

Divergence in Host Economy and FDI: Job allocation by Japanese MNEs in France and the UK

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Abstract

~~Along with~~With the development of ~~the~~globalisation / regionalisation, ~~the~~economic divergence within a country becomes larger. This situation certainly influences ~~on~~ MNEs' strategy and operations. This paper examines the effects of ~~the~~domestic divergence ~~relating their~~ labour forces in France and the UK on ~~the~~job allocation by Japanese MNEs in those countries. Some factors like ~~the~~manufacturing share and unemployment rates positively influence foreign investment, but there are some differences between ~~the~~two countries. Furthermore, Japanese MNEs do not always follow the industrial concentration pattern in those countries. ~~As a~~Contrary to ~~the what~~ mainstream international economics might predict, MNEs ~~are can be~~ expected to behave uniquely.

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I. Introduction

Behind the scene of global economic fluctuation in the 21st century, various types of economic imbalance have gradually developed. Indeed, the global economic crisis started with the sub-prime loan problems in 2007, followed by the Lehman shock in 2008, and finally resulted in the financial turmoil and sovereign risks in 2009, but the recovery process seems to ~~start~~ have started from 2010. Before the crisis, a lot of observers, ~~from the media and the policy makers to the academics and the international organisations,~~ praised the unprecedented prosperity of global economy. However, it is worth ~~to mention~~ ing that some rang ~~alarming bells of alarm on the~~ economic divergence. Palma (2006) shows ~~that~~ the difference between the rich and the poor within a country is the cause of ~~the~~ inter-country diversity of income distribution in the global economy. Sapir (2004) points out that ~~the~~ economic inequality within ~~the~~ EU member states can be observed along with the development of ~~the~~ EU integration. Here, we can say that such inequality within a country partly relates with the geographical pattern of its national economy. It is not so unrealistic that the workers in relatively poor locals can earn less than those in rich-wealthy ones. ~~In actual~~ Actually, the OECD (2007) reports ~~the-that~~ economic difference ~~between-among the~~ OECD countries is less remarkable than within each OECD member state. In sum, in the age of globalisation, ~~the~~ economic divergence is one of the most important issues ~~under the age of globalisation to be investigated.~~

In order to ~~come close to the situation of the real world~~ ascertain the real situation, new approaches ~~have~~ yes- been taken to explain the unbalanced allocation of production ~~under the process in the age~~ of globalisation. New economic geography (Krugman, 1991; Fujita, et al. 1997) is one of such important steps forward taken by ~~the~~ mainstream economists. This ~~attempt is~~ this step forward has enabled ~~successful to in~~ constructing the models showing the logic-of-relationship between economic concentration ~~along-with and~~ the advancement of international trade. However, the basic assumptions for the models ~~sacrifice-causes them to ignore the~~ differences among ~~the~~ factors ~~which have with~~ significant policy implications. For example, the “iceberg” form of transportation cost in new economic geography (Fujita, et al, 1997, p.49) does not explicitly distinguish the costs concerning “transportation” from one form to another. While the costs concerning physical movement from one place to another relate to the conditions of infrastructure, the transaction costs ~~concern-are related to the~~ different ~~characters-characteristics~~ of markets between-different-countries from one country to another, which may well

reduce the value of goods and services from home to hosts. ~~The~~ improvement of the infrastructure is ~~appropriate~~ important to consider in the former case, and the accumulation of knowledge and information for the market in question is necessary ~~for them~~ in the latter ~~case~~. That is, the different transportation costs ~~needs-require~~ the different ways of business to reduce ~~the~~ costs.

As summarised above, ~~the~~ mainstream international economics pay ~~a~~ great attention to the international ~~(visible) (visible)~~ trade to explain ~~the~~ economic divergence within a country, but the multinational enterprises (MNEs) are given a less important role. For example, Krugman and Obstfeld (1997, p.173) state, “~~multinational-multinational~~ corporations probably are not as important a factor in the world economy as their visibility would suggest”. This assessment is based on the assumption that MNEs would behave ~~as~~ reactively actors in a market economy, such ~~like-as~~ an atomic actor within the perfect competitive market, and that they would follow the force of market mechanisms. However, it is difficult to justify the above assessment from the ~~view-point~~ viewpoint of international business scholars, since they do not see the world economy ~~is-as~~ the perfect market, but ~~has~~ rather, as having a lot of structural imperfections, which are the basic reasons ~~of-for~~ the very existence of firms, including MNEs.

From the above observation of the 21st century global economy, and the assessment on the shortcomings of ~~the~~ mainstream international economics, the questions to be asked from the ~~view-point~~ viewpoint of international business ~~are~~ concerning the relationships between MNEs and ~~the~~ economic divergence. Then, the differences in the transportation costs must be kept in mind, while the characteristics of MNEs need to be explicitly considered. ~~For the purpose of~~ In this research, we will ~~take-examine~~ Japanese MNEs in France and the UK. Besides the availability of the necessary data for analysis, ~~the selection of~~ there is sufficient rational for selecting these two countries ~~has significant foundations~~. First of all, they are the largest host economies of Japanese FDI in the EU. They are quantitatively similar ~~with their~~ respect ~~of-to~~ such macro-economic indicators ~~such-like-as~~ population, GDP, and so on, ~~whilst-while~~ their institutional frameworks are ~~quite-contrasted~~ with each other greatly. Therefore, the comparative analysis of Japanese MNEs in France and the UK will give us the deep insight on ~~the~~ location issues.

~~This paper will take the following structure after this introduction~~ The outline for this paper is as follows:- Chapter II will summarise the literature concerning ~~the~~ economic

location, and Chapter III will consider ~~the~~labour ~~force-force~~related location conditions. ~~The~~Empirical tests will be ~~given-introduced~~ in Chapter IV, and Chapter V will discuss ~~on~~the findings. The last chapter will ~~give-provide~~ some concluding remarks.

II. Literature Survey

~~In order to consider~~When contemplating the relationships between MNEs and ~~the~~ location conditions, it is worth ~~to start of looking~~taking a look at ~~the~~economic geography. ~~The~~economic geography ~~comes-has come~~ to attract ~~the~~academic interests from a wide range of scholars. ~~The~~aNational border ~~iss are~~ regarded as the main element ~~setting-for establishing~~ the framework of ~~the~~economic geography. However, the definition and assessment of a ~~nation-nation~~state is different from one analysis after another, due to ~~the~~different research purposes and approaches. For example, the new economic geography assumes that ~~the-a~~ national border is ~~the-a~~ line prohibiting the free movement of labour force (Krugman, 1991; Fujita, Krugman and Venable, 1999). From this simple assumption, the model can clarify the effects of scale economy and transportation costs on ~~the~~economic agglomeration. On the other hand, ~~the~~traditional economic geographers insist ~~on~~the complexity of national economies, and the differences between them (Dicken, 2007; McCann, 2002).¹

There is also a long history of discussion on ~~the~~economic geography among ~~the~~scholars of international business. The product life cycle model ~~by-of~~ Vernon (1966, 1979) focuses on the change of production location along with the life cycle of products in question starting from the entry stage in the most developed nations through the growing ~~one stage~~ in other developed nations to the mature ~~one-stage~~ in ~~the~~developing countries. According to the OLI paradigm proposed by Dunning (1988, 1993), ~~the~~location is one of the most important factors, along with ~~the~~ownership advantage, and ~~the~~ internalisation advantage. ~~The~~Location advantage affects the decision making of MNEs ~~as to~~ where they ~~would-will~~ actually invest abroad, ~~even if the location conditions can be a wide range of advantage from~~though there is a wide of factors that they may ~~deem the most important. for example. the~~natural resource endowment ~~to-theor~~ created resources such ~~like-the~~as a highly-skilledskilled labour force and good infrastructure. Recently, Rugman & Verbeke ~~have~~ emphasised that the location advantage does not independently affect FDI, but the ~~configuration-location advantage~~

¹ As ~~the-a~~ general reference concerning the recent discussion on the economic geography, see, for example, Clark, Feldman & Gertler (2000).

~~combined~~ with ~~other two~~ other advantages ~~is becomes~~ significant ~~to for~~ successfully operate ~~in~~ ing on foreign soil (Rugman & Verbeke, 2004).

The advancement of globalisation ~~from since~~ the 1990s ~~makes has made the~~ scholars reassess the issues concerning ~~the~~ economic geography, and ~~the~~ attention ~~directs has been directed~~ to the relative importance of ~~nation-nation~~ states. Some advocate the weakening of ~~nation-nation~~ states, since ~~the~~ regime hopping by MNEs reduces the bargaining power ~~by of~~ national governments. ~~The concerns idea~~ relates ~~to~~ a wide range of issues, from ~~the~~ taxes, to ~~the~~ environmental protection, ~~while the to~~ trade unions worrying about the loss of labour protection, and the worsening of working conditions. Others point out the importance of sub-national regions, which are often called ~~as a~~ “clusters” (Porter, 1990). The positive external economy within a certain area attracts the inward-FDI, while the divestment of the main company in the area concerned may well lead ~~to~~ the collapse of the local economy. Thus, ~~the both supra-national and sub-national~~ forces ~~toward both the upper, and the under level of a country~~ make ~~the nation-state-states~~ not absolute but relative units, ~~when consider the economic geographic issues~~ (Dunning, 1998).

~~When we confirm the upward~~Indeed, supra-national forces ~~to~~ make a ~~nation nation-state relative's~~ importance ~~relative, the but~~ regionalisation ~~constructs such forces more strongly~~is more forceful than ~~that of~~ globalisation. This is mainly because the regional liberalisation of international economic transactions ~~such like as in~~ the EU generally advances more than that at the global ~~scale level~~, for example, under the WTO. Along with ~~the~~ globalisation, it is often said that ~~the~~ regionalisation is ~~the~~ characteristic of the era from the 1990s, led not only by the European Union (EU), but also by other regional ~~schemes organizations~~ like NAFTA and ASEAN. Some scholars of ~~the~~ international business, like Rugman, are sceptical ~~on the of~~ globalisation, and emphasise more the importance ~~more on the of~~ regionalisation (Rugman, 2001). On the other hand, Dunning, et al. (2007) are sceptical ~~against the of Rugman's~~ argument ~~by Rugman~~, and insist on the importance of the global trend ~~of in~~ international business. It is true that the discussion on ~~the~~ globalisation and ~~the~~ regionalisation ~~so far to date~~ is quite interesting. Here, however, what we can see from this debate is that ~~the~~ international business must be conducted under the four-dimension structure rather than the simple global-national structure. The four dimensions are ~~consisted with~~ global area, supra-national area (called “region” in this paper), ~~called as “region”~~, national area, and sub-national area (called “local” in this paper), ~~called as “local”~~.

A lot of research exists that considers ~~When we are considering the relationship between~~ the location of MNEs ~~along with the~~ and regional integration schemes, such as the EU, ~~a lot of research exists~~. The single European market programme is one of the main factors ~~for to which~~ MNEs ~~have had~~ to respond, and both the newly motivated FDI and the reallocation of FDI ~~are have been~~ reported (European Commission, 1998; Dunning, 1997). Cantwell makes clear ~~that~~ the location of FDI ~~was~~ significantly influenced by the innovative capacity of host economies (Cantwell, 1988, Cantwell, Iammarion & Noonan, 2001). Yamawaki ~~has reports reported on the regression analysis of~~ the allocation of Japanese FDI in Europe ~~with the regression analysis, pointing out indicating~~ the significance of labour costs, technological capability, as well as the national market size. Barrell & Pain (1999) emphasise the importance of the domestic institutions on FDI location in Europe. Meyer & Peng (2005) summarize the literature ~~of the on~~ international business in new member states of the EU. The different allocation pattern between the core and the periphery in the EU are examined by Dimitropoulou, Pearce ~~& and~~ Papanastassiou (2008), whose conclusion suggests the strategies of MNEs influence ~~on the~~ location and ~~the~~ operation. It is impossible to give ~~a~~ full summary of ~~the~~ literature on FDI in the EU, but still we can say that they treat the member state of the EU, the “national dimension” as the analytical unit of MNEs’ location rather than the “local dimension”.

On the other hand, it is worth ~~to point pointing~~ out that ~~the~~ location patterns ~~within the~~ member states of the EU are analysed much less than ~~these on~~ the national pattern ~~of~~ ~~for~~ FDI in the EU. The rare examples are Crozet, Mayer & Mucchielli (2003) on the inward FDI into France, Boudier-Bensebaa (2005) on that into Hungary, and Chidlow, Salciuvienė & Young (2009) into Poland. Their results are slightly different in some details of the determinant factors, but all of them agree on the significance of agglomeration economies.

However, the above summarised ~~situation~~ of present research is not satisfactory, since the convergence among nation states has been advancing along with the growth of ~~the~~ divergence within a ~~nation-nation~~ state. It is possible to expect ~~that~~ the different levels of economic development and ~~the differences in of the~~ formal and informal institutional frameworks lead ~~the to~~ different allocations of FDI among the member states of the EU. Indeed, ~~the~~ economic divergence within a country can be the result of MNEs’ activities, including ~~the newly~~ investment and ~~the~~ divestment, but MNEs also have to operate and

adjust themselves according to ~~the~~ location conditions and their changes. What we presently recognise as the location of MNEs is the result of such a ~~dynamism~~dynamics. Furthermore, the divergence pattern within a country may well be different from one ~~member-member~~ states of the EU to another, and that could lead to ~~the~~ different responses by MNEs. Thus, it is ~~the-an~~ interesting challenge for us to examine the location of MNEs within the ~~member-member~~ states, and to compare them.

From the above summary, it is possible to raise two questions to be investigated. One of them is what the determinant factors of FDI location are at the sub-national local level. Another is ~~the-how to~~ assessment-of the FDI concentration pattern within a nation-state. This present paper will address these questions through the comparative examination of Japanese FDI into France and the UK with giving special attention to their locals. Before the empirical analysis, we must clarify the local factors remaining within a country, since, due to the shortage of ~~observations-observations~~, we have to focus more on some specific labour-force factors than ~~the-a~~ general investigation.

III. Labour Force Factors at the Local Level.

In spite of the unique and important structure of the global economy with the ~~four-four~~ dimensions ~~above-above~~ mentioned, the “local” conditions ~~are-not~~have not been fully examined. In addition, due to the legal framework of people to move freely, at least, within a ~~nation-nation~~ state, the different local conditions ~~concerning-for~~ labour force ~~are-missed~~have been lacking in the ~~previous~~ research to date. However, as will be seen later, the labour ~~force-force~~ related conditions ~~are-quite-diverged~~diverge greatly not only between France and the UK, but also within each of them. This situation certainly affects the location of MNEs, but the ~~way-of~~nature of the influence is quite complicated. Thus, we need to confirm how scholars have been considering and discussing ~~on~~ this matter, so that we can ~~mention-confirm~~ the points to be investigated in the empirical tests.

It must be kept in mind that the labour force is not ~~the-a~~ simple and similar ~~commodities~~ commodity like goods. It responds not only ~~respond-the-to~~ (labour) market conditions, but also to ~~the~~ historical, cultural, and social ones, which recently have come to be treated as ~~the~~ institutions by ~~the~~ economists like North (1990), ~~and-A~~ Aoki (2001), ~~and~~ ~~so-on~~. Along with the recognition on the importance of institutions, many scholars ~~from~~ of different perspectives insist that the US and European capitalism are quite different

~~with~~ from each other, and the European social or business model works in its own historical, social, and economic context. However, it is worth ~~to remind~~ remembering that the European model itself is not a single unique one, but ~~it has some variances~~ has some varieties. Even if ~~the a wide range of constructing factors~~ structural elements of the European model can be pointed out ~~as a wide range~~, from the financial systems to ~~the~~ government ~~policy~~ policies, it is still appropriate to focus on the labour ~~force~~ force-related ones more deeply, here.²

With respect ~~of the~~ to labour market policy, Sapir (2006) classifies European models into four types with ~~the~~ standards of ~~the~~ efficiency and ~~the~~ equity. ~~The s~~ Standards of ~~the~~ efficiency ~~is concerning the~~ are concerned with employment protection legislation, while the equity standards ~~represents the~~ relate to unemployment benefits. These two are in ~~the a~~ trade-off, and Sapir classifies France and the UK ~~are classified~~ into the Continentals and the Anglo-Saxons, respectively. Sapir insists the Anglo-Saxons ~~model~~ are is sustainable ~~under in~~ the globalisation era, though with ~~inequitable~~ inequities, while the Nordics ~~model~~ can manage to combine ~~the~~ efficiency and ~~the~~ equity. On the other hand, the Continentals ~~are equitable~~ is equitable, but inefficient and unsustainable, which must be reformed along with another model, the Mediterranean. Raveaud (2007) similarly emphasises ~~on~~ the supremacy of the Nordic model as the ideal European social model ~~with the strong criticise and strongly criticises the on~~ European Commission's employment strategy, which is based on ~~the~~ mainstream economics. Thus, we can expect the labour ~~force force~~ related conditions ~~are to be~~ affected by the national social policy. However, it is worth ~~to mention~~ mentioning that ~~they these scholars~~ do not fully explain ~~the~~ domestic divergence.

Some explanation can be given for the divergence of labour ~~force force~~ related conditions within a country.³ First, as the pattern of industrial cluster is different from one local to another, the economic performances ~~and results of those locals are~~ also ~~different~~ reflects ~~such pattern, and shows the different results~~. Here, we should keep in mind that ~~the~~ industrial cluster ~~is not~~ does not have a uniform type, but ~~it instead~~ has various types variation. From the transaction costs approach, there are three types of ~~the~~ industrial clusters, that is, the pure agglomeration, the industrial complex, and the

² ~~As the~~ interesting references, see, for example, Hall and Soskice (2001), Jackson and Deeg (2008), Mudambi and Navarra (2002), Whitley (1999), and so on.

³ ~~The s~~ Scholars interested in ~~the~~ differences of ~~the in~~ capitalism tend to discuss ~~the~~ differences at the national level, but here our discussion extends to consider the different impact of the national character on the locals.

social network (McCann, Arita & Gordon, 2002). In the pure agglomeration type of industrial cluster, the relationships between the economic agents, including firms and workers, are fragmented and unstable, while those in the industrial complex are stable in the long-term. The social network type emphasises ~~the~~ horizontal relationships as well as the hierarchical ones, and ~~gives-is more characterized by~~ mutual trust and loyalty ~~more~~ than the other types.

Second, the configuration between the national social model or business system and the locals' industrial character is not always sufficient and satisfactory for all the locals in a country. There is a possibility that, while ~~the-a~~ national social model ~~is-may be~~ generally based on ~~the~~ short-termism, ~~but~~ a certain industry ~~relies-might rely more on the~~ longer-term relationships ~~among-with the~~ concerned parties than others. In this case, ~~the-an~~ adjustment process ~~has to face with the~~ will be needed to reconcile social and institutional conflicts ~~between them~~, and ~~may well need longer time period to stabilise~~ stabilisation may require time.

Finally, the issues just mentioned are likely to be further intensified in the context of regionalisation and globalisation. The international economy naturally influences ~~on~~ ~~the~~ local economies, as well as ~~on the~~ national ones. ~~The-i~~ International economic transactions, which are intensified by ~~the~~ economic integration schemes like the SEM, leads ~~to~~ more ~~prosperous-prosperity~~ for the locals ~~involved in with the comparative advantage-a comparatively advantageous~~ industry, ~~and thus, those locals with them~~. The opposite side of the same coin is that those ~~having been dependent on the~~ that have ~~depended on a~~ comparatively disadvantageous sector must ~~be suffered~~ suffer from ~~the~~ international competitive pressure brought about by regionalisation.

The above summarised explanations are behind the divergent local conditions in France and the UK. The important point for our analysis is what kind of data reflects ~~the~~ divergence ~~of-in~~ labour ~~force-force~~ related local conditions. ~~The-e~~ Economic divergence can be ~~represented-ascertained~~ firstly ~~by the~~ from labour market conditions such as ~~the~~ unemployment rates and ~~the~~ wage levels. At the same time, ~~the~~ agglomeration can be seen from ~~the~~ shares of manufacturing jobs, which can be effectively pooled for the cluster in question. Along with these quantitative variables, the nature of the labour ~~force-force~~ related local conditions is also qualitative. It includes ~~the~~ levels of ~~labour labour~~ force quality, ~~the~~ rigidity / flexibility ~~of-in the~~ labour market, and so on. They influence the capability of locals to adjust ~~the-to~~ dynamic change ~~through the~~ brought

about by regionalisation and globalisation.

IV. Analysis of Japanese Plants in the UK and France

For the purpose of examining the effects and ~~meanings-significance~~ of diverging local conditions on MNEs' location, we will look at Japanese manufacturing MNEs in France and the UK. The followings ~~are is an the~~ explanation of the testing method and the data, and the results of the empirical tests.

IV-1. Methodology

It is fair to consider that the number of ~~Japanese-Japanese~~ plant's jobs is ~~the-a~~ dependent variable influenced by the host local's conditions, since Japanese FDI is relatively low ~~share~~ in France and the UK. ~~In such a case~~ Thus, we can expect ~~the-that~~ ~~conditions concerning the labour-labour~~ force conditions have significant meaning even at the local level. Indeed, not only the EU but also national governments neither legally prohibit ~~the~~ labour mobility within the EU, nor within the member state, but we can still recognise ~~the~~ differences of in the labour-labour market variables. Japanese MNEs cannot be completely independent from such local conditions, and we will examine the influence through two methods. The first is to conduct ~~the-a~~ regression analysis of the relationship between the location pattern of Japanese manufacturing jobs and the ~~labour-labour~~ related conditions at the local level. The second is to examine whether the industrial structure of employment by Japanese MNEs ~~would follow~~ correlates with that of national ~~economy~~ economies.

In order to conduct ~~the-a~~ regression analysis ~~with the of~~ ~~labour-labour~~ related local conditions, we should sum up again the influencing factors. That is, the importance of the manufacturing sector, ~~the labour-labour~~ market conditions, the flexibility or rigidity of labour markets, and the quality of labour force are the factors ~~in the~~ ~~consideration~~ considered by MNEs ~~to conduct~~ when deciding what the operations to conduct in a certain local. As is often said, ~~the~~ developed countries have already moved from ~~the-an~~ industrial to ~~the-a~~ service economy, but not all the locals of a country ~~do~~ ~~not have~~ shifted ed to the service sector. For ~~the~~ manufacturing plants, ~~the pool of a~~ work force pool with ~~the~~ experience of manufacturing operation in manufacturing is one of the attractive factors. Thus, we can expect ~~the-a~~ positive relationship between the number of Japanese plant's workers and the manufacturing worker's 'ss' share in the local in question. ~~The-l~~ labour market conditions, i.e. ~~the~~ unemployment rates s and ~~the~~ wage

levels, are also ~~the issues factors~~ not to be ~~missed-overlooked~~ by MNEs. It is needless to say that ~~the-a~~ low wage level-of-wage is an attractive factor, while higher unemployment ~~makes-is~~ favourable for MNE-sides in the industrial relations. Thus, ~~the-a~~ negative sign correlation can be expected ~~to-thefor~~ wage levels, while ~~the-a~~ positive one ~~is-can be~~ for ~~the~~ unemployment rates.

The qualitative nature of ~~the~~ labour ~~force-force~~ related conditions should be ~~put into~~ given consideration. The flexibility / rigidity of a labour force is the hottest topic in ~~the~~ labour market reform, although it is difficult to grasp ~~the~~ flexibility / rigidity by statistical data. Here, the formal institutions such ~~like theas~~ labour laws do not always determine ~~the~~ flexibility / rigidity, but ~~the~~ social and cultural elements ~~have something to do with~~ do affect it. MNEs may well prefer ~~the~~ flexible locals to ~~the~~ rigid ones, since that ~~makes-enables~~ them enable to adapt ~~the-to~~ changing pressures in the host economy, as well as in the EU. Furthermore, the quality of a labour force is important for MNEs, if they ~~would stay want to continue to operate-operating~~ in developed countries such as France and the UK. It is easier for MNEs to upgrade their operations in ~~the~~ developed countries with high-high quality workers than otherwise. Thus, we can expect ~~the-that a~~ high-high quality labour force ~~could-would~~ positively influence ~~on-the~~ allocation of Japanese MNEs' jobs.

The first part of this analysis will look at the impact of ~~the~~ local factors on the allocation of Japanese jobs in France and the UK, but it cannot deal with the industrial characteristics. Therefore, the second part of the analysis will examine the relationships between the geographic pattern of ~~the~~ industrial allocation in France and the UK ~~on one hand,~~ and that of Japanese manufacturing jobs in those countries. If ~~the~~ mainstream international economics is right to insist that MNEs are indifferent ~~on-to~~ the economic conditions of the locals, and ~~with respect of to~~ their impacts on the locals, Japanese MNEs are likely to allocate their manufacturing operations along with the national pattern. Because of the shortage of necessary data, our analysis must be restrained to the comparison of manufacturing industry jobs at the local level. Indeed, relatively large countries like France and the UK hold the main industrial sectors, but they cannot allocate every industry to every local ~~with-keeping~~ ~~the-a~~ balance. Some industries concentrate in some locals, while others are located in others. We cannot touch the causes of such a variety of industrial allocation within a country at this stage, but it is fair to say that the industrial allocation pattern certainly exists, and affects ~~on~~ and is affected by ~~the~~ local economic conditions. On one hand, ~~the~~ agglomeration of ~~the~~

workers can be ~~the a~~ guide ~~of the to~~ industrial embeddedness and ~~the~~ local competitiveness, and ~~is can be~~ expected ~~as the to be a~~ location advantage. On the other hand, the informal institutions brought by the industrial agglomeration are not always appropriate for MNEs, whose competitive advantages have been generated and nurtured in the home country environment which may well be different from ~~hosts that~~ in the host location. Thus, we must be careful to look at ~~the~~ matching patterns ~~of in~~ the location in the industry for a particular industry.

III-2. Data

In order to conduct the two empirical tests ~~above mentioned~~ mentioned above, we must collect the appropriate data. Here, the dependent variables are the number of jobs in the plant of Japanese MNEs (JOBS) in ~~the~~ France and the UK, which must be confirmed at the local level. The main source of the data and information is the inward FDI agencies of both France and the UK, which report on Japanese subsidiaries (Invest in France Agency, 2009; UK Trade & Investment, 2009). It is true that the data and information are slightly different between them. For example, the address of subsidiaries in the UK is listed in very great detail, while that in France is listed roughly at the local level. Some data are not always fully appropriate for the analysis. For example, some of the establishment years are not of the Japanese subsidiaries themselves, but of the companies acquired by Japanese MNEs. In order to confirm the data and information, ~~the~~ double checks ~~has have~~ been ~~done by other~~ obtained from sources such as Toyo Keizai, and the annual reports s of the ~~company~~ companies in question. Still, we can consider the implication of Japanese FDI from the perspective of three dimension structure in the EU is fruitful, since the available data confirms the location at the sub-national local level. ~~(I COULDN'T UNDERSTAND THIS LAST SENTENCE.)~~

~~Concerning In regard to~~ the independent variables, the Eurostat, the statistical office of the European Union, is the main source. Nowadays, the Eurostat provides various statistical data through its own homepage, and we can obtain the data ~~at for~~ the local level. ~~They are~~ This data is quite useful for our ~~research to examine the~~ statistical analysis, but some points must be treated with ~~cautious~~ caution. ~~Concerning the In regard to~~ data ~~of the related to the~~ host locals for Japanese plants in France and the UK, ~~the~~ NUTS is ~~the~~ appropriate data set at the as it provides sub-~~national~~ national-level data rather than ~~the~~ national ~~ones level~~ data. ~~The~~ NUTS is reported at from 1 to 3

~~level~~levels 1 to 3, and ~~the~~-NUTS-1 covers the widest geographical area. However, ~~the~~ NUTS has a wide range sometimes overlapping between different levels. This ~~makes complicated-complicates~~ the comparison between the member states more than that within each member state. For example, ~~the~~-NUTS-2 in France is generally much larger than that in the UK. Thus, it is better to compare NUTS-2 in France with NUTS-1 in the UK, and this paper takes this way for collecting the independent variables ~~of-for~~ the statistical analysis.

As pointed out above, various factors concerning ~~the~~-labour force are expected to ~~influence~~ the job allocation of Japanese MNEs. We selected six independent variables for the regression analysis. Among the six independent variables, the first is the manufacturing share in total employment (MFGSH) in each NUTS, while ~~the~~-wages (WAGES) and the unemployment rate (UNEMP) at each NUTS are the ~~labour~~ labour-market condition factors. ~~As the proximity of the quality of labour-(DON'T UNDERSTAND UNDERLINED EXPRESSION)~~, the selected independent variable is the share of the high-tech sector workers in total (HTSEMP). Finally, the flexibility / rigidity ~~of-in a~~ labour market is difficult to grasp through ~~the~~-statistical data, ~~but-so~~ only the long-term unemployment share in total unemployment (LUNEMPS) and the share of part-time worker in total (PTWS) are chosen for the independent variables.

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For the purpose of the second analysis, we calculate the Balassa-Hoover index (BHI) ⁴, and compare that with the allocation pattern of Japanese MNEs' jobs. The Eurostat provides the number of workers according to the 15 industrial sectors at the NUTS level, which can be used for the BHI calculation. The BHI is used to show the concentration level, and here, at each local of a country. If the BHI in a certain local is more than 1, the industry is concentrated in that local. If the BHI is less than 1, the local does not possess the average level of the industry in question. Thus, if Japanese MNEs prefer to access the agglomerated pool of the labour force in the industry in question, they would have more employment in the local with more than 1 of the BHI than those with less than 1. However, there is another ~~possibility-of-reason why~~ MNEs ~~to-might~~ avoid the local conditions brought by ~~the~~-agglomeration, which may well represent ~~the-a~~ difference ~~from-with~~ the home economy of MNEs.

Through the explained method, we obtained the necessary data. According to the data obtained from the inward FDI agencies of France and the UK in Japan, in 2008

⁴ See the appendix for the calculation method.

Japanese MNEs established 315 manufacturing facilities, ~~which are divided with~~ 132 in France and 213 in the UK, and they employ a total of 91,335 in the two countries, ~~and~~ 36,951, and 54,384 workers, respectively. They are allocated in 20 NUTS-2 in France, 12 NUTS-1 in the UK, ~~and thus~~. Thus, the observed NUTS ~~are~~ total 32. We excluded the over-sea's territory from our examination, and some locals, which do not receive Japanese manufacturing FDI at all. The independent variables at these 32 NUTS level (~~LEVELS???~~) are summarised in ~~the~~ Exhibition-1 (~~CHART 1???~~), while the BHI is calculated at the main industrial sectors Japanese MNEs investing in the NUTS level with the total 103 observation.⁵ From the summary of the descriptive statistics in Exhibition-1, we can see that there is a wide variety of differences within France and the UK, and between them. This ~~makes-enables~~ us to ~~expect/predict the importance of that~~ local conditions will be important, and to see the differences s between the two countries.

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III-3. The Results

As the first step of the analysis, we conducted the regression with all six variables (Model-1 in Exhibition-2 (CHART 2???)). The result is all the independent variables except for the long-term unemployment share are statistically significant with 32 observations of French and UK NUTS. However, none of them are significant, when we conducted the regression separately in France and in the UK. Thus, we tried to find out the best combination of the independent variables, and ~~we discovered that a the~~ set of four, i.e. ~~the~~ manufacturing share, ~~the~~ unemployment rates, ~~the~~ high-tech sector share, and ~~the~~ part-timer share, is appropriate ~~to show the significance for showing the influence~~ of labour ~~concerning~~ factors on the allocation of Japanese manufacturing workers (Model-2 in Exhibition-2 (CHART 2???)). It is interesting that all of these four variables are significant with the expected sign at (~~DON'T UNDERSTAND UNDERLINED PHRASE~~) ~~the~~ France and the UK combined. Furthermore, the results to be emphasised are the similarity-similarities and the differences s between France and the UK. When we divided our observations between-of France and the UK, the manufacturing share comes to be insignificant in both countries, while the unemployment rate is significant. At the same time, the high-tech sector's employment share is robust in France, but not in the UK. On the other hand, the part-time workers'

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⁵ Here, we focus on the main investing sectors of industry, that is, food, ~~the~~ chemicals, machinery, electric and electronics equipment, and transport equipment, whose employment consist 76% in France and 84% in the UK.

share is insignificant in France, but significant in the UK. Indeed, our regression analysis suggests the importance of labour ~~force-force~~ related factors on Japanese MNEs, but the local conditions and their impact are different even between the EU member states.

For the second analysis, we look at the relationships between the BHI and the job allocation by Japanese MNEs (Exhibition-3). ~~There are~~ We observe 103 ~~observations~~ cases, and the first step is to check the correlation between the BHI of France and the UK on the one hand, and either the absolute number or the BHI of Japanese jobs according to the industrial sector on the other ~~hand~~. The second step is to check and compare the matching pattern of national BHI and Japanese MNEs' BHI in France, the UK, and the combination of these two. ~~For the first attempt, the result does~~ The data from the first step does not show a statistically significant relationship between Japanese jobs allocation pattern according to the industry and the BHI, not only in the case of the France ~~and the UK~~ /UK-combined BHI, but also ~~in their separating cases~~ when the two countries are examined separately.⁶ In other words, it is impossible to insist that Japanese MNEs locate to follow the agglomeration pattern of the industry in terms of employment concentration.

The second method is also to consider whether the BHI of Japanese jobs would match to the general BHI in France and the UK, or not. There are 53 French locals ~~receiving~~ hosting Japanese MNEs, and 50 UK locals, ~~and for a~~ total of 103. Among them, 36 locals report more than 1 both ~~of the~~ Japanese MNEs job BHI and ~~of for~~ the general BHI, and roughly one third of Japanese jobs concentration ~~at in~~ the industrial sector ~~level~~ follow the local concentration ~~local~~ in general. Indeed, this ~~can be easily~~ would be expected from the first step result ~~by the first method above mentioned~~, but the interesting finding to be emphasised is that there is a different matching pattern between France and the UK. That is, Japanese MNEs in France follow the agglomeration pattern of workers in the food and chemical industries, but not in the transportation equipments sector. On the other hand, the transportation equipment sector in the UK shows the matching between the concentration of the industry in general and that of Japanese jobs ~~in this sector~~.

⁶ The correlation coefficients for all the cases calculated by this author are less than 0.1, and we can say they are not statistically significant ~~correlation~~.

V. Discussion

The results of empirical research do not fully confirm the expectations, but show some interesting but complicated features. Now, we are considering the meanings of our findings. From the empirical tests of Japanese manufacturing jobs in France and the UK, some interesting findings ~~are have been~~ pointed out. Although ~~the first method in the first step conducted~~ the regression analysis was conducted with ~~the a~~ relatively small number of observations, the importance of the manufacturing agglomeration ~~is~~ was confirmed. Both France and the UK are ~~the~~ developed countries, and ~~became have come~~ to rely on the service sector more and more, nowadays. However, ~~the~~ manufacturing operations in those countries need ~~the an~~ appropriate ~~basis base~~ including ~~the an appropriate~~ labour force. Thus, it is quite natural for Japanese MNEs to allocate ~~the~~ manufacturing jobs into those locals with higher shares of manufacturing workers in total, from which they can hire suitable workers more easily than in the locals with lower shares.

The unemployment rate shows ~~the~~ statistical significance, while the wage level indicates statistical significance in only the combined regression of Model-1. The former finding means Japanese MNEs tend to keep jobs in the locals where their position is relatively favourable against the labour force. This is in clear contrast with the wage level variable ~~of wage level~~. As it is often said that, due to ~~the~~ foreignness, MNEs tend to pay higher wages than ~~the~~ indigenous firms, the absolute level ~~of for~~ wages may well be less important for MNEs. From these considerations, MNEs ~~are may be~~ expected to prefer ~~the a~~ stronger negotiating position ~~of negotiation to the a~~ lower wage, since ~~the a~~ strong position ~~of for~~ MNEs makes it easier to introduce and conduct their own management style, which is not always familiar in the host.

The fact that the different variables between France and the UK show ~~the~~ statistical significance is another interesting finding. That is, France ~~shows to~~ receives more jobs from Japanese MNEs in ~~the~~ locals with high tech workers with statistical significance ~~with statistical significance, a statistically significant amount~~, but ~~not in~~ the UK does not. On the other hand, Japanese MNEs in the UK tend to allocate ~~the~~ manufacturing workers in the locals with a higher share of ~~the~~ part-timers, but not in France. Both indicate the qualitative nature of the labour ~~force force~~ related conditions, but the implication is opposite. Furthermore, this difference is ~~suggestive thought provoking~~, if we consider this in the context of the different social models between of these two countries. As seen in the previous chapter, France and the UK have very contrasting

~~feature of their own~~ social models ~~s with each other~~, the Continental and the Anglo-Saxon, respectively. This contrast may well affect ~~on~~ MNEs' job allocation ~~as such~~. All MNEs have to adjust their operations ~~s~~ along with ~~the dynamic~~ ~~the dynamic~~ changes ~~of in~~ the economy, but they ~~could~~ ~~can~~ choose ~~one of the several possibilities~~ ~~from many possible options~~, including ~~the~~ reduction of jobs, ~~the~~ divestment, ~~the~~ upgrading and so on. Once MNEs invested ~~ed~~ into ~~a~~ less flexible labour market economy like France, they have to struggle ~~for to upgrading~~ ~~upgrade~~ their operations ~~s~~, which could compensate ~~for~~ the relative increase of labour costs compared with, for example, East European countries. For this purpose, the high quality of labour force is, at least, ~~a~~ necessary condition, ~~though not sufficient one~~ ~~but not sufficient in itself~~. If MNEs could adjust ~~the~~ operations ~~s~~ ~~to the economic fluctuation~~ through ~~the~~ changes ~~of in~~ working ~~time hours~~ ~~to the economic fluctuation~~, the availability of ~~the~~ part-timers ~~s~~ could be very much attractive. Thus, the national features ~~s~~ of ~~a~~ social model may well be ~~an~~ important consideration for Japanese MNEs.

The analysis based on the BHI also suggests ~~the some~~ interesting issues. As a general pattern, it ~~is has been~~ confirmed that Japanese MNEs do not follow the local, in which the industry in question concentrates, to allocate their manufacturing jobs. This means that they tend to avoid the agglomeration locals, even if ~~the~~ mainstream economics assumes ~~the~~ similar behaviour by MNEs to the general one. It is possible ~~of the assessment from the international business perspective to advocate to argue~~ that MNEs may well behave differently from ~~the~~ indigenous firms. This can be explained by the strategic response of MNEs, which need to ~~make the configuration between~~ ~~combine advantageously~~ their ~~own style of~~ ownership advantages ~~s~~ derived from their own home environment on ~~the~~ one hand, ~~and with~~ the host local's conditions on the other.

~~At the same time, t~~The following pattern among the industrial sectors is ~~further also~~ different between France and the UK. In general, Japanese comparative advantage sectors ~~Sectors that are comparatively advantageous to Japanese MNEs~~ are ~~the~~ transport equipments, ~~the~~ electric ~~& and~~ electronics equipments, while the disadvantageous sectors are ~~the~~ food, and ~~the~~ chemicals. Despite ~~of~~ this general pattern, Japanese MNEs' job allocation ~~goes after is~~ differently in France and ~~in~~ the UK. Japanese MNEs' jobs in the comparative disadvantage sectors ~~s~~ follow the higher concentrated locals in France. In the UK, the job concentration by Japanese MNEs ~~at in~~ the industrial sector ~~level~~ trace ~~in~~ the comparative advantage ~~industry industries of in~~ Japan. Indeed, part of the high concentration at the local in the transport equipment in

the UK can be explained by Japanese MNEs themselves. For example, ~~North East of northeast~~ England is one of the locals with more than 1 of BHI in the transportation equipment sector, but Japanese jobs ~~consists~~ comprise more than half of ~~the~~ total jobs in ~~the~~ transportation equipment in this local. In other words, Japanese MNEs tends to obtain the host local's advantage, so that they can fill their lack of ownership advantage in France. On the other hand, Japanese MNEs located in the UK do not mind ~~the~~ direct confrontation in the host locals.

VI. Conclusion

~~Behind the up-and-down of~~ Along with the ups and downs of the global economy in the 21st century, ~~the~~ economic divergence has been advancing, ~~which~~. This divergence is partly related ~~with the~~ to geographic disparity within a country. Thus, we summed up the debate on the economic geography from various perspectives, and pointed out the importance of labour ~~force-force~~ related conditions and institutions. ~~As the location advantages affect the decision making and operation of MNEs, the different location conditions among the locals are expected to influence on MNEs, and we have seen that different conditions among locals influence MNEs.~~ —With the Japanese MNEs in France and the UK, we made clear that the labour ~~force-force~~ related conditions at the local level have significant meaning, and their impacts are different between these two countries. This ~~can be~~ is due to the strategic considerations of Japanese MNEs, which are very much likely to ~~include the consideration of~~ consider not only market conditions, but also business-/social model factors, including ~~the~~ informal institutions. Moreover, we found out that the allocation of Japanese MNEs' jobs does not always follow the general pattern, and this is quite different from the expectation from ~~the~~ mainstream international economics. In other words, it is worth ~~to investigate~~ investigating MNEs and their operations from ~~the a different~~ perspective ~~of the other than that of~~ mainstream international economics.

Even if the findings are quite important as just mentioned, ~~but~~ our analysis ~~is~~ involves a relatively limited number of cases, mainly because of the limited ~~of the~~ data ~~used~~ available for use. For the extension of research in the future, some different directions can be pointed ~~out currently at the moment~~. ~~First~~ The first approach can be to exploit more of the data of Japanese MNEs, not only in these two countries with their older data, but also in other countries like Germany or East and Central European ~~Countries~~ countries. Other countries' MNEs ~~than Japanese ones are also~~ will also be

interesting ~~issues~~ to ~~be~~ investigated, since the home country conditions influence ~~on~~ the competitive ~~advantages~~ of MNEs, ~~whose configuration~~ which will combine with the host locals conditions ~~is likely to be in a manner~~ different from ~~our cases~~ Japan's. The analysis in this paper ~~used~~ ~~focused~~ mainly ~~the on~~ labour ~~force~~ ~~force~~-related conditions, but they are not ~~the~~ only ~~influencing~~ factor ~~on~~ ~~influencing~~ MNEs. Thus, it can contribute ~~to~~ our understanding ~~on~~ ~~of~~ the relationships between the local conditions and MNEs to take ~~other a look at~~ factors ~~representing identifiable in the a~~ business-/social model ~~other~~ than ~~the~~ labour ~~force~~ ~~force~~-related ones.

Appendix

Balassa-Hoover Index (BHI) ~~is calculated to measure~~calculates the concentration level ~~by using~~ the following equation.

$$BHI = (Y_{ij}/Y_j)/(Y_i/Y)$$

Y_{ij} : number of total employees in sector i in local j.

Y_j : number of total employees in local j.

Y_i : number of total employees in sector i of the country.

Y : number of total manufacturing employees of the country.

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Exhibitions

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Exhibition-1 Description of variables, observation 32 for France & the UK, 20 for France, 12 for the UK

| | | JOBS | MFGSH | WAGES | UNEMP | LUNEMPS | HTSEMP | PTWS |
|--------------------|-------------|-------|-------|--------|-------|---------|--------|-------|
| Mean | France & UK | 2,845 | 14.06 | 29,653 | 7.15 | 32.83 | 4.54 | 20.40 |
| | France | 1,848 | 15.39 | 27,965 | 8.44 | 39.16 | 4.25 | 17.42 |
| | UK | 4,507 | 11.84 | 32,468 | 5.00 | 22.26 | 5.02 | 25.38 |
| Max | France & UK | 8,713 | 20.57 | 40,485 | 12.26 | 47.06 | 8.32 | 29.60 |
| | France | 7,838 | 20.57 | 36,776 | 12.26 | 47.06 | 8.32 | 20.24 |
| | UK | 8,713 | 15.53 | 40,485 | 7.04 | 39.08 | 7.74 | 29.60 |
| Mini | France & UK | 66 | 6.18 | 25,035 | 3.56 | 13.95 | 2.73 | 13.98 |
| | France | 66 | 7.30 | 25,035 | 6.70 | 31.27 | 2.73 | 13.98 |
| | UK | 354 | 6.18 | 26,481 | 3.56 | 13.95 | 3.38 | 20.55 |
| Standard deviation | France & UK | 2,712 | 3.62 | 3,672 | 2.16 | 9.74 | 1.30 | 4.33 |
| | France | 2,308 | 3.46 | 2,611 | 1.55 | 4.44 | 1.28 | 1.47 |
| | UK | 2,590 | 2.78 | 3,521 | 0.95 | 6.19 | 1.23 | 2.43 |

Calculation from Eurostat data

JOBS: number of Japanese plant job in 2008

MFGSH: share of manufacturing employee in total, average 2003-07, %.

WAGES: absolute value of wages, average 200-07, euro.

UNEMP: unemployment rate, 5-year average between 2003-07, %.

LUNEMPS: long-term unemployment share 5-year average between 2003-07, %.

HTSEMP: high-tech sector share, 5-year average between 2003-07, %

PTWS: part-time worker's share, 5-year average between 2003-07, %.

Exhibition-2 Regression Tests

| | Model 1 | | | Model 2 | | |
|------------------------|------------------------|---------------------|---------------------|-------------------------|-------------------------|-----------------------|
| | France & UK | France | UK | France & UK | France | UK |
| R2* | 0.425 | 0.328 | 0.257 | 0.394 | 0.362 | 0.455 |
| MFGSH 1) | 484.633 *** (2.921) | 212.179 (1.065) | 367.161 (0.580) | 379.880 *** (2.649) | 267.500 (1.601) | 537.350 (1.619) |
| WAGES 1) | 0.322 * (1.804) | 0.387 (1.039) | -0.301 (0.733) | | | |
| UNEMP 1) | 625.005 * (1.712) | 925.558 (1.741) | 2174.853 (0.254) | 629.073 ** (2.108) | 725.278 ** (2.205) | 1775.722 * (2.134) |
| HTSEMP 1) | 754.579 * (0.373) | 686.044 (-0.717) | 873.555 (0.830) | 1173.355 *** (3.304) | 1192.059 *** (3.039) | 652.959 (0.898) |
| LUNEMPS 1) | 52.589 (1.758) | -161.182 (1.128) | -103.463 (0.490) | | | |
| PTWS 1) | 649.653 ** (2.586) | 92.984 (0.185) | 615.354 (0.613) | 589.745 *** (3.691) | -155.778 (-0.473) | 766.535 * (2.079) |
| number of observations | 32 | 20 | 12 | 32 | 20 | 12 |

R2*: multiple correlation coefficient adjusted for the degree of freedom.

*, **, *** Denotes statistical significance at 10%, 5%, and 1%, respectively. T-ratios in parentheses.

1) the same as in Exhibition-1

Exhibition-3 Matching pattern of job distribution among the locals in France and UK

| | matching locals | total locals | Share of matching locals |
|---------------------|-----------------|--------------|--------------------------|
| Total | 36 | 103 | 35.0% |
| France | 19 | 53 | 35.8% |
| food | 6 | 12 | 50.0% |
| chemical | 6 | 10 | 60.0% |
| machinery | 2 | 5 | 40.0% |
| electric equipment | 2 | 13 | 15.4% |
| transport equipment | 3 | 13 | 23.1% |
| UK | 17 | 50 | 34.0% |
| food | 2 | 7 | 28.6% |
| chemical | 3 | 10 | 30.0% |
| machinery | 4 | 11 | 36.4% |
| electric equipment | 3 | 11 | 27.3% |
| transport equipment | 5 | 11 | 45.5% |

Source: author's calculation