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SPATIAL DIFFUSION OF ASIAN DIRECT INVESTMENTS IN THE NORTHERN EUROPEAN EU COUNTRIES

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The first publications on the spatial diffusion of foreign direct investment (FDI) appeared in the 1970s-1990s. Since then, many of their provisions have been repeatedly criticised as outdated and inconsistent with empirical evidence of the current stage of globalisation. Previously, only examples of ‘newcomers’ to internationalisation were used to illustrate distinct phases in the expansion of transnational companies and their effort to first establish themselves in major economic centres, as the factor of gradually growing awareness of potential investors began to play an important role. This article aims to show the persistent character of FDI spatial diffusion patterns and their correlation with the existing hierarchy of cities. In our research, we used the example of Asian companies working in the Baltic states, Finland, Sweden and Denmark, newcomers to internationalisation, not affected by the ‘neighbourhood effect’, and contrasted them with Western European investors. We confirmed the validity of the hierarchical wavelike model of the FDI spatial diffusion with the dominance of metropolitan urban agglomerations. It was also found that mergers and acquisitions are dominant forms of FDI in developed countries. Their ascendancy leads both to a distortion of the geographical pattern of subsidiaries networks of investor companies and to the intention of investors to sell their assets in provinces and move their head offices closer to capital cities. Consequently, there is a simplification of the structure of businesses, which is typical of the earlier stages of the FDI spatial diffusion.

Keywords:

foreign direct investment, Asian multinational enterprises, Baltic region cities, FDI spatial diffusion

Problem statement

There are hundreds of scientific works on foreign direct investment (FDI). The interest the topic generates is hardly surprising. On the one hand, it has not lost its relevance over the past 50—70 years. After all, this type of investment in-

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variably serves a significant role in host economies, provides the inflow of funds and ensures the technology transfer required for new enterprises and industries. It can have both positive and negative effects on the national economy, for instance, by modifying the competitive environment. Outward FDI is also of importance. On the other hand, direct investment is constantly transforming, opening up new lines of research. For example, over the last 50 years, the list of FDI-exporting countries has significantly expanded; scientists are also striving to fill the knowledge gap on ways to integrate various enterprises and their clusters into cross-border value chains. Still, the geographical diffusion of FDI does not seem to receive sufficient attention.

Of course, empirical works on direct investment to regions and even its interregional features (for instance, in Russia [1, 2]) do exist. Yet, researchers often neglect to identify general patterns of spatial FDI diffusion. In our opinion, one of the primary reasons for this is disregard for modern dynamic location concepts. Many scholars still rely on almost a century-old ideas of agglomeration effect. At best, they are sprucing up August Lösch's conclusions with Paul Krugman's new economic geography (for an example of a well-cited work by two PhDs, see [3]).

This article aims to examine whether the 1970s-1990s' dynamic location concepts based on various centre-peripheral and hierarchical ideas about the organisation of economic space are adequate to describe FDI diffusion in the current conditions. The significance of these concepts for the emerging scientific discipline of company geography has been discussed in a separate article [4]. Six northern EU countries — Lithuania, Latvia, Estonia, Finland, Sweden and Denmark — were selected as a geographic 'testing ground' since they form a relatively isolated and compact macroregion. This selection limits the array of subsidiaries of multinational enterprises (MNEs), for instance, Japanese ones, owning hundreds of firms globally.

The study largely relies on the space segmentation done by investors. Adding non-EU states (for example, Norway, undoubtedly part of Northern Europe) or countries with large territories outside the Baltic region (Germany and Poland) to the 'testing ground' would grossly distort the diffusion pattern by including in the study fragments of subsidiary networks chains aimed at expansion to other regions. The Baltic voivodeships of Poland are the periphery of Warsaw rather than Stockholm, let alone Riga (although some investment firms may have a different vision of global and European macroregions). Viewing the six Northern EU countries together allows us to add another hierarchical level (assuming that the EU is a supranational quasi-state, which is the case when assessing foreign trade and competition policy essential for FDI).

As for the choice of investors, most Asian multinational companies are 'newcomers' to internationalisation. Therefore, identifying 'model' patterns is simpler in the case of such businesses since they, at least in Europe, have not so far developed intricate subsidiary networks. Moreover, Asian FDI in the Baltic region is mostly free from the 'neighbourhood effect', and this circumstance simplifies our analysis.

Spatial diffusion of direct investment models and modern methods for their confirmation

The first dynamic location concept was Harold Hotelling's simple ice cream vendor model of two sellers on the same beach, representing an evenly distributed consumer market [5]. We can use it to explain, for example, the territorial concentration of FDI in the Russian automotive industry in the urban agglomeration of St Petersburg or the Kaluga region. However, it was not until the late 1960s' Harvard's multinational enterprise project led by Raymond Vernon (for more detail, see [6]) that such dynamic concepts were regularly applied to explain FDI.

Whilst the product life cycle concept proposed by Vernon does little to explain the international contrasts in FDI diffusion, the applied works of James Vaupel [7] and William Davidson [8] on American transnational corporations allowed researchers, for the first time, to focus on the 'neighbourhood effect' in the geography of foreign investment. As early as the end of the 1990s, we showed, drawing on German data, the paramount importance of the 'neighbourhood effect' for many direct investors determining the in-country investment diffusion pattern [9, p. 78].

Another theoretical explanation of the spatial diffusion of FDI, also dating back to the late 1960s, is the Uppsala school with its internationalisation model led by Jan Johansson. In their most prominent works of the late 1970s, the Uppsala scholars replaced Vernon's 'neighbourhood effect' with a more general concept of 'psychological distance'. Still, the focus remained on the phased internationalisation of firms conditioned by the long time needed to learn how to run increasingly complex forms of international business or enter new countries and regions the company knows little about at the initial stages of foreign expansion (see [10]).

Lars Håkanson, the school's representative famous for proposing a stage model of corporate growth in the 1980s [11], recently produced a detailed analysis of the viability of the Scandinavian concept. Criticism of phased internationalisation as a consequence of the 'learning of firms' has been widely criticised by students of 'new international enterprises' and companies 'born global' (the pioneering works are [12, 13]; for modern interpretations, see [14, 15]). However, this criticism is easy to counter by clarifying one of the Uppsala School's ideas: after all, it is not firms that 'learn' but people working for them (in the 1970s, this circumstance was negligible). Thus, the rapid internationalisation of individual companies (those 'born global') is due to foreign business experience acquired by top management elsewhere [16]. In questioning the scientific validity of these interpretations, Håkanson proposes his own 'Casino Model' of internalisation. In essence, it holds that many decisions made by MNEs are not rational as companies enter various markets with small FDIs, seeking opportunities and acting upon those they discover. Although the motives of MNEs are as described by Johanson and his colleagues, the decisions these businesses make

are not overly deterministic: for rapidly internationalising firms, the search for global niches is a substitute for gradual international expansion. In his model, Håkanson attempts to reconcile on a fundamental level the empirical evidence, the postulates of the Uppala School and the beliefs shared by advocates of research into 'born globals' [17].

The third significant development of spatial FDI diffusion concepts was the German researcher Rolf Schlunze's adaptation of the hierarchical wavelike innovation diffusion model by the Swedish geographer Torsten Hägerstrand [18]. Schlunze applied the model to produce a conceptual description of the expansion of Japanese firms in West Germany. In the early 2000s, having made adjustments for the insights provided by the models described above, we presented the resultant concept as a basically universal model [19].

The current version of the hierarchical wavelike diffusion of FDI has four central points. Firstly, foreign enterprises (especially with greenfield FDI) often choose urban agglomerations playing the role of major economic centres as their primary locations since foreign entrepreneurs are best informed about them, and they have good international transport links, etc. Secondly, distortions are often a result of the 'neighbourhood effect', the investor's previous collaborations with local producers (thus localisation is possible in a relative periphery) or industry specifics (raw materials extraction is confined to deposit sites and requires an extraction licence; boarding houses will concentrate in resort areas). Thirdly, further FDI diffusion has hierarchical elements as new enterprises will open in regions and cities of decreasing importance. Moreover, at least in the case of Russia, the hierarchy of urban agglomerations (especially for European MNEs) is determined not only by their population or regional product but also by how far east they are. Fourthly, the wavelike diffusion does not always involve many enterprises. This effect is due to industry-specific economies of scale when fewer than a dozen subsidiaries of one firm can cover a national market. Wavelike diffusion is typical of manufacturers of low-tech mass-market products and companies providing a standard set of services (retail chains, fast food restaurant groups, retail banks, etc.). An extensive subsidiary network develops incrementally in major urban agglomerations, gradually expanding into the periphery.

By summarising the insights of the three models, we can formulate several hypotheses to be tested by empirical data:

- 1) international economic relations, especially FDI, is more complex than doing business domestically; against the background of poor knowledge of foreign markets, this slows down expansion abroad;

- 2) varying knowledge of countries, regions and cities attaches importance to psychological distance. The latter, if the array of direct investors is wide enough, produces the 'neighbourhood effect', bringing out the factors of linguistic, cultural and historical proximity, as well as other non-economic circumstances. Yet, for some investors, psychological distance may play out differently because of certain specific features (for instance, an atypical ethnicity of the company owner)

or preference for a strategy of simultaneous entry into multiple markets, often by trial and error (the latter is especially characteristic of vibrant emerging service industries);

3) the geography of FDI is affected not only by the general investment climate or its distortions by non-economic influences but also by the role that cities (or their environs) housing foreign enterprises have in the national economy. Thus, wavelike spatial diffusion of FDI (which, as shown above, does not necessarily concern all investors) has cardinal importance.

As testing each of these hypotheses is a large-scale task, this article examines only the latter of the three. We chose Asian direct investment because, in its case, the ‘neighbourhood effect’ and associated distortions that may affect the analysis of investment climates of Northern EU countries are kept to a minimum.

The geographical dimension of Asian investment expansion in the Baltic region

Spatial FDI diffusion can be studied by investigating any company in any region. Firms, however, tend to focus on their recent accomplishments, and it is not easy to find even half a century old information on FDI. The failures of MNEs covered by the media quickly disappear from the newsfeed of investment companies’ websites. Although the spatial patterns of foreign giants’ ramified subsidiary networks are tempting to study, in practice, it is difficult to identify patterns in the corresponding arrays due to a variety of distortions complicating the search for reliable information. That is why, in our opinion, the emphasis should be on the analysis of ‘newcomers’ to internationalisation.

The first significant international expansion of Asian direct investment (aside from Japanese MNEs) occurred only 40–50 years ago [20]. Another reason for choosing the Baltic region as a ‘testing ground’ for studying the initial stages of diffusion is that Baltic countries opened for FDI only 30 years ago. Sweden and Finland were not attractive to non-European investors for several reasons until the early 1990s. Thus, the 2010 acquisition of Sweden’s industry flagships, Volvo Cars, by China’s Geely Holding Group was a significant globalisation milestone.

Of course, our choice has certain limitations: many Asian investors bypass the Baltic region. The four traditional groups of motives for FDI are supporting marketing expansion, reducing labour costs, facilitating resources extraction and establishing control over high-tech companies. Chinese and South Korean, not to mention Indian or Thai, investors lack interest in Northern Europe as concerns the second and third groups of motives. Moreover, Northern European sales markets are not huge, and high-tech companies operate in the region in a limited range of industries (for instance, different areas of mechanical engineering). As a result, many leading Asian MNEs willing to open factories in Europe do that in neighbouring Russia, Poland and other Visegrad Group countries,

Germany and the UK. Few main EU sales headquarters covering the entire integration group are located in the north of Europe. Nevertheless, expanding the geographical scope of analysis would not help us prove or disprove that such hierarchical wavelike diffusion of FDI occurs for such investor companies in the Baltic region.

The most recent data on FDI stock from different countries currently available on the IMF website are for the end of 2019 (see Table 1). The total FDI from Asia (excluding the CIS) in the six countries under consideration amounted to USD 28bn or 4.4 per cent of the total amount of direct investment in the region. This percentage was slightly higher in Finland and Sweden — homes to many high-tech companies, which appeal to Asian investors. Moreover, Finnish and Swedish universities and science parks provide access to the achievements of some of the most advanced national innovation systems through acquisitions and greenfield investments.

Table 1

FDI stocks in the Northern EU countries as of the end of 2019, USD million

FDI Source Country	Denmark	Sweden	Finland	Estonia	Latvia	Lithuania	Total for the six countries
China	144	9,449	4,153	36	30	9	13,821
Japan	1,813	4,354	796	152	0	-5	7,110
Hong Kong	1,390	...	443	45	15	922	2,815
Israel	21	...	921	26	65	59	1,092
Singapore	515	...	6	143	69	24	757
Republic of Korea	52	670*	0	0	30	0	752
India	6	609*	6	5	7	13	646
UAE	...	-37	-9	184	17	134	289
Thailand	134	0	-4	1	0	67	198
Malaysia	157	-2	-1	1	0	6	161
Turkey	-36	127	16	19	16	-1	141
Vietnam	0	60	-1	0	30	0	89
Saudi Arabia	42	...	-13	1	0	3	33
Taiwan	...	35	-6	1	0	0	30
Top 14	4,238	15,265	6,307	614	279	1,231	27,934
Global	134,982	340,853	85,821	27,940	17,890	20,855	628,341
Share of top 14, %	3.1	4.5	7.3	2.2	1.6	5.9	4.4

Notes: 1) negative stocks are a result of the revaluation of previous FDI due to the termination of large investment projects; 2) information on inward FDI was used for all indicators of performance in Sweden (except those of South Korean and Indian companies); 3) FDI from post-Soviet states was not considered in the case of the Baltic States to avoid the 'neighbourhood effect'.

Source: Coordinated Direct Investment Survey (<https://data.imf.org>).

Almost half of all Asian direct investments came from China, whose contribution has significantly increased over the recent years. As a result, Japanese businesses, which came to Northern Europe as early as the 1980s-1990s, slid down to second place. Japanese and Chinese enterprises are the major Asian competitors in northern EU states.

Not all countries in the region are equally appealing to investors from Asian countries. Sweden is slightly more popular with Indian, South Korean, Turkish and Vietnamese companies, whilst Denmark attracts MNEs from Singapore, Thailand and Malaysia; the Baltic countries have allure for firms from the UAE. Remarkably, Taiwan ranks only 14th in terms of FDI in northern EU countries, whilst, in terms of outward FDI stocks, the island takes 7–8th place amongst all Asian countries.

The literature on the international expansion of Asian direct investment usually has little, if anything, to do with the analysis of FDI geographical patterns. Works on the topic, be they review papers on MNEs from different countries (see [21; 22]) or books and articles on investors from key states [23; 24], tend to focus on three aspects: reasons to export capital from China, India, countries of Southeast Asia and the Middle East; differences between Asian MNEs and the ‘classical’ US and EU models; the regulation of Asian FDI (Western protectionism). Econometric exercises with high-sounding names are not likely to clarify anything (to support this statement, here is a link to a recent work valuable mainly for its bibliographic review [25]). The few exceptions tend to focus on China (see [26]). The literature rarely views investments in the Baltic region, whilst the first significant work on Chinese direct investment was published 14 years ago [27]. Articles on Chinese investment in Northern Europe and the Baltic countries are published with a high degree of regularity (a most recent example is [28]), but FDI from other Asian countries in the region is rarely given even a paragraph.

We analysed individual Asian MNEs to examine our working hypothesis. Particularly, we investigated their websites, media reports and diplomatic mission websites. More than 50 firms from UNCTAD annual World Investment Reports and their electronic supplements were selected (with approximately the same number of leading Asian investors left out as not having assets in northern EU countries). The most recent instalment at the time of writing is [29]. For the Republic of Korea, Taiwan, Turkey and Israel, we also used the materials of an international study on MNEs from emerging markets, including the monograph [30].

The car manufacturer Toyota Motors, Japan’s leading investor and the owner of seven factories and three R&D centres in Europe, including facilities in

neighbouring Poland and Russia, has none in the study region. Nor are there any subsidiaries of Honda Motor, the second-largest Japanese investor by foreign assets. The leaders of some Asian countries have never carried out FDI in the region, amongst them the Chinese oil and gas corporation CNPC (it has significant assets in the UK, France and Russia) and the Taiwanese electrical engineering company Hon Hai Precision Industries (represented in three Visegrad group countries).

According to UNCTAD, the Japanese pharmaceutical company Takeda is the only Asian company amongst the world's top 25 non-financial MNEs to have subsidiaries in the region, even though they are less significant than its enterprises in Western Europe or its plant in Russia. In 2011, the company bought the renowned Scandinavian pharmaceutical company Nycomed headquartered in Roskilde and a factory in Hobro, both in Denmark. In 2014, Takeda Pharma A/S moved from Roskilde to Tostrup, closer to Copenhagen, announcing the relocation of its R&D units to Germany and the UK, leaving the Danish office solely to serve the Northern European markets. In 2018, major management functions were moved to Switzerland. The company's sales offices are in the capitals of all other countries in the region, which demonstrates the preference for the largest centres in the city hierarchy. Apart from its facilities in Denmark, Takeda used to have a regional plant in Põlva, Estonia (sold in 2016). The Japanese investor did not build either the enterprise in southeastern Estonia or the plant in provincial Hobro, but, having acquired them, the Asian company decided to simplify the geographical organisation of its business.

For an Asian investor, even the growing complexity of geography following the acquisition of a firm does not necessarily exclude FDI in large centres. In 2000, Toyota Industries, one of the world-leading manufacturers of handling and storage equipment, bought a major industry player — the Swedish company BT Industries, which has existed since the 1940s (now Toyota Material Handling Europe). Its headquarters, main plant, R&D centre and two other enterprises were located in the small provincial town of Mjölby more than 200 km away from Stockholm (with a sales office in the capital's western suburb of Bromma) and Gothenburg, Sweden's second-largest city. More than half a century of experience in Scandinavia did not prevent BT Industries from capturing the markets of neighbouring countries and opening sales offices in both the provinces (Slangerup in Denmark) and suburbs of capitals (Vantaa in Finland). And its acquisition by the Japanese did not lead to the closure of these divisions. Yet, the development of the Baltic market, supported by direct investments since 2001, is carried out by a new subsidiary company registered in Latvia's Riga —

the largest of the three Baltic capitals. Soon, the main R&D centre moved from Mjölby to Gothenburg, where the Japanese investor founded a new company in the Lindholmen Science Park.

Empirical research results: proving the four hierarchical wavelike diffusion theses

The above examples do not disprove the four theses about the hierarchical wavelike diffusion of FDI. Overall, the major localisation centres for the study array of Asian MNEs are Stockholm and Helsinki, a little less commonly Copenhagen and Gothenburg. Although the capitals of the Baltic countries are markedly inferior to them, they far surpass any other city of these states (except for the port of Klaipeda in Lithuania). Companies that are exceptions might 'prove the rule' later. For instance, in 2012, GRG Banking, a large Chinese manufacturer of ATMs and other equipment for financial institutions, decided to coordinate all its European activities from its office in Vilnius, Lithuania [28]. But, in a few years, it changed its strategy to a more traditional one, conquering the huge European market through offices in million cities in the most populated countries (Hamburg, Moscow and Istanbul).

Since most of the examined second-tier companies perceive Northern EU countries as a peripheral region for their expansion, these organisations either open sales offices only, or such offices become principal recipients of FDI. Their localisation usually fits neatly into the analysed hierarchical wavelike diffusion model. At the same time, an investor using FDI to support sales may choose a capital's suburb over the city itself, such as Ballerup in Denmark, Solna in Sweden and Espoo in Finland. The first and the third house South Korea's Samsung Electronics; the first and the second, Japan's Hitachi.

The Stockholm metropolitan area, to which Helsinki is not a serious rival, is another likely location for FDI in the service sector. In 2012, the Bank of China, a pioneer in Chinese financial expansion in Scandinavia, opened its only subsidiary bank serving Northern Europe (including Norway and Iceland) in Stockholm. Five out of 12 Indian IT firms in Sweden are registered in the centre of the Stockholm metropolitan area, four in the outskirts of the capital or nearby suburbs (Kista, Farsta, Solna), and three in cities within an hour drive from the capital (Sigtuna, Uppsala and Nynäshamn). There are over 20 Indian IT firms in Finland, mostly in Helsinki or its suburb Espoo. Of course, the choice between the metropolitan areas of Sweden and Finland often depends on the needs of the industry. For instance, in 2012, India's Trivitron Healthcare acquired a major manufacturer of medical test equipment, Ani Labsystems, with a plant in Vantaa (a suburb of Helsinki).

Within the hierarchical wavelike diffusion model, when the investor considers all northern EU countries together, Stockholm's narrow leadership means that other Swedish cities will be preferred as a destination for additional FDI over Helsinki or Copenhagen. Japan's Mitsubishi Electric has three sales companies in the study region: in the capital in the east of Sweden, Gothenburg in the west and Lund in the south (most likely, these offices also cover the markets of neighbouring countries).

The second thesis is illustrated by diffusion distortions caused by FDI in the purchase of long-standing local companies (or MNEs from Germany and other EU countries). There are also industry-specific distortions: India's hotel company Mahindra Holidays & Resorts makes all its FDI in the region far from Stockholm or Helsinki. In 2014–2017, this investor took control of the Finnish Holiday Club Resorts with hotels in Turku, Vuokatti (Kainuu), near Kuusamo (Northern Ostrobothnia) and Saariselkä (Lapland), as well as in the Swedish ski resort of Åre in remote Jämtland County and Ekerum on the island of Öland.

The discrepancy between how the investor company delineates the region's boundaries and its actual borders may also cause distortions. Viewing 'greater' Northern Europe or the entire Baltic region as a single destination may point to the construction of a transboundary hierarchical wavelike model taking into account production needs. For example, the European headquarters of China COSCO Shipping, China's largest transport company, are outside the study region, in Hamburg. Its offices in the Baltic region are located along the route to the east: in Oslo (Norway), Gothenburg (Sweden), Birkeröd (a northern suburb of Copenhagen), Gdynia (Poland) and Helsinki (Finland), i.e. there are no offices in Stockholm or Baltic ports. Only in 2020, Hong Kong's famous conglomerate Hutchison, owning 15 terminals in Europe, acquired its first port in the region, in Stockholm.

As for the purchase of existing plants, the common belief in the early 1990s was that a foreign investor in a small country did not care too much for the location but focused on other economic performance of the acquired assets. In other words, only the further expansion of such an MNE is of interest when describing spatial FDI diffusion. Geely Holding Group, having purchased Volvo Cars, got several factories, R&D centres and other enterprises in several European countries. Those in the study region are located in Gothenburg, where the company originated in 1915. Further FDI diffusion has been wavelike: in 2013, the Chinese investor opened another R&D centre — Uni3 by Geely — in Gothenburg (in the Lindholmen Science Park) to meet the needs of the parent Chinese company.

The third thesis, the one about the city hierarchy, requires further clarification based on the results of our analysis. If an Asian investor carries out FDI not to support its marketing expansion but to increase its technological level, it is essen-

tial to consider the hierarchy of university centres. A clear illustration is the case of the Chinese IT company Huawei Technologies. It has sales subsidiaries in central Stockholm, Helsinki, Copenhagen and Vilnius. Its R&D centres in the study region are located in the outskirts of the Swedish capital (in Kista — the local Silicon Valley housing several Asian R&D centres, for example, South Korea's Samsung Electronics), Gothenburg, Lund (home to the second-oldest university in Sweden, after Uppsala) and Tampere.

To what extent does Tampere, Finland's second-largest city, owe its appeal as an FDI destination to its economic potential and to what, to its general attractiveness to high-tech businesses? Not only does it have a good university, but also it boasts a high quality of life (one of the best in Europe, according to several opinion polls) — a factor particularly valued by well-paid specialists. The case of Huawei offers an answer to this question: in 2016, when Microsoft closed its R&D centre in the city, the Chinese took over its very professional team. Moreover, the 2021 world leader in smartphone sales Xiaomi Corporation opened its first European R&D centre in Tampere in 2019.

The fourth thesis, about diffusion reducing to simple forms with a few subsidiaries in a region, is clearly illustrated by most Asian investors in Northern Europe. But this does not mean that cases of branched wavelike diffusion will not be observed in the future.

Difficulties in identifying spatial diffusion patterns

The description of FDI spatial diffusion models aimed initially to facilitate the attraction of new investment in a country. Insights into what attracts new investor countries and industries to a national economy simplified raising awareness amongst potential investors and creating favourable conditions in the most likely locations for subsidiaries.

Knowledge of FDI diffusion mechanisms helps larger countries accelerate foreign expansion into peripheral areas.

In the case of small countries, especially those participating in integration projects, it is essential to understand what macro-region potential investors consider as a single destination. Within the perceived boundaries of such a macro-region, MNEs will create a hierarchy of cities or urban agglomerations. Representatives of different countries may have different views on the geographical division of Europe. It is equally important to remember that the hierarchy of cities changes over time, particularly under the influence of internal and external migration.

The mature stages of the internationalisation of firms have always been of lesser interest to researchers more focused on serving the interests of society

and governments rather than entrepreneurs. When foreign investors come to a country or region, experts would assess their activities through the lens of purely economic analysis. As the case of Takeda shows, after acquiring local companies (for example, to gain access to their technology or knowledge of local markets), a foreign investor may seek to simplify the geography of its subsidiaries by moving closer to the capital and selling enterprises in the province. In other words, even though mergers and acquisitions, as a form of FDI, are currently dominating developed economies, a foreign investor unfamiliar with the details of doing business in the area goes back to earlier, more comfortable stages of spatial diffusion. At the same time, they do not curtail business activity in the region: the Japanese pharmaceutical company moved its operations to the countries where it felt more at ease (Germany, the UK and Switzerland).

There is, however, another factor not considered in the article: at mature stages, not only do the foreign investors have a lot of knowledge of the local environment, but they also actively cooperate with other foreign companies and local businesses, which grossly distorts any basic FDI spatial diffusion model.

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