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Summary. The progress of political and economic integration among European countries is inducing the progressive emergence of a European urban system. National urban systems are restructuring and adapting themselves to this new international and economic context. The location of the largest multinational firms is taken as revealing a major step in the process of the integration of European cities into supra-national networks. A survey of the location of 3000 establishments belonging to the 300 largest European firms provides interesting results about the factors making European cities attractive for such activities. It may be inferred from these results that they confirm a new trend called 'metropolisation', which is reinforcing the top of the national urban hierarchies, as demonstrated in other studies.

1. Introduction

With growing economic integration in the framework of the European Economic Community and because of the multiplication of connections between all European countries, the urban systems are restructuring. For a long time they have been evolving under constraints which were mainly acting inside the national boundaries, but nowadays cities are becoming more and more interdependent. A more integrated and widely defined European urban system is emerging. Questions about its future configuration are many: which cities have the best situations in the inter-urban competition for attracting resources, activities and population? Will the largest cities take benefit from this restructuring at the expense of small and medium-sized ones? Which geographical situations and policy options will be more in favour of urban development?

Several processes are to be considered when trying to make predictions about the future of the European urban system, in relation with the expanding internationalisation of exchanges. One is the development of more efficient communication systems, including high-speed trains, international airports and specialised networks for telecommunications. Many studies have already shown that such processes have contributed at first to reinforce the hierarchy in the European urban system, since the largest cities with the widest markets benefitted from the initial advantage of location for this type of infrastructure (Auphan, 1991; Bieber, 1990; Cauvin *et al.*, 1989; Cattan, 1990).

Another process of importance for connecting and restructuring the European urban system is the growing internationalisation of firms and the organisations of economic networks all over Europe. Following the

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classical theory of hierarchical innovation diffusion for such a type of entrepreneurial innovations, one would also expect a reinforcement of existing urban hierarchies through that process. However, detailed studies of the evolution of the spatial organisations of firms have shown that the hierarchical pattern of diffusion was not always the most probable and that cities could also be connected according to other types of networks (Pred, 1977).

There are several possible ways of testing such an hypothesis. Surveys have been conducted among firms in order to know their locational preferences (IFO, 1990; EEC, 1990). Other surveys have investigated the urban factors which are correlated with the degree of internationalisation of urban activities by sending questionnaires to the cities (MOCI, 1989; Bonneville *et al.*, 1991; Rozenblat, 1991). A third method will be presented here, which consists in revealing the location factors through a study of the actual presence of economic branches of foreign origin within European cities.

The existence of subsidiary companies of foreign firms in a city, and the fact of a city hosting firms which have subsidiary companies in foreign countries, are considered as two different measures of the level of integration of a city to supra-national networks, via the internationalisation of economic activities. Those various integration levels are then correlated to indicators of urban size and situations.

In order to analyse the location of foreign firms within the urban system, we made a survey of a sample of the 300 largest European firms, providing information on about 3000 of their implantations located abroad throughout Europe. The collection of comparable cross-national information at a relevant urban level is still a difficult exercise for Europe as a whole.

2. Problems of European-wide Data Collection and Comparison

Despite the existence of a specialised institution, EUROSTAT, which provides data sets at various regional levels for all EEC countries, there is no official source of comparable data at the urban level. The definitions of what can be considered as an urban entity vary from one country to another. For a few countries, the concept is restricted to the 'local unit' or 'municipality', not including the possible suburban extentions over the neighbouring administrative units. Several countries have defined urban agglomerations (or 'urban areas') according to morphological criteria, only a few use concepts analogous to SMSA (Pumain *et al.*, 1990).

The pioneer work of Hall (Hall and Hay, 1980) tried to solve this problem by designing functional urban regions for many European countries, upon criteria which were adapted from the ones being used for US SMSAs. However, the absence of statistics about commuting in several countries renders very difficult an homogeneous application of such criteria. That is why the database which is used here considers cities in the geographical framework of 'urban agglomerations': the main criteria of the definition is the continuity of the built-up area, and the delimitation includes all the administrative local units the majority of whose population lives within the continuous built-up area. The definition is homogeneous for all European countries. This database was prepared in order to be compatible with the world-wide database GEOPOLIS (Moriconi, 1991) using all available statistical, cartographic and air-photograph material, in order to provide the most comparable delimitations. Population data are regularly updated for each decade between 1950 and 1990.

The concept of urban agglomeration would not be broad enough to study the more recent forms of urban extensions in low-density areas. However, due to the urbanisation pattern of most European cities, it does capture the essential part of their population and economic weights, which is what is needed for our study, and it does it in the most rigorous way possible for a European-wide comparison. Data about population and economic activity have been collected and

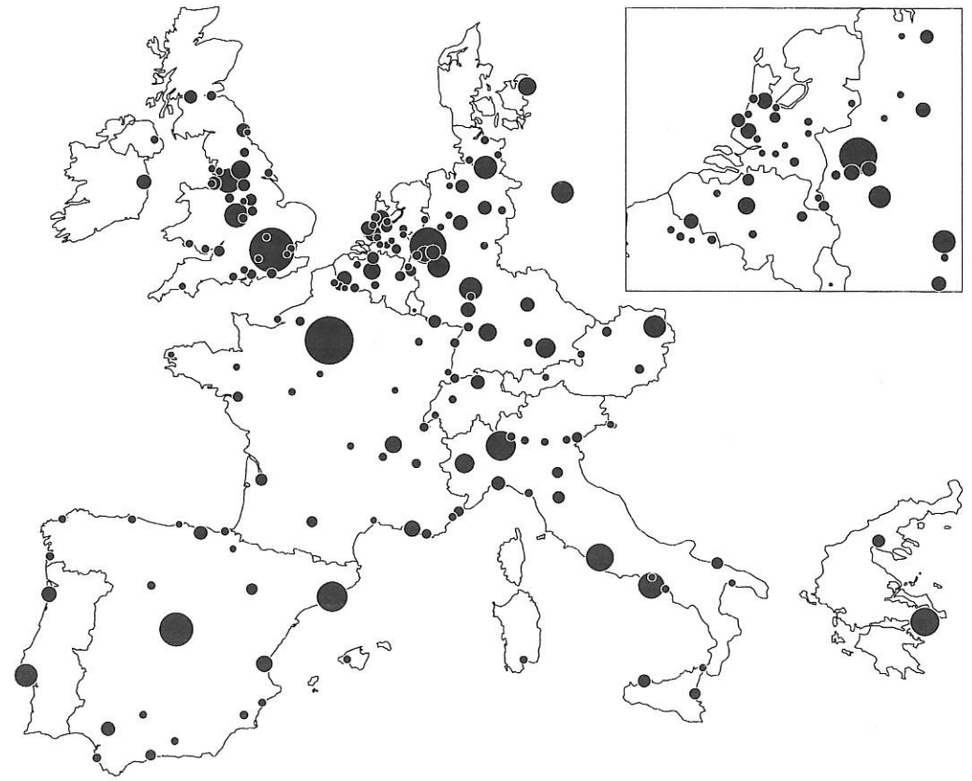


Figure 1. The West European urban system of cities having more than 200 000 inhabitants (1981). *Source:* Equipe P.A.R.I.S. (1990).

aggregated in this spatial framework by Cattan and Rozenblat (1991) for the 169 urban agglomerations with 200 000 inhabitants and more, in the 12 EEC countries plus Austria and Switzerland (Figure 1).

In order to locate foreign firms in those large agglomerations, a questionnaire was sent to the 300 largest European enterprises quoted by Duns and Bradstreet (1990) asking for a list of their subsidiary companies in foreign countries, indicating their location, size and activity. Ninety-four firms answered, without any noticeable bias in size, country or type of industry (Table 1). They provided a sample of 2798 foreign branches having a European location.

It was impossible from this source to know the exact date when the firms were first settled in their actual location. Thus, it is not the process of internationalisation which can be studied, but only the state of diffusion that it has now reached throughout the European urban system.

3. The Location of Headquarters

The distribution of the headquarters of the 300 largest European firms in 1988 provides an image of the actual state of concentration of the economic decision power among European cities (Figures 2 and 3). Despite the rather small size of the sample, the results

Table 1. The 94 firms of the survey compared with the sample of the 300 first European firms (1988 turnover)

	First 300 European firms		Firms of the survey (94)		Difference Percentage
	Number	Percentage	Number	Percentage	
Country of location of the headquarters					
Austria	4	1.3	2	2.1	0.8
Belgium	8	2.7	3	3.2	0.5
Denmark	0	0.0	0	0.0	0.0
Spain	10	3.3	1	1.1	− 2.3
France	74	24.7	20	21.3	− 3.4
Great Britain	96	32.0	29	30.9	− 1.1
Greece	0	0.0	0	0.0	0.0
Ireland	0	0.0	0	0.0	0.0
Italy	21	7.0	4	4.3	− 2.7
Luxemburg	0	0.0	0	0.0	0.0
Netherlands	0	0.0	0	0.0	0.0
Federal Republic of Germany	60	20.0	21	22.3	2.3
Switzerland	9	3.0	6	6.4	3.4
Main activity of the firms					
Agriculture	0	0.0	0	0.0	0.0
Food industry	23	7.7	8	8.5	0.8
Energy and chemistry	50	16.7	11	11.7	− 5.0
Basic products, electrical and electronic engineering	71	23.7	26	27.7	4.0
Transport equipment	33	11.0	14	14.9	3.9
Other manufacturing	4	1.3	0	0.0	− 1.3
Building	7	2.3	2	2.1	− 0.2
Trade	51	17.0	15	16.0	− 1.0
Transport, communications	15	5.0	5	5.3	0.3
Services (except finances)	11	3.7	4	4.3	0.6
Financial services	33	11.0	9	9.6	− 1.4
Administration	2	0.7	0	0.0	− 0.7

Source: Duns & Bradstreet (1980).

are similar when other sources are used, like Eurobusiness, or the 500 largest firms published by the magazine *Fortune*. They are also comparable to those of a previous study mapping the 700 largest European firms (Reynard, 1977).

The spatial distribution of the headquarters is highly concentrated, with very large quantities of firms in London (83 headquarters, 28 per cent of the European total) and Paris (67, 22 per cent). These two capitals concentrate together one-half of the European headquarters, and the proportion is roughly the same when the importance of the firms is measured by their turnover.

Other clusters of headquarters of less importance are located mainly in several cities of north-west Europe (Brussels, Amsterdam, Essen, Düsseldorf, Frankfurt, Hamburg, München) and only very small numbers are to be found in cities of southern Europe, with the exceptions of Madrid, Roma, Milano and Torino.

In Europe as a whole, there is a high concentration of headquarters in the largest cities. Only a few are located in cities with

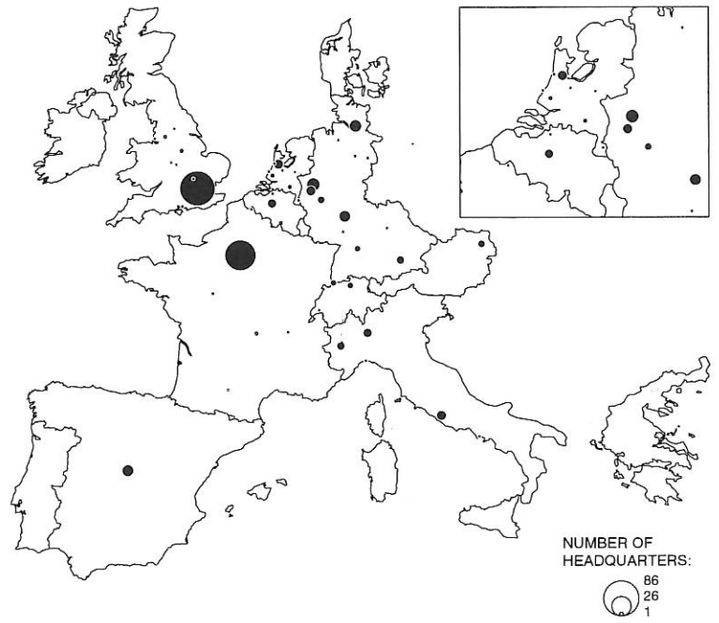


Figure 2. Headquarters of the first 300 European firms, 1988. *Source:* Duns & Bradstreet (1990).

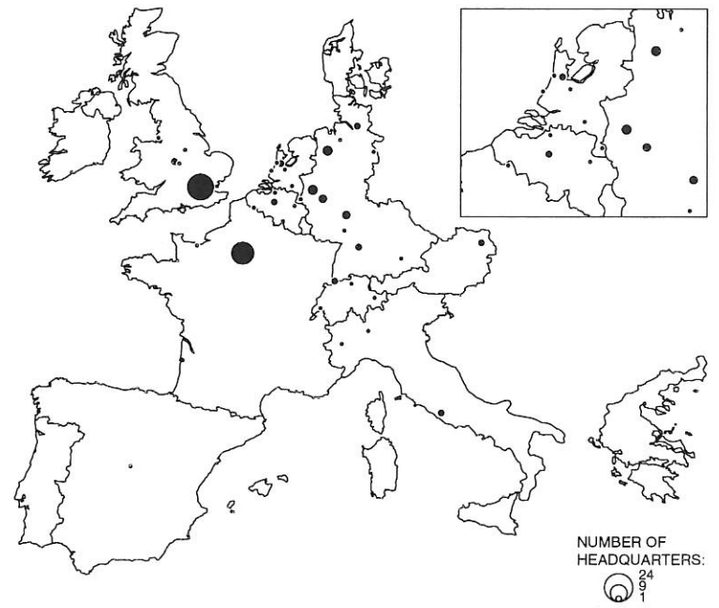


Figure 3. Headquarters of the 94 surveyed firms.

less than 200 000 inhabitants: Wolfsburg, Salzgitter and Ingolstadt in Germany, Caen in France, Milton Keynes in England, Glarus in Switzerland, Ravenna in Italy, Genk in Belgium and Groningen in the Netherlands. Glarus excepted, all these cities have over 100 000 inhabitants.

4. Location of Foreign Subsidiaries

The number of foreign subsidiaries reveals the importance of foreign investment in a city. It also refers to a part of the economy of a city which is necessarily connected to external networks. The spatial distribution of foreign subsidiaries in European countries reflects the actual state of the diffusion of the process of internationalisation of the firms.

More than three-quarters of foreign firms are located in agglomerations of over 200 000 inhabitants, 17 per cent in smaller towns and only 5 per cent in the countryside (Table 2 and Figures 4 and 5). Their location is mainly limited to the top of the urban hierarchy, and this fact possibly results from a filtering-down process in the internationalisation of the urban economies. The distribution of the branches is however not so strongly concentrated in a few leading cities as is the distribution of headquarters. This is a first and well-known indication about the locational preferences of the economic firms, which maintain their main decision centres close to the places where the political and financial powers are also located.

The highest concentration of foreign subsidiaries is in Paris (193) followed by Milano (116), Brussels (115), Barcelona (114) and London (110). For those countries obviously, one or two main cities have a role of bridgehead for foreign investments. By contrast, in the case of Germany, which is the country receiving the largest number of foreign firms, the implantations are shared by six main cities: Essen, Düsseldorf, Köln–Bonn, Frankfurt, München and Hamburg, with about 40 foreign firms each. Those cities are at the same level as Manchester, Lyon or Rome, which have the second rank in their respective countries. Metropolitan locations are more frequent in Greece and Spain, and in Luxemburg of course. The largest diffusion in the countryside is to be found in the Netherlands and in Switzerland, France and Denmark.

The diffusion level may vary according to the sector of activities. There is a slight trend for a less concentrated location of manufacturing than for services: 76 per cent of manufacturing subsidiaries against 84 per cent of services subsidiaries have chosen the large cities, whereas 65 per cent and 25 per cent respectively are to be found in countryside locations. A few economic activities tend to concentrate more in the largest cities: civil engineering, financial services and also, at a lower level, transport and telecommunications, local services and energy. On the other hand, industries for final demand more often choose the small towns and of course they are more likely to be found in the countryside (Table 3).

More contrasted preferences according to the size of cities appear if, instead of considering the sector of activities, one observes the functions of the firms inside the main firm, as functions of decision, research, production or distribution (Table 4). Headquarters and financial services are mainly found in large metropolises, whereas production or multifunctional establishments are more decentralised and widely diffused within the lower part of the urban hierarchy. Neither is the location of the research-oriented firms very centralised.

The metropolisation process due to the internationalisation of firms is highly selective, then, according to the desired proximity of the main decision centres. It follows the general rule of the 'new spatial division of labour' as quoted by Aydalot (1985): decision or financial activities on the one hand are close to the centres of economic and political power, whereas production- and research-oriented activities on the other hand have more diverse types of location.

The propensity to diffuse may also vary according to the country of origin of the firms and reflect then the duration of the internationalisation process: old practitioners of exporting activities like Belgian, Swiss

Table 2. Location of foreign subsidiaries, according to urbanisation levels

Country of location	Cities with more than 200 000 inhabitants		Towns with less than 200 000 inhabitants		Countryside		Total	Percentage share of each country
	Number	Percentage	Number	Percentage	Number	Percentage		
Austria	99	81	15	12	8	7	122	4.4
Belgium	171	76	38	17	15	7	224	8.0
Denmark	43	69	10	16	9	15	62	2.2
Spain	318	91	26	7	6	2	350	12.5
France	290	70	94	23	31	7	415	14.8
Greece	50	94	3	6	0	0	53	1.9
Great Britain	219	76	64	22	4	1	287	10.3
Ireland	41	75	10	18	4	7	55	2.0
Italy	220	80	47	17	9	3	276	9.9
Luxemburg	22	100	0	0	0	0	22	0.8
Portugal	58	78	9	12	7	9	74	2.6
Netherlands	189	72	57	22	18	7	264	9.4
Federal Republic of Germany	350	80	64	15	24	5	438	15.7
Switzerland	117	75	29	19	10	6	156	5.6
Total	2187	78	466	17	145	5	2798	100

Source: Rozenblat (1992).

Table 3. Location of foreign subsidiaries by urbanisation level, according to activity

Main activity	Cities with more than 200 000 inhabitants		Towns with less than 200 000 inhabitants		Countryside		Total	Percentage share of each activity
	Number	Percentage	Number	Percentage	Number	Percentage		
Agriculture	4	36	2	18	5	45	11	0.4
Food industry	102	78	22	17	6	5	130	4.6
Energy and chemistry	174	85	22	11	8	4	204	7.3
Basic products, electrical and electronic engineering	1142	75	273	18	102	7	1517	54.2
Transport equipment	130	76	34	20	7	4	171	6.1
Other manufacturing	43	68	16	25	4	6	63	2.3
Building	26	96	1	4	0	0	27	1.0
Trade	164	77	40	19	10	5	214	7.6
Transport, communications	251	86	40	14	2	1	293	10.5
Services (except finances)	44	86	7	14	0	0	51	1.8
Financial services	107	91	9	8	1	1	117	4.2
Total	2187	78	466	17	145	5	2796	100

Source: Rozenblat (1992).

Table 4. Location of foreign subsidiaries by urbanisation level, according to their function

Function	Cities with more than 200 000 inhabitants		Towns with less than 200 000 inhabitants		Countryside		Total	Percentage share of each function
	Number	Percentage	Number	Percentage	Number	Percentage		
Production	817	71	252	22	74	6	1143	40.9
Research, production, distribution	38	63	14	23	8	13	60	2.1
Finances	69	92	6	8	0	0	75	2.7
Sub-headquarters	193	93	13	6	2	1	208	7.4
Distribution	467	84	73	13	19	3	559	20.0
Production, distribution	189	83	28	12	11	5	228	8.1
Research	22	81	5	19	0	0	27	1.0
Unknown	392	79	74	15	31	6	497	17.8
Total	2187	78	466	17	145	5	2798	100

Source: Rozenblat (1992).

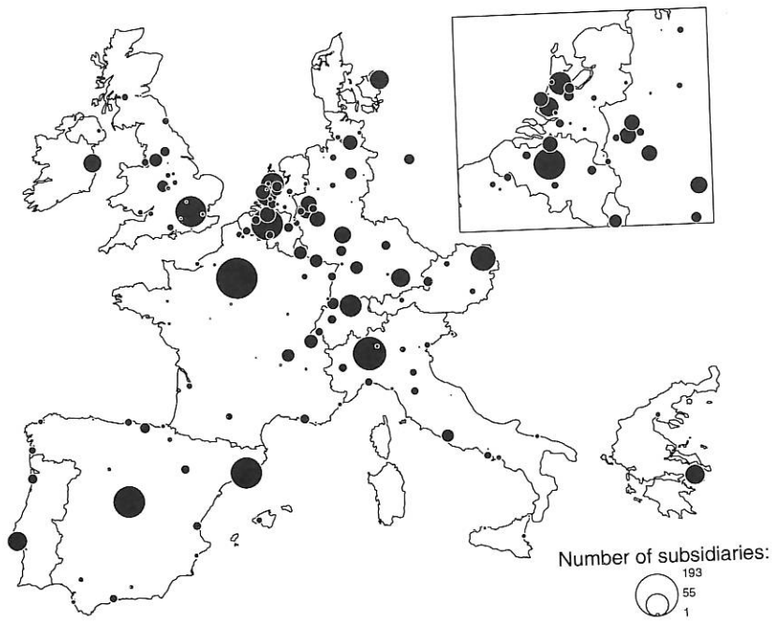


Figure 4. Location of foreign subsidiaries within cities having more than 200 000 inhabitants.

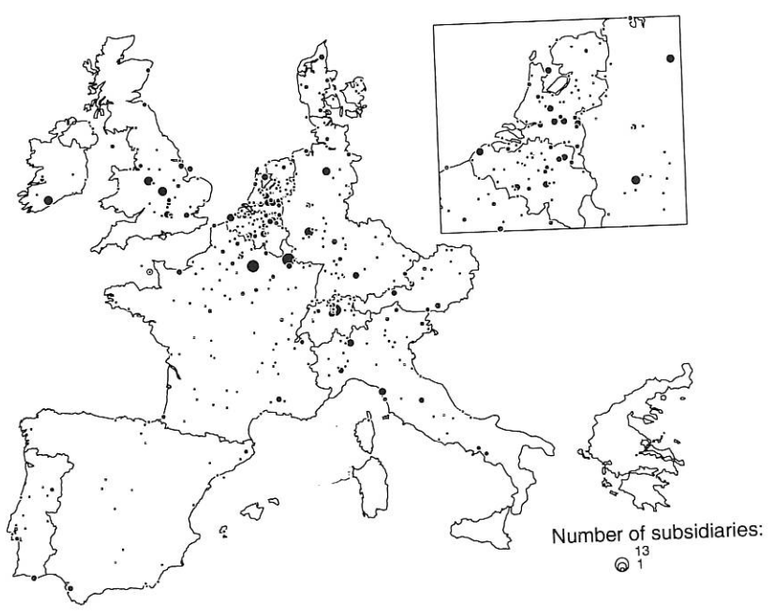


Figure 5. Location of foreign subsidiaries outside of cities having more than 200 000 inhabitants.

and Dutch firms choose countryside implantations much more often than Spanish ones which started their internationalisation later.

5. Interdependences and Dominations

The location of foreign firms also reveals a selection of the city of destination by economic investment according to their country of origin: French investments choose more often Madrid, Geneva, Saarbrücken and Stuttgart; British investments are more directed towards Dublin, Köln–Bonn and Hamburg; whereas German funds prefer Antwerpen, Rotterdam and The Hague. Belgian firms invest more in Luxemburg, Essen and Hannover; and Austrian firms choose almost exclusively Zurich and München.

From our survey it was possible to identify the city in which were located the subsidiaries of firms having a headquarters located within one of the European cities in our sample. We analysed the squared matrix where the headquarters city is considered as the origin, and the city receiving a branch is the destination. The total number of such links is considered as a 'flow' between two cities. This number reveals the intensity of economic control through foreign branches from one city to another. Two-way 'exchanges' of foreign branches are used to measure the intensity of flows of internationalisation between cities on the one hand, whereas the more or less symmetrical character of those relations define links of 'domination' between cities on the other hand.

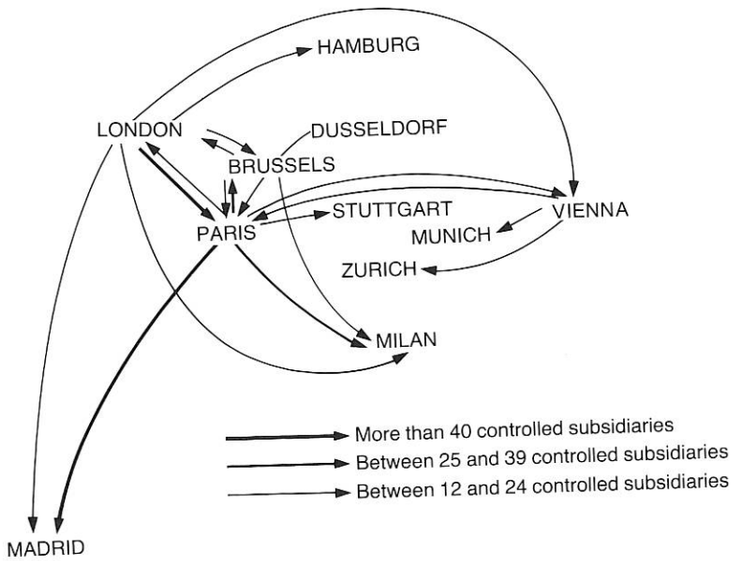
The ten largest relations concern five cities only. London controls 49 subsidiaries in Paris; Paris has 48 in Madrid, 37 in Brussels (which has 22 in Paris), 34 in Milano and 32 in London; whereas London has only 24 in Milano, 23 in Brussels and 21 in Madrid (Figure 6). In such a small system of cities receiving and sending more than 20 links, London has more control on Paris than the reverse, but the number of cities controlled by Paris is larger. Paris also receives more branches from those cities than London does. Another system can be seen around Vienna, which has 19 subsidiaries in Munich and 15 in Zurich. Wien also has links with the other sub-system since it controls 13 branches in Paris and 7 in London, and receives 13 from Paris and 12 from London.

So the geographical situation of cities seems as important as their size in explaining the intensity of relationships through the exchange of subsidiaries. However, an adjustment by a simple gravity model explains only 48 per cent of the inequalities of the links of foreign branch control.

The imbalances in the numbers of firms controlled between each couple of cities can be measured by an index which divides the net exchange (number of 'exported' firms minus the number of 'imported' ones) by the sum of all imported and exported (Figure 6). After this index, there is no relationship of 'dominance' between London, Paris and Brussels. But these three cities dominate strongly Madrid and Milano. On the whole, western German cities dominate the cities of the Benelux, whereas the southern German cities are controlled by Wien, with many connections depending also from Paris, London and Brussels.

Of course the interpretation of asymmetrical relationships in terms of dominance and dependence has to be cautious. It puts forward the city where headquarters are located and which has divided the economic risks into many foreign investments, but it does not mean necessarily that the 'depending' cities which receive more foreign firms than they invest are in a threatening situation. They may also gain advantages from a better integration to the European urban system.

Moreover, the exchanges of foreign subsidiaries are also difficult to interpret since all the links of dependence between cities are not direct. For instance, the spatial organigrams of three firms represented in Figure 7 show that in some cases, a foreign branch may itself control other subsidiaries in cities, either in the same country or in others. On the whole, 8 per cent of the total number of foreign subsidiaries are controlled in such an indirect way. It is then possible to identify 'intermediate cities', where such controlled-controlling foreign firms are located.



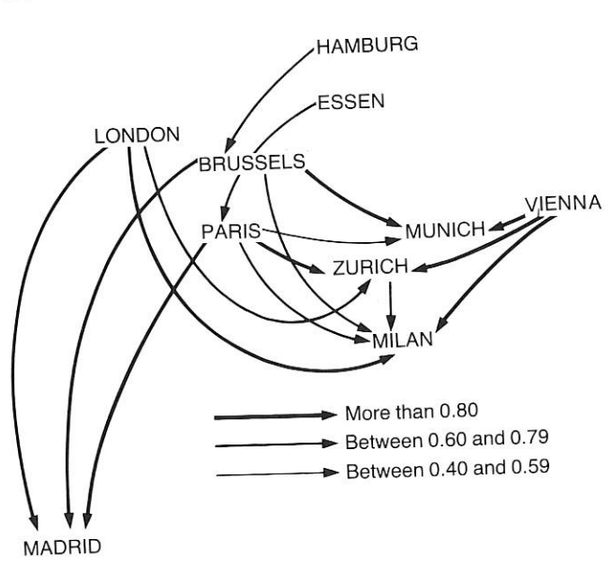
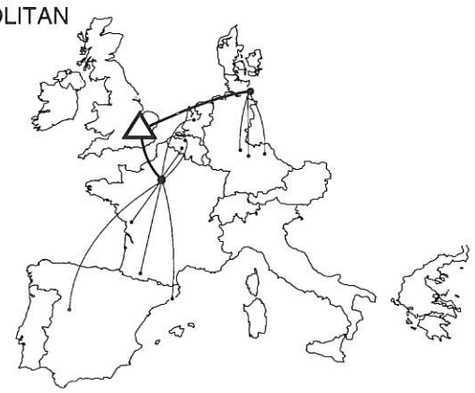


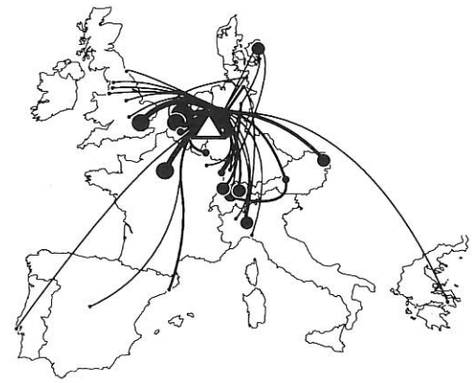
Figure 6. Interdependence and domination links between cities by control of subsidiaries: main flows of subsidiaries (above); and imbalances in exchanges of subsidiaries (below).

These intermediate cities are of three types: the first is 'bridgehead', most of which are large cities (like London, Paris, Milan, Vienna, Barcelona, Stuttgart, Brussels and

A. GRAND METROPOLITAN
(only German part:
Pillsbury GMBH
and French part:
Pistral)



B. VEBA



C. DAIMLER-BENZ

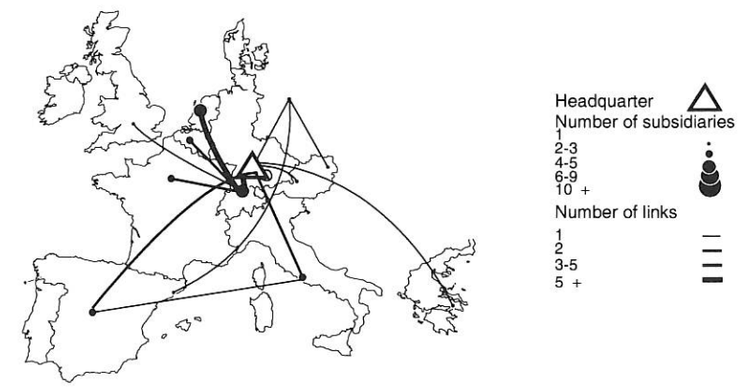


Figure 7. Direct and indirect control of foreign subsidiaries: examples of the spatial organisation of three firms.

Amsterdam), through which firms invest in foreign countries. These cities do not spread out in the same way the foreign investment on their national territory: for instance in

Barcelona, all the indirectly controlled branches are located inside the city itself, whereas Madrid redistributes more in the rest of Spain. Half of the branches indirectly controlled by London remain in that city, whereas Milan, Paris, Vienna and Amsterdam send them in a larger proportion towards other cities in their country.

The second type of intermediate cities 'export' abroad branches for firms whose headquarters are located in their own country. Cities of Austria, the UK and Germany are such relays for firms located in other cities. A third type of city owns subsidiaries which are controlled from abroad but which in turn control branches outside: the best example of such 'turntables' is undoubtedly Amsterdam, possibly due to taxation advantages.

The conclusion of this rapid investigation could be that the links which connect European cities through the internationalisation of their firms are already very complex and do not allow the derivation of a simple pattern of economic control within the urban system, but on the contrary exemplify a rather large complexity of interactions among European cities. If an hierarchy exists between cities, it is tied to the mass effect of the number of international links rather than to a large asymmetry of these links.

6. The Location Factors of Foreign Firms

The preferences of firms in terms of location for their foreign implantations can be revealed by the characteristics of the cities that they choose more often. It may be expected that for such an innovation diffusion process, the size of the cities is important. A simple correlation coefficient confirms that the main location factor of foreign firms in European cities is their size. Size explains 65 per cent of the variations in both numbers of headquarters and subsidiaries. After a variance analysis, the explanation level rises to 92 per cent when the size of cities is combined with their location within the different European countries, since there are still rather strong differences in the rate of penetration by foreign investments from one state to the other.

It may also be expected that the accessibility of cities within the European urban system, and their capacity to develop international relationships, will increase their ability to receive foreign subsidiaries. The functional specialisation of cities may add to their attractivity for firms of the same type. It could also be suggested that a high demographic growth either reflects or attracts foreign investments. In order to identify such location factors, a preliminary study was made for French cities (MOCI, 1989; Rozenblat, 1991). The relevant explanatory variables were of two types: accessibility for international relationships, and capacity for attracting international visitors by suitable facilities.

Similar variables were collected for European cities: accessibility was measured by an international population potential (counting only population across international boundaries); attractivity for international relationships was measured by ther airport traffic and by the number of international congresses hosted by the city; high-level facilities for international visitors were measured by the number and capacity of four-star hotels; functional specialisation was approached, due to the lack of comparable sources, by the share of labour force in tertiary activities; demographic growth was computed within comparable agglomeration framework for four periods using the GEOPOLIS database (Moriconi, 1991). Most of these variables can be seen as consequences as well as factors of the internationalisation.

A correlation matrix was computed (Table 5). It shows that only variables reflecting accessibility, attractivity and catering capacity are linked to the number of foreign firms. (For all those variables, this relationship is mainly an effect of size, since the correlation disappears when one considers the number of firms per inhabitant.) A multiple regression model selected four independent variables explaining 76 per cent of the variance in the number of foreign units within European cit-

Table 5. Correlations between indicators measured on the largest European agglomerations

	Number of foreign subsidiaries	Population	Share of tertiary activities	Number of international congresses	Number of international hotels	International air flows	International population potential	Population growth rate 1950–60	Population growth rate 1960–70	Population growth rate 1970–80	Population growth rate 1980–90
Number of foreign subsidiaries	1 0 180	0.81 0.0001 171	0.07 0.3904 171	0.76 0.0001 180	0.71 0.0001 180	0.76 0.0001 180	0.11 0.1474 169	−0.06 0.4756 164	−0.06 0.4765 164	−0.04 0.6573 164	−0.05 0.5331 164
Population		1 0 171	−0.01 0.93 171	0.71 0.0001 171	0.67 0.0001 171	0.76 0.0001 171	−0.09 0.27 169	−0.07 0.39 160	−0.09 0.24 160	−0.1 0.22 160	−0.07 0.37 160
Share of tertiary activities			1 0 171	0.27 0.0003 171	0.26 0.0005 171	0.21 0.006 171	0.06 0.43 169	−0.22 0.0051 160	−0.15 0.05 160	−0.11 0.14 160	0.16 0.05 160
Number of international congresses				1 0 180	0.8 0.0001 180	0.73 0.0001 180	0.1 0.18 169	−0.09 0.28 164	−0.09 0.27 164	−0.1 0.21 164	−0.004 0.96 164
Number of international hotels					1 0 180	0.85 0.0001 180	0.12 0.13 169	−0.1 0.22 164	−0.14 0.07 164	−0.14 0.07 164	−0.09 0.23 164
International air flows (number of planes)						1 0 180	0.04 0.56 169	−0.08 0.32 164	−0.1 0.2 164	−0.1 0.22 164	−0.02 0.76 164
International population potential							1 0 169	0.21 0.0078 158	0.17 0.03 158	−0.06 0.48 158	−0.11 0.18 158
Population growth rate 1950–60								1 0 164	0.58 0.0001 164	0.22 0.0046 164	0.02 0.78 164
Population growth rate 1960–70									1 0 164	0.7 0.0001 164	0.48 0.0001 164
Population growth rate 1970–80										1 0 164	0.73 0.0001 164
Population growth rate 1980–90											1 0 164

Source: Rozenblat (1992); Moriconi (1992).
Notes:
Correlations are Pearson correlation coefficients.
Prob > IRI under Rho = 0
Number of cities

Table 6. Explanation of the number of foreign subsidiaries

Variables	Regression coefficient	Prob > F
Population	0.00001	0.0001
Number of international congresses	0.10221	0.0001
International population potential	2.06127	0.0044
International airflows	0.0002	0.0127
$R^2 = 0.763$		

ies (Table 6). The size of cities is combined with their number of congresses, their international population potential, and their attractivity for air traffic.

The selection of the variables shows that it is not only the general accessibility but also the specific location which is of importance, since the number of foreign firms per inhabitant is higher in cities not too far from a national boundary. Such locations have the advantage of increasing the simultaneous accessibility to various national markets. This effect is especially high in the smallest countries. It may partly explain, together with the smaller size of the national market, that the level of penetration of their urban economy by foreign investments is always higher than in the largest countries.

The interpretation of the accessibility factor is reinforced by a positive correlation with the availability of high-level accommodation in international hotels (Figure 8). The more accessible the cities are, the more likely it is that they will receive subsidiaries within the internationalisation process. It is interesting to note that the number of international congresses, which is another indication of the international attractivity of cities, has the same location pattern (Figure 9).

However, it is interesting that there is no relationship between the attractiveness of cities for foreign firms and their own dynamism as measured by the growth rate of their population. Structural differentiation within the European urban system seems then to be of greater importance than conjectural features for the internationalisation process.

When the number of firms is measured per number of inhabitants rather than as an absolute number, specific location factors are revealed for the headquarters, on the one hand, and for the subsidiaries on the other hand (Figure 10). The number of headquarters per inhabitant is still correlated with city size, as well as the number of foreign firms that they control. However, that last correlation depicts only the extreme situation of London and Paris and does not exist for the lower levels of the urban hierarchy. Such a result also suggests that the attractivity of city size on headquarters location is not a simple mass effect but that it has a quali-tative dimension which consists of the proximity to economic and politic decision powers in the largest European capitals.

The location of subsidiaries in cities is mainly a matter of geographical situation (Figure 8). The accessibility level is the most important factor, as measured for instance by the international airflows.

7. Conclusion

More research of comparable indices throughout Europe is of course needed before concluding about the factors leading the strategies of foreign firms when they choose a European city for developing their activity. In particular, more detailed comparable information about the economic profiles of cities is needed to investigate the links between urban functions and the internationalisation process. However, the main trend is clear: for their internationalisation, firms tend to privilege the largest cities. This effect is strongest for the location of headquarters and for financial branches. It accompanies the process of metropolisation in the urban system, which reinforces, at least at present,

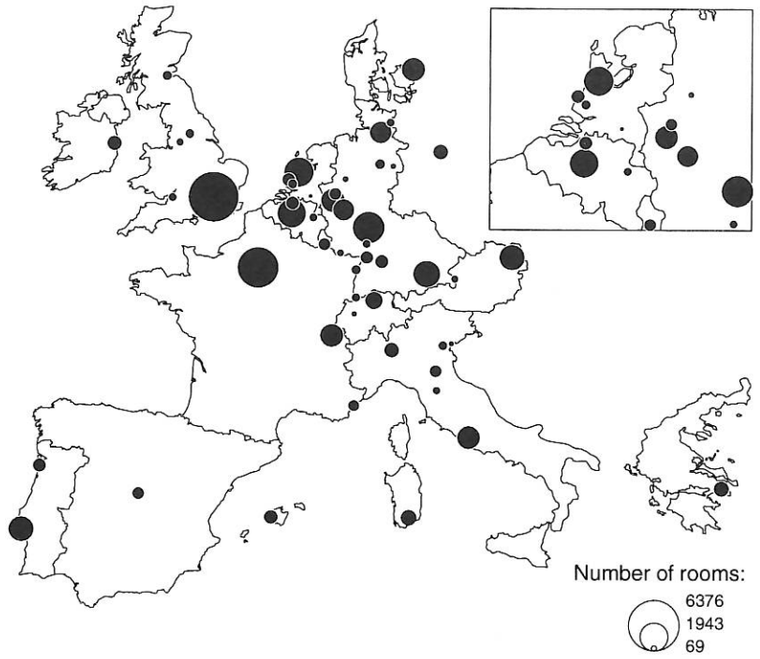


Figure 8. The location of international hotels. *Source:* International Hotels Association (1990).

the top of the urban hierarchies through the internationalisation of all kind of exchanges and communications.

Without any intervention, it is highly probable that the European urban system is entering a period of concentration of, if not so much population, at least of skill and activities in its largest centres. The trend to 'counter-urbanisation' has not been so important in Europe as in the US; it has been mainly a process of local deconcentration of the population in the most densely populated areas, without any strong revitalisation of smaller towns or strong decline of the largest urban centres—except perhaps in the UK. The end of the 1980s and the first results of the 1990 censuses show on the contrary, together with a continuing local deconcentration of the densely populated areas, a new trend in concentration of population in the largest cities (Pumain and Faur, 1991). This will increase territorial imbalances, since almost 50 per cent of the population already lives in the approximately 400 cities of over 100 000 inhabitants, on less than 5 per cent of the surface.

However, the role of multinational firms in the process of the internationalisation of the European urban system may not be limited to the metropolisation process. The firms which have the longest history in the internationalisation process locate themselves in smaller centres than the new ones. Some specialised activities, like research in the case of 'technopoles', or tourism, already show slight preferences for small or medium-sized cities. Counterbalancing policies could trade upon those differential propensities to aggregate in metropolises. They could also compensate for the main advantage of the largest cities, which is the universality of their image outside their country, by diffusing knowledge about the real comparative advantages of other cities. Better information should also be given about the social and physical environments, recognising the indispensable variety of an urban system in complex societies. Policies also may act by

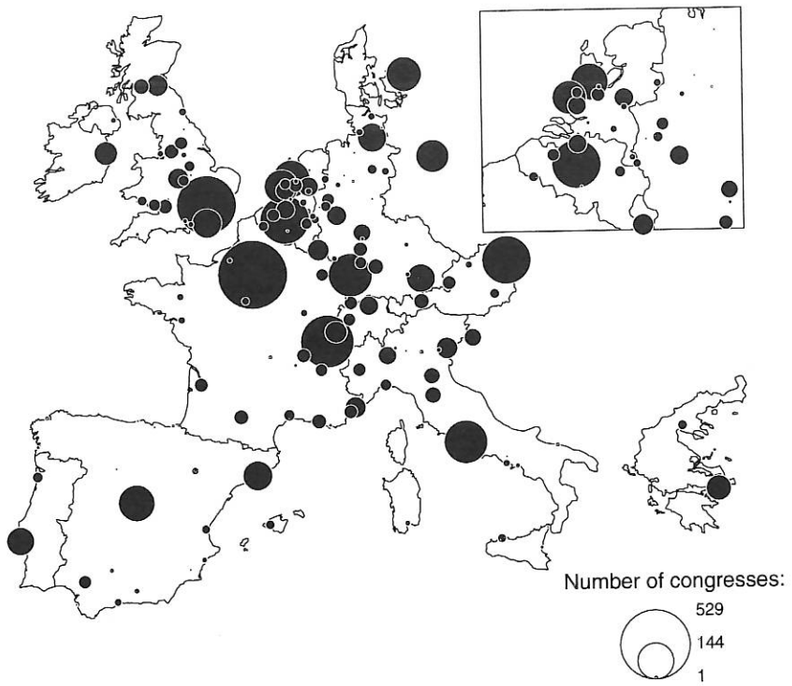


Figure 9. The location of congresses, 1987–90, in cities having more than 200 000 inhabitants. *Source: International Congress Calendar.*

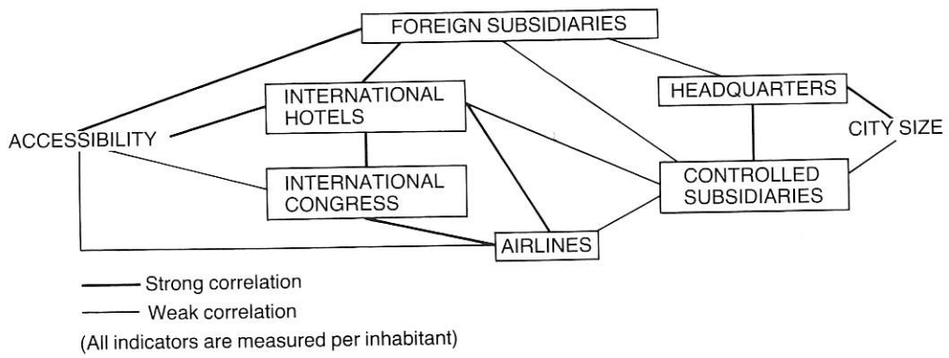


Figure 10. Multinational firms and other international functions.

spreading out the infrastructures for communication and transport, which are the second location factor by importance. Due to the cost of large infrastructures, this is however not the actual trend.

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