

**FOREIGN AND INDIGENOUS FIRMS IN THE MEDIA CLUSTER OF
CENTRAL LONDON**

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Abstract

This study uses the comparison between foreign and indigenous firms in localised clusters to gain insights into the behaviour of the former in clusters. In-depth study of 49 foreign and indigenous media firms in the Soho district of Central London suggests a combination of differences and similarities between them in terms of their cluster behaviour and the benefits they draw from their cluster participation. The major factor determining these differences and similarities is the extent to which internal linkages within TNCs substitute for cluster linkages.

Key words: TNCs, clusters, media industries

JEL codes: F23; M370; M210

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1. Introduction

Comparisons between foreign and indigenous firms operating in the same country and industrial context have been used by international business and international management scholars to distinguish between the attributes accruing to all firms regardless of their ownership, and those that are unique to foreign-owned establishments. Such comparisons have provided a better understanding of the behaviour of TNCs and their unique attributes. Foreign and indigenous firms have been compared in terms of characteristics such as productivity and innovative capabilities (see for example, Willmore, 1986; UNCTAD, 1999, chapter I), trade propensity (Lipsey, 1991; UNCTAD, 1999, chapter I), employment practices (UNCTAD-DTCI, 1994), failure probability (Shaked, 1986), and financial performance (Michel and Shaked, 1986; Abdulla, 1994), among others. Other scholars have studied the intra-country location patterns of foreign firms vis-à-vis those of indigenous firms (Mariotti and Piscitello, 1995; Shaver, 1998; Cantwell and Iammarino, 1998). International management scholars have paid considerable attention to the differences between foreign and indigenous firms in terms of their managerial and organisational practices, and have examined the extent to which foreign affiliates pursue managerial practices that resemble those of indigenous firms (Rosenzweig and Singh, 1991; Rosenzweig and Nohria, 1994; Zaheer, 1995). These studies have shown that certain characteristics of foreign-owned firms, such as the disadvantages arising from operation in a foreign country, the specific nature of their firm-specific advantages, and their role as part of a global network, lead to considerable differences between them and indigenous firms in terms of their strategic behaviour, organisational practices and location patterns.

One aspect of this comparison that has not received much research attention thus far is the behaviour of foreign and indigenous firms in

localised clusters of business activity. Recent studies have shown that TNCs are often attracted to such clusters and that their linkages with other members of the cluster affect both their own operations and the operations of the clusters that host them (Dunning, 1997, 1998; Morsink, 1998; Nachum and Keeble, 1999a, 1999b; Birkinshaw and Hood, forthcoming). The participation of TNCs in localised clusters creates a different context for the comparison between them and indigenous firms, and seems to deserve specific attention. Localised clusters, by their very nature, can and often do bring firms closely together in intense inter-firm collaboration which creates dynamics of learning and innovation and the accumulation of collective capabilities (Scott, 1998a; Keeble et al., 1998b; Keeble and Wilkinson, 1999, 2000). The unique attributes of foreign-owned establishments, that distinguish them from their indigenous counterparts, are likely to affect their behaviour in such circumstances in a manner that has not been acknowledged by previous comparisons. This calls for research that addresses the differences between foreign and indigenous firms in this specific context.

Better understanding of these differences has important implications for firms, policy makers and researchers. From a firm perspective, it provides TNCs with an indication as to how they compare with indigenous firms in clusters. When considering taking part in localised clusters, TNCs would then be better able to assess whether they can expect to derive benefits similar to those accruing to indigenous firms from cluster participation, and to identify the specific areas in which such benefits may differ. From a policy perspective, knowledge of whether or not the behaviour of foreign and indigenous firms in clusters differs provides information on whether policies to attract investment to clusters and to enhance the performance of firms in clusters (see for example, Secretary of State for Trade and Industry, 1998) need to be differentiated for foreign and locally-owned investors. For example, governments often seek to facilitate the interaction between firms in clusters by establishing mechanisms that encourage firms to undertake joint operations (Cooke and Morgan, 1998). It would be useful to know to what extent

foreign establishments are likely to take part in such mechanisms and whether they are likely to benefit from them similarly to indigenous firms, or whether their presence requires different policies.

From a research perspective, such a comparative approach could indicate whether there is a need to study the behaviour of foreign firms in clusters apart from the general study of firms in clusters. If existing models of geographic clustering, which have been developed in various disciplines at least since Marshall's pioneering recognition of the concentration of certain types of economic activity in space (Marshall, 1890, 1920), apply to TNCs, there is no need to pursue research on the latter in clusters as a separate phenomenon. Only if the behaviour of foreign firms in clusters has characteristics that make existing theoretical models or paradigms inappropriate or inapplicable, may the pursuit of separate studies of TNCs in clusters perhaps be justified. Such research would provide the opportunity both for extending and enriching current theories and for building new ones.

The present study seeks to examine the behaviour of foreign and indigenous firms in a particular cluster, and to gain insight into the extent to which the differences between these firms affect their participation in the dynamics of the cluster and the benefits that they derive from it. Specifically, the study is designed to answer the following questions: To what extent can foreign affiliates, which are part of large, diversified TNCs, become insiders in clusters in a manner similar to indigenous firms, which might enjoy the advantage of greater familiarity and stronger ties to clusters? Can the needs of TNCs with wide product and market scope be met locally, within the cluster, similarly to indigenous cluster members, which often specialise in narrow product and/or activity lines? Can foreign affiliates gain benefits from the interaction with other members of the cluster that are similar to those accruing to indigenous firms in clusters? And, to the extent that there are differences between foreign and indigenous firms in clusters, are they a matter of degree or a matter of kind? We address these questions from both a theoretical

perspective, and with reference to a detailed case study of firms in a particular cluster.

In the next section we outline the theoretical underpinnings for differences and similarities between foreign and indigenous firms, drawing upon theories of international business and international management, and discuss their possible implications for cluster behaviour. The following sections examine these theoretical arguments with reference to the media cluster of the Soho district of Central London. The latter provides a suitable context for empirical investigation due to the co-existence of foreign and indigenous firms, and their joint contribution towards the historical persistence and continuous vitality of the cluster. Section three describes this Soho media cluster, and pays specific attention to the role of foreign affiliates and to their interaction with indigenous firms in the cluster. In section four we discuss some methodological issues before examining the activities of foreign affiliates in selected media industries in this Central London cluster, on their own and vis-à-vis those of their indigenous counterparts. This examination provides the basis for the generation of general propositions related to the behaviour of foreign firms in clusters and the nature of the differences between them and indigenous firms. The paper concludes by summarising the main findings, evaluating their contribution to theory and suggesting directions in which future research might be developed.

2. Foreign and Indigenous Firms in Localised Clusters: The Theoretical Point of Departure

Cluster participation can be theorised as being driven by firms' desire to gain access to certain complementary assets, which are better provided externally than internally, and are accessed more effectively in geographic proximity. The theories of geographic clustering identify three main forces that drive the clustering of firms engaged in related economic activity in geographic proximity. These include the attraction of a pool of specialised labour within and around clusters of

producers, so that a supply of agglomeration-specific skills and tacit knowledge is available to firms; the external supply of intermediate inputs which allows firms to replace their own production by external supply and generates a sufficiently large level of demand to warrant efforts to produce highly specialised inputs; and the economies arising from technology spillovers, through which firms share ideas and information, and generate collective knowledge that is embedded in the locality. The presence of these specialised resources in a geographically constrained area creates localised dynamics of collective learning and creativity (Keeble and Wilkinson, 1999), linking the firms taking part in them together, with each unit of production performing a series of specialised tasks within the complex towards the collective creation of output.

Theory offers unclear predictions as to whether the behaviour of foreign and indigenous firms in such local clusters will be similar or different. It provides reasons to expect that as a result of the unique attributes of foreign affiliates, they will be attracted to clusters for reasons different from those attracting indigenous firms, and will gain different benefits from taking part in their dynamics. At the same time, however, there are also reasons to expect considerable similarity between foreign and indigenous firms in clusters, as both are operating in the same economic environment and responding to similar market pressures and opportunities.

2.1. Reasons for differences between foreign and indigenous firms in clusters

A first reason for expecting foreign affiliates in clusters to differ from their indigenous counterparts stems from the nature of the competitive advantages of TNCs. The theory of international business implies that the advantages of firms investing abroad differ from those of indigenous firms. Such differences arise from the disadvantages faced by TNCs in a host country vis-a-vis local firms, which they offset by their firm-specific advantages (Hymer, 1960/1976; Dunning, 1993; Caves, 1996). Because of the possession of such intangible assets,

foreign affiliates might value differently certain advantages provided by clusters. For example, if foreign firms bring with them intangible assets in the form of technologies that indigenous firms do not possess, they would value differently interaction with other firms as a means of acquiring advanced technology. Due to the nature of their advantages, the pool of specialised labour or specialised input providers from which they hope to draw might also differ from those of indigenous firms (Shaver, 1998). Furthermore, foreign-owned establishments are often more import intensive than indigenous firms (see for example Lipsey, 1991, for a comparison between US firms and foreign-owned affiliates in the US), and they may have less need for specialised inputs from within the cluster. They also tend to export more than indigenous firms (an example of these differences is provided by Willmore, 1986, with reference to foreign and domestic firms in Brazil), so they are likely to be less dependent on demand from within the cluster. Foreign-owned establishments are also likely to carry out less R&D in foreign countries compared with their indigenous counterparts (Papanastassiou and Pearce, 1999), so they would be less dependent upon the cluster for resources that facilitate R&D activity (see Birkinshaw, 1999, for a comparison between foreign and indigenous firms in the Information Technology cluster in the Stockholm area). As a result of these differences, foreign affiliates might be attracted to clusters for reasons different from those that attract their indigenous counterparts, and have different needs for interaction with other firms in clusters.

A second difference between foreign and indigenous firms stems from the disadvantages of foreignness faced by foreign affiliates investing in foreign countries. A fundamental assumption driving international business theories has been that TNCs doing business overseas face increased costs arising from unfamiliarity with the environment, from cultural, political and economic differences, and from the need for coordination across geographic distance (Hymer, 1960/1976; Buckley and Casson, 1976; Dunning, 1993; Caves, 1996; see also Zaheer, 1995). As a result of these disadvantages, TNCs are likely to seek different complementary assets from cluster participation. For

example, relative to their indigenous counterparts, foreign affiliates often confront higher information costs, a result of lack of knowledge of how to run business operations in an unfamiliar setting and of limited ability to forecast the economic events in a foreign country (Casson, 1997; Mariotti and Piscitello, 1995). Consequently, foreign affiliates may be attracted to clusters by the need to reduce information costs, while this factor is less influential for indigenous firms. The relative unfamiliarity of foreign-owned establishments with local norms, routines and culture is also likely to limit their ability to draw upon the local pool of skills and technologies and to build linkages with local networks. Hence, they may not be able to take part in and benefit from cluster dynamic to the same extent as their indigenous counterparts.

Thirdly, TNCs, by virtue of the fact that they operate in two or more countries, have the ability to be simultaneously embedded in two or more localities (Ghoshal and Bartlett, 1990; Nohria and Ghoshal, 1997). Their geographic spread enables them to tap into numerous sources of knowledge and they are likely to be less dependent on local resources than their indigenous counterparts. The wider geographic scope of TNC activities also implies that they have greater need to gain access to sources of knowledge and information on a global level, which often cannot be provided locally. Compared with indigenous firms in clusters, foreign affiliates are thus likely to be less able to rely only or mainly on local assets.

A fourth characteristic of foreign affiliates that distinguishes them from indigenous firms and is likely to affect their cluster behaviour is that they are part of an international network. Their multiple external ties are thus supplemented by internal ties within the TNC. Consequently, unlike indigenous firms, which may have close links only to one dynamic - the local one - foreign affiliates are linked with two dynamics - those internal to the TNC, and those operating within the locality under consideration (Dupuy and Gilly, 1996, 1999; Rosenzweig and Singh, 1991). As a result, they can often obtain within the TNC particular resources which indigenous firms have to

obtain externally, and which often encourage proximity to other firms¹. Foreign affiliates can benefit from TNC-wide cross fertilisation of ideas, exchange of people, and exposure to new knowledge, and they have less need to search for these benefits through interaction with other firms in a cluster than indigenous firms do. TNC internal networks provide them with the ability to make use of, and apply locally, knowledge developed in other parts of the TNC, while firms in clusters are typically dependent on knowledge developed locally, within the cluster. TNCs can also benefit from internal economies of agglomeration, by concentrating particular activities in a limited geographic area, thus reducing their need to take part in economies of agglomeration provided by the cluster².

2.2. Reasons for similarity between foreign and indigenous firms in clusters

A major reason for expecting foreign affiliates to be attracted to clusters for reasons similar to those that attract indigenous firms is that when a particular location possesses specific advantages, it may attract firms, regardless of their ownership, to invest there. According to international business theory, a major rationale for firms to invest outside their home country is to gain access to the immobile resources available in foreign countries (Dunning, 1993). This rationale has been stressed in recent conceptualisations of FDI as an asset augmenting investment, emphasising the need of firms to gain access to new technologies and organisational capabilities (Wesson, 1997; Kuemmerle, 1998). The availability of such location advantages may attract foreign firms just as it attracts their indigenous counterparts. Furthermore, when localised clusters generate agglomeration economies, arising from the interaction and spillover between firms engaged in related economic activity and reinforced by their geographic proximity, foreign affiliates may seek the proximity of such cluster in a manner similar to indigenous firms. This is particularly likely when geographic proximity to the cluster is a necessary condition for benefiting from the localised advantages that the cluster offers (Scott, 1998a; Storper, 1997).

Secondly, over the last decade or so, TNCs have increasingly abandoned the hierarchical organisational structure that characterised linkages between headquarters and affiliates in earlier decades, in favour of a more decentralised organisational structure. The essence of this form of organisation is greater autonomy for the affiliates, which often house the entire production cycle and share responsibility for innovation and creation of knowledge (Bartlett and Ghoshal, 1989; Nohria and Ghoshal, 1997). Greater autonomy for affiliates is increasing the potential for local linkage formation, and for the transfer of technology and skills between them and other members of the cluster, in a manner similar to indigenous firms. Furthermore, affiliates often need to respond to pressures from the local environment and to local demand in order to serve the local market effectively (Prahalad and Doz, 1987)³. This limits the value of knowledge generated in the headquarters and requires greater local integration and greater reliance on local resources. Under such circumstances, the affiliates are likely closely to resemble indigenous firms competing in the same environment.

Third, similarity between foreign and indigenous firms may also arise from them competing in the same environment and responding to the same market pressures and opportunities. Particularly when investment is undertaken in order to serve the local market (market seeking investment), the fact that foreign and indigenous firms are competing for the same customers and resources may drive them to adopt similar standards of operations (Rosenzweig and Singh, 1991). Cluster participation is likely to accelerate the similarity between foreign and indigenous firms, as it increases the level of interaction between them and facilitates imitation and spillovers.

A final reason for expecting foreign affiliates to resemble their indigenous counterparts is that in recent decades, FDI has increasingly been undertaken via mergers and acquisitions rather than greenfield start ups. In 1998, 85% of the total \$644 billions of world-wide FDI was via mergers and acquisitions (UNCTAD, 1999). Affiliates founded as independent firms and only later acquired by TNCs are

likely to remain relatively similar to local firms. In many cases, the parent leaves existing structures and top management intact and demands conformity only on a few elements of organisational structure. Particularly in the context of localised clusters, acquired firms may have established linkages and routines of operations within the cluster which have been developed over years of independent activity, many of which are maintained under the new ownership, similar to indigenous firms.

This discussion has outlined the theoretical arguments as to why foreign and indigenous firms might exhibit differences and similarities in their cluster behaviour. It suggests that certain characteristics of foreign affiliates, such as the type and nature of their ownership advantages, the disadvantages of foreignness, and their being part of international networks, are likely to affect their cluster behaviour. Consequently, they might be attracted to clusters for reasons different from those attracting indigenous firms, and draw different benefits from taking part in the dynamics of clusters. Other factors, however, provide a basis to expect similarities between foreign and indigenous firms. These include the desire to benefit from the advantages of a particular location, including those emerging from the externalities available within a localised cluster, as well as the need to respond to local competitive and market pressures along similar lines to indigenous firms in the cluster.

One reason for these contradicting theoretical arguments is that the forces generating differences and similarities between foreign and indigenous firms in clusters often exist simultaneously (Shaver, 1998). Another is that they have different impacts in different industrial and environmental contexts. In the rest of the paper we attempt to examine these theoretical arguments with reference to foreign and indigenous firms in selected media industries in Central London. We seek to identify both the conditions under which the forces for similarity and differences are influential, and those forces which play an important role in the outcome.

3. The Media Cluster of Central London

The UK media industries have two characteristics that render them particularly suitable for the examination of the issues addressed here. First, they exhibit strong patterns of geographic concentration within the UK and London, providing an appropriate setting for the examination of the behaviour of firms in clusters. Second, in some of these industries, the UK has attracted considerable amounts of inward FDI, allowing a meaningful comparison between foreign and indigenous firms operating in the same context.

London has been the dominant centre of media activity within the UK for decades. In the 1990s, between 70-90% of total UK employment in different media industries was estimated to be in London. In music, London's employment accounts for 90% of the national total, and even in film and TV, in which business activity is more dispersed, London accounts for 70% (Llewelyn-Davies, 1996). However, the agglomerative propensities of these activities are so strong that they can be observed at the sub-metropolitan level too. Within London, by far the largest concentration of media activities associated with film and TV production⁴ is within a tiny district, known as Soho⁵. About 70% of firms engaged in activities associated with film and TV production taking place in Central London are located in and around this area (Nachum and Keeble, 1999b, figure 1). The entire chain of production - film production and post production, film distribution and sales agents, design, photography, music, advertising - is available in an area of about one square mile!

Film and TV media production is characterised by many small, constantly changing transactions, carried out in an uncertain and dynamic environment. This strongly encourages geographic proximity between producers and service providers. Such proximity facilitates the dense inter-firm relationships which are vital in the production system, and increases the efficiency of transactions and information exchange between producers (Scott, 1996, 1997, 1998). It creates economic externalities that yield increasing return effects and enhance

the core competences of the member firms⁶. A recent study of the Soho media cluster (Nachum and Keeble, 1999b) reveals that within this localised cluster of competencies there exists a critical network of inter-firm transactions that holds the complex together as a spatial agglomeration. Firms in the Soho cluster, many of them small and medium-sized enterprises, are linked by dynamic processes and learning and innovation into a collective entity, dependent on and benefiting from highly localised competitive advantages.

Soho is not only a centre of British media firms. It is also a global media centre and a monitoring post for world media trends, hosting Hollywood film-producers, advertising TNCs, and music groups. Since its origin around the turn of the 20th century, the majority of foreign media firms investing in the UK have located in Soho, in proximity to the cluster of indigenous firms (Nachum and Keeble, 1999a). Figure 1 shows the contemporary concentration of foreign affiliates, along with indigenous firms, in the W1 postal code area, which hosts the Soho area⁷. Nachum and Keeble's (1999b) study of the cluster of media activities in Central London has shown that the processes of mutual learning and synergy, made possible by the presence of firms engaged in many interrelated activities in one place, are not confined to indigenous firms. Foreign firms investing in London take an active part in them and often play a vital role in their persistence. Foreign and indigenous firms in Soho are also intertwined with one another in dense localised networks of transactional activities, expressed in the mutual locational attraction that these firms seem to exert upon one another.

4. Methodology

The analysis which follows is based on a variety of sources, including a large number of detailed case studies of foreign and indigenous media firms based in Soho, interviews with industry experts, industry publications, company reports, industrial histories and published documents. The qualitative, case study method was selected for this study as it provides rich data for conducting a detailed analysis of the

dynamics of inter-firm ties and for understanding the nature of the interaction of firms within clusters. The insight sought could only be obtained through a fine-grained analysis inside the firm, and this ruled out a broader-sample study. The lack of standardised statistical measures of some of the concepts examined in the study further inhibited formal statistical analysis.

Based on relevant industry directories and unpublished information from industry associations, we identified media firms based in Soho and their ownership (that is, British or foreign owned). All the foreign-owned firms operating in Soho - 58 in total - were approached and 23 agreed to take part in the study. Only three of the media industries clustered in Soho - advertising, film production and distribution, and music and recording groups - were included in the sample. Other media industries that play a central and vital role in the functioning of the Soho cluster were not included, as there are few, if any, foreign affiliates in these industries. The latter include film and TV production services ('post production' in the industry's jargon), design and photography. In order to create a comparable indigenous sample, firms in these industries were excluded from the sampling frame. 58 indigenous firms were selected randomly from the population of Soho indigenous advertising agencies, film producers and distributors, and music and recording groups. All these firms were approached and 26 of them agreed to take part in the study. Table 1 presents some characteristics of the sample.

The cluster linkages index, though a crude measure for local embeddedness, suggests that indigenous firms are somewhat more integrated in the cluster, but the differences are not significant. The data in table 1 show large, though statistically insignificant, differences between foreign and indigenous firms in terms of their size and age. These differences may imply that some of the variation in cluster behaviour between foreign and indigenous firms is due to the fact that the latter are larger and older rather than to the existence or non-existence of foreign ownership by itself. In order to test for this possibility, we conducted one-way Candall Tau ANOVA tests

(selected since they do not require the assumption of normality of the samples) with the cluster linkages index (see table 1) as the dependent variable, group type (that is, foreign or indigenous) as the independent variable and size and age as the covariates. Size and age were not significant ($F= 0.132$ and 1.404 , Sig. $F= 0.719$ and 0.245 for age and size respectively), findings that imply that despite the differences, size and age do not account for the observed variation by ownership in the intensity of cluster linkages.

The sample of foreign affiliates is dominated by affiliates of US origin, reflecting the dominance of US-owned TNCs in the global media industries. It has been estimated that in the 1990s, these firms generated about 75%, 55% and 50% of world-wide broadcast and cable TV revenues, film screenings and home video rentals and music revenues respectively (Burnett, 1996). The UK has been the single most favoured destination of US media TNCs since they started their international expansion (Low, 1997; West, 1988; Nachum, 1999), and throughout the 20th century, they have dominated most media activities in the UK. US film TNCs have distributed between 50% and 80% of films produced in the UK throughout the 20th century (Curran and Porter, 1983; BFI, 1998). The market power of US advertising TNCs in the UK has been growing continuously since the 1950s onwards (West, 1988). Most non-US TNCs in our sample are music TNCs, an industry in which the nationality pattern of the leading TNCs is more diverse⁸.

Theoretical attempts to identify the factors that determine the behaviour of firms in clusters focus on key linkages through which firms interact with other members of the cluster. These include local labour market ties, linkages with suppliers of intermediate and other inputs, contracting and sub-contracting arrangements, interaction with customers, networking, collaboration and competition with firms and organisations other than customers and suppliers, and collective learning and creativity (see Baptista, 1998, for a comprehensive review). These linkages determine the extent to which firms are integrated and embedded in the cluster and the subsequent impact of

its dynamics on their operations. They have been used in studies examining the behaviour of firms in clusters (for example Henry and Pinch, 2000), and have been found to be particularly relevant when comparing the behaviour of firms with different characteristics in clusters (such as size, Scott, 1993; level of international involvement Keeble et al., 1998a). They provide the framework for this comparison of foreign and indigenous firms in the Soho cluster. The focus here is on the nature and scope of cluster linkages, and the light these shed on the factors attracting foreign and indigenous firms to Soho, their level of local integration and the advantages they gain from taking part in local dynamics. The study of foreign affiliates paid specific attention to the conditions affecting the balance between advantages gained from local interaction within the cluster and those derived from the parent and the rest of the TNC.

5. Foreign and Indigenous Firms in the Media Cluster of Central London

In line with the theoretical discussion above, the insights that emerged from the study of the Soho cluster revealed both differences and similarities between foreign and indigenous firms. Both groups of firms similarly stressed the importance of the pool of high quality service providers and specialised labour abundant in Soho⁹ and the need for proximity to these resources as major factors attracting them there. Indeed, foreign and indigenous firms exhibit considerable similarity in terms of their reliance on the pool of specialist employees and service providers available locally. The share of service purchases taking place in Soho in total external purchases of the firms studied is 93% and 88% for indigenous and foreign firms respectively. Equally, 90% and 95% of the employees are recruited locally by foreign and indigenous firms respectively (both differences are not significant at the 0.1 level, Mann-Whitney test, two tails). Foreign and indigenous firms alike recruit only certain types of labour outside London, often globally (for example, film directors might be recruited from all over the world), and purchase specialist services outside Soho only for very specific needs. Only in rare cases do

foreign affiliates purchase services from other parts of their TNC and move employees within the TNC from other countries. The dominant tendency is to rely on resources available locally for the supply of these needs, in the same way and to the same extent as indigenous firms.

Both groups also seem equally to value geographic proximity to the cluster in facilitating information gathering and accessing specialised and customised expertise needed for particular tasks. The similarity between foreign and indigenous firms in this respect was striking. The managing director of a US film production affiliate put it: *'...A base in Soho helps hiring the 'right people'. They are all around, you get to know them, you get to know other people who know them.'* The managing director of a British-owned advertising agency gave a surprisingly similar expression of this need: *'[a Soho location] is necessary to attract and retain the best employees ...to signal creativity, 'being in' for the creative people. ... Nowhere else would it be possible to find the kind of talent we need.'*

The main reason for this similarity seems to lie in the nature of media production, which involves co-operation between many different specialised functions and individuals (DeFilippi and Arthur, 1998; Jones, 1996). Most of this co-operative activity takes place locally, and requires the development of local knowledge by foreign affiliates, similarly to indigenous members of the cluster. Transactions in the media industries tend to be small in scale, frequent in occurrence, and highly idiosyncratic, and they regularly involve prolonged personal contact between different individuals (Scott, 1998). Production is typically organised around teams which are formed for a single project (a film production, a music album) and are dissolved when the project is completed to take part in yet another project, probably administered by another firm. Consequently, Soho's media industries are in a constant state of flux in terms of movement of all types of labour and births and deaths of service providers, with network organisations which are constantly being created and re-created¹⁰. Research by *Screen Finance*, the UK film industry weekly

publication, found that only 9 film production firms in the UK made more than 3 films between 1991 and 1997 (Screen Finance, 1998a). Firms are often project-based, and once the film is completed they go out of business. This form of organisation of production is also reflected in the nature of employment in the industry. In 1996, over 60% of the labour force in the film industry were self-employed freelance workers (Skillset, 1997). Similarly, the weekly publication *Music and Video Week* reported that of the total number of agreements signed between music labels and artists in 1996, 53% were broken in 1996 and 27% in 1997. Agreements were either signed initially for a one-album deal, or else were dropped in the on-going turnover of signings, by artists and/or labels seeking to sign new deals elsewhere (Music and Video Week, 1999). In advertising, the unwritten norm is that staff should change agency every few years, as a way of promoting themselves. The common feeling in the industry, which was expressed by many interviewees, is that turnover of employees in advertising is far higher than in most other sectors of the economy.

Under such circumstances, firms need to develop competencies in the identification and recruitment of commercial and artistic talent and in the co-ordination and integration of these skills for collaboration on each project (Hirsch, 1972; DeFilippi and Arthur, 1998; Miller and Shamsie, 1996; Kretchmer et al., 1999). These arrangements are based on networks of personal relationships and are made entirely informally, through personal recommendations and previous knowledge. Human capital (each knowing their own trade) and social capital (each knowing each other) are inextricably linked in their skill-unfolding relationship (DeFilippi and Arthur, 1998) with continuing interplay between them. As the chief executive of an American affiliate put it: ‘... *This industry is about who you know - there are about 100 companies producing TV commercials - so why deal with strangers? ...When we need to hire people - for example, a director for a specific film - we take those we know from personal contacts.*’

Successful implementation of these tasks requires deep local knowledge and high levels of integration in the local cluster. The skills required are largely location specific and hence mobile only to a limited degree, if any, within the TNC across countries. Affiliates thus have to develop these skills and acquire the necessary knowledge independently of the parent. This imperative explains the similarity between foreign and indigenous affiliates in terms of their perception of the value of participating in the Soho cluster, and the reasons for their location in Soho.

Other factors, however, play a very different role in attracting foreign and indigenous firms to Soho. Foreign affiliates often rely on the TNC of which they are part for the provision of more standardised and easily transferable-over-distance intermediate inputs and services, while indigenous firms acquire them externally and are often located in Soho for this reason. For example, foreign film producers are most often dependent upon the rest of the TNC for the provision of capital, a critical resource in this highly capital-intensive activity, while indigenous firms typically raise capital externally. Many of them have finance agreements with foreign TNCs (Low, 1997; Film Policy Review Group, 1998; Screen Finance, 1998, 1999a, 1999b), whose arrangement usually takes place in Soho. Likewise, distribution for film producers and music recording groups is usually provided internally within the TNC, while indigenous firms are dependent upon external sources for their provision (Film Policy Review Group, 1998; Scott, 1998; Burnett, 1996). These finance and distribution arrangements are often project based, that is, they are established for the distribution or finance of a single project. Hence, there is an on-going need to construct and reconstruct such distinctive relationships. Proximity to potential financiers and distributors eases the interaction and flow of information, and is thus a major reason for the location of indigenous firms in Soho, but it has limited, if any, impact on foreign firms.

The internal linkages available within TNCs also eliminate the need for foreign affiliates to be located in Soho in order to reduce risk.

Media production is characterised by very high levels of uncertainty concerning the commercial prospects of output, and firms face an overall market that is notorious for its instability and unpredictability. The clustering together of many different types of firms and specialised labour in one place provides participants with a way of reducing some of this inherent risk, as it ensures a relatively high probability of finding the right kind of resource within easy access at the right time (Scott, 1998). The strength of the TNCs of which they are part provides foreign affiliates with greater internal risk reduction and renders proximity to other Soho firms as a means of reducing risk less important. One outcome of this is that foreign affiliates tend to produce far more on a stand-alone basis than do their indigenous counterparts. For example, film co-production agreements, which are used by firms to share fund raising, to access foreign production facilities when shooting films in foreign countries, and to share risks, are pursued by indigenous film producers far more frequently than by foreign affiliates. The latter typically obtain the benefits sought in these co-production agreements from within their TNC and have less need for collaboration. The average number of co-production agreements undertaken during the last five years by the Soho foreign and indigenous film producers surveyed in the present study was 0.6 and 2.4 respectively (this difference is statistically significant at the 0.01 level, Mann-Whitney, two tails). The establishment of such arrangements is a major reason attracting indigenous firms to Soho, but is far less influential, if at all, for foreign affiliates.

In line with this discussion we suggest the following propositions:

Proposition 1: The unique advantages and internal TNC networks of foreign affiliates do not diminish their need for access to the highly-specialised non-standardised intermediate inputs provided by localised clusters, compared with indigenous firms.

Proposition 2: Internal TNC linkages are no substitute for locally-generated knowledge needed for production co-ordination and integration. The need to acquire this type of knowledge encourages

cluster location of foreign and indigenous firms alike.

Proposition 3: Unlike indigenous firms, foreign affiliates obtain standardised, routine inputs, whose costs of transaction over distance are low, from internal TNC sources. The reliance of foreign affiliates on the TNC of which they are part for the provision of such assets reduces their dependence on, and integration within, the cluster.

Soho foreign and indigenous firms are similar in terms of their perception of the Soho cluster as a source of learning and inspiration, but they differ in their appreciation and use of the cluster's linkages as a way of acquiring other types of knowledge. This mixture of differences and similarities between the groups of firms seems related to the nature of competitive advantages in the media industries.

A fundamental feature of the media industries is the need for constant innovation and creativity. Each output is a 'one-off' item, which has to be experienced in consumer's minds as different, if only minimally (Vogel, 1990). The innovative capabilities, which are the life blood of these activities, are derived from the creative capabilities of individual people - the actor(s) in films, the musician(s) and performer(s) in music, the copywriters and designers in advertising. This reliance on the talent of individuals limits the extent to which foreign affiliates can draw upon the strength of the TNC, and puts a high premium on local interaction. Indeed, foreign affiliates, just like indigenous firms, greatly value their linkages with other members of the Soho cluster as a source of inspiration and creativity. As one interviewee put it: '*... There will never be a secret formula for creating good ads. And at the end of the day, this is what really counts. This is in the head and soul of our people. So there are limits to what we can get from New York [where the agency's headquarters is located]*'. This similarity between foreign and indigenous firms implies some limitations for foreign affiliates to substitute internal linkages for local interaction, particularly with regard to accessing sources of inspiration and creativity. We will return to this point in the following sections.

The importance of local linkages for a firm's generation of its own knowledge and creativity engenders a distinctive approach to competition which is common among foreign and indigenous firms alike. Rather than viewing other firms as competitors, both groups of firms regard them as sources of inspiration and learning. In a sense firms do not so much compete with one another as hitch their fate to success or failure of different networks and fashions, what Powell (1987) named 'friendly competition'. The view expressed by the managing director of a US affiliate engaged in film production in London was representative of both foreign and indigenous firms: '*... The whole business is about creating ideas, and other firms are often the source of new ideas ...Sometimes you can get an idea just by having a few words with someone - and it has to be someone from the industry, so we speak the same language. Because we are involved in art - there isn't really that kind of competition [as in other industries] - there is room for many movies as long they are good. So we have nothing to hide from other companies - rather we see them as a source of inspiration.*' Hence the search for proximity and interaction by foreign and indigenous firms alike.

While media outputs are always, in profound ways, the expression of the creativity and originality of their creator(s), they are never just that, for the production of media is constituted by large and multifaceted organisation in which many individuals play important roles at different stages of the production process. Thus, though competitive performance is largely dependent on the creative capabilities of individuals, it also reflects a firm's success in selecting, recruiting, developing and supporting talent, in organising production and in linking available output to reliable and established distribution channels. From a universe of innovations proposed by artists in the creative system, firms select a sample of products for organisational sponsorship and promotion (Hirsch, 1972). The huge supply of media output which far exceeds demand (Kretchmer et al., 1999), and the high uncertainty over the ingredients of success, render the selection itself a vital firm-specific attribute. Firms also try to develop unique capabilities in various areas of media production that they can use to

differentiate their media output from that of their competitors (Miller and Shamsie, 1996), and to create a reputation around their various skills in order to attract the best talent. To some extent at least, affiliates can build their strength in these areas upon knowledge generated within the TNC which is external to the cluster.

For example, the success of US film affiliates during the entire 20th century in the UK and their dominant position in this market has, in part, been due to technological innovations developed in Hollywood and imported by the affiliates to the UK. In the first decades of the 20th century, US affiliates in the UK, taking advantage of developments in Hollywood, pioneered the introduction of advances in sound, editing, design and photography which UK producers were much slower to incorporate (Curtiss, 1944). This technological lead has remained a distinguishing characteristic of US affiliates in the UK throughout the 20th century (Low 1997). Advertising affiliates have also followed practices developed in their foreign headquarters with respect to certain aspects of the creation and organisation of advertising campaigns. A well-known example is J Walter Thompson's 'T Plan', which was developed in its US headquarters as a means to establish a systematic framework for planning and production of advertising campaigns, and has been used by J Walter Thompson's affiliates world-wide (West 1987). The transfer of this type of knowledge between the various parts of the TNC provides foreign affiliates with knowledge from sources which are external to the cluster and distinguishes them from indigenous members of the cluster, which are dependent overwhelmingly upon the cluster for the acquisition of such knowledge.

This discussion can be summarised in the following propositions:

Proposition 4: When performance is heavily dependent upon the creative capabilities of individuals, foreign and indigenous firms exhibit considerable similarities in valuing interaction with other members of the cluster as a source of inspiration.

Proposition 5: With respect to more easily codified knowledge, which is firm- rather than individual-specific, foreign affiliates draw on knowledge developed by the TNC and are less dependent upon the cluster than their indigenous counterparts.

Foreign and indigenous firms exhibit considerable similarities in terms of their level of local integration and the mechanisms they use for accessing Soho's resources. They also value similarly the informal linkages and social processes that accompany the selection of local resources. The search by foreign and indigenous firms for these resources relies extensively on personal networks, which are based on loyalty and friendship. Informal linkages, such as personal contacts, referral by colleagues and word of mouth are the main mechanisms used by both groups to recruit employees or to select service providers locally. Formal mechanisms, such as recruitment offices, web advertisements, directories and national and regional press are seldom used by foreign and indigenous firms alike.

Foreign and indigenous firms also use similar mechanisms to create linkages with other local firms and access similar sources of cluster knowledge. Both groups of firms have similar preferences for face-to-face contact with other firms, most often taking place informally in Soho meeting places, as their most common way of communication. The managing director of a German-owned music recording group expressed a typical view among foreign affiliates: *'...We [people working in foreign and British firms] drink in the same pubs, meet in the same coffee bars. There are probably some differences between a foreign-owned firm and a British one, but I hardly know the ownership of most firms here.'* A major reason for this similarity is that the high turnover of employees in the industries also takes place between foreign and indigenous firms, and diminishes many of the differences between them. The career trajectory of the recently appointed chief executive of 'The Sale Machine' communication group gives a flavour of a typical career path in advertising and the way such movement between foreign and indigenous firms takes place:

- 1977 – entered the industry as an assistant account, Ogilvey & Mather (US-owned);
- 1982 – account supervisor, Compton advertising (UK-owned);
- 1984 – management supervisor/associate director, Saatchi & Saatchi (which bought Compton) (UK-owned);
- 1987 – chief executive, FC Inc. (French-owned);
- 1995 – senior vice president, world-wide director, Blue Marketing (US-owned);
- 1998 – chief executive, The Sale Machine (US-owned).

However, when it comes to sources of knowledge and information that link Soho firms to wider international and global processes, interviewees employed by foreign affiliates, notably those who have spent most of their career in such firms, expressed a greater need to follow up events in the industry on the global level compared with their indigenous counterparts. Indeed, they rely to a greater degree on external sources of information, compared with their indigenous counterparts. Interviewees employed by indigenous firms tend more frequently to read local industry publications (such as *Campaign*, *Music and Video Week*, *Screen Finance*), while those employed by foreign-owned establishments reported a greater tendency to read international industry publications (for example, *Advertising Age*, *Screen Digest*, *Billboard*).

To formalise the implications of this discussion in terms of propositions, we suggest:

Proposition 6: Foreign affiliates use similar mechanisms to those used by indigenous firms to access the cluster's immobile resources and to interact with other members of the cluster.

Proposition 7: The reliance of affiliates on local labour market recruitment, as a key component of the internal dynamics of clusters, diminishes some of the differences between foreign and indigenous firms in terms of their ability to integrate in clusters and in the mechanisms they use for such integration.

Proposition 8: The global scope of the activities of TNCs renders them more externally oriented in their search for knowledge than indigenous firms.

Finally, the clustering of media firms in Soho is undoubtedly driven by supply rather than demand reasons, that is, by the need by firms for geographical proximity to service providers and other firms, rather than to their clients. The clients of most Soho firms are based outside Soho, in Greater London or in other parts of the UK, and linkages with clients have only a limited impact on the behaviour of firms in the cluster. Though foreign and indigenous firms differ in terms of client profiles (for example, both foreign and indigenous advertising agencies overwhelmingly serve clients based in the UK, but foreign affiliates have a considerably larger number of foreign clients investing in the UK than their indigenous counterparts) and in the way they obtain new business (foreign affiliates often rely on the TNCs of which they are part for getting new work while indigenous firms are dependent upon linkages and reputation developed in the UK), these differences do not affect their cluster linkages, as they typically operate at different geographic levels. Hence:

Proposition 9: When geographic clustering is supply rather than demand driven, differences between foreign and indigenous firms in terms of their client profiles do not affect their cluster behaviour.

6. Concluding Remarks

This study has attempted to develop insights into the behaviour of foreign affiliates in clusters and the benefits they derive from cluster participation, using indigenous firms as the yardstick for comparison. This comparison has provided a powerful analytical tool for gaining a better understanding of the behaviour of foreign affiliates in clusters. It has enabled identification of those factors that characterise all firms in clusters, regardless of their ownership, as well as those that are specific to foreign-owned establishments. The mechanisms adopted by foreign and indigenous firms in clusters to interact with other firms

have been studied in detail in relation to selected media industries in the Soho cluster of Central London.

The insights gained through this study reveal a combination of differences and similarities between foreign and indigenous firms in Soho. Both groups of firms are attracted to the cluster in order to gain access to its specialised resources, and they use similar mechanisms to access these resources. They also benefit similarly from certain aspects of the interaction with other members of the cluster, notably those related to the cluster as a source of inspiration and creativity. Thus, to a certain extent foreign affiliates can become insiders in clusters, and some of their needs can be met locally, in a manner similar to indigenous members of cluster. However, with respect to some other aspects of their activity, the linkages of foreign affiliates with the rest of the TNC of which they are a part enable them to draw upon resources external to the cluster and limit their needs for and their benefit from local participation. The differences between foreign and indigenous firms in clusters are thus both a matter of degree and a matter of kind.

The major factor determining the differences and similarities between foreign and indigenous firms in Soho is the extent to which internal linkages within TNCs substitute for cluster linkages. When foreign affiliates gain internally the assets and resources required for successful operation, they tend to be somewhat isolated from the cluster and to differ considerably from their indigenous counterparts. By contrast, when such substitution is limited, foreign affiliates interact intensively with other members of the cluster and they resemble indigenous firms to a greater degree.

The extent to which the internal linkages within the TNCs substitute for cluster linkages is in turn determined by the nature of the assets concerned. Codified, easily transferable across distance assets, are usually provided internally within the TNCs, in substitution for linkages within the cluster, and in this respect foreign affiliates differ considerably from local indigenous firms. When it comes to other

assets, however, and notably the types of knowledge whose creation and diffusion favour geographic proximity, internal linkages within TNCs do not substitute for interaction with other locally-based firms. For the acquisition of these assets, foreign affiliates are often as dependent on the local cluster as indigenous firms.

This distinction is somewhat akin to that made with reference to knowledge creation and diffusion within TNCs that has been identified in other industrial contexts (Zander and Solvell, 1992; Kogut and Zander, 1993; Cohendet et al., 1999). This literature shows that the characteristics of knowledge determine the extent and mode of transfer between affiliates and the headquarters. The non-codified, not easily transferable, types of knowledge, are best transmitted when the parties involved are in close geographical proximity, and internal linkages within the TNCs cannot provide similar benefits to those accruing through local interaction. These suggestions are also in line with the growing literature that emphasises the independent role of foreign affiliates in the creation of knowledge (Bartlett and Ghoshal, 1989; Gupta and Govindarajan, 1991, 1993; Harzing, 1999) and the limitations of knowledge generated in the headquarters for affiliates competing in local markets (Prahalad and Doz, 1987; Nohria and Ghoshal, 1997).

This study opens up a large area for further research. Case studies are a rich source of insight, but they usually can make no claim for statistical representation. Hence, a large-scale study is needed to establish the validity of the insights that have emerged from the present study, and to clarify with more precision than we have been able to achieve some of the detailed mechanisms at work within this nexus of relationships.

There is also a need for both longitudinal and cross-sectional empirical work, to examine the differences between foreign and indigenous firms in clusters in different industries and over time. Particular characteristics of the media industries are especially likely to limit the validity of this research to other industries, and should

therefore receive more attention from future research. The first is the nature of competitive advantages in local and international competition. As noted above, the media industries are heavily dependent on creative capabilities which are often embedded in an individual or a group of individuals. Under such circumstances, the extent of transfer of advantages between the headquarters and the affiliates is confined to certain aspects of operation, notably those related to finance and distribution. It is possible that in industries in which firm-specific advantages are chiefly embodied in other resources such as proprietary technology, scale, or organisational capabilities, foreign affiliates will exhibit different relations to their indigenous counterparts.

The second industrial characteristic that should receive more research attention is related to the nature of production. The media industries studied here are characterised by a highly disintegrated production system, with networks of many small transactions that are constantly changing in terms of their content and destinations. Such an industrial setting gives rise to considerable external economies of scale and scope, and is likely to develop a specific balance between advantages drawn from cluster participation and those gained through the internal network of the TNC. It is likely that this balance, which affects the degree of similarity between foreign and indigenous firms, would vary in industries in which the nature of the production processes differ.

In this study we have treated all foreign affiliates alike, but their behaviour in clusters is likely to vary, with some resembling indigenous firms more while others differ to a greater degree. An important task for future research is to examine the variation across foreign affiliates and the way it affects their cluster behaviour. The main factors that should be examined by this research include certain characteristics of the affiliates, such as length of operation in the cluster, size and entry mode; the nature of the link between affiliates and the parent and the rest of the TNCs, in particular the level of autonomy of the affiliates; and some characteristics of the country of

origin, notably the cultural distance between the home and the host country and the common business practices in the home country. The international management literature provides a theoretical basis and empirical evidence for the effect of these factors on the degree of similarity between foreign and indigenous firms in general (Rosenzweig and Singh, 1991; Rosenzweig and Nohria, 1994). Future research may examine how they affect the differences between foreign and indigenous firms in clusters.

Notes

1. The large, and rapidly growing, amounts of intra-firm trade provide some indication of the intensity of the internal linkages within the various parts of TNCs. It is estimated that about 30% of world trade in the late 1990s was intra-firm (Markusen and Venables, 1999).
2. GE's R&D centre in New York State and BMW's research and engineering centre in Munich, which is the largest single concentration of vehicle engineering expertise in Europe (Cooke and Morgan, 1998), are examples of a common approach among TNCs towards the geographic centralisation of R&D activities. Bosch's central training centre (Cooke and Morgan, 1992), Arthur Andersen/Andersen Consulting's education centre (Lowendhal, 2000), and McDonald's Hamburger University (The Economist, 1999) represent similar approaches towards training. These centres have been established in order to use geographical proximity as a means of taking advantage of the collective knowledge within the TNCs, and to benefit from agglomeration economies internal to the TNCs.
3. 'Local' in this context should be taken to include national demand and socio-political pressures, not just those associated with the localised cluster itself.
4. Other media activities, such as publishing and broadcasting, are located elsewhere in Greater London.
5. The area loosely referred to as Soho is a one square mile area within the W1 postal code area of Central London. It is commonly defined by Oxford Street to the north, Regent Street to the west, Charing Cross Road to the east, and Leicester Square and the streets immediately adjacent to it to the south (Tames 1994).

6. In an interesting study, Scott (1998) has shown that there are positive non-linear relations between the number of hit records produced in the USA music industry agglomeration areas and the size of the agglomeration.
7. Such location patterns are not unique to the media industries in the UK. In most countries, these industries tend to cluster geographically, typically in a small district of major metropolitan centres (notably New York, Los Angeles, Paris and Tokyo) (Llewelyn-Davies 1996). These districts most often host also foreign media firms investing in the country, as well as the headquarters of the TNCs from the country concerned. See for example Scott, 1998, with reference to the US clusters of recorded music in Los Angeles and New York.
8. The Six Major music companies - accounting for an estimated 70-80% of world-wide sales of music products (Burnett 1996) - are of Japanese (Sony), German (Bertelsmann Music Group), Canadian (Seagram), British (EMI), and US (MCA and Warner) origin. By comparison, all but one of the film Majors (Seagram) are of US origin - Buena Vista (Disney), Columbia, Fox, UIP and Warners.
9. As noted before, about 70% of the work force engaged in film and TV production in the UK are employed by firms located in Soho (Llewelyn-Davies 1996) and reside in Greater London (Skillset 1998). Between 70-80% of the major service providers to these firms, including post-production services, designers, photographers, are based in Soho (Nachum and Keeble 1999a).
10. It should be noted that there is some variation across the three media industries studied here, and over time regarding the organisation of production. Fragmented operation is a notable characteristic of contemporary music and film production, but up to the 1960s, the large film Majors implemented the entire process of film production, distribution and exhibition under the

same ownership (Miller and Shamsie 1996). In advertising there is a greater tendency for vertical integration.

Table 1. Some Characteristics of the Firms Studied
Means (Standard Deviations)

	Foreign	Indigenous	Total
Number of firms	23	26	49
Age ^a	23.46 (21.41)	13.97 (11.05) ^e	18.26 (17.07)
Size ^b	49.95 (48.51)	33.50 (67.15)	41.50 (59.76)
Index of cluster linkages ^c	1.14 (0.30)	1.36 (0.30)	1.26 (0.31)
Industry	Advertising: 5 Film: 11 Music: 7 (3) ^f	Advertising: 6 Film: 12 Music: 8	Advertising: 11 Film: 23 Music: 15
Nationality of ownership ^d	15 USA, 2 Japanese, 2 French, 3 German, 1 Dutch/Canadian	-	

^aYears from establishment. Foreign affiliates – years from establishment of the London affiliate.

^bNumber of employees in the London office. In film production this number underestimates the magnitude of activity, as there is a tendency to employ large numbers of free-lance employees, and their number varies, in line with the requirements of specific films.

^cThe index of cluster linkages is calculated as the geometric average between share of local revenues, local purchases and local recruitment in the respective totals. It provides some indication of the extent of local embeddedness in the cluster. The higher the index's value, the greater are local shares of activity.

^dNationality of foreign affiliates is defined by the location of the parent company (see Nachum 1999 for a discussion of the rationale for this choice).

^eMann-Whitney Wilcoxon Rank Sum significant test between foreign and indigenous firms, two tailed.

Age - $p=0.1106$

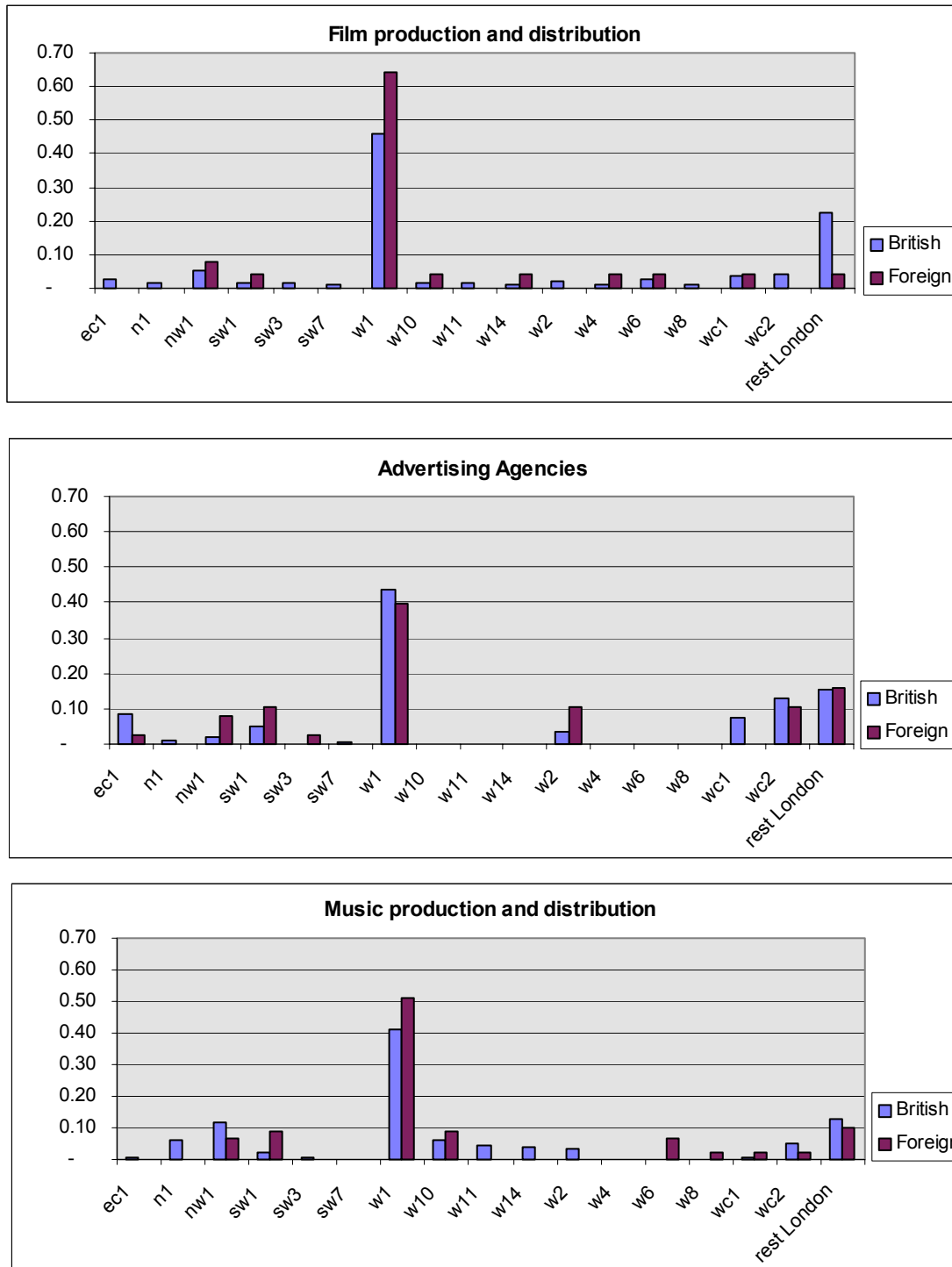
Size - $p=0.0801$

Cluster index – $p=0.0579$

^f3 of the foreign affiliates interviewed are owned by TNCs active in both film and music production.

Table 1

Figure 1. The location of foreign and indigenous firms in selected media industries in Central London
 (Shares of industry's total number of firms by post code areas)



Sources: Film: BFI, *Film and TV Handbook 1998*, BFI, London; London Film Commission database.
 Advertising: *Account List File (ALF) May 1998*, BRAD, London; *IPA Member Agencies, 1998*, IPA, London.
 Music: *The UK Record Industry Annual Survey 1997*, Media Research Publishing, Weston-super-Mare

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