3	1,8	5,0	2,9	7,5	5,9	9,3
Machines, mechanical eq.	2,5	0,3	6,4	3,1	2,4	10,0	3,9	1,6	2,6	6,2	4,9	3,9
Other transp. materials	4,0	2,0	0,1	1,1	0,5	1,1	1,0	17,6	0,9	3,3	4,5	3,8
Health products, cosmetics	6,4	0,2	1,3	0,7	1,2	4,5	1,5	3,8	10,0	2,7	3,7	3,9
Metal works	2,5	0,6	2,6	1,6	6,2	2,4	5,6	2,8	1,3	2,6	3,3	2,8
Textile, garments	0,5	0,0	0,1	0,0	1,8	2,5	7,6	2,7	4,1	3,1	3,5	2,6
Other heavy ind . printing	2,0	0,6	0,9	0,8	3,9	9,2	12,8	2,0	4,8	5,8	6,2	4,3
Total Manufacturing	67,1	83,7	98,2	90,1	62,9	87,3	92,9	81,8	45,0	85,8	79,6	78,3
Other fin., comm active.	8,6	1,3	0,0	0,9	7,5	1,8	1,9	4,5	14,8	4,4	5,3	5,3
Other services to business	11,1	3,6	0,7	2,2	7,9	7,2	0,3	9,1	10,1	2,3	5,0	6,1
Software and inf. services	11,0	8,6	0,6	4,9	2,9	0,8	0,2	2,2	3,4	2,4	2,2	4,9
Telecom oper., internet	0,4	1,2	0,0	0,6	2,5	0,7	3,0	0,2	7,7	1,6	2,2	1,4
Transport, warehousing	1,9	1,5	0,4	1,3	16,3	2,2	1,6	2,2	19,0	3,4	5,8	3,9
Total Services	32,9	16,3	1,8	9,9	37,1	12,7	7,1	18,2	55,0	14,2	20,4	21,7
Total	100,0	100,0	100,0	100,0	100,0	100,0	100,0	100,0	100,0	100,0	100,0	100,0

Western Europe attract around three-quarters of the projects

Over the period 2002-2006, countries in Western Europe attracted more than three quarters of all development projects, but less than half of total jobs created (see Tables 14 and 15). These percentages remained relatively stable during the period, with a high point in 2003, followed by a downturn in 2004 which gained momentum in 2005.

Table 14
Breakdown of job creation abroad by host region in Europe, 2002-2006 (%)

	2002	2003	2004	2005	2006	Total
Other eastern Europe	16,8	18,0	25,6	19,2	20,6	20,0
Central-eastern Europe	42,7	31,0	29,2	42,2	37,9	36,9
France	7,2	8,0	7,2	6,7	7,3	7,3
Benelux	3,5	4,5	3,7	4,6	2,1	3,6
Northern Europe	2,7	1,6	3,5	1,1	1,4	2,0
Southern Europe	11,4	10,1	10,6	6,8	9,1	9,5
Britain Islands	11,2	18,8	12,8	8,2	12,5	12,6
Germ. Countries, Sw.	4,4	8,0	7,4	11,2	9,1	8,2
Total	100,0	100,0	100,0	100,0	100,0	100,0

Source: Invest in France Agency

Table 15 Breakdown of projects abroad by host region in Europe, 2002-2006

	2002	2003	2004	2005	2006	Total
Other eastern Europe	9,8	8,1	11,7	13,3	14,8	12,0
Central-eastern Europe	16,2	14,4	15,4	17,6	15,8	15,9
France	12,9	15,4	14,2	15,2	12,9	14,1
Benelux	7,3	8,9	8,0	7,6	6,8	7,6
Northern Europe	5,8	5,8	6,3	5,2	5,1	5,6
Southern Europe	17,9	14,9	13,4	10,6	11,9	13,3
Britain Islands	17,5	19,2	17,7	15,5	16,2	17,0
Germ. Countries, Sw.	12,6	13,2	13,4	15,1	16,4	14,5
Total	100,0	100,0	100,0	100,0	100,0	100,0

Globally, the larger unit size for projects in Eastern Europe (290 jobs per project compared to 114 in Western Europe)³ can be explained by the higher proportion of large-scale factory development projects, and also by a higher job concentration in every category of development project (see Table 16).

Table 16
Average size of projects by function and host region (2002-2005)

Function	Total	Total	Total
Host region	East	West	Europe
Production	316,4	136,8	226,8
Waste management	71,3	32,7	40,8
Total Production	315,6	135,6	225,5
Comm. offices	19,9	18,4	18,6
R&D centres	163,2	79,2	97,7
Call centers	330,4	207,0	234,8
Distribution, logistics	246,1	143,8	160,7
Services to customer	203,8	118,3	133,8
Internal services, SSC, HQ	353,0	89,3	116,9
Total services	205,4	99,4	117,0
Total	290,1	113,9	174,0

Source: Invest in France Agency

Finally, it should be noted that the creation of new sites is significantly higher in Eastern European than in Western Europe (see Table 17).

³Calculations based on projects providing job creation data.

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 $Table\ 17$ Share of new « greenfield » projects in jobs creation depending on the host region , 2002-2006

Host Region	Jobs	Projets
Other eastern Europe	87,1	89,2
Central-eastern Europe	77,6	82,4
Total East	81,0	85,3
Benelux	62,9	84,0
Northern Europe	57,8	87,5
Southern Europe	85,4	87,2
France	46,5	66,0
Britain Islands	65,5	82,9
Germ. Countries, Sw.	65,7	85,5
Total WEST	66,1	81,4
Total	74,6	82,5

EMERGENCE OF A NEW GEOGRAPHICAL SPECIALISATION MODEL

An analysis by sector/industry and activity shows a marked difference in profile between Eastern and Western Europe (see Tables 18 and 19). Eastern Europe attracts more production projects, particularly in low or medium technology based activities (automotive and electrical and electronic equipment industries in particular). Western Europe attracts a higher proportion of service industries, high tech projects, corporate functions (R&D? HQ, etc.), as well as activities whose location is dependent on proximity to the final market.

These contrasting profiles highlight the existence of differing location strategies within multinational companies: a desire to benefit from low cost production possibilities in Eastern European countries by setting up manpower-intense activities in these countries, combined with strategic access to local markets and utilisation of the high level of skill available in Western European countries by setting up R&D centres, logistics and distribution networks, company headquarters etc. there. This specialisation towards services is particularly evident in the British Islands, where the service sectors account for one out of every two jobs created.

Table 18
Breakdown of jobs creation in Europe by function depending on the host region, 2002-2006

	Production	Waste management	Total Prod.	Comm. Offices	R&D Cent.	Call centres	Distrib., logistics	Serv. To customer	Int. serv. SSC, HQ	Total Services	Total
Other eastern Europe	25,9	21,9	25,9	7,7	7,9	12,7	5,0	6,2	6,2	7,5	20,0
Central-eastern Europe	44,0	14,8	44,0	5,6	29,0	19,0	20,3	21,4	25,4	21,7	36,9
Total East	69,9	36,7	69,9	13,3	36,9	31,7	25,3	27,6	31,6	29,2	56,9
Benelux	1,9	1,3	1,9	5,3	4,3	2,1	18,5	3,4	5,1	7,2	3,6
Northern Europe	1,6	0,0	1,6	6,3	2,9	1,5	2,7	2,4	4,6	2,8	2,0
Southern Europe	8,7	0,0	8,7	8,4	10,7	18,4	12,6	6,9	7,7	11,2	9,5
France	5,0	37,4	5,1	25,6	8,5	10,8	11,7	16,4	6,2	11,9	7,3
Britain Islands	6,9	18,2	6,9	25,0	19,5	32,0	14,6	28,9	28,7	24,7	12,6
Germ. Countries, Sw.	5,9	6,4	5,9	16,2	17,2	3,4	14,5	14,4	16,1	12,9	8,2
Total WEST	30,1	63,3	30,1	86,7	63,1	68,3	74,7	72,4	68,4	70,8	43,1
Total	100,0	100,0	100,0	100,0	100,0	100,0	100,0	100,0	100,0	100,0	100,0

Source: Invest in France Agency

Within each of these large groups (Eastern and Western Europe), there are clearly marked differences according to sub-region or country:

1) Within Eastern European countries, two trends of differing nature :

- On the one hand, there is a migration towards new host countries (Romania, Bulgaria and particularly Poland since 2005) by manufacturing investments which are a source of large increases in job creation;
- On the other hand, there is an increase in services or tertiary sectors in first generation host countries (Hungary, Czech Republic...), a trend which still appears timid but which seemed to gain ground since 2005.

These two trends seem to indicate the beginning of a structural convergence on the Czech and Hungarian economies with those in Western Europe: increases in manpower costs reducing the economic appeal of these countries for traditional manufacturing development projects, compensated by an "upgrading" of these economies towards more service-based and value added-based activities.

2) Regarding Western European countries, they present quite diverse profiles of specialisation .

The British Isles, which are the recipients of some 12.6% of total job creation over the 2002-2006 period, are more orientated towards hosting service sector activities: administrative services, call centres, software, other business services...

Countries in Southern Europe (particularly the Iberian Peninsula), which are the recipients of some 9.5% of total job creation, are more orientated towards hosting manpower-intense manufacturing activities (automotive, other transport equipment), as well as call centres. However, they only attract a low proportion of service activities or high value added activities (pharmaceuticals,...). This region therefore is particularly susceptible to competition from Eastern European countries where manpower costs are low.

- *Germanic countries and Swizerland* (8,2% of jobs created) are more orientated towards hosting superior tertiary activities (R&D, decision centres,...) some high tech manufacturing production activities (aerospace, pharmaceuticals) and sectors which are traditional in this region (chemicals,...).
- **Benelux countries** (3.6% of jobs created), are heavily specialised in the logistics sector as well as certain high value added sectors such as pharmaceuticals.
- Countries in Northern Europe (2.0% of jobs created) are more attractive to superior tertiary activities, high value added manufacturing industries (biotechnology,...) and activities related to their traditional skills (metal working,...).
- *Finally, France* performs well in all of the tertiary sector activities, as well as in the agrofood industry and various medium and high tech based industries, such as machinery, pharmaceuticals, aerospace equipment.

Table 19
Breakdown of jobs creation by sector depending on the hsot region 2002-2006 (%)

Host region Sector	Oth. East Europe	Central East. Eur.	Total East	Benelux	North. Europe	South. Europe	France	Brit. Islands	Germ . Count., Sw.	Total West	Total
Agro-food	18,4	25,6	44,0	4,4	2,0	16,7	9,5	12,4	11,0	56,0	100,0
Home appliances, consumer goods	36,1	39,1	75,1	1,8	0,0	6,8	6,7	3,1	6,5	24,9	100,0
Biotechnologies	1,7	0,1	1,8	3,8	12,5	1,7	5,7	52,2	22,5	98,2	100,0
Chemicals, plastics	15,6	29,4	45,0	4,7	3,4	18,7	8,3	7,3	12,6	55,0	100,0
Electronic components	9,9	45,3	55,2	0,4	2,2	8,3	9,5	9,9	14,4	44,8	100,0
Automotive	29,8	47,4	77,1	1,5	1,5	7,1	3,2	4,3	5,2	22,9	100,0
Consumers electronics	14,0	78,8	92,8	1,1	1,0	1,6	0,9	1,4	1,2	7,2	100,0
Energy, other utilitie	20,9	14,0	34,9	1,6	0,5	20,4	4,5	33,4	4,6	65,1	100,0
Electrics and electronic equipts, , computers	16,7	42,7	59,4	2,5	1,8	7,3	6,6	13,7	8,8	40,6	100,0
Machines and mechanical equipments	21,9	39,8	61,8	2,5	1,2	13,1	10,7	4,8	6,0	38,2	100,0
Other transportation materials	21,3	15,2	36,5	0,0	0,9	24,0	12,9	9,1	16,6	63,5	100,0
Health products and cosmetics	4,6	18,1	22,6	13,5	2,9	7,6	9,5	26,3	17,5	77,4	100,0
Metal works	23,3	42,4	65,7	5,9	7,4	4,9	8,4	4,1	3,7	34,3	100,0
Textile, garments	65,3	28,1	93,4	0,4	0,0	0,7	2,9	0,5	2,1	6,6	100,0
Other heavy industries, printing	26,8	33,2	60,0	1,9	0,6	9,0	7,3	12,6	8,5	40,0	100,0
Total Manufacturing	23,9	41,3	65,2	2,6	1,8	8,7	5,8	8,4	7,5	34,8	100,0
Other financial and services activities	5,4	13,3	18,7	5,1	1,9	11,1	15,3	37,1	10,9	81,3	100,0
Other services to business	5,5	17,9	23,4	4,3	3,7	18,6	13,1	30,7	6,3	76,6	100,0
Software and information											
services	8,0	32,4	40,4	4,3	2,0	7,6	10,0	27,7	8,0	59,6	100,0
Telecom operators, internet	11,9	27,9	39,8	2,8	3,7	15,5	11,6	7,1	19,5	60,2	100,0
Transport and warehousing	3,3	18,8	22,1	20,6	3,0	10,0	11,8	16,3	16,1	77,9	100,0
Total Services	6,1	20,9	26,9	7,3	2,7	12,5	12,6	27,4	10,5	73,1	100,0
Total	20,0	36,9	56,9	3,6	2,0	9,5	7,3	12,6	8,2	43,1	100,0

CONCLUSION

Data compiled by the IFA Monitors can be used to highlight the extent of geographical relocation trends currently being adopted by trans-national corporations on the European continent. This movement is expressed by a growing tendency to locate large production facilities which are largely manpower-intense, in Eastern European countries offering low manpower costs. Western Europe still plays host to the majority of development projects which are linked to tertiary activities or high tech industries. These development projects have a unit size which is significantly smaller than those in Eastern Europe, but with a higher concentration of qualified jobs being created.

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