Topics in Economic Geography: A Dialogue between Economists and Geographers (EW02-188)

A European Science Foundation Exploratory Workshop

London, 24-26 October 2003

1. Executive Summary

This two-day conference provided a forum for a wide variety of methods and questions to be applied to the area of economic geography. Participants were drawn from a variety of countries and a variety of perspectives, making the discussions wide-ranging and stimulating.

The workshop was divided into three sessions, each focussing on a different aspect of the topic.

The first session comprised four papers related to the economic geography of cities, and was chaired by Neil Wrigley (University of Southampton). The following papers were presented:

- "Buzz: Face-to-Face Contact and the Urban Economy", by Michael Storper (London School of Economics and UCLA) and Tony Venables (London School of Economics and CEPR)

This paper elaborated on face-to-face contact as an essential component of many immaterial transactions, and provided theoretical foundations for its relevance. Tony Venables showed how the importance of face-to-face can be derived and modelled from its efficiency as a mode of communication, from its use to overcome incentive problems in working partnerships, and from is role in socialising individuals in professional networks. The consequences are that agglomeration forces remain strong, even when the spatial costs of information transmission are low.

- "The Role of Localised Goods in Segregation - the Case of Schools", by Paul Cheshire (London School of Economics) and Stephen C. Sheppard (Williams College)

There has been a growing literature in both the US and in the UK that estimates the way in which school quality is capitalised into house prices. This paper explored the sources of variations and the impact of model specification. The results support the conclusion that both secondary and primary school quality is capitalised into the market price of houses, and that the capitalisation of school quality is discounted in areas where new construction is concentrated.

- "Communication Externalities in Cities", by Sylvie Charlot (INRA Dijon) and Giles Duranton (London School of Economics and CEPR)

To identify communication externalities in French cities, this paper exploited a unique survey recording workplace communication of individual workers. Based on a model of agglomeration economies, the working hypothesis has two dimensions. First, in larger and/or more educated cities, workers should communicate more; second, more communication should have a positive effect on individual wages. By estimating both an earnings and a communication equation, the authors find evidence of communication externalities.

- "Segregation, Networking and Assimilation of Immigrants: An Economic Perspective on Culture and Language", Raymond J.G.M. Florax (Free University of Amsterdam)

Immigration and multiculturalism are at the heart of modern western societies. The issue of language acquisition of immigrants is intrinsically linked to immigration. This paper finds, in contrast to earlier studies, that language acquisition and understanding are inversely related to high levels of spatial segregation, and positively influenced by assimilation to the host country's culture.

The second session comprised three papers on location, and was chaired by Michael Storper (London School of Economics and UCLA).

- "Core-Periphery Patterns of Generalised Transport Costs: France 1978-1998", by Pierre-Philippe Combes (Boston University, CERAS and CEPR) and Miren Lafourcade (CERAS)

This paper developed a methodology to compute transport costs at low infra-country geographical levels, and applies it to a detailed data set on France. The results were compared with several popular shortcut approaches to the measurement of transport costs. When considering levels, these measures are shown to be good substitutes for the measure developed in this paper, but variations across time are poorly captured. Another conclusion of this paper was that the 38.2% decrease in transport costs in France in the period 1978-98 was a result of technology improvement and deregulation..

- "Global Retail in Emerging Markets – Insights for Economic Geography from Tesco's Experience in East Asia", by Neil Wrigley (University of Southampton) and Andrew Currah (University of Cambridge)

A lack of data on recent changes in global organisations prompted an explorative approach based on 20 interviews with managers who were involved with activities of Tesco in Thailand in order to understand organisational change. The continued uncertainty about Thai economic performance combined with deep cultural differences forced the company to organise their information flows and supply chains in a highly flexible way.

- "Trade Shocks and Industrial Location: the Impact of EEC Accession on the UK", by Henry Overman (London School of Economics and CEPR) and Alan Winters (University of Sussex and CEPR)

The authors combined detailed production data with international trade data by port to examine the impact of EEC accession on the location of UK manufacturing. The results suggest that EEC accession did eventually encourage UK manufacturing to relocate towards the South-East, but that some industries also retreated north-westwards to avoid import competition. There is also evidence that the port-composition of UK trade is partly determined by country-composition of UK trade. UK accession changed the country-composition of UK trade and via the port-composition induced an endogenous shock to the relative degrees of export market access and import competition in different UK locations.

In the third session, chaired by Bernard Fingleton (University of Cambridge), three papers examining the economic geography of firms were presented.

- "Economic Geography of Corporate Governance and Capital Market Integration: Evidence from Germany 1997-2003", by Gordon Clark (Oxford University) and Dariusz Wójcik (Oxford University)

The paper began with the observation that there is a schism in the academic community between those who emphasise global finance and capital market integration and those that emphasize the economic geography of distinctively local regimes of accumulation. There is rarely dialogue between these camps except for mutual disregard and antagonism. The authors sought a rapprochement between these two world-views. In doing so, they focussed on recent developments in continental Europe and particularly Germany. In contrast with Anglo-American expectations, the authors argued that the German model is hardly a model at all: it has a distinctive economic geography apparent in capital market structure and performance. Moreover, the past is not the future insofar as there is evidence of the adoption of financial practices and institutions consistent with the Anglo-American model and inconsistent with the inherited German model. Hence the contribution of the paper is twofold: to demonstrate the significance of economic geography for understanding German capital market structure and to explain how path dependence may unravel and how the forces driving institutional convergence can emerge within the context of the past.

- "Analytical Differences in the Economics of Geography: The Case of Multinational Firms", by Philip McCann (University of Reading)

McCann presented reflections on methodological differences between academics from economic, geography and international management traditions, particularly with respect to studies on multinational enterprises

- "Going International Under Conditions of Uncertainty: The Economic Value of Social Practice Institutions for Entry and Survival in Foreign Consulting Markets", by Johannes Glückler (University of Frankfurt)

A field study based on interviews was carried out in London to analyse how foreign consulting firms manage to access and establish themselves in the UK consulting market. 80% of all business was developed through existing social relations – client referral and the mobility of former client contacts or employees between client organisations. Only 20% of all business was generated in a market-like fashion. A social network analysis of the referrals between clients in a consultants' business network revealed a remarkable structural effect of strong client relations: the higher the proportion of revenues a client generated for a consultant, the more did these clients spread word of mouth and refer new clients to their consultant.

The fourth session, chaired by Raymond Florax (Free University of Amsterdam), examined the economic geography of innovation. The following two papers were presented:

- "The Spatial Distribution of Innovation Activity in the European Regions", by Rosina Morena Serrano (University of Barcelona), Raffaele Paci (University of Cagliari) and Stefano Usai (University of Cagliari)

The paper explored the spatial distribution of innovative and productive activity across 138 regions of 17 countries in Europe (the 15 members of the European Union plus Switzerland and Norway). The analysis was based on an original statistical databank set up by CRENoS on regional patenting at the European Patent Office spanning the period 1978–97 and classified by ISIC sectors (3 digit) and on the Cambridge Econometrics database on production activity. Econometric estimation findings seem to prove that internal and external factors are important in the production of knowledge and technology by European regions.

- "Regional Innovation Potentials in South East Asia – Empirical Evidence for Bangkok, Penang and Singapore", by Javier Revilla (University of Kiel)

Based on experiences from the European Regional Innovation Survey (ERIS), Revilla reported on a first attempt to measure and compare regional innovation potential and innovation-related cooperation in selected parts of Southeast Asia. Around 1600 manufacturing firms responded to representative surveys in Singapore, Penang (Malaysia) and Thailand. The results show that despite remarkable catching-up in Singapore, the breadth and efficiency of innovative activities still lag considerably behind that found in eleven European regions. Co-operation is virtually indispensable for corporate innovation processes in the region.

The fifth session, chaired by Gilles Duranton (London School of Economics and CEPR), comprised two papers on the topic of growth.

- "Growth, Integration and Regional Inequality in Europe", by George Petrakos (University of Thessaly), Andrés Rodríguez-Pose (London School of Economics) and Antonis Rovolis (Harokopio University of Athens)

Their paper challenges the ability of the conventional literature initiated by Barro and Sala-i-Martin (1991, 1992) to detect actual convergence or divergence trends across countries or regions. Instead, they suggest an alternative dynamic framework of analysis, which allows for a better understanding of the forces in operation. The findings challenge the conventional wisdom in the European Commission about the evolution of regional inequalities and have important policy implications.

- "Explaining the Distribution of Manufacturing Productivity in the EU Regions", by Bernard Fingleton (University of Cambridge) and Enrique Lopez-Bazo (University of Barcelona)

Regional inequalities in product per capita and labour productivity in the EU are large and persistent. Building on a model in which aggregate increasing returns are the result of the increase in the number of varieties of composite services, under competitive manufactures, the authors derive a simple and empirically tractable reduced form linking manufacturing productivity growth to the growth of manufacturing output. This specification is used to simulate the equilibrium distribution of labour productivity in the EU regions that is compared with virtual distributions obtained by equalising, for instance, the amount of returns to scale and the stock of human capital across regions. This way, the impact of some growth determinants on the whole EU regional equilibrium distribution can be assessed.

At the sixth and final session, chaired by André Rodríguez-Pose (London School of Economics), four papers were presented on the subject of agglomeration.

- "Clusters, Innovation and Regional Development", by Ian Gordon (London School of Economics) and Philip McCann (University of Reading)

This paper provides a critical examination of the widely disseminated view that innovation in all or most activities is favored by certain common characteristics in the local "milieu", involving a cluster of many small firms benefiting from flexible inter-firm alliances, supported by mutual information exchanges of both an informal and formal nature. The general applicability of this model, and the localness of crucial linkages, is questioned on the basis of a theoretical analysis of the innovation processes, and relations between actors and their environments, leading to the identification of a range of different hypotheses about the geography of innovation.

- "Agglomeration and Economic Geography", by Gianmarco I P Ottaviano (University of Bologna) and Jacques-François Thisse (CORE and CEPR)

The contribution of this paper was to give a general survey of recent theoretical advances in the theory of economic geography.

- "An Account of Geography Concentration Patterns in Europe", by Marius Brülhart (University of Lausanne) and Rolf Traeger (United Nations Commission for Europe, Geneva)

The authors provide a methodologically rigorous description of sectoral location patterns across Western European regions over the period 1975-2000. To measure geographic concentration, they use decomposable entropy indices and associated bootstrap tests. In addition, they estimate locational centre-periphery gradients for individual sectors and the impact of EU membership on countries' internal geography.

- "Contrasts in Agglomeration: Proto-Industrial, Industrial and Post-Industrial Forms Compared", by Nicholas Phelps (University of Leeds) and Terutomo Ozawa (Colorado State University)

Phelps argues that for geographers and economists urban agglomeration remains an enduring feature of the industrial landscape and a perennial source of theoretical and empirical interest. Curiously, despite this long-standing interest, there has been a remarkable tendency to explain agglomeration with reference to Alfred Marshall's trinity of external economies and industrial district model. The author seeks to draw some contrasts in the form and causes of agglomeration.

2. Scientific Content of the Event

This conference was jointly organized by **Gilles Duranton** (LSE), **Andres Rodriguez-Pose** (LSE), **Michael Storper** (LSE), and **Jacques-Francois Thisse** (Universite Catholique de Louvain, CERAS and CEPR). The aim of the conference was to bring together Economists and Geographers who both work on similar topics in the fields of Economic Geography and to encourage them to transcend the boundaries of their established disciplines for discussion and cooperation. The strategy of this meeting was to shift the focus away from methodological debates towards the discussion of key issues that are common to both disciplines such as the analysis of agglomerations and spatial structure. Remarkably, several papers of the conference were joint work between economists and geographers.

After a short presentation of the funding European Science Foundation by **Torsten Fischer** (ESF, Strasbourg), **Georges Petrakos** (University of Thessaly) opened the first session on “Cities”. Each presenter was given 30 minutes followed by 15 minutes of general discussion.

Michael Storper (LSE) and **Tony Venables** (LSE) started the conference with their joint paper “Buzz: Face-to-Face Contact and the Urban Economy”. The paper examines the benefits from and consequences of face-to-face contact (F2F). Michael Storper points to the established fact that in spite of dramatic decline in the costs of transport and communication, the forces of agglomeration remain strong. Recently, the study of the potential underlying mechanisms has shifted away from physical transactions to concentrate on immaterial transactions, involving the transmission and exchange of information, knowledge and ideas, especially in light of the ascendancy of the internet. The contribution of this paper is to elaborate on face-to-face (F2F) contact as one key component of many immaterial transactions and to provide some theoretical foundations for its relevance. In a second part of the presentation Tony Venables showed how the benefits and relevance of F2F can be derived and modelled first from the efficiency of F2F as a mode of communication, second from its use to overcome incentive problems in working partnerships, and third from its role in socializing individuals in professional networks. The consequences are that agglomeration forces remain strong, even in a world where the spatial costs of information transmission are low. The presentation was followed by a vivid discussion. Among other questions Gordon Clark (University of Oxford) argued that the presented models of F2F should be extended by an explicit spatial dimension that could account for a decrease of the mentioned benefits in distance. Ian Gordon (LSE) proposed to take considerations about time costs and frequency of contacts into account, while Bernard Fingleton (University of Cambridge) stressed the role of firms within the process of communication. Gilles Duranton (LSE) wondered whether the presented arguments for the relevance of F2F might be falsifiable by empirical analysis and what empirical predictions do they imply. In a general reply Tony Venables (LSE) and Michael Storper (LSE) took some of these suggestions on board and stressed the preliminary character of their work.

Next, **Paul Cheshire** (LSE) and **Stephen C. Sheppard** (Williams College) presented their work on “The Role of Localized Goods in Segregation – the Case of Schools”. The paper explores the impact of school quality on house prices. There has been a growing literature in both the US (for example Haurin and Brasington 1996, and Black 1999) and the UK (for example Gibbons and Machin 2001) that estimates the way in which school quality is capitalised into house prices. Cheshire and Sheppard 1995 and 1999 estimated hedonic models in which the quality of the secondary school to which a household was assigned was a significant variable. This provided evidence that the value of secondary school quality was being capitalised into the price of houses. Analysis to date has been predicted on the assumption that the value of local schools should be reflected in the value of houses. One expects variation in the capitalised price of a given expected school quality at either primary or secondary level according to the elasticity of supply of "school quality" in the local market. This will vary systematically between and perhaps within cities. In this paper Cheshire and Sheppard explore the sources and the impact of such variations as well as the impact of model specification. The results support the conclusion that both secondary and primary school quality is capitalised into the market price of houses and that the capitalisation of school quality is discounted in areas where new construction is concentrated. There is also evidence that the price paid for expected school quality with access to better state schools being conditioned on the position within the income distribution as much as the level of income. The discussion centred around the topics of endogeneity and potential omitted variable bias in the performed estimations. As Henry Overman (LSE) pointed out, the plain fact that one observes mixed areas with no straightforward mapping of school quality into house prices indicates that there must be omitted variables. He suggested to explore border regions between areas to identify the factors that give rise to spatial segregation. Michael Storper (LSE) raised the question about the impact of private schools on house prices with reference to evidence from the US. Stephen Sheppard (Williams College) answered that the idea to explore border areas was used in Blacks (1999) study who found rather smooth transitions between adjacent areas. Also, the impact of high quality private schools is implicitly present in the estimation as they put an upper bound on any potential capitalisation of public school quality.

Gilles Duranton (LSE) presented a joint paper with **Sylvie Charlot** (INRA Dijon) on "Communication Externalities in Cities". The paper contributes to the broad literature related to human capital externalities by providing empirical evidence on the existence and relevance of externalities that work through human communication. To identify communication externalities in French cities, the paper exploits a unique survey recording workplace communication of individual workers. Based on a model of agglomeration economies, the working hypothesis has two dimensions. First, in larger and/or more educated cities, workers should communicate more. Second, more communication in turn should have a positive effect on individual wages. By estimating both an earnings and a communication equation, the authors find evidence of communication externalities. Being in a larger and more educated city makes workers communicate more and in turn this has a positive effect on wages. However, the empirical evidence suggests that only a small fraction of the overall effects of a more educated and larger city on wages percolates through this channel. The following discussion was characterized by a focus on estimation methods. One key issue was the question, raised by Stephen Sheppard (Williams College), why the authors did not control for other potential factors that might affect communication levels, such as firm sizes. Gilles Duranton (LSE) answered that firm effects were dropped due to the fact that their interpretation would not be straightforward and because of some missing data. If a firm variable was introduced there was some evidence of higher levels of communication in larger firms. Another part of the discussion dealt with potential threshold effects in communication: Andres Rodriguez-Pose (LSE) argued that there might be an upper level of communication above which it start to affect the performance of employees negatively. Gilles Duranton (LSE) replied that the data file, while being very detailed does not include information on the time spend on communication and hence does not allow to control properly for this kind of potential threshold effects.

Raymond J. G. M. Florax (Free University of Amsterdam) presented the last paper of the day on "Segregation, Networking and Assimilation of Immigrants: An Economic Perspective on Culture and Language". The paper contributes to a growing literature that explores the impact of social integration of immigrant groups in terms of language acquisition in an economic modelling framework. Immigration and multiculturalism are at the heart of modern western societies. The issue of language acquisition of immigrants is intrinsically linked to immigration. In a seminal paper, Lazear (1999) formally links language acquisition of immigrants to the relative size of the immigrant stock, employing a microeconomic trading framework due to Becker. This paper extends the Lazear model in three important ways. First, it allows for a spatial interaction going beyond the immigrant's area of residence. Second, non-spatial behavioral differences in the level of assimilation to the host country as well as differences in networking within the own ethnic community are accounted for. Third, the paper incorporates variations in the level of segregation. The model is tested for four non-western immigrant groups in the Netherlands. The empirical analysis refutes Lazear's setup using an intraregional random encounter model. The results for a spatial interaction model are very similar to Lazears', but the probability of encountering somebody from the same culture does not significantly influence either language acquisition or language understanding. The authors find instead, that language acquisition and understanding are inversely related to high levels of spatial segregation, and positively influenced by assimilation to the host country's culture. Among several technical comments on the paper from Stephen Sheppard (Williams College), George Petrakos (University of Theassly), and Suma Athreye (Open University), Henry Overman (LSE) raised the issue of a possible circular causation between language acquisition of individual immigrants and the personal contacts with the ethnic group of the host country as modeled by the mentioned encounter probability. Klaus Desmet (University Carlos III Madrid) wondered whether the duration of group presence in the host country might have an important effect on an individuals' propensity of language acquisition. In his reply Raymond Florax linked both issues insofar as he suggested that taking into account more characteristics of the immigrant group might also help to get along with potential endogeneity issues.

On Saturday **Micheal Stolper** (LSE) opened the second session of the conference dealing with issues of "Location". **Miren Lafourcade** (CERAS) presented a joint paper with **Pierre-Philippe Combes** (Boston University, CERAS, and CEPR) on "Core-Periphery Patterns of Generalized Transport Costs: France 1978-1998". The paper develops a methodology to compute transport costs at low infra-country geographical levels and applies it to a detailed Geographical Information System (GIS) data set on France. The methodology simultaneously accounts for the real network infrastructure, a distance cost (fuel, repair, tolls), and a time opportunity cost (wages, insurance and general charges, vehicle use). The results are compared to several "shortcut" approaches to the measurement of transport costs that are quite popular in the literature, namely geodesic distance, real distance, and real time. When about levels these measures, especially real distance, are shown to be good substitutes to the measure developed in this paper. By contrast, variations across time are poorly captured by these simpler transport cost measures. Besides, the large decrease in transport costs that occurred in France between 1978 and 1998, namely - 38:2%, is shown to be mainly due to technology improvements and deregulation. New transport infrastructures, which contribute only marginally to this decline, shape the spatial pattern of accessibility improvements, however. During the discussion Henry Overman (LSE) pointed out that the very high correlation between simple standard measures of distance such as real distance and the presented generalized transport costs is an encouragement to continue with simple approaches at least in cross-sectional studies. Next, Overman warned not to generalize the finding of a low impact of improved infrastructure on transport costs. This might be a feature of highly developed countries such as France but probably does not hold for developing countries.

Neil Wrigley (University of Southampton) presented the second paper of the day on "Global Retail in Emerging Markets – Insights for Economic Geography from Tesco's Experience in East Asia". Wrigley started by pointing out that both textbook and empirical accounts fail to capture the most recent changes in global organizations. This principal lack of data motivates an explorative approach based on 20 interviews with managers who were involved with activities of the large retailer Tesco in Thailand in order to learn about the key issues in organizational change. The Asian crisis provided an opportunity for several large retailers to buy massive shares of domestic groups in these emerging markets, however in an uncertain economic and political environment. Wrigley stressed that there was both, a massive impact of these activities on the Thai economy and dramatic changes within Tesco. The continued uncertainty about Thai economic performance and policy on top of deep cultural differences forced the company to organize their information flows and supply chains in a highly flexible way. Among other things Tesco changed its internal IT-network and cost management to react quickly to a changing economic and political environment. The presentation was followed by a very lively discussion that touched not only details of the talk but also most general aspects of the conference. Marius Brulhart (Universite de Lausanne) raised the question of potential pitfalls of interview-based data, especially the necessary one-sidedness of that information. Michael Storper (LSE) wondered whether a case study on Tesco could not be tackled with more standard tools of economics, such as changes in market structures, the relevance of technological spillovers, etc. Neil Wrigley referred in his answer partly to the mentioned lack of data, but also defended his research strategy in more general terms as capturing subtle questions of globalization that are “beyond the product space”. Bjorn T. Asheim (Lund University) backed this view by stressing the different notions of “theory” in the fields of economics and geography. The discussion was informally continued during the coffee break.

After the break **Henry Overman** (LSE) gave a talk on his joint work with **Alan Winters** (University of Sussex and CEPR) on “Trade Shocks and Industrial Location: The Impact of EEC Accession on the UK”. The authors combine very detailed production data (from the ARD) with international trade data by port to examine the impact of accession to the EU on the location of UK manufacturing. Their contribution has two main objectives. The first is to test the implications of models of economic geography for the location of economic activity in a developed economy subject to a significant trade shock. The second is to shed new light on the implications of EEC accession for the UK economy. The results suggest that accession did eventually encourage UK manufacturing to relocate towards the South-East but that within the aggregate some industries retreated north-westwards in the face of increased import competition. Methodologically the paper indicates that proximity to the ports through which trade occurs is a proxy for export market access and import competition and thus helps to explain industrial location. There is also evidence that the port-composition of UK trade is partly determined by the country-composition of trade. UK accession changed the country-composition of UK trade and via the port-composition induced an exogenous shock to the relative degrees of export market access and import competition in different UK locations. The results show that employment responded as predicted to these shocks. During the vivid discussion, Andres Rodriguez-Pose (LSE) wondered whether it would not be necessary to include more controls in the estimation procedures. Essentially the paper tests only one out of several theoretical hypotheses and thus should consider more counterfactuals. Henry Overman (LSE) replied that the aim of the paper is indeed limited on testing certain predictions of certain theories, and that inclusion of fixed effects (dummy variables) should be sufficient to get along with that issue. Among other comments Raymond Florax (Free University of Amsterdam) suggested to allow for industry-specific variation in the impact of distance, and Marius Brulhart (University of Lausanne) proposed to use the firm level data as a test of recent microeconomic theories of export behaviour in the wake of Marc Melitz (2002).

Bernard Fingleton (University of Cambridge) was the chair of the third session on “Firms”. The opening paper dealt with “Path Dependence and the Alchemy of Finance: The Economic Geography of the German Model, 1997-2003”. **Dariusz Wojcik** (Oxford University) presented the paper, which is joint work with **Gordon Clark** (Oxford University). The paper starts with the observation that there is a schism in the academic community into two camps: those who emphasise global finance and capital market integration and those that emphasize the economic geography of distinctively local regimes of accumulation. In the first instance, flows of capital and the corrosive forces of global economic competition are assumed to drive institution convergence. In the second instance, the stability of relationships and inherited institutions presuppose the necessity of path dependence. There is hardly ever dialogue between these camps except for mutual disregard and antagonism. In this paper the authors seek a rapprochement between these two world-views. In doing so, the authors focus on recent developments in continental Europe and particularly Germany. In contrast with Anglo-American expectations, the authors argue that the German model is hardly a model at all: it has a distinctive economic geography apparent in capital market structure and performance. Moreover, the past is not the future insofar as there is evidence of the adoption of financial practices and institutions consistent with the Anglo-American model and inconsistent with the inherited German model. Hence the contribution of the paper is twofold: to demonstrate the significance of economic geography for understanding German capital market structure and to explain how path dependence may unravel and how the forces driving institutional convergence can emerge within the context of the past. In this respect, the contribution is both empirical and theoretical and has implications for conceptualising the status and significance of economic geography. During the discussion, Jacque-Francois Thisse (Universite Catholique de Louvain, CERAS and CEPR) and Raymond Florax (Free University of Amsterdam) questioned the geographical character of the paper insofar as there is no direct account for space or distance. Wojcik replied that the geography enters indirectly by considering different geographical units (Lander), and that some effort has been made in an earlier version of the paper to include distance measures. Moreover, Jacques-Francois Thisse pointed to the similarity of these findings for Germany to other findings of very limited market integration with respect to foreign direct investments between France and the UK.

Philip McCann (University of Reading) continued the session with a talk on “Analytical Differences in the Economics of Geography: The case of multinational firms”, a joint work with **Ram Mudambi** (Fox School of Business, Temple University). McCann presented reflections on methodological differences between academics from economic, geography and international management traditions and thereby breaks somewhat the conference policy of having a focus on the issues rather than on methods. In any case, the talk inspired a vivid but cooperative discussion. The paper considers methodological differences and their impact with respect to studies on multinational enterprises (MNE). The spatial behaviour of MNE has significant implications for regional and local development, because of the sheer scale of foreign direct investment (FDI) operations undertaken by MNEs. However, understanding these implications is not straightforward. This is because the spatial behaviour of the MNEs provides a set of difficult challenges to industrial location analysts within both economic geography and regional economics, but also within the international business and management traditions none of which have been sufficiently responded to. Many of the MNE location issues overlap all of these traditions and recently there has been something of a major convergence of interest. In several articles the nomenclature, terminology, and insights of each filed are used more or less interchangeably, most notably seen concerning issues of so-called industrial “clustering”. However, this often can be inappropriate, and frequently a misleading approach. Especially, the authors argue that the international business approach is now longer appropriate for discussing the spatial behaviour of MNEs for two reasons. Firstly, there have been fundamental changes which have taken place in modern MNE organizational structures and strategic behaviour, and these changes have affected the way in which MNE operate in space. Secondly, the recent changes in the global and institutional environment for FDI and the development of regional blocs of integration (EU, NAFTA, etc.) mean that industrial location analysis cannot be undertaken any more exclusively on a national level. As such, issues like agglomeration, clustering or dispersion now become crucial in evaluating alternative location choices within countries and within areas of integration. The traditional (case-study) based economic geography literature might provide more important insights into the location behaviour of MNE in the presence of those structural changes than most of the more economics-based traditions of location theory. Similarly, that literature might provide more helpful tools of analysis than the broad but unspecific literature on “clusters” in the tradition of Porter does. Using a typology of three different clusters that highlight the different traditions the authors discuss their interrelation and applicability to MNE location behaviour. During the general discussion after the talk Simona Iammarion (University of Sussex) and similarly Paul Cheshire (LSE) warned not to overstress the differences between the three academic traditions and “types of clusters” but to consider and exploit their connections.

Johannes Glueckler (University of Frankfurt) presented a paper entitled “Going International under Conditions of Uncertainty: The Economic Value of Social Practice Institutions for Entry and Survival in Foreign Consulting Markets”. Based on interviews a field study was carried out in London in order to analyze how foreign consulting firms manage to access and establish themselves in the British consulting market. The majority of consultancies entered ex novo, i.e. they established own branches or subsidiaries in London. The context of entry proved relevant to the form of entry: those firms that already had existing relations with the British market, either through clients or business contacts, tended to enter organically, whereas firms without any network relations tended to purchase market access via acquisitions. 80% of all business was developed through existing social relations. The most important mechanisms were client referrals and the mobility of former client contacts or employees between client organizations. Interview partners emphasized the primacy of trustful and enduring client relations for a sustainable penetration of the market. Only 20% of all business were generated in a market-like fashion, whereas direct client development was reported to take longer periods of time to succeed and to imply only a limited success rate. A social network analysis of the referrals between clients in a consultants’ business network revealed a remarkable structural effect of strong client relations: The higher the proportion of revenues a client generated for a consultant, the more did these clients spread word of mouth and refer new clients to their consultant. Statistical analysis reports significant associations between the economic importance of a client and its network effect on the circulation of referrals. Hence, the study proved that entry and development in the British market were very much enabled and constrained by networks of enduring social relations and their cumulating effects through referrals and recommendations. The discussion focused on the quality of this case study to highlight general aspects of market interrelatedness. Henry Overman (LSE) questioned that the consulting market has any distinguishing features in that respect. Johannes Glueckler stressed in his response the relevance of “trust” and “reputation” for the consulting market as revealed during the interviews. Michael Storper (LSE) backed this perspective pointing out that the study contributes to a richer understanding of “transaction costs” that play a central part in economic geography.

Raymond Florax (Free University of Amsterdam) was chair for the fourth session of the conference on “Innovation”. **Raffaele Paci** and **Stefano Usai** (both University of Cagliari) presented a joint paper with **Rosina Morena Serrano** (University of Barcelona) on the “Spatial Distribution of Innovation Activity in the European Regions”. The paper explores the spatial distribution of innovative and productive activity across 138 regions of 17 countries in Europe (the 15 members of the European Union plus Switzerland and Norway). The analysis is based on an original statistical databank set up by CRENoS on regional patenting at the European Patent Office spanning from 1978 to 1997 and classified by ISIC sectors (3 digit) and on the Cambridge Econometrics database on production activity. In a first step, a deep exploratory spatial data analysis of the dissemination of innovative activity in Europe is performed. The spatial mapping of innovation is compared to the distribution of productive activity. Some global and local indicators for spatial association are presented, summarizing the presence of a general dependence process in the distribution of the phenomena under examination. Such an analysis is implemented for different manufacturing macro-sectors to assess for the presence of significant differences in their spatial features. Moreover, the extent and strength of spatial externalities are evaluated for three different periods: 1981-83, 1988-90 and 1995-97. Finally, the authors attempt to model the behavior of innovative activity at the regional level. Econometric estimation findings seem to prove that internal and external factors are important in the production of knowledge and technology by European regions. During the discussion, Suma Athreye (Open University) asked how the finding of a strong spatial structure in innovative activities, such as the importance of innovative activity of adjacent areas, can be reconciled with results from micro-studies that point to the usage of an international knowledge base. In his answer Stefano Paci maintained that this needs not be a contradiction since there is evidence of massive spillovers as well as significant variation between economic sectors. Another point was raised by Henry Overman (LSE) about the origins of spatial autocorrelations that were found in this and in many other studies to be important. Paul Cheshire (LSE) noted that this simple fact is a hint for the presence of omitted variables which in itself presents an interesting research agenda. Raymond Florax (Free University of Amsterdam) stressed that, regardless of what lies behind the omitted variables, the presence of spatial autocorrelation is also the key motivation to apply methods of spatial econometrics, since otherwise all estimates will be necessarily biased.

Next, **Javier Revilla** (University of Kiel) presented "Regional Innovation Potentials in South East Asia – Empirical Evidence for Bangkok, Penang, and Singapore". Based on experiences from the European Regional Innovation Survey (ERIS), Revilla reported on a first attempt to measure and compare regional innovation potential and innovation-related cooperation in selected parts of Southeast Asia. Around 1600 manufacturing firms responded to representative surveys in Singapore, Penang (Malaysia) and Thailand. The results show that despite remarkable catching-up in Singapore, the breadth and efficiency of innovative activities still lag considerably behind that found in eleven European regions. Co-operation is virtually indispensable for corporate innovation processes in the region. Subsidiaries of multinational corporations are most likely to collaborate with their corporate headquarters, or R&D centers respectively. In contrast, lead users in technologically advanced countries are the prime sources of external knowledge for endogenous firms. Both ways lead to a discontinuous spatial pattern of collaboration linkages in which innovating companies "leapfrog" neighboring regions and countries to work with technologically advanced partners further on. This contrasts sharply with the distance-decay pattern of collaboration linkages found in Europe. In the following discussion Klaus Desmet (University Carlos III Madrid) suggested that the different role of MNE in Asia and Europe might account for the different spatial patterns of innovation cooperation. Revilla replied that this might be a factor and implies – as stressed in the paper – the vulnerability of innovation processes in Southeast Asia due to a lack of a local innovative basis.

Gilles Duranton was the chair of the fifth session on "Growth", which was opened by a presentation of **George Petrakos** (University of Thessaly) together with **Andres Rodriguez-Pose** (LSE) of their joint work with **Antonis Rovolis** (Harokopio University of Athens) on "Growth, Integration, and Regional Inequality in Europe". Their paper challenges the ability of the conventional literature initiated by Barro and Sala-i-Martin (1991, 1992) to detect actual convergence or divergence trends across countries or regions. Instead, they suggest an alternative dynamic framework of analysis, which allows for a better understanding of the forces in operation. With the use of a SURE model and time-series data for eight European Union (EU) member-states, the authors test directly for the validity of two competing hypotheses: the neoclassical (NC) convergence hypothesis originating in the work of Solow (1956) and the cumulative causation hypothesis stemming from Myrdal's theories (1957). They also account for changes in the external environment, such as the role of European integration on the level of inequalities. The findings indicate that both short-term divergence and long-term convergence processes coexist. Regional inequalities are reported to follow a pro-cyclical pattern, as dynamic and developed regions grow faster in periods of expansion and slower in periods of recession. At the same time, significant spread effects are also in operation, partly offsetting the cumulative impact of growth on space. Similar results are obtained from the estimation of an intra-EU model of inequalities at the national level, indicating that the forces in operation are independent of the level of aggregation. The findings challenge the conventional wisdom in the European Commission about the evolution of regional inequalities and have important policy implications. The discussion centered on questions of potential endogeneity in the presented estimations, especially between GDP measures and the level of Inequality. Apart form that point, Jacque-Francois Thisse asked whether a time horizon of 20 years of that study can be sufficient to analyze changes in inequality between and within nations, and referred to recent work by economic historians on that topic George Petrakos replied that the analysis of intra-national developments was based on data over 41 years, yielding quite similar results. Gilles Duranton suggested using the data in order to test directly the Williamson-hypothesis that had been mentioned in the paper of a bell-shaped pattern of inequality over different stages of economic development.

Bernard Fingleton (University of Cambridge) and **Enrique Lopez-Bazo** (University of Barcelona) presented their joint work “Explaining the Distribution of Manufacturing Productivity in the EU Regions”. Regional inequalities in product per capita and labour productivity in the EU are large and persistent. Building on a model in which aggregate increasing returns is the result of the increase in the number of varieties of composite services, under competitive manufactures, the authors derive a simple and empirically tractable reduced form linking manufacturing productivity growth to the growth of manufacturing output. This specification is used to simulate the equilibrium distribution of labor productivity in the EU regions that is compared with "virtual" distributions obtained by equalizing, for instance, the amount of returns to scale and the stock of human capital across regions. This way, the impact of some growth determinants on the whole EU regional equilibrium distribution can be assessed. The following discussion was dominated by technical questions on the use of appropriate instruments and non-parametric techniques. When about the simulations, Raymond Florax (Free University of Amsterdam) asked what the forecast horizon of that exercise is, and Klaus Desmet (University Carlos III, Madrid) wondered about the underlying assumptions of these simulations. In his reply, Bernard Fingleton stressed the point that any economic equilibrium is an unlikely assumption and hence, the assumed time horizon does not have a clear-cut meaning. The simulations have been realized assuming different scenarios, among others a stability of all variables over time. Jacques-Francois Thisse remarked that the analysis of disequilibria would provide an interesting but demanding agenda for further research.

The final session of the conference was about “Agglomeration” chaired by **Andres Rodriguez-Pose**. **Ian Gordon** (LSE) and **Philip McCann** (University of Reading) gave a joint presentation of their work on “Clusters, Innovation, and Regional Development”. Their contribution provides a critical examination of the widely disseminated view that innovation in all or most activities is favored by certain common characteristics in the local “milieu”, involving a cluster of many small firms benefiting from flexible inter-firm alliances, supported by mutual information exchanges of both an informal and formal nature. The general applicability of this model, and the localness of crucial linkages, is questioned on the basis of a theoretical analysis of the innovation processes, and relations between actors and their environments, leading to the identification of a range of different hypotheses about the geography of innovation. Examination of new survey evidence from a large number of firms in the London conurbation suggests that the importance of informal information spillovers enabled by spatial proximity for successful innovation is much more limited than has been suggested, both in relation to wider agglomeration economies and to non-local business linkages. During the following discussion, Javier Revilla-Diez (University of Kiel) asked whether the employed data allows to capture social structure, and hence the character of London as being potentially a very special case. Ian Gordon conceded that the data is poor in this respect and that the results might not be applicable to other cases than London. George Petrakos (University of Thessaly) suggested shifting the focus away from the core towards peripheral areas, as most agglomeration models have been developed to deal with policy issues of backwardness and peripheral location.

Jacques-Francois Thisse (Universite Catholique de Louvain, CERAS and CEPR) gave a talk on “Agglomeration and Economic Geography”, based on joint work with **Gianmarco Ottaviano** (University of Bologna). The contribution of their paper is to give a general survey of recent theoretical advances in the theory of economic geography. Peaks and troughs in the spatial distributions of population, employment and wealth are a universal phenomenon in search of a general theory. Such spatial imbalances have two possible explanations. In the first one, uneven economic development can be seen as the result of the uneven distribution of natural resources. This is sometimes called “first nature” and refers to exogenously given characteristics of different sites. However, it falls short of providing a reasonable explanation of many other clusters of activities, which are much less dependent on natural advantage. The aim of geographical economics is precisely to understand the economic forces that, after controlling for “first nature”, account for “second nature”, which emerges as the outcome of human beings' actions to improve upon the first one. Specifically, geographical economics asks what the economic forces are that can sustain a large permanent imbalance in the distributions of economic activities. In this paper, we focus on the so called “new economic geography” approach. After having described some of the main results developed in standard location theory, Ottaviano and Thisse use a united framework to survey the home market effect as well as core-periphery models. These models have been criticized by geographers because they accounts for some spatial costs while putting others aside without saying why. Furthermore, core-periphery models also exhibit some extreme features that are reflected in their bang-bang outcomes. Thus the authors move on by investigating what the outcomes of core-periphery models become when we account for a more complete and richer description of the spatial aspects that these models aim at describing. Finally the authors conclude by suggesting new lines of research. The presentation induced a general discussion on the relation between geography and economics. Andres Rodriguez-Pose (LSE) asked what the contribution of geography might be in the light of these recent advances in economic geography. Jacques-Francois Thisse pointed to the introduction of probabilistic formulations that were known for a long time to geographers but entered the field of economics only recently. Ian Gordon (LSE) questioned the generality of simple economic models and the use of equilibrium concepts with respect to the location choice of people. In his reply Jacques-Francois Thisse stressed that these economic approaches help to reduce the complexity of the issues and to fix key ideas. Moreover, they often allow for a wide range of interpretations.

After a short coffee break, **Marius Brulhart** (University of Lausanne) presented “An Account of Geographic Concentration Patterns in Europe”, based on joint work with **Rolf Traeger** (United Nations Commission for Europe, Geneva). They provide a methodologically rigorous description of sectoral location patterns across Western European regions over the period 1975-2000. To measure geographic concentration, the authors use decomposable entropy indices and associated bootstrap tests. In addition, they estimate locational centre-periphery gradients for individual sectors and the impact of EU membership on countries’ internal geography. It is found that the results depend heavily on the applied measures. For example, there is an important difference between measures of topographic and relative concentration. Overall, manufacturing has become gradually and statistically significantly more concentrated, although the locational bias towards central regions has become weaker. Conversely, market services have been relocating towards centrally located regions. Accession to the EU has strengthened countries’ internal concentration trends. During the discussion several participants stressed the importance of the new methodological approach and the new insights gained from this research. Nikolaus Wolf (LSE) wondered whether the impact of supposed integration processes could be captured more directly, using measures of market integration rather than accession dates. Ian Gordon (LSE) suggested modeling the relation between topographic and relative measures of concentration. Henry Overman (LSE) in turn argued that any statistic should be theory based, which might be an issue for the presented paper. Marius Brulhart replied that theory often lags behind, making this desirable strategy impractical. Especially, even the recent advances in economic geography fail to account for topographic space. Raymond Florax (Free University of Amsterdam) noted that the presented measures, while being superior to most of the previously used, are probably very sensitive with respect to changing borders. However, for the case of the data under consideration this was not a problem, as borders were stable over time.

Nicholas Phelps (University of Leeds) gave the last conference presentation, based on two of his papers. The first part of the presentation speculated on “Contrasts in Agglomeration: Proto-Industrial, Industrial and Post-Industrial Forms Compared”, a joint work with **Terutomo Ozawa** (Colorado State University), while the second part referred to Phelps’ paper on “Clusters, Dispersion, and the Spaces in Between: for an Economic Geography of the Banal”. Phelps argues that for geographers and economists urban agglomeration remains an enduring feature of the industrial landscape and a perennial source of theoretical and empirical interest. Curiously, despite this long-standing interest, there has been a remarkable tendency to explain agglomeration with reference to Alfred Marshall’s trinity of external economies and industrial district model. The author seeks to draw some contrasts in the form and causes of agglomeration. In this context Phelps develops a simple and highly schematic taxonomy of what could be considered the emblematic forms of agglomeration in proto-industrial, industrial and post-industrial urban contexts. Highly simplified though they are, such contrasts highlight the changes in the spatial extent of agglomeration, the contribution of particular industrial sectors and types of external economy and of exports to the process of agglomeration over time. As such there is an urgent need to reconcile the perspectives of economists and geographers in a renewal of the theory of agglomeration. Another issue that gains relevance is the changing spatial extent of agglomerations over time. Hence it might be worth to focus on “in-between” places. The value of analyzing the economic basis of largely overlooked “banal” intermediate places lies in what they may reveal about the functioning of diffuse forms of agglomeration. Paul Cheshire (LSE) stressed in the following discussion the value of available modeling approaches even in the presence of seminal changes in the environment. The principal mechanisms of agglomeration and dispersion and the underlying costs of moving items across space are still revelant, even when the items change their character.

At the end of the conference **Andres Rodriguez-Pose** (LSE) summarized the presentations and discussions as a highly encouraging experience for probably both, economists and geographers to continue the dialogue between both fields. Overall, the debates proved again that geography and economics are rather complementary modes of research. While geographers start their analysis with acknowledging the complexity of their issues, and then try to reduce it, economists do the opposite. They start with some simple basic model and eventually include additional features to account for the observed complexity of their topic. A deeper cooperation between them might result in new insights for both.

3. Assessment of the Results, and Contribution to the Future Direction of the Field

The conference provided a wide variety of approaches to a similarly wide-ranging set of issues involving economics and geography. Besides taking stock of international and European research in the field, the workshop advanced the field of study and interactions between economists and geographers in the following areas.

First, methodological differences between geographers and economists have been the subject of debate between the two groups for some years. This type of debate has not led to a fruitful convergence of views and approaches and risks becoming sterile. In consequence, the workshop focussed on real world issues and studies, not methodology, and this approach proved much more fruitful; in particular, the fact that a number of papers presented at the workshop were the result of joint work between economists and geographers is a positive achievement.

Second, until recently economic geography in Europe has tended to be strongly biased towards theoretical studies. The "New Economic Geography" (or NEG, see Krugman, 1991 and Fujita, Krugman and Venables, 1999) has led to a large number of theoretical developments with empirical work lagging far behind. Over the last couple of years, European research has started to deal with the empirics of the NEG (Combes and Lafourcade, 2001, Redding and Venables, 2001). More economists are now pursuing this line of research in Europe, but most of the work is still in progress. The workshop therefore had a beneficial effect in bringing together these researchers and their current work.

Third, the dialogue between economists and geographers has so far taken place only between very senior scholars in the two disciplines. To perpetuate it, it is essential to involve more junior academics. An important aspect of the conference was that it was able to bring together both senior and more junior scholars from the two disciplines.

The conference also led to two more tangible results.

First, the editors of *Environment and Planning A* have invited the two organizers (Duranton and Rodríguez-Pose) to serve as guest editors for a special issue of their Journal based on contributions from the conference. About ten papers were submitted in total. The two organizers worked with the authors and gave them some instructions about how to revise their papers. The papers are currently in the hand of external referees. Given the reputation of the Journal (it ranks among the highest journals in geography and it is also well-known by economists working on urban or regional issues), this special issue should ensure a lasting impact for the conference.

Second, some of the participants (Magrini, Florax and Lopez-Bazo) decided to pursue the experience further and ask for a more substantial grant to fund a research network and regular meetings between the participants. The likely unifying theme to bring together economists and geographers is regional policy.

4. Final Programme

Topics in Economic Geography: A Dialogue Between Economists and Geographers

CEPR, London 24-26 October 2003

Programme

Friday 24 October

13.45-14.15 Registration/Coffee

14.15-14.30 Introduction: Gilles Duranton (London School of Economics)
Presentation of the European Science Foundation: Torsten Fischer

Session 1: Cities

Chair	Neil Wrigley (University of Southampton)
14.30-15.15	**Buzz: Face-to-Face Contact and the Urban Economy** *Michael Storper (London School of Economics and UCLA) *Tony Venables (London School of Economics and CEPR)
15.15-16.00	**The Role of Localised Goods in Segregation - the Case of Schools** *Paul Cheshire (London School of Economics) Stephen C Sheppard (Williams College)
16.00-16.15	Coffee
16.15-17.00	**Communication Externalities in Cities** Sylvie Charlot (INRA Dijon) *Gilles Duranton (London School of Economics and CEPR)
17.00 – 17.45	**Segregation, Networking and Assimilation of Immigrants: An Economic Perspective on Culture and Language** *Raymond J.G.M. Florax (Free University of Amsterdam)

Saturday 25 October

Session 2: Location

Chair	Michael Storper (London School of Economics)
9.00-9.45	**Core-Periphery Patterns of Generalized Transport Costs: France 1978-1998** Pierre-Philippe Combes (Boston University, CERAS and CEPR) *Miren Lafourcade (CERAS)
9.45-10.30	**Global Retail in Emerging Markets – Insights for Economic Geography from Tesco's Experience in E Asia** *Neil Wrigley (University of Southampton) Andrew Currah (University of Cambridge)
10.30-10.45	Coffee
10.45-11.30	**Trade Shocks and Industrial Location: The Impact of EEC Accession on the UK** *Henry Overman (London School of Economics and CEPR) Alan Winters (University of Sussex and CEPR)

Session 3: Firms

Chair	Bernard Fingleton (University of Cambridge)
11.30-12.15	**Economic Geography of Corporate Governance and Capital Market Integration: Evidence from Germany 1997-2003** *Gordon Clark (Oxford University) *Dariusz Wójcik (Oxford University)
12.15-13.00	**Analytical Differences in the Economics of Geography: The case of multinational firms**
13.00-14.0	Philip McCann (University of Reading
13.00-14.00	Lunch
14.00-14.45	**Going International Under Conditions of Uncertainty: The Economic Value of Social Practice Institutions for Entry and Survival in Foreign Consulting Markets**. *Johannes Glückler (University of Frankfurt)

Session 4: Innovation

Chair	Raymond Florax (Free University of Amsterdam)
14.45-15.30	**Spatial Distribution of Innovation Activity in the European Regions** Rosina Moreno Serrano (University of Barcelona) * Raffaele Paci (University of Cagliary) * Stefano Usai ((University of Cagliary)

15.30-16.15	**Regional Innovation Potentials in South East Asia – Empirical Evidence for Bangkok, Penang, and Singapore** *Javier Revilla (University of Kiel)
16.15-16.30	Coffee

<u>Session 5: Growth</u>

Chair	Gilles Duranton (London School of Economics and CEPR)
16.30-17.15	**Growth, Integration and Regional Inequality in Europe** * George Petrakos (University of Thessaly) *Andrés Rodríguez-Pose (London School of Economics) Antonis Rovolis (Harokopio University of Athens)
17.15-18.00	**Explaining the Distribution of Manufacturing Productivity in the EU Regions** * Bernard Fingleton (Univsersity of Cambridge) Enrique Lopez-Bazo (University of Barcelona)

<u>Sunday 26 October</u>

<u>Session 6: Agglomeration</u>

Chair	Andrés Rodríguez-Pose (London School of Economics)
9.00-9.45	**Clusters, Innovation and Regional Development** *Ian Gordon (London School of Economics) *Philip McCann (University of Reading)
9.45-10.30	**Agglomeration and Economic Geography** Gianmarco I P Ottaviano (University of Bologna) *Jacques-François Thisse (CORE and CEPR)
10.30-10.45	Coffee
10.45-11.30	**An Account of Geographic Concentration Patterns in Europe** *Marius Brülhart (University of Lausanne) Rolf Traeger (United Nations Commission for Europe, Geneva)
11.30-12.15	**Contrasts in Agglomeration: Proto-Industrial, Industrial and Post-Industrial Forms Compared** *Nicholas Phelps (University of Leeds) T. Ozawa (Colorado State University)
12.15	Lunch

***denotes speaker**

Each presenter has 30 minutes and there will be 15 minutes for general discussion

Organizers:	Gilles Duranton (London School of Economics and CEPR) Andrés Rodríguez-Pose (London School of Economics) Michael Storper (London School of Economics) Jacques-François Thisse (Université Catholique de Louvain, CERAS and CEPR)

5. Final List of Participants

Name	Address	Telephone, Fax, Email
Bjørn T. Asheim	Dept of Social and Economic Geography University of Lund Solvegatan 13 223 62 Lund SWEDEN	TEL: 00 46 46 222 8402 FAX: 00 46 46 222 8401 EMAIL: bjorn.asheim@keg.lu.se
Suma Athreye	Lecturer in Economics Faculty of Social Sciences The Open University Walton Hall Milton Keynes MK7 6AA	TEL: 00 44 1908 654 556 FAX: 00 44 1908 652 152 EMAIL: s.s.athreye@open.ac.uk
Marius Brülhart	Ecole des HEC Université de Lausanne CH - 1015 Lausanne SWITZERLAND	TEL: 00 41 21 692 3471 FAX: 00 41 21 692 3405 EMAIL: marius.brulhart@hec.unil.ch
Paul Cheshire	Department of Geography London School of Economics Houghton Street London WC2A 2EA	TEL: 00 44 20 7955 7586 FAX: 00 44 20 7955 7412 EMAIL: p.cheshire@lse.ac.uk

Gordon Clark	School of Geography Mansfield Road Oxford OX1 3TB	TEL: 00 44 1865 271 928 FAX: 00 44 1865 271 929 EMAIL: gordon.clark@geography.oxford.ac.uk
Klaus Desmet	Departamento de Economía Universidad Carlos III Madrid 28903 Getafe Madrid SPAIN	TEL: 00 34 91 624 9845 FAX: 00 34 91 624 9875 EMAIL: desmet@eco.uc3m.es
Gilles Duranton	Department of Geography & Environment London School of Economics Houghton Street LONDON WC2A 2AE	TEL: 00 44 20 7955 7604 FAX: 00 44 20 7955 7412 EMAIL: g.duranton@lse.ac.uk
Jurgen Essletzbichler	Dept of Geography University of Southampton Highfield Southampton SO17 1BJ	TEL: 00 44 23 8059 5085 FAX: EMAIL: j.essletzbichler@soton.ac.uk
Bernard Fingleton	Department of Land Economy University of Cambridge 19 Silver Street Cambridge CB3 9EP	TEL: 01223 337 147 FAX: 01223 337130 EMAIL: bf100@cam.ac.uk

Torsten Fischer	European Science Foundation 1 quai Lezay Marnésia 67080 Strasbourg FRANCE	TEL: FAX: EMAIL: tfischer@esf.org
Raymond J.G.M. Florax	Free University Department of Spatial Economics Master-Point De Boelelaan 1105 NL-1018 HV Amsterdam THE NETHERLANDS	TEL: 00 31 20 444 6090 FAX: 00 3120 444 6004 EMAIL: rflorax@feweb.vu.nl
Steve Gibbons	Centre for Economics of Education & Dept of Geography London School of Economics Houghton Street London WC2A 2AE	TEL: FAX: EMAIL: s.gibbons@lse.ac.uk
Johannes Glückler	University of Frankfurt Institute for Economic &Social Geography Dantestr. 9, PO-Box 11 19 32 60054 Frankfurt am Main GERMANY	TEL: 00 49 69 7982 3547 FAX: 00 49 69 7982 3548 EMAIL: glueckler@em.uni-frankfurt.de
Ian Gordon	London School of Economics Houghton Street London WC2A 2AE	TEL: FAX: EMAIL: i.r.gordon@lse.ac.uk

Simona Iammarino	Science Policy Research Unit (SPRU) Freeman Centre University of Sussex Falmer Brighton BN1 9QE	TEL: FAX: 00 44 1273 685865 EMAIL: s.iammarino@sussex.ac.uk
Danilo Igliori	Department of Land Economy University of Cambridge 19 Silver Street Cambridge CB3 9EP	TEL: FAX: EMAIL: dci21@cam.ac.uk
Miren Lafourcade	CERAS - ENPC 28. rue des Saints Pères 75343 Paris Cedex 07 FRANCE	TEL: 00 33 1 4458 2886 FAX: 00 33 1 4458 2880 EMAIL: lafourca@enpc.fr
Enrique Lopez-Bazo	Dept of Econometrics University of Barcelona Avda Diagonal 690 08034 Barcelona SPAIN	TEL: 00 34 93 403 7041 FAX: 00 34 93 402 1821 EMAIL: elopez@eco.ub.es
Stefano Magrini	Università Ca' Foscari di Venezia Dipartimento Scienze Economiche Fondamenta S. Giobbe Cannaregio, 873 30121 Venezia ITALY	TEL: 00 39 041 234 9194 FAX: 00 39 041 234 9176 EMAIL: s.magrini@unive.it

Philip McCann	Department of Economics University of Reading Reading RG6 6AW	TEL: 00 44 118 378 7864 FAX: 00 44 118 931 6533 EMAIL: p.mccann@reading.ac.uk
Barry Moore	Department of Land Economy University of Cambridge Sidgwick Avenue Cambridge CB3 9DD	TEL: FAX: EMAIL: bcm1@cam.ac.uk
Rosina Moreno	Universitat de Barcelona Dept. d'Econometria, Estadística i Economia Espanyola Avda. Diagonal, 690 08034 Barcelona SPAIN	TEL: 00 34 93 402 1012 FAX: 00 34 93 402 1821 EMAIL: rmoreno@ub.edu
Henry Overman	Department of Geography and Environment London School of Economics Houghton Street LONDON WC2A 2AE	TEL: 00 44 20 7955 6581 FAX: 00 44 20 7955 7412 EMAIL: h.g.overman@lse.ac.uk
Raffaele Paci	Dpt di Ricerche economiche e sociali Universita di Cagliari Viale Fra' Ignazio 78 09123 Cgliari ITALY	TEL: 00 39 070 675 37 65 FAX: 00 39 070 675 37 6 EMAIL: paci@unica.it

George Petrakos	Department of Planning and Regional Development University of Thessaly Pedion Areos 38334 Volos GREECE	TEL: 00 30 24 2107 4468 FAX: 00 30 24 2107 4380 EMAIL: petrakos@uth.gr
Nicholas Phelps	School of Geography University of Leeds Leeds LS2 9JT	TEL: 00 44 113 233 1820 FAX: 00 44 113 233 3308 EMAIL: n.phelps@geog.leeds.ac.uk
Javier Revilla Diez	University of Kiel Unstitue of Geography Chair of Economic Geography Ludewig-Meyn-Strasse 14 24098 Kiel GERMANY	TEL: 00 49 431 880 2951 FAX: 00 49 431 880 4658 EMAIL: diez@geographie.uni-kiel.de
Andrés Rodríguez-Pose	Dept . of Geography & Environment LSE, Houghton Street London WC2A 2AE	TEL: 00 44 20 7955 7971 FAX: EMAIL: a.rodriguez-pose@lse.ac.uk
Elodie Ruelleux	Centre for Economic Policy Research 90-98 Goswell Road London EC1V 7RR	TEL: 00 44 20 7878 2900 FAX: 00 44 20 7878 2999 EMAIL: eruelleux@cepr.org

Regina Salvador	Department of Geography and Regional Planning Universidade Nova de Lisboa Travassa Estevao - Campolide 1000 Lisboa PORTUGAL	TEL: FAX: EMAIL: regleo@mail.telepac.pt
Stephen C Sheppard	Economics Dept Fernald Hosue Williams College Williamstown, MA 01267 USA	TEL: 00 1 413 597 2476 FAX: 00 1 413 597 4045 EMAIL: stephen.c.sheppard@williams.edu
Michael Storper	Dept of Geography & Environment LSE, Houghton Street London WC2A 2AE	TEL: 00 44 20 7955 6550 FAX: 00 44 20 7955 7412 EMAIL: m.storper@lse.ac.uk
Jacques-François Thisse	CORE Université Catholique de Louvain 34 Voie du Roman Pays B-1348 Louvain-la-Neuve BELGIUM	TEL: 00 32 10 474312 FAX: 00 32 10 474301 EMAIL: thisse@core.ucl.ac.be
Stefano Usai	University of Sassari Corso Margherita di Savoia 15 07100 Sassari ITALY	TEL: 00 39 070 675 3765 FAX: 00 39 070 675 3760 EMAIL: usai@uniss.it

Anthony J. Venables	Department of Economics London School of Economics Houghton Street WC2A 2AE LONDON	TEL: 0 44 20 7955 7522 FAX: 00 44 20 7831 1840 EMAIL: a.j.venables@lse.ac.uk
Dariusz Wójcik	University of Oxford School of Geography and the Environment Mansfield Road Oxford OX1 3TB	TEL: FAX: EMAIL: dariusz.wojcik@geog.ox.ac.uk
Nikolaus Wolf	Humboldt University Spandauer Straße 1 10178 Berlin GERMANY	TEL: 00 49 30 2093 5673 FAX: 00 49 30 2093 5727 EMAIL: nikowolf@wiwi.hu-berlin.de
Neil Wrigley	University of Southampton Highfield Southampton SO17 1BJ	TEL: 00 44 23 8059 3762 FAX: 00 44 23 8059 3295 EMAIL: n.wrigley@soton.ac.uk

6. Statistical Information on Participants

Name	Year of Birth	Gender	Country of Origin
Bjørn T. Asheim		M	Sweden
Suma Athreye		F	UK
Marius Brülhart	1967	M	Switzerland
Paul Cheshire	1942	M	UK
Gordon Clark		M	UK
Klaus Desmet		M	Spain
Gilles Duranton	1969	M	UK
Jurgen Essletbichler		M	UK
Bernard Fingleton		M	UK
Torsten Fischer		M	France
Raymond J.G.M. Florax		M	Netherlands
Steve Gibbons	1964	M	UK
Johannes Glückler		M	Germany
Ian Gordon	1954	M	UK
Simona Iammarino		F	UK
Danilo Igliori		M	UK
Miren Lafourcade	1972	F	France
Enrique Lopez-Bazo		M	Spain
Stefano Magrini	1966	M	Italy
Philip McCann		M	UK
Barry Moore		M	UK
Rosina Moreno		F	Spain
Henry Overman	1970	M	UK
Raffaele Paci		M	Italy
George Petrakos		M	Greece
Nicholas Phelps		M	UK
Javier Revilla Diez		M	Germany
Andrés Rodríguez-Pose	1966	M	UK
Elodie Ruelleux	1980	F	UK
Regina Salvador		F	Portugal
Stephen C Sheppard	1955	M	USA
Michael Storper		M	UK
Jacques-François Thisse	1946	M	Belgium
Stefano Usai		M	Italy
Anthony J. Venables	1953	M	UK
Dariusz Wójcik		M	UK
Nikolaus Wolf	1973	M	Germany
Neil Wrigley		M	UK