

## Internationalisation of firms and the French economy

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**From a French perspective, there are two dimensions to the internationalisation of firms as multinationals: the presence in France of enterprises controlled by foreign groups, and the set-up abroad of affiliates under French control. Almost one in two persons employed in France (excluding temporary workers) in the non-farm mainly market sectors works in a multinational, i.e. 6.8 million persons employed in 2010. Of these, 1.8 million are employed in a foreign-controlled company. As a comparison, non-farm and non-financial international groups under French control employ 4.6 million persons abroad, or 53% of their global workforce. Whether in France or the rest of the world, these multinationals' affiliates located outside their country of origin are strongly industry-oriented and are frequently intermediate in size (intermediate sized enterprises - ISEs).**

**French-controlled affiliates abroad are mainly set up by the biggest enterprises: 135 French groups in the 'large enterprise' category excluding financial firms employ 3.7 million people abroad and conduct more than half their business there. One third of French-controlled ISEs have an affiliate abroad. This is hardly the case of SMEs.**

**These multinational enterprises account for more than 80% of France's exports (of which 31% from those under foreign control).**

The globalisation of the economy is largely due to the international development of firms. International expansion was initially focused on conquering markets, with firms exporting rather than setting up in the target countries. Today the development of foreign affiliates has become essential, and these affiliates serve as both commercial intermediaries and production units with the combined aim of conquering markets and organising and optimising production. The development of information and communication technologies, greater transport facility and the worldwide organisation of trade have all fostered a geographical splintering of the production chain: it has become possible to organise production of a good from several plants or sites located thousands of miles apart. Cross-divisional functions (support, in particular) no longer need to be in the same place as the production unit. International expansion can lead to the sharing of common costs, often fixed costs, on a large scale [Markusen, 2002, for example]. However, this expansion makes country-level analysis more complex: on the one hand there is only a partial, or "truncated" view of production factors; and on the other hand the local allocation of common costs, corresponding to factors which are globalised throughout the firm, generates another optical effect in national statistics [Boccara, 2001].

By gathering available statistical data on multinational enterprises (*Box 1*), we conduct a detailed review of the internationalisation of these firms (size, sector, activity, countries of operation, exports) and their performances. A survey carried out recently by the INSEE (*Box 2*) goes a step further, examining the activity chain and relocations.

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### New definition of the enterprise - Principal activity of a group - Controlling country

Since decree n° 2008-1354, the **enterprise** has been defined as the "smallest combination of legal units that is an organisational unit producing goods or services, which benefits from a certain degree of autonomy in decision-making, especially for the allocation of its current resources".

This definition provides a better view of the way groups are organised. A group is a set of companies linked together by capital ownership shares, with direct or indirect majority control of votes by one company over the others. Very often the legal unit depending on a group is incorporated for exclusively internal purposes and purely management-related objectives. It only has meaning in complementarity with the other companies belonging to the group, without itself having any relevance.

In this study we approach this notion of enterprise by considering a group of companies as a single "enterprise" irrespective of its size. In the current state it is an approximation.

Indeed, certain diversified conglomerates are made up of several relatively autonomous subsets engaged in different branches and which should strictly speaking be considered as separate enterprises. However, delineation within groups of such entities forming enterprises as defined by the above decree is a major task which is currently underway.

This operation, known as "profiling", is also being conducted in other European countries. Across all sectors it will increase the number of

large enterprises (from around two hundred to three hundred) as well as the total number of ISEs (about a hundred more out of almost five thousand), as well as certain sector-specific distributions. However, the main conclusions of this study remain valid.

The **principal activity** of a group is defined according to a method which is analogous to that used for legal units. It is the activity that occupies the largest proportion of the group's workforce, excluding headquarters and support functions.

In accordance with European recommendations, the **controlling country** of a multinational group is defined as the country in which the group's operational control unit is located and in which the financial information of the affiliates is generally consolidated. For certain groups, when objective complementary information is available, this unit may be different from the head of the group, or the parent company at the summit of the pyramid of affiliates. In this definition the country is assigned to a group independently of the nationality of the main shareholders or other criteria sometimes used. An internationalised group under French control is thus a group whose operational control centre is located in France and which has at least one affiliate outside France.

Virtually all enterprises (98.5%) are made up of a single legal unit. Groups only represent 1.5% of enterprises and 6% of legal units, but employ 64% of the workforce.

## In France, multinationals employ half the workforce, and in industry the proportion is two-thirds

Non-farm multinational enterprises (MNEs) under foreign control employ 1.8 million persons in France in 2010, *i.e.* 12.5% of enterprises employed persons (*Figure 1*). French-controlled Multinational enterprises employ 4.9 million people, or 34% of persons employed by enterprises on French territory.

Industry in France is particularly involved in globalisation, with 64% of industrial jobs in multinationals. Multinational groups under French control and those under foreign control employ respectively 43% and 21% of industrial workers on French territory. Foreign implantation in France is far more frequent in industry than in other sectors: manufacturing accounts for 41% of jobs in foreign groups in France against just 24% of employees in all non-farm firms. With 31% of their employment in France in industry, French-controlled multinational enterprises are also more industry-oriented than French-only firms.

The multinationalisation of large industrial corporations through direct foreign investment has been studied in the economic literature [Fontagné, Toubal 2010]. Authors have analysed

## 1. Weight of multinational enterprises (MNEs) in paid employment in France according to activity sector in 2010

	Employment by sector (thousands)	Proportion of each enterprise type in employment in the sector				Proportion of employment in the sector in each enterprise type			as a %
		MNE under foreign control	MNE under French control	MNE under French control	Overall	MNE under foreign control	MNE under French control	MNE under French control	
Industry	3,579.7	21.2	42.7	36.1	<b>100.0</b>	41.1	31.0	16.4	
Construction	1,534.8	2.3	21.6	76.1	<b>100.0</b>	2.0	6.7	14.8	
Trade, transports, accommodation, food services	5,267.8	11.3	31.6	57.1	<b>100.0</b>	32.4	33.6	38.1	
Information and communication	678.7	13.2	50.8	36.0	<b>100.0</b>	49	7.0	3.1	
Financial and insurance activities	768.9	8.4	73.8	17.8	<b>100.0</b>	3.5	11.5	1.7	
Real-estate activities	199.1	1.9	2.0	96.1	<b>100.0</b>	0.2	0.1	2.4	
Spec. scientific and tech. activities and adm. and support activities	1,758.7	13.0	21.3	65.7	<b>100.0</b>	12.4	7.6	14.6	
Teaching, human health, social action	544.3	6.8	14.4	78.8	<b>100.0</b>	2.0	1.5	5.4	
Other service activities	353.2	8.3	14.0	77.7	<b>100.0</b>	1.5	1.0	3.5	
<b>All sectors</b>	///	<b>12.5</b>	<b>33.7</b>	<b>53.8</b>	<b>100.0</b>	<b>100.0</b>	<b>100.0</b>	<b>100.0</b>	
<b>All employees</b>	<b>14,685.2</b>	<b>1,842.0</b>	<b>4,944.5</b>	<b>7,898.7</b>	///	///	///	///	

Scope: All non-farm enterprises in the mainly market sectors (including financial and insurance activities, excluding temporary workers).

How to read it: in France, 21.2% of employees in industry depend on a MNE under foreign control. 41.1% of employees of MNEs under foreign control in France are employed in industry (principal activity of the "enterprise").

Source: Insee, *Ésane, Liji, I-Fats, Clap*.

the international deployment of enterprises in terms of ownership-specific advantage, location, and internalisation [Dunning, 1988] or in terms of international segmentation of production processes [ISPP, Lassudrie-Duchêne, 1982] and, later, in terms of global value chain [GVC, Gerefi et alii, 2005]. Ownership-specific advantage accounts for expansion through the use of a 'specific asset' owned by the company. The location advantage analysis explains why firms may prefer to set up operations abroad rather than export goods (access to resources or to markets as against transport costs). The internalisation advantage analysis looks at the reasons why multinationals might prefer to control subsidiaries instead of signing licensing or outsourcing agreements with firms in other countries. Technology has much to do with this: an enterprise sets up in another country through an affiliate either because technology can only be used inside the enterprise group itself (management of a plant, for example) as the technology has not been codified, or to avoid the risk of losing ownership of it. The international segmentation of production processes approach describes the fragmentation of the chain of activity and its propensity to generate trade in goods between countries with the same level of development; the furthering of the ISPP approach as a GVC analysis emphasises control over this chain and the distribution of value and production costs. The particular appeal of France to foreign investors is often explained by various factors: its central position in Europe, the proximity of the continent's most densely populated regions, industrial expertise, infrastructure, lower electricity costs, etc. [Cœuré, Rabaud, 2003]. A map of enterprises under foreign control overlaps significantly with that of industrial France, namely the north west, the Paris region, and the Rhône-Alpes region.

Finance and ICT are the two sectors in which the various types of multinational are in the majority in terms of employment. Financial and insurance activities are dominated by French-controlled, internationalised large firms: around twenty banking networks, insurance companies and investment banks concentrate almost 75% of jobs in the sector, including 6% in the networks of large enterprises under foreign control (*Figure 2*). To a lesser degree, ICT is also structured around French-controlled multinational enterprises although they also have a

### Foreign direct investment: frame supporting the expansion of MNEs

Foreign direct investment (FDI) is a complementary indicator of the international expansion of firms. As a matter of fact, international ownership of affiliates and joint ventures are the results of FDI.

FDI is measured by the Banque de France for the requirements of the balance of payments, in line with the international standards of the IMF. For stocks it is measured as an ownership of more than 10% of the share capital of a non-resident enterprise (otherwise it is a "portfolio" investment), and for flows as the financial flows of equity capital or loans between enterprises in a FDI relationship (that is, belonging to the FDI stock or indirectly controlled). Therefore, FDIs do not measure a fixed capital investment but a financial expenditure (in cash, in equity, etc.). These investments form the frame for a link between real economic activity (via affiliates and joint ventures) and financial flows. As an enterprise can control a subsidiary without owning it wholly or directly, FDI does not convey exactly the same picture as a study of subsidiaries, but the two approaches are complementary and in fact the majority of FDI presented here corresponds to an ownership share of over 50%. As an additional difference, FDI includes a valorization component for the capital held: it is generally more costly in a developed country than in a developing country. Furthermore, an enterprise that invests in a foreign affiliate may use this affiliate to make investments in subsidiaries in the country or elsewhere. Yet, for equity capital, FDI is only

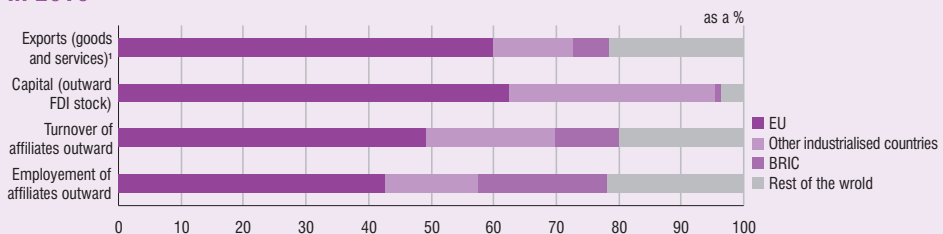
concerned by what occurs in the first rank invested in, since it is a component of the balance of payments between France and the rest of the world.

FDI includes transactions in equity capital, real-estate investments, reinvested profits and lending and borrowing between subsidiaries (or affiliates). Reinvested profits and loans have a big impact in the revenues of multinationals [see for example Nivat, 2013]. In economic crises groups tend to repatriate their reinvested profits so that they can consolidate the financial balance sheet in the group's main country: FDI flows thus also circulate value within the group. FDI income is separate and is added to the profits of the resident firms: in 2012, the net balance of FDI income measured by the balance of payments was +32Bn euros. At the same time, enterprises may pay dividends to minority shareholders as pension funds, the holders of equity portfolio investments: the balance of these incomes was -9.5Bn euros in 2012. In all, the net balance of these two types of income was 22.5Bn euros.

The stock of French direct investment abroad represents 45% of French GDP, while the stock of foreign investment in France represents 25%.

The *Figure below* shows that the stock of financial capital held as FDI from France is mainly concentrated in the developed countries where MNEs can draw on funds and remunerate them, whereas jobs are spread more around the world, as are sales. This gives an idea of the "hidden" part of the capital/labour combination of a MNE when only one country, or one type of country, is examined.

#### Breakdown by zone of Exports, FDI stocks, Sales and Employment of foreign affiliates, in 2010



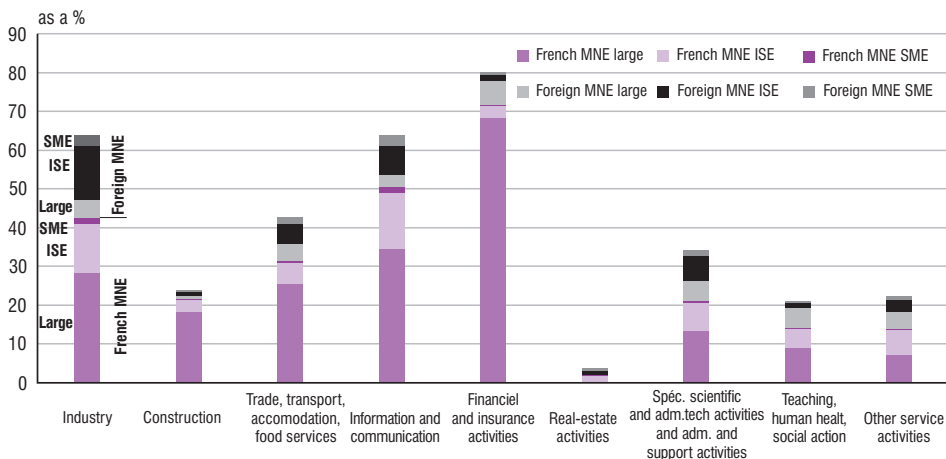
1. Excluding tourism.

Scope: for turnover and headcount: all enterprises excluding agriculture and financial and insurance activities.

How to read it: in 2010, 62.4% of outward FDI stock is in the EU, as are 59.9% of exports of goods and services excluding tourism.

Source: Insee, O-Fats, Douane, BdF balance des paiements.

## 2. Share of the different types of MNE in paid employment in each sector in France, by category, in 2010



Scope: France, all non-farm enterprises in the mainly market sectors (including financial and insurance activities, excluding temporary workers).

How to read it: in France in 2010, 29% of jobs in industry are in large MNEs under French control and 14% are in ISEs of MNEs under foreign control. The 100 complementary represents French-only enterprises.

Note: the categories of enterprises are defined using criteria measured over the national territory.

Source: Insee, Ésane, Lifi, I-Fats, Clap.

significant share of workers under foreign control (13%). These are France-based IT consultancy groups and software houses. As in industry, international deployment may be explained by the need to keep control over technologies, know-how and expertise.

In the trade, transport-logistics, accommodation and food services sectors, foreign groups are very slightly less prominent than the average. These activities involve a wide variety of enterprises ranging from large groups to microenterprises (see Definitions). Internationalised French groups are also slightly underrepresented.

Services to individuals and construction are mainly performed by local SMEs and microenterprises. These activities are intended to satisfy a direct demand from the population, whose physical location they follow closely. Apart from a few specific sectors such as civil engineering, the capital required to conduct business and the economies of scale are far less significant than in industry. Additionally, the requirement of being geographically close to clients and having good knowledge of the local market encourages deconcentration. Hence SMEs (including microenterprises) account for three quarters of employment in personal services or in construction. In construction however, one employee in five works in a French-controlled MNE. In real-estate, foreign affiliates in France and external deployment are particularly underrepresented, probably due to the need to know the market and the legal environment. These activities are a special case in that as well as SMEs and microenterprises, there are also 150 regional or national ISEs that employ over 35% of the workforce in the sector, against an average of 22%.

### Foreign affiliates set up in France are first and foremost ISEs

Internationalisation is closely linked to size. In France 76% of employees of French-controlled internationalised enterprises are employed by large corporations and 22% by ISEs. Foreign controlled enterprises in France are more likely to take the form of ISEs (53% of jobs) while 85% of employees of French-only firms work in SMEs, including

microenterprises (*Figure 3*). All in all, foreign affiliates are particularly prominent both in the form of ISEs and operating in industry.

The average foreign multinational in France has 240 employees in France, a figure which is very comparable to the average of 270 employees per foreign country observed abroad for multinationals under French control. In France, a French-controlled MNE has an average of 1,830 employees, against less than 3 for French-only enterprises.

In addition to their predominance in France as ISEs, with half their employees working in ISEs, foreign groups also control 70 of the 229 large enterprises. The latter account for one third of persons employed in France by foreign groups.

### 3. Paid employment in France according to MNE control and category, in 2010

as a %

	MNE foreign control	MNE French control	French-only enterprises	Overall
Microenterprises	0.4	0.0	37.4	<b>20.2</b>
SME excluding microenterprises	13.1	2.4	47.2	<b>27.8</b>
ISE	53.4	21.7	14.6	<b>21.8</b>
Large enterprises	33.1	75.9	0.8	<b>30.2</b>
<b>All categories</b>	<b>100.0</b>	<b>100.0</b>	<b>100.0</b>	<b>100.0</b>
<b>All employees (in thousands)</b>	<b>1,842.0</b>	<b>4,944.5</b>	<b>7,898.7</b>	<b>14,685.2</b>

Scope: all non-agricultural enterprises in the mainly market sectors (including financial and insurance activities, excluding temporary workers).

How to read it: in France, 53.4% of employees of MNEs under foreign control depend on a ISE.

Source: Insee, *Ésane, Lifi, I-Fats, Clap*.

### Decline in jobs among foreign groups over the last 10 years, mainly in industry

After a sharp rise in the 1990s, employment in France by foreign groups has slipped back over the last ten years or so. Excluding financial activities, it increased from barely a million in 1993 to over two million at the start of the 2000s, but the current level is now below two million - although this measure may be limited by changes in concepts and classifications over the period. This fall has been consistent with the slide in industrial employment, but has actually exceeded it (*Figure 4*): in manufacturing, employment in affiliates of foreign groups has fallen by one third, against a drop of 17% for all firms in this sector. It thus represents 24% of workers in manufacturing in 2010 against 29% in 2003.

### 4. Changes in paid employment in France dependent on MNEs under foreign control

in thousands

	2003	2010	Change (as a %)
Manufacturing industry	1,036	693	-33.1
Trade	396	490	23.7
Others sectors	839	540	-35.6
All sectors	2,271	1,723	-24.1
Proportion of MNEs under foreign control in paid employment in manufacturing industry (%)	29,2	23,7	///
<b>All paid employment (end of year) in manufacturing sectors, France</b>	<b>3,549</b>	<b>2,936</b>	<b>-17.3</b>

Scope: all non-agricultural enterprises in the mainly market sectors (including financial and insurance activities, excluding temporary workers).

Source: Insee, *Lifi, I-Fats, estimations d'emplois salariés en 2003 et 2010*.

## Large enterprises dominate deployment abroad of French-controlled MNEs, and are more industrial abroad than at home

In 2010, around 2,600 non-farm, non-financial French groups controlled 30,500 affiliates abroad. They employ 53% of their total workforce abroad (4.6 million persons employed) (Figure 5)<sup>1</sup>.

This international expansion in the form of affiliates abroad concerns virtually all large groups. It is usually financed by foreign direct investment (FDI). Among the 137 non-farm, non-financial French-controlled groups in the category of large enterprises, 135 have at least one affiliate abroad (Figure 6). Half of these French-controlled large MNEs are set up in more than 23 countries. France accounts for less than half their business, with 45% of their consolidated sales and 44% of their global workforce. These large multinationals employ 81% of the 4.6 million persons employed in the foreign affiliates of French groups, and account for 82% of the turnover of foreign affiliates of French groups.

More than a third of French-controlled ISEs have at least one affiliate abroad. In comparison to large enterprises, these internationalised French-controlled ISEs are more focused on France, which accounts for 56% of their sales and 57% of their headcount. Their foreign affiliates employ 18% of persons employed abroad by French groups and the figure is the same for sales generated abroad. Lastly, international expansion in the form of foreign

### 5. Paid employment and turnover of MNEs under French control, in 2010

	France <sup>1</sup>	World excluding France	Of which: European Union	Overall
Number of MNE under French control	///	///	///	<b>2,598</b>
Persons employed (in thousands)	4,115	4,581	1,947	<b>8,696</b>
Proportion of workforce (as a %)	47.3	52.7	22.4	<b>100.0</b>
Consolidated turnover (in billion euros)	920.5	992.6	484.3	<b>1,913.1</b>
Proportion of consolidated turnover (as a %)	48.1	51.9	25.3	<b>100.0</b>
Number of affiliates	33,334	30,440	15,518	<b>63,774</b>
Proportion of affiliates (as a %)	52.3	47.7	24.3	<b>100.0</b>

1. The workforce in this table is that declared by enterprises in the O-FATS survey.

Scope : all MNEs under French control in the mainly market sectors excluding agriculture, financial and insurance activities..

Source: Insee, O-Fats.

### 6. Intensity of internationalisation by enterprise category in 2010

	MNE under foreign control in France (number)	French-only groups (number)	MNE under French control (number)	Intensity of internationalisation of MNEs under French control			
				Turnover achieved abroad (as a %)	Employment abroad (as a %)	Country of implantation (médian number)	Foreign affiliates
Large enterprises	62	2	135	54.6	56.1	23	65
ISE	1,238	1,834	1,060	44.4	42.6	4	6
SME	6,387	33,521	1,403	25.2	34.7	1	3
<b>All</b>	<b>7,687</b>	<b>35,357</b>	<b>2,598</b>	<b>51.9</b>	<b>52.7</b>	<b>///</b>	<b>///</b>

Scope: all enterprises controlled by a group in the mainly market sectors excluding agriculture, financial and insurance activities.

How to read it: in France, 1060 ISEs under French control are internationalised and 1834 are not. The internationalised ISEs achieve abroad 44.4% of their turnover and employ 42.6% of their workforce outside France. Half of these ISE are implanted in at least 4 foreign countries, with at least 6 subsidiaries.

Source: Insee, O-Fats, I-Fats, Lifi.

1. It should be noted that this information, from the French part of the Outward-FATS survey, is subject to two differences from that of Lifi; firstly, the scope is slightly different and secondly, the employment variable does not correspond to the same definition as in Lifi used for multinational enterprises in figure 1. It is however comparable to the definition used for employment abroad.

affiliates is very uncommon among SMEs: only 1% of them (excluding microenterprises) set up abroad and foreign affiliates account for 3% of their employment, but when they do set up abroad it is with an intensity not far in scale from that of ISEs.

While people employed abroad by French multinationals mostly (50%) perform tertiary activities - 34% in services and 17% in retail - this predominance is not as marked as in France where 62% of employees work in the tertiary sector. Their foreign subsidiaries are more industrial than their French base: 41% of employment abroad in industry against 31% in France. This sectoral breakdown is similar for employment in France by multinationals under foreign control. Like the similarities observed for the average affiliate size by country, this could indicate the existence of a common pattern for international deployment of large enterprises, with a predominance in industry and in the form of ISEs. French groups abroad employ what seems to be quite a high proportion of workers in retail (17%), whether compared with the sector's share in France (9%) or with the proportion of foreign groups' jobs in retail in France (10%). This reflects the development of mass retailers which have set up in Europe, Russia and China in particular.

### **Deployment of affiliates mainly towards and from the European Union and the United States**

The European Union (EU) is the leading zone for the set-up of affiliates abroad by French-controlled multinationals, with 43% of their workforce abroad, ahead of the United States (11%) and China (9%). This is the case across all categories of groups. Large enterprises and ISEs each have 21% of their foreign workforce in the BRICs (Brazil, Russia, India and China) against 11% for internationalised SMEs, which are prominent in North Africa and in Central and Eastern Europe (CEE): their affiliates in North Africa employ 19% of their workers abroad against 2% for larger groups. CEE countries account for 14% of persons employed abroad by internationalised SMEs compared with 8% for the other groups.

The kind of business sector abroad reveals a wide variety of rationales in terms of openness and attractiveness from one country to the next. For example, French groups in the United States develop in services first and foremost, while the proportion of industrial employees is higher in Japan (53%), Africa (51%) and in the countries of central and eastern Europe (47%). In China employment is concentrated in industry, but also mass retail.

In the other direction the EU is more predominant. For 63% of employees working in France for MNEs under foreign control, the decision-making center is in one of the 26 other European Union countries. However, the United States remains the leading country in terms of scale of workforce in France (388,000), ahead of Germany (307,000) and the United Kingdom (184,000). Japan's rank is tenth among controlling countries with 55,000 employees, and China seventeenth with 9,000 employees.

### **Internationalised enterprises account for more than 80% of exports**

More than 80% of exports of goods and services are by multinationals: 52% by French-controlled groups owning foreign affiliates and 31% by firms under foreign control<sup>2</sup>. Large industrial firms and ISEs account for 37% and 21% respectively. Virtually all large enterprises export, whether they are French or foreign controlled, and exports represent on average one fifth of their sales (almost 40% for those in industry), as they do for internationalised ISEs. These exports by internationalised large enterprises and ISEs partly

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2. These are the exports declared in turnover. They thus include exports of services. They are therefore more extensive than the customs recorded flows.



correspond to trade with other foreign affiliates in the group<sup>3</sup>. However, when an ISE is not a MNE, only one in two exports on average for all sectors. But in manufacturing industry, this is still the case of almost all of them (88%) and represents on average 20% of their own sales (Figure 7).

More than half (58%) of industrial SMEs excluding microenterprises also export, and this represents about a quarter of their turnover. However, it only accounts for 6% of export turnover of all firms located in France (total for all sectors).

## 7. Propensity to export according to category of enterprise in 2010

						as a %
				Exportation rate	Exporting enterprises	
		Number of enterprises	Proportion of exporting enterprises		Number	Exportation rate of exporting enterprises
<b>All sectors</b>						
SMEs (excluding microenterprises) (irrespective of control)		134,290	33.0	9.8	44,377	19.6
French-only enterprises		2,166	57.1	6.3	1,237	10.1
MNE under French control	ISE	1,060	92.5	20.9	981	21.9
	Large enterprises	138	96.4	21.2	133	21.4
MNE under foreign control	ISE	1,238	90.9	27.5	1,125	28.9
	Large enterprises	62	93.5	19.2	58	20.0
<b>Manufacturing</b>						
SMEs (excluding microenterprises) (irrespective of control)		24,388	57.9	19.2	14,132	24.7
French-only enterprises		390	88.2	17.6	344	19.9
MNE under French control	ISE	470	98.7	28.7	464	28.8
	Large enterprises	46	100.0	38.4	46	38.4
MNE under foreign control	ISE	614	98.5	37.7	605	38.0
	Large enterprises	21	100.0	35.1	21	35.1
<b>Trade</b>						
SMEs (excluding microenterprises) (irrespective of control)		32,433	42.2	8.5	13,672	16.5
French-only enterprises		677	58.8	3.4	398	5.7
MNE under French control	ISE	203	93.6	17.5	190	18.4
	Large enterprises	19	100.0	5.0	19	5.0
MNE under foreign control	ISE	319	87.5	15.0	279	16.4
	Large enterprises	21	100.0	9.3	21	9.3

Scope: all non-agricultural enterprises in the mainly market sectors, excluding financial and insurance activities

Source: Insee, Esane, I-Fats, O-Fats, Lifi, Clap.

## ISEs under foreign control seem more productive than other ISEs but also commit more capital resources

Foreign-controlled ISEs in France employ more people on average than French-only enterprises, but less than internationalised French-controlled firms, including when the scope is restricted to manufacturing (Figure 8). In this sector an ISE under foreign control employs an average of 760 FTE (full-time equivalent employees) in France against 420 for a French-only ISE, but against 850 for an internationalised French-controlled ISE.

3. Symmetrically, they are at the origin of imports, most notably as part of their production and intra-group trade. The sources available for this study do not allow us to quantify the proportion of intra-group flows. Older studies show a goods trade surplus of MNEs under French control, a deficit for MNEs under foreign control, mainly by their wholesale affiliates, and a deficit for the others.

## 8. Performance according to category of enterprise-group in 2010

	SMEs excluding micro enterprises	Intermediate size enterprises (ISEs)			Large enterprises	
		French- only	MNE under French control	MNE under foreign control	MNE under French control	MNE under foreign control
<b>Manufacturing</b>						
Number	24,388	390	470	614	46	21
Average size (FTE employees)	32.6	418.6	849.4	761.4	14,392	7,280.6
Tangible capital per head (in thousands of euros) <sup>1</sup>	76.0	140.9	110.5	176.1	252.1	314.8
Annual wage per head (in thousands of euros)	33.7	32.9	36.7	41.7	49.6	48.4
Apparent labour productivity (in thousands of euros) <sup>2</sup>	60.2	69.6	74.0	89.2	117.9	126.9
Profit on value added ratio <sup>3</sup> (as a %)	16.6	27.2	23.0	25.0	25.7	29.7
Apparent productivity of tangible capital <sup>4</sup> (as a %)	79.2	49.4	67.0	50.7	46.8	40.3
Gross operating profitability <sup>5</sup> (as a %)	6.6	10.1	8.7	7.0	7.0	7.2
Total capital per head (in thousands of euros)	173.1	277.3	462	531.9	1,996.7	1,175.5
Apparent productivity of total capital (as a %) <sup>6</sup>	34.8	25.1	16.0	16.8	5.9	10.8
<b>All sectors</b>						
Number	134,290	2,166	1,060	1,238	138	62
Average size (FTE employees)	26.4	455.6	895.3	727.4	21,514	8,271.6
Tangible capital per head (in thousands of euros) <sup>1</sup>	90.6	243.2	130.5	146.7	264.5	169.9
Annual wage per head (in thousands of euros)	34.5	33.1	37.1	43.1	39.1	53.2
Apparent labour productivity (in thousands of euros) <sup>2</sup>	62.4	70.6	77.1	92.2	92.7	131.9
Profit on value added ratio <sup>3</sup> (as a %)	18.9	27.5	26.1	26.5	29.9	19.3
Apparent productivity of tangible capital <sup>4</sup> (as a %)	68.9	29.0	59.1	62.5	35.0	77.6
Gross operating profitability <sup>5</sup> (as a %)	6.7	6.4	7.7	9.0	7.8	9.2
Total capital per head (in thousands of euros)	207.2	383.7	593.3	501.4	1,134.5	722.0
Apparent productivity of total capital (as a %) <sup>6</sup>	30.1	18.4	13.0	18.4	8.2	18.3

1. Tangible assets per FTE employee. 2. Gross value added excluding taxes per FTE employee. 3. GOS/VA. 4. VA/tangible assets. 5. GOS/operating capital. 6. VA/total net assets. (FTE=full time equivalent, GOS=cross operating surplus, VA= value added)

Scope: France, all non-farm enterprises controlled by a group in the mainly market sectors, excluding financial and insurance activities.

Note: the *ratios* are mean ratios: the profit on value added ratio of ISEs under foreign control is calculated as the sum of these ISEs' GOS to the sum of their value added.

Source: Insee, *Ésane, I-Fats, O-Fats, Lifi, Clap*.

ISEs under foreign control generally commit greater resources than those under French control. In manufacturing, they have nearly 50% more tangible assets per employee than French-controlled ISEs and their total capital<sup>4</sup> per employee is 30% higher. So they are more productive per person, with value-added per employee standing at 23% more than their French-controlled counterparts, and they pay an average of 17% more wages. Differences are similar when foreign-controlled ISEs are compared either with French-only ISEs or with internationalised French-controlled ISEs, which account for 70% of French-controlled ISEs in terms of payroll workers on the territory.

These results are also largely true across all sector *ratios*, except with regard to operating capital. Foreign-controlled ISEs generate 25% more value-added and pay 23% more wages on average than those under French control.

The *ratio* of profit to value-added (GOS/VA) generally increases in line with capital-resources committed, and is required to finance these resources. Multinational ISEs have quite similar *ratios* of profit to value-added, whether French or foreign controlled. In 2010 these *ratios* stood at respectively 23.0% and 25.0% in manufacturing and 27.2% for French-only ISEs. For all sectors it stood at respectively 26.1% and 26.5%, 27.5%. It is thus not the degree of internationalisation that appears to count for ISEs. The *ratio* for SMEs stood at 18.9%, *i.e.* far lower than that of the different categories of ISEs.

4. Total assets in the balance sheet, *i.e.* physical capital (including tangible assets) and financial capital.

## Bigger differences between large enterprises than between ISEs, for MNEs

The *ratios* between large manufacturing enterprises under French or foreign control are more disparate than those between ISEs. The small number of such large enterprises (respectively 46 and 21) and their sheer size gives a far bigger impact to individual differences and explains this greater heterogeneity. Furthermore, in France, large French-controlled enterprises are twice as big as their foreign-controlled counterparts (almost 14,400 persons employed on average against 7300). Those under foreign control commit far more tangible capital per employee, but their total capital-resources per employee are still lower, as might be expected given that the large firms under French control are world-level parent companies with extensive financial and intangible assets in their balance sheet. Again in the manufacturing industry, large enterprises generate higher value-added per employee than the other categories and also pay higher wages, but their capital productivity is weaker. After the major impact of the 2008-2009 crisis, profit to value-added *ratios* tended to recover. That of the 46 large manufacturing enterprises under French control, which fell to 15% in 2009, climbed back up to 26% in 2010. For the 21 large manufacturing enterprises under foreign control, the variation was even greater: from 12% to 30%.

Productive performance can also be assessed by gross operating profitability, which is the *ratio* of GOS to working capital employed<sup>6</sup>. In manufacturing this indicator is similar among French-controlled large enterprises, those under foreign control and ISEs under foreign control, and stands at 7%. Multinational ISEs under French control generate a higher performance with this indicator, and this is related to the fact that they commit less capital. In industry, it is almost 240 million euros for an ISE controlled by a foreign group against 160 million euros for an internationalised French-controlled ISE, and 80 million euros for a French-only ISE.

## A still-truncated picture

The picture that our indicators give of performances of multinational groups deployed both in France and abroad is nevertheless partial and truncated, despite progress in knowledge of the foreign part of these firms. This bias affects both the denominator for capital employed, and the numerator where both GOS and value-added ignore the part achieved abroad, or even the part transferred via internal group sales or other elements such as intra-group loans and borrowings. The picture is also truncated as regards the composition of groups' activities: there is no reason for this composition to be the same in France and abroad, and the contributions from the various activities to the global result of the group or its value-added may also differ.

## Global activity chains are strongly organised around the group

Generally speaking the global activity chain is organised strongly around the group (Box 3). Hence 56% of firms with 50 employees or more located in France and belonging to a group use the group's affiliates for their activity chain, and almost half of these affiliates use the foreign affiliates of their group. In 81% of such cases, this concerns at least one affiliate in Europe and in 25% of cases at least one affiliate in the USA or Canada. The use of affiliates is more extensive when they are direct or indirect affiliates of the firm within the group: among

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6. This is the sum of non-financial assets and working capital requirement.

firms with 50 employees or more that own affiliates, 77% use them in their activity chain, and 34% their foreign affiliates. But it is also common aside from direct ownership: 45% of these firms which belong to a group without being its head use companies in the group other than their own affiliates and 19% of them use affiliates of this type abroad.

Firms with 50 employees or more also use subcontractors outside the group. International sub-contracting outside of the group (18%) is far less frequent than the same type of sub-contracting in France (57%). It is mainly concentrated in the EU (81%), but also China and Africa (respectively 17% and 15%). Core business is more commonly concerned by foreign sub-contracting than support activities (respectively 75% and 49% of cases).

## Over the period 2009-2011, French employment de-/relocations are mainly towards the EU

Over the period 2009-2011, companies with 50 employees or more stated they had directly cut 20,000 jobs in France for reasons of de-/relocations (*Box 3*), *i.e.* 6600 jobs a year. These direct job losses over three years represent 4% of the paid workforce in 2011 of the companies that de-/relocated and 0.3% of employment of all companies with 50 employees or more (7.7 million employees). They do not constitute a balance of the globalisation effects regarding employment: they do not include the job losses caused among suppliers or subcontractors in France, nor, conversely, the jobs created in companies relocated to France or those created thanks to the purchasing power gains induced by globalisation.

In manufacturing the direct losses come to 11,500 jobs over three years, *i.e.* 4.2% of the 275,000 payroll workers that these relocating companies kept in France. Direct job suppressions thus have an equivalent weight in manufacturing industry and in the market economy as a whole. Information and communication services are concerned as much as industry.

These figures are of an order of magnitude comparable to those produced over previous periods, although they are more moderate, probably due to the period which was less favourable to de-/relocations and to the method which only counts direct job losses and thus

### Box 3

#### Global Activity Chains

The Global Activity Chains (chaînes d'activité mondiales - CAM) survey conducted in 2012 covers firms in the non-farm, non-financial mainly market sectors located in France and employing 50 workers or more in France (at the end of 2008). The firms are asked to describe their world activity chain. Via international sourcing questions, the survey also provides a direct measure of de-/relocations between 2008 and 2011. The measure is made in terms of companies rather than groups, and only direct job losses in the company or its affiliates are counted.

#### Description of the global activity chain

The firms surveyed are asked to describe their activity chain according to a twofold criterion: the location of companies in France or abroad,

and the existence of a group or sub-contracting relationship.

#### Definition of de-/relocations

Each company (not group) is asked whether it has carried out a **de-/relocation** over the period 2008-2011. In the survey, **de-/relocation** means a transfer of activity, either total or partial, carried out previously by the firm towards a foreign company (belonging to the group or not); it causes a reduction in this activity in France.

#### Core business and support functions

The firms are also asked to distinguish between core business and support functions, and the survey proposes a classification for these functions.

does not measure indirect effects. For example, over the period 1995-2001 which corresponded to the massive growth in China and the CEE, the study by Aubert and Sillard (2005) estimated job losses at between 9,000 and 20,000 per year in manufacturing (overall, not limited to firms with 50 employees or more).

The propensity to de-/relocate increases with firm size. Exporting firms or those already present abroad through affiliates are also more inclined to de-/relocate. De-/Relocations by acquisitions or creations of affiliates are rare (respectively 5% and 8% of cases, compared with de-/relocations to own affiliates that already exist (30%) or to other companies in the group (39%) (Figure 9).

### 9. Partners for de-/relocations, between 2009 and 2011

as a %

Proportion of companies belonging to a group that have relocated	For each activity, the proportion of companies belonging to a group that have relocated the activity						outside the group
	within the group						
	within the group	<i>Of which: towards an affiliate that already existed prior to relocation</i>	<i>Of which: towards an affiliate acquired for the relocation</i>	<i>Of which: towards a new affiliate set up for the relocation</i>	<i>Of which: towards a company of the group that is not an affiliate of the company</i>		
At least one activity	5.2	73	30	5	8	39	35
Core business	3.2	80	37	3	11	38	28
At least one support activity	2.8	66	20	6	3	42	41

Scope: all companies in the mainly market sectors (excluding agriculture and financial and insurance activities), employing 50 people or more (in 2008), implanted in France and belonging to a group.

How to read it: 2.8% of companies in the survey's scope relocated (totally or partially) at least one support activity. 41% of companies that relocated did so at least partially outside the group and 66% did so at least partially within the group.

Note: for each activity the sum of proportions is higher than 100 % because a company can relocate to different types of partner in the course of the period.

Source: Insee, enquête Chaînes d'activité mondiales (CAM).

The leading destination for de-/relocations is the EU: the EU of 15 (39% of cases) and the 12 new member States (22%). Africa including the Maghreb (24%) is also high up, as are China (18%) and India (18%). The main reason cited for relocating in the EU of 15 is to improve the organisation of the firm, while the reasons for relocating to China and India combine lower costs (wages and other) and access to new markets.

Over the period observed, the de-/relocated activities are focused more on core business in manufacturing, and on support activities in the other sectors. In industry, de-/relocations concern core business in 83% of cases and support activity in 30% of cases (they may concern both at the same time). In the other sectors core business represents 36% of de-/relocations, and support activities 76%. ■

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## Definitions

A **group** is a set of companies (legal units) linked by equity ownership, where one of these units has the power of decision over the others through direct or indirect control of votes.

In this study, a **multinational enterprise** (MNE) is a group that has at least one foreign located affiliate or a foreign head.

In Decree no 2008-1354 of 18 December 2008, an enterprise is defined as the smallest combination of legal units that is an organisational unit producing goods or services, which benefits from a certain degree of autonomy in decision-making. In this study this concept is approximated by the notion of group or independent legal unit.

The **enterprise categories** below are defined by the combination of three criteria, workforce, turnover and balance sheet total, considered on the French territory:

- **Microenterprises** are businesses that employ fewer than 10 people on the one hand and have annual turnover or a balance sheet total not exceeding 2 million euros on the other;
  - **Small and medium-sized enterprises** (SMEs) are firms that employ fewer than 250 people on the one hand and have annual turnover not exceeding 50 million euros or a balance sheet total not exceeding 43 million euros on the other;
  - **Intermediate-sized enterprises** (ISEs) are firms that do not belong to the category of SMEs and which employ fewer than 5,000 people on the one hand and have annual turnover not exceeding 1,500 million euros or a total balance sheet not exceeding 2,000 million euros on the other.
  - **Large enterprises** are businesses that are not in the above categories.
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