WHY DO BUSINESS SERVICE FIRMS CLUSTER? SMALL CONSULTANCIES, CLUSTERING AND DECENTRALISATION IN LONDON AND SOUTHERN ENGLAND

D. Keeble and L. Nachum

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David Keeble
ESRC Centre for Business Research
and Department of Geography,
University of Cambridge,
Downing Place,
Cambridge CB2 3EN

email: dek1@cus.cam.ac.uk

Lilach Nachum
ESRC Centre for Business Research,
University of Cambridge,
Austin Robinson Building,
Sidgwick Avenue,
Cambridge CB3 9DE

email: Lilach.Nachum@econ.cam.ac.uk

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Abstract

Notwithstanding their remarkable recent growth, surprisingly little research has hitherto been conducted on the evolving geography of professional and business services in Britain. This paper analyses the results of a detailed survey of 300 small and medium-sized management and engineering consultancies, in investigating the forces underpinning both the striking clustering of such firms in central London and their growth in decentralised locations of East Anglia and South West England. Particular attention is paid to the role of demand-side influences, localised 'collective learning' processes, and increasing globalisation in clustering, and to so called 'enterprising behaviour theory' in explaining decentralisation.

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Introduction

In his seminal 1980s work on the spatial consequences of the rise of a Post-Fordist capitalist system of flexible production and accumulation since the 1960s, Allen Scott (1988) argued that "the new regime of flexible accumulation is founded pre-eminently on three major ensembles of industrial sectors. These are (a) revivified artisanal and design-intensive industries producing articles... for final consumption, (b)... high technology industries... and (c) service functions, and most especially business services" (italics added). These "new flexible forms of production" are also, according to Scott, "typically situated in networks of extremely malleable external linkages and labour market relations",... exhibit "vigorous revival of entrepreneurial behaviour, renewed market competition and active technological innovation", "have an especially intense association with... small and medium-sized firms", and most interestingly of all from a regional perspective, exhibit "selective reagglomeration" or geographical clustering.

Despite Scott's identification of business services as one of the three key sectors associated both with this new phase of flexible accumulation and the "rise of new industrial spaces" or regional agglomerations in advanced Western economies, neither he himself nor most subsequent commentators have devoted more than limited attention to the role of geographical clustering in the dramatic growth of advanced, knowledge-intensive business and professional services in countries such as the United Kingdom. In investigating the growth of these services, recent research has indeed demonstrated the importance of vigorous entrepreneurship and of small and medium-sized enterprises (SMEs) (Keeble *et al* 1992a; Bryson *et al* 1997). It has also shown that the latter are characterised, like high-technology

SMEs (Hughes 1998; Longhi and Keeble 2000, 46-50), by exceptional levels of external networking and inter-firm linkages (Bryson *et al* 1993; Bryson *et al* 1997), including networking with large corporate clients (Wood 1996). Lastly, it has documented the empirical fact that in Britain, "business service firms are highly concentrated into clusters", with this clustering pattern being most pronounced "in London, which is the most highly focused cluster of all" (Bennett *et al* 1999, 410-11).

Explaining geographical clustering³ in business services is however another matter. Surprisingly little in-depth research has been carried out on this in recent years, with what work has been published generally focussing on the role of agglomeration economies (Illeris 1989, ch.6; Moulaert and Gallouj 1993; Gordon and McCann 2000) or of the demand-side imperative of a need for accessibility to clients (Daniels 1993, ch.4; Wood 1997⁴; Bennett et al 1999, 415-6; Bennett et al 2000). This paper seeks to re-assess the forces which may explain the existence of business and professional service firm clusters, by examining in depth the processes and benefits associated with the clustering of small and medium-sized management and engineering consultancies in central London, as compared with the experience of a control sample of similar consultancies which have established themselves outside London (and indeed outside South East England) in decentralised small-town or even rural locations of South West England and East Anglia. In investigating this issue, the paper draws on the growing recent literature linking geographical clustering by innovative or knowledge-based firms to processes of local or regional 'collective learning", as well as on so-called "enterprising behaviour" theory of urban-rural decentralisation of small firm activity.

Growth and clustering of professional business service firms in Britain

The explosive growth of business service firms employing professionally-qualified staff, especially small and medium-sized

firms, in Britain since the 1970s is well documented. Between 1985 and 1992, for example, the number of VAT-registered management consultancy firms in Britain increased by 177% or 7,600 (Bryson et al 1997). More recently and broadly, the number of UK business service firms with at least one employee in SIC Divisions 72, 73 and 74 (computer and related activities, research and development, and 'other business activities'⁵) increased by no less than 94,256 or 42.3% in only four years, from end-1994 to start-1999 (DTI SME Statistics Unit 1996, Small Business Service 2000a). Nearly all of these additional firms were small firms, employing less than 10 workers. In sharp contrast, many other sectors, and especially manufacturing sectors, have experienced a decline in their business stock since 1994 (DTI 1998, 1999, Small Business Service 2000b). Various studies (Wood 1991; Keeble et al 1992a; O'Farrell 1995; Beyers and Lindahl 1996; Lindahl and Beyers 1999) have demonstrated that this rapid and continuing growth of business services, and especially business services providing professionally-qualified and specialised expertise, reflects ever-growing demand for such expertise as a result of competition, technological "increased international recessionary forces and changes in the needs of organisations...in a rapidly-changing macro-economic environment", rather than the thesis of externalisation of "service demands previously supplied by internal management" (Bryson et al 1997, 347) which was popular in the 1980s.

The geography of this remarkable growth in professional business services has also been documented in a variety of studies (Daniels 1988; Keeble *et al* 1991; Daniels 1995). These and recent data reveal that the marked 1980s North-South divide and resultant uneven spatial development within Britain (Martin 1988, 1993) in the growth of such services continued if not intensified in the 1990s. As Table I shows, Southern Britain (defined as the London, South East, East, and South West Government Office Regions) recorded well over three times the volume (+700 thousand) and nearly double the percentage rate (+51.5%) of employment growth in the business services, real estate and renting sector (SIC Section K), compared with Northern

Britain (the North West, North East, Yorkshire and the Humber Government Office Regions plus Wales and Scotland: only +222 thousand and +29.3%, respectively) between 1994 and 2000. Virtually all this growth was in business services, especially professional business services, not in real estate or renting⁶. The extraordinary scale and rate of recent growth in the business services sector is also highlighted by the comparison in Table I with trends in the whole of the rest of the British economy.

Table I also shows that within this intensifying North-South divide, by far the biggest concentration of business services in Britain is in London, which not only now contains one-quarter (25.2%) of national employment in this sector, but recorded an even faster growth (+54.3%) 1994-2000 than the rest of the South, let alone either the North or Britain as a whole (+44.0%). The London business service cluster is thus becoming more, not less, dominant in terms of its share of national activity. London, and especially central London, has in fact contained by far the largest and most dominant cluster of professional business service firms in Britain for decades, as revealed for management consultancy by Figure 1. This hitherto unpublished map plots the location (by county) and size in 1990 of the 869 management consultancy firms in the Cambridge University Small Business Research Centre Management Consultants Database⁷ (Keeble et al 1994). It shows that no less than one-third of these firms (286) were to be found in London, with just under one-quarter (23.7%) concentrated in inner London. This very substantial inner London cluster is characterised by a relatively high proportion of large (51 or more professional staff) consultancies. But most firms in this London cluster are nonetheless small businesses, employing 12 or fewer professionals. Many of these are undoubtedly specialist firms, providing specialist expertise targetted at growing niche markets, a characteristic of smaller inner London consultancies clearly identified and documented by earlier research (Wood et al 1993, 691). This research also revealed a strong association between small consultancy specialisation and above-average employment growth (Keeble et al 1992a), a characteristic which may well contribute to an explanation

of the later-1990s exceptional growth of professional service firms in London documented above. This was certainly forecast by Wood in 1991 when he argued that future growth in business services was likely to be fastest in "areas possessing a diverse range of specialized business services", given the increasing "range of specialist market niches for business service firms stimulated by business, consumer and public sector change" (Wood 1991, 168-9).

Why do professional business services cluster?

The literature discussing clustering and agglomeration of economic activity is vast and only a few key issues can be highlighted here. An important initial consideration is that from the earliest 19th-century interest in clusters (Marshall 1920, 271), most previous research and attempts at theory-building have been dominated by a preoccupation with manufacturing industry and "industrial clusters", not with clusters of service firms. This preoccupation is still evident both in recent academic research and government policy pronouncements on clusters as tools for regional development (Baptista and Swann 1998; Feser and Bergman 2000; Feldman 2000; Secretary of State for Trade and Industry 1998). However, as many scholars have pointed out (Moullaert and Gallouj 1993), explanations for clustering by manufacturing firms, engaged in the production, marketing and distribution of material goods to final consumers, may not be appropriate for professional service firms whose raison d'etre lies in the provision of customised and often novel information, expertise and knowledge to other firms and organisations.

Associated with this is a second point, namely that many previous attempts by economists and economic geographers at theorising manufacturing clusters have focussed on the concept of agglomeration economies (Moulaert and Gallouj 1993). "Broadly defined, agglomeration economies are.... cost savings to a firm accruing because of the scale of industry in a particular [location], and the resultant ability of the firm to share some of its external expenses with others" in the same cluster (Keeble 1976, 59).

Traditional examples of such economies include the minimisation of transport and transaction costs between locally-based suppliers, subcontractors and assemblers, and lower costs of accessing specialised labour. The so called 'new economic geographers' have recently rediscovered and re-emphasised the role of these traditional agglomeration economies in attempting to explain "the strong tendency of....particular industries or clusters of industries to concentrate in space" (Krugman 1993, 173; see also Martin 1999, Feldman 2000, Gordon and McCann 2000). However, as scholars such as Moulaert and Gallouj (1993), Storper (1995) and Pinch and Henry (1999) have pointed out, transaction cost savings arising from distance minimisation are inadequate on their own to explain the growth and persistence of clusters of high value-added and knowledge-intensive activities such as advanced business services or high-technology research and production. Rather, emphasis is now placed on the vital importance to such enterprises of access to localised and relatively immobile tacit knowledge, and of knowledge spillovers. Explaining clustering in these sectors also needs to include explicit attention to the role and growing importance of global networks, clients and links to cluster firms, as charted by workers such as Amin and Thrift (1992), Moulaert and Gallouj (1993), and Keeble et al (1998).

Dissatisfaction with traditional conceptualisations has thus led scholars to try to develop alternative frameworks for understanding clustering, especially of these key knowledge-intensive and service-oriented components of the so-called "new economy". One such attempt which appears to have merit in this context is that which emphasises the importance for successful knowledge-based clusters of localised "collective learning" processes associated with the evolution of an "innovative milieu" (Camagni 1991; Ratti *et al* 1997; Keeble and Wilkinson 2000a). This approach places great stress on the ways in which the local or regional clustering of firms in a particular industry or sector can over time generate dynamic processes which significantly enhance the innovativeness and capacity for learning, sharing and creation of new knowledge by the

cluster's firms. In stressing the importance of innovation, of learning processes, and of the historically and socio-culturally contingent nature of cluster evolution, it possesses many links both with evolutionary economics and proponents of the "regional innovation system" and "learning region" concepts (Braczyk et al 1998; Maskell and Malmberg 1999; Hudson 1999; Asheim 2000). It is perhaps however distinguished by its identification of particular processes as crucial for the development of a localised collective learning capacity and resultant enhanced innovativeness in a knowledge-based cluster. The most important of these, on which attention will focus in this paper, are high rates of localised entrepreneurship and spin-off of new firms from existing businesses, high rates of knowledge exchange and development through informal and formal networking, collaboration and personal interaction by professionals and managers of cluster firms, and high rates of localised knowledge movement through the cluster because of flows of professionals and "embodied expertise" through the local labour market (Keeble et al 1999; Keeble 2000a). Recent pan-European research on high-technology clusters has empirically substantiated the central thesis of this approach, namely that clusters characterised by such active collective learning processes also display exceptional rates of new product innovation (Keeble 2000a, 218-220).

The possible role of dynamic collective learning processes as a driving force underpinning the clustering of innovative professional business service firms in areas such as central London has not however hitherto been investigated⁸. Indeed, some of the most recent research on the growth of advanced services in South East England has even argued that localised service clusters do not exist in this region, and has sought to "expose what we term the 'myth of localized agglomeration' in the case of the South East" (Coe and Townsend 1998, 400). In rejecting this notion, Coe and Townsend argue that "the appropriate unit for studying firms' market, supplier and joint venture linkages is nothing less than the 'Greater South-East' as a whole", this region being distinctively characterised by what Allen (1992) has termed a "regionalized mode of service

growth" (Allen 1992, 300). This view is also broadly supported by Gordon and McCann's recent (2000, 523) work, which argues that "classic 'milieux' effects, which evidently operate among smaller local clusters [in London] - such as Soho, Covent Garden or the White City - do, however, only seem relevant to a small minority of London firms". While Coe and Townsend's arguments have considerable force⁹, they do ignore the empirical fact, which is acknowledged by Gordon and McCann, that particular localized clusters of advanced service firms nonetheless do exist within Greater London. Indeed, very recent research for the Department of Trade and Industry (Miller et al 2001, 65) demonstrates that London possesses more important clusters than any other UK region, one of these, which is concentrated in central London, actually being "business services". Another is the financial services cluster of the City of London (Amin and Thrift 1992), while a third is film and TV production, the Soho area of central London containing a distinctive and long-standing cluster of media firms focussed on this industry (film, TV, video and associated music, advertising, photographic and specialist services). This central London media cluster has recently been studied in depth by Nachum and Keeble (1999, 2000a, 2000b), who have found powerful evidence of the role of localized collective learning processes as a major force underpinning the persistence, innovativeness and vitality of this service cluster. If this is true for the Soho media sector, may it not also apply, to some extent at least, to the clustering of management and professional consultancies in central London documented earlier in this paper?

Investigating this proposition must however also be set within a broader, and indeed global, context. For previous work on the clustering of advanced knowledge-intensive services, both theoretically (Castells 1989; Daniels 1993; Moullaert and Gallouj 1993) and in the specific cases of the City of London (Amin and Thrift 1992) and Soho (Nachum and Keeble 1999), clearly suggests that one reason for cluster development in such services is their need for accessibility to global networks, clients and knowledge, as well as to the local knowledge base. Globalisation means that an increasing

proportion of consultancies, especially larger consultancies, are now serving overseas clients, are foreign-owned, have developed global as well as local collaborative links and networks with other consultancy firms, or recruit professional staff globally. For such firms, location within a knowledge-intensive services cluster at the heart of a global city (Sassen 1991, 1994) offers exceptional advantages for developing and fostering global links, given these cities' unrivalled international air, rail and telecommunications networks, numerous foreign multinationals, and unique role as global knowledge and information centres for the world economy. While these advantages are of key importance for large and multinational consultancies, it may well be that the opportunities for global networking offered by cluster location are also valued by specialist local consultancy SMEs, of the kind studied in this research.

Why do professional business services decentralise?

The final issue which needs attention in this contextual review is that clustering by no means represents the whole picture of the spatial dynamics of professional business service activity in Britain. Indeed, many accounts in the 1980s and 1990s argued that decentralisation and dispersal of such activity was the dominant trend, with an absolute and relative growth of business service firms and employment both in small town and less-urbanised environments of southern Britain and in major northern and western cities (Leyshon and Thrift 1989; Illeris 1989; Marshall 1992). The creation and expansion of such firms in decentralised rural and small town locations was investigated in several studies in the early 1990s (Keeble et al 1992b; Small Business Research Centre 1992, ch.7; Curran and Storey 1993; Keeble 1993), research which led to the development of so-called "enterprising behaviour" theory of the urban-rural shift of business activity in Britain (Keeble and Tyler 1995).

Put simply, this theory argues that decentralisation, in the form of the creation and growth of new firms in rural areas and small towns, can

be explained by three inter-related processes (Keeble 1997). First, macro-economic trends since the 1970s have enabled the creation of numerous small businesses targetting new specialised market niches created, in part, by the increasing complexity of business needs for inputs from other firms of specialised information, technology and services. Second, continually rising household incomes and mobility have enabled increasing numbers of highly-qualified professionals and managers and their families to migrate from congested metropolitan cities to environmentally-attractive rural areas and small towns for reasons of residential amenity and enhanced quality of life. These migrants bring with them know-how, expertise and client networks derived from their previous big city employment which enable entrepreneurship and successful new enterprise creation in their chosen small town or rural location. Third, inherited attributes of these decentralised environments have supported and enabled enterprising behaviour by these entrepreneurs and their start-ups, possibly to a greater degree than in metropolitan cities. These attributes include lower costs of premises, labour and other overheads, more space to expand, greater labour force stability, quality and motivation, better management-labour relations, and the indirect effect of improved accessibility of many rural settlements and small towns because of improved telecommunications and transport links.

This theory provides a framework for investigating the creation and growth of small business consultancies in outer southern Britain, as a contrasting trend to that of clustering in inner London. It must however be noted that very recent research (Keeble 1998, 1999, 2000b) does cast considerable doubts on the degree to which small firms, including business service firms, in Britain's rural areas and small towns still exhibit greater dynamism and employment growth than their metropolitan counterparts, as was the case in the 1980s.

Aims and methodology

The broad aim of this paper is then to investigate why knowledgeintensive professional business service firms, especially small and medium-sized enterprises, cluster at the centre of major metropolises such as London, and to assess in particular how far such clustering reflects processes of localised collective learning and networking, alongside more traditional demand and supply factors such as accessibility to clients and to professional staff labour markets. A related question is the extent to which clustering is stimulated by, and enables, globalisation and the development of international sales and networks. To investigate the extent to which professional business service firms in clusters exhibit behavioural differences because of clustering, it would seem essential to compare them with a 'control sample' of similar firms in non-clustered locations. Further broad aims are therefore to assess the extent and nature of differences in origins, behaviour and performance between professional business service firms in clusters and their counterparts in decentralised locations, and to examine the extent to which the creation and growth of such firms in small towns and rural regions conforms with the expectations of enterprising behaviour theory.

To investigate these questions, some preliminary descriptive analysis was conducted using data collected by the ESRC Centre for Business Research (CBR) at Cambridge University as part of its 1997 national survey of SMEs (Cosh and Hughes 1998). Two large, randomly selected samples of SMEs engaged in management/business and engineering consultancy were then identified using Business Database records. The Business Database is a BT subsidiary which maintains a comprehensive databank, updated on a weekly basis, of all British businesses possessing telephone connections. Sectoral affiliations are self-defined by the firms themselves. One of the two samples was of firms in central London¹⁰, the other of firms in outer rural counties of southern England, four in eastern England (Cambridgeshire, Lincolnshire, Norfolk and Suffolk) and five in South West England (Cornwall, Devon, Dorset, Somerset and Wiltshire). All firms selected were then telephoned to check that they were independent (not owned by another firm or larger consultancy

organisation), were engaged in the relevant professional consultancy activity, employed at least one and not more than 100 staff, and would in principle be willing to participate in the survey. Those meeting these criteria were then sent a short structured questionnaire asking them about their origins, current activities, clients, competitors, networking and collaborative links, and location. Firms which initially failed to respond were subsequently telephoned to encourage participation. Exactly 300 usable completed questionnaires were returned, representing a response rate of 54.6%. This is appreciably higher than for most business postal questionnaire surveys, especially of small firms¹¹. Job titles provided by respondents reveal that the vast majority of these were directors, managing directors or partners of the firm.

National and regional patterns of professional business service SME characteristics

Some descriptive data on national and regional professional business service SME characteristics obtained from the 1997 CBR national SME survey is recorded in Table II, as useful context for subsequent analysis. This reveals interesting variations nationally in the characteristics of different professional business service sectors, with accountancy firms being generally appreciably older and larger than firms in other sectors, but with computer software and service firms recording much the highest rates of both new product innovation and collaborative/partnership networking, along with the lowest median number of serious competitors. Management and business consultancy SMEs tend to be younger and smaller (employment and sales turnover), but more frequently innovative and involved in collaborative links with other firms and organisations, than architectural, engineering and technical consultancies. Both sectors report a low median number (5.0) of serious competitors.

Regional variations within southern Britain in the characteristics of professional business service firms as a group (Table II) are probably partly influenced by differences in sectoral structure, with the much

larger median size and greater age of SMEs in London compared with East Anglia and South West England being partly explained by the concentration in London of older and larger accountancy and architectural, engineering and technical consultancy firms. This size difference is however almost certainly too great to be accounted for solely by a structural explanation, suggesting at the outset that agglomerative or other locational advantages in London may enable SMEs there to grow larger than their counterparts in more decentralised locations. It is also interesting that London professional business service SMEs record higher rates of novel service product innovation and collaborative links than those in decentralised locations (especially East Anglia), and that the latter tend to be younger (especially in the South West), although sample sizes are too small for these differences to be statistically significant.

The remainder of this paper analyses in detail the 300 responses by clustered (central London) and decentralised SMEs to the CBR Business Services survey described above, looking at differences in their size, growth, origin and entrepreneurship characteristics, in the locational influences they report on business performance, and in the role or otherwise of both local collective learning processes and global networking as possible key influences underpinning clustering by professional business service firms.

Clustered and decentralised SMEs: similarities and differences

Indicators of some key characteristics of the two samples of professional business service SMEs, one clustered in central London, the other dispersed amongst a variety of smaller urban and rural settlements located between 50 and 200 miles from London, are shown in Table III. This shows that as designed, the two samples are closely similar in sectoral composition¹², but that SMEs in the central London cluster are significantly larger and have achieved significantly greater recent absolute employment growth than their decentralised counterparts. Their rate of employment growth has also been faster, although the difference is only significant (using the chi

square test) at the 10%, not 5%, level. Finally, decentralised firms report significantly fewer competitors, and fewer of these which are large firms, than their London counterparts. Indeed, nearly one-quarter (23%) of the decentralised sample report having no serious competitors at all, compared with only 9% of clustered firms.

These differences appear to support the view that location in central London's dominant cluster of business service activity enables greater long-term (as shown by 1998 employment size) and short-term (as shown by 1995-98 employment change) growth for surviving but still small or medium-sized consultancies, notwithstanding appreciably more intense competitive pressures on clustered firms. Indeed, the latter may partly help account for the former, as argued by O'Farrell et al (1992, 531) on the grounds that "active local competition [and] demanding, sophisticated and discriminating local customers...are crucial in developing and sustaining competitive advantage" in business service firms. Other factors are however also likely to enhance competitive advantage amongst clustered firms, to which discussion now turns.

Origins and entrepreneurship

As noted earlier, previous work on knowledge-based business clusters has argued that one important process underpinning the development of a localised collective learning capacity and associated enhanced innovativeness is active localised entrepreneurship and spin-off of new firms from existing local businesses. In leaving one local firm to establish another, entrepreneurs carry, diffuse and develop embodied knowledge within a cluster, while continuing personal links and contacts with the previous employer may also provide channels for continuing localised flows and creation of new knowledge through collaborative activity. Collective learning within a knowledge-based business cluster may thus be evident in patterns of entrepreneurship which differ from those amongst non-clustered firms in the same sector.

This hypothesis appears to be supported by the evidence of Table IV. This reveals that although most firms see themselves as having begun life as "new start-ups", there is a significant difference in firm origins between the clustered central London consultancies and those in decentralised locations, with appreciably more of the former choosing to describe themselves as "a spin-off from an existing firm". "Spinoff" does seem clearly to imply that in these cases, the founder or founders carried with them from their previous employer knowledge, expertise and business know-how which was then used to establish and grow their new firm, exactly as envisaged in the collective learning literature. Closely linked to this finding is the fact that clustered firms also differ significantly from their decentralised counterparts in being significantly more likely to be established by two or more founders, rather than by a single entrepreneur. Multiple founders often bring together and combine different expertise and knowledge (Whittaker 1998, 7-11), from both a single and different "parents". Again, this implies a process of knowledge combination and diffusion within the central London cluster in line with collective learning arguments.

Finally, Table IV also and strikingly reveals that for clustered firms, "parent" firms are far more likely (73% of cases) to have been local, located within London, than is the case with decentralised firms (only 48%) if "local" in their case is taken to mean somewhere within the same region (East Anglia or South West England). In the case of the central London cluster, therefore, spin-off and entrepreneurship appears to be strongly associated with *localised* knowledge diffusion and new firm creation, whereas a majority of decentralised firms have been set up by individuals who have brought know-how from outwith the region concerned, usually London or south eastern England. This distinctive characteristic of decentralised firm entrepreneurs is however exactly that predicted by enterprising behaviour theory, as noted earlier. Interestingly, decentralised firms are also significantly younger than their central London counterparts, suggesting both a more recent process of new business formation in rural and small town locations of southern England, and one possible reason for the

smaller size of decentralised SMEs noted earlier since younger firms have clearly had less time in which to grow to a given size, all else being equal.

Why clustering? Networking, collaboration and skilled labour flows as collective learning processes

Scott's (1988) conceptualisation of business service clustering stresses, as noted earlier, the importance of "networks of extremely malleable external linkages and labour market relations". Equally, the collective learning literature argues that in a successful knowledgebased innovative milieu, clustering enhances competitive advantages and growth by enabling firms to tap into "a collective learning process" which operates "through skilled labour mobility within the local labour market, customer-supplier technical and organisational interchange, imitation processes...and informal 'cafeteria' effects" (Camagni 1991, 130). This local knowledge sharing and diffusion reflects "the presence of an intricate network of mainly informal contacts among local actors... made up of personal face-to-face encounters, casual information flows, customer-supplier cooperation and the like" (Camagni 1991, 131). To what extent, then, are SMEs within central London's business service cluster distinguished by and benefit from more active informal networking, collaboration and knowledge acquisition through local labour market flows than their non-clustered counterparts in outer southern England?

Table V reveals that in line with collective learning arguments, significant differences do exist in this respect in terms of informal networking and knowledge acquisition. While both clustered and decentralised SMEs rate the importance of personal contacts in obtaining work equally and extremely highly, significantly more central London firms report that these vital personal contacts are geographically concentrated (67.0% very or moderately concentrated) than do decentralised firms (only 53.7%)¹³. And not surprisingly, for central London firms, personal contact networks are heavily focussed on London itself (76.4% of firms), whereas decentralised firm

networks are appreciably more dispersed (only 57.2% in the same region). Most strikingly of all, Table V reveals that when asked how important these personal contacts with clients are for developing the firm's own knowledge base, significantly higher proportions of clustered firms (over 70% in the first two cases) rated their contact networks 'important' or 'very important' for acquiring professional, general market and staff recruitment knowledge than was the case with their decentralised counterparts. In short, business service firms in central London are not only more frequently distinguished by geographically concentrated personal networks focussed heavily upon London itself, but place much greater importance on such spatiallyfocussed networks for acquiring essential new knowledge, especially professional and market knowledge. This original finding clearly supports the thesis that in knowledge-intensive service industries such as management and engineering consultancy, clustering is of real importance for business competitiveness by enabling acquisition of vital new knowledge through local informal networks, a judgement which perhaps contrasts with recent scepticism over the role of social networks (Gordon and McCann 2000) and the 'myth of localized agglomeration' (Coe and Townsend 1998) in business service clustering in London. The existence of such local networks within the London cluster is further demonstrated by the significantly higher proportion of clustered firms reporting personal meetings with other professionals in the same industry (Table V), and the significantly greater frequency of such meetings¹⁴.

Central London firms also significantly more frequently engage in formal and informal collaborative arrangements with other firms and organisations, excluding clients, than do their decentralised counterparts (Table VI), and these collaborative networks are again most focussed, geographically, upon London. Clustering thus again appears to enhance opportunities for localised collective learning, this time through actual collaboration and knowledge sharing with other local firms. In this case, however, it is striking that central London firms also report a much higher frequency of global, overseas, collaborative networks, a distinctive attribute (see later section) which

almost certainly explains the lower rating given by such firms to geographical proximity as 'very important' in collaboration, notwithstanding their higher rating of proximity as 'moderately important'. The differences here are not however statistically significant. Clustering is also unrelated to a firm's propensity to collaborate with associate consultants, a widespread practice amongst smaller management consultancies in Britain (Bryson *et al* 1993).

In the collective learning literature, a particular emphasis is placed on skilled labour mobility as a central process in localised knowledge diffusion and learning: as Lorenz (1996: quoted in Keeble et al 1999) argues, "mobile workers [are] the carriers of knowledge on the local labour market". In this context, Table VII shows that once again, central London SMEs differ significantly from decentralised firms, this time in both the nature and geography of skilled labour recruitment. Clustered firms are significantly more likely to recruit professional staff from large firms of one type or another (42% compared with 33%), whereas decentralised SMEs are more likely to recruit previously self-employed professionals (21% compared with 14%). Large firm recruits are perhaps more likely to carry with them up-to-date professional and market knowledge than are self-employed practitioners. Recruitment by firms in the central London cluster is also moreover overwhelmingly local, from within the London labour market (70% of professional recruits), whereas decentralised firms located in smaller labour markets have to recruit more widely. Finally, approximately three-quarters of recruits in both samples are reported as bringing with them at least some, if not considerable, new expertise or knowledge which the firm did not possess before. Professional staff recruitment is therefore clearly important in enhancing the knowledge base of consultancy SMEs, which in the case of central London firms is primarily associated with local skilled labour flows involving new 'embodied expertise' and know-how, often from large firms, within the London labour market. Clustering is thus associated with local labour market processes which seem likely to enhance the knowledge base and competitiveness of firms in the cluster. This judgement is further supported by Table VIII which reveals that the third most frequently reported reason for choosing a location in central London given by clustered firms is 'proximity to expertise'. For decentralised firms, this comes only fifth.

Clustering or decentralisation? Locational influences on SME origins and performance

Reference to Table VIII leads naturally to explicit consideration of firms' views on the reasons for their choice of location (clustered or decentralised) and the significance of their location for their competitive performance and growth. Written responses to an entirely open question on reasons for location have been coded into logical categories and expressed as percentages of total responses. The results reveal major and significant differences between SMEs in clustered and decentralised locations. For consultancies in central London, proximity to clients stands out as the most frequently reported influence, although this nonetheless only accounts for onethird of replies. In contrast, the leading locational influence reported by decentralised SMEs is proximity to the founder's home, which accounts for 55% of replies, a much higher proportion. Other noteworthy differences are the significantly higher frequencies of replies amongst firms in the central London cluster stressing proximity to expertise and professional staff, and good business and personal contacts. These last two findings further substantiate the existence and importance of localised networking and flows of expertise within the London cluster, which clearly act as a locational attraction to new and small firms. A final interesting difference is the unique inclusion of good global access as a reason for location by central London SMEs.

The bottom half of Table VIII reports firms' views on the significance of different locational attributes for competitive performance. Again, there are striking differences between clustered and decentralised SMEs. The top seven attributes are all rated highly for competitive performance significantly more frequently by clustered firms than by their decentralised counterparts, while the

opposite is true for the bottom five attributes. Particularly important for central London firms are good road and rail links, a place-based image signalling quality and credibility, client proximity, good air connections, and local availability of professional staff and expertise, all of which record at least a 50% response. Significantly more London firms also highlight the advantages of access to local service firms (47%) and firms in their own industry (33%), findings which further substantiate the benefits of local networking and supplier linkages to firms operating within the central London cluster. In contrast, the only two attributes reported as important by at least half of decentralised SMEs are an attractive living environment for directors and staff, and good road and rail links. The first of these is by far the most highly rated locational attribute (69% compared with 31%) differentiating decentralised from clustered firms. The low cost of premises is also rated significantly more frequently (39%) by the former. The generally appreciably lower attribute frequencies for decentralised firms seem to indicate a greater 'footlooseness' in locational terms, locational influences being viewed as less important for their competitive performance than is the case with firms in the central London cluster.

These survey results support the view that the growth of Britain's dominant cluster of business service SMEs in central London does reflect unique market accessibility (proximity to clients, good access to road, rail and air links), but that in addition, clustering itself engenders significant competitive advantages for and attracts constituent firms because of the ease with which new professional, technical and market-relevant knowledge can be accessed and shared via personal and business networks, local flows of highly-qualified staff, and proximity to and collaboration with other consultancies and service providers. The results indicate that cluster firms recognise and value their ability to tap into a collective learning capacity provided by the whole cluster's firms, organisations and pool of highly-qualified labour and expertise. The existence of the cluster also itself signals quality and credibility to potential clients seeking reassurance

in a very uncertain and imperfect business service market-place (Bryson *et al* 1993, 270).

For decentralised firms, and in sharp contrast, the survey findings clearly support the 'enterprising behaviour' thesis of the growth of small new consultancies in decentralised locations of outer southern England outlined earlier, in that personal (proximity to founder's home) and quality of life (attractive living environment) influences are strongly highlighted as the dominant considerations underpinning this growth. A secondary competitive advantage is the lower cost of premises, rates and staff¹⁵, while improved transport links mean that three-fifths of decentralised consultancies still report good access to road and rail communications, even if this is a lower proportion than in the central London cluster.

Business service SME clustering and globalisation

As noted earlier, recent work on the clustering of knowledgeintensive service firms has suggested that a final important reason for clustering is these firms' need for accessibility to global networks, clients and knowledge, as well as to the local knowledge base (Nachum and Keeble 1999). For many small and large consultancies, location within a knowledge-intensive services cluster at the heart of a global city offers exceptional advantages for developing and fostering global links, given these cities' unrivalled international air and telecommunications networks and unique role as global knowledge and information centres. Moreover, for clustered SMEs, international linkages should not be viewed as replacing the need for local networking and embeddedness, but rather as an essential and complementary source of new knowledge, information and expertise in an increasingly globalised economy (Camagni 1991, 134-41; Keeble and Wilkinson 2000b, 13-14). Indeed, recent work has even demonstrated that within particular knowledge-intensive clusters such as high-technology SMEs in Cambridge and Oxford, it is the most globally-networked firms which are also the most locally-embedded in terms of collaborative and research linkages (Keeble et al 1998).

This link between local clustering and global networking is strongly corroborated by the empirical findings of the CBR survey. SMEs operating in the central London cluster differ significantly from their decentralised counterparts in exhibiting a much higher level and intensity of global activity, measured in a variety of ways (Table IX). On average, they derive one-fifth of their revenue from overseas clients compared with only 11% for decentralised firms, while 28% operate at least one overseas office compared with only 7% for the control sample. Most strikingly, over half of the clustered firms surveyed report collaborative arrangements with firms overseas, a proportion not far short of that for London-based collaboration networks (55%: see Table VI). They also recruit twice as large a share of professional staff from overseas as do decentralised SMEs, and place significantly greater value on access to international air links both as a reason for locational choice and as a source of competitive advantage. These differences may of course be related, in part at least, to the greater size of SMEs in the central London sample noted earlier, larger (though still relatively small) consultancies having greater financial resources to establish overseas offices and market themselves abroad. But equally, it could be argued that it is the competitive advantages associated with location within the London cluster which have helped local SMEs to grow large enough to embark upon overseas activities, advantages which have been smaller counterparts in decentralised locations. denied their Clustering by small and medium-sized professional service firms at the heart of a global city such as London thus appears simultaneously to enable processes of localised collective learning and global networking, as complementary sources of competitive advantage enhancing SME performance and growth.

Conclusions

Within a context of extraordinarily rapid recent growth and pronounced spatial clustering of UK professional and business service firms, this paper has sought to re-assess the forces underpinning the existence of central London's business services cluster, and to do so by contrasting the experience of small and medium-sized consultancies in this cluster with that of similar firms which have chosen to locate in non-clustered, decentralised locations of outer southern England. In this comparison, particular attention has been paid to the possible role of localised 'collective learning' processes within the London cluster in influencing firm establishment and subsequent firm competitiveness and growth, and of 'enterprising behaviour' arguments as an explanation for the growth of small consultancies in decentralised locations.

The original empirical survey results presented in the paper suggest perhaps four key conclusions in relation to these questions. First, clustering of professional and business service consultancies in central London is powerfully and centrally influenced by the need for and benefits of proximity and accessibility to clients, both those in London itself and accessible through the metropolis's unrivalled national and global communications nodality. Though largely ignored by the supply-side focussed 'agglomeration economy' clustering literature (Gordon and McCann 2000), demand-side explanations are of key importance for understanding the clustering of professional and business service firms at the heart of global cities. Linked to this is the fact that over time, the historic growth of the central London cluster rooted in client accessibility has conferred locational prestige and a positive image on its firms as a signal of quality and credibility to potential clients seeking reassurance in a very uncertain and imperfect business service market-place, as a further and significant clustering benefit.

Secondly, however, the survey results also provide strong evidence of the existence and importance to central London firms of localised processes of knowledge acquisition, development and networking, of the kind highlighted in 'innovative milieux' and 'collective learning' conceptualisations of industrial clusters. Our results clearly demonstrate that as argued in these conceptualisations, the central London cluster is distinctively characterised by high rates of spin-off

of new firms from existing local businesses, and that many more of these new firms embody combinations of local founder skills, knowhow and expertise. At the same time, virtually all their owners and managers report London-focussed personal contact networks as being important not only in obtaining work from clients, but also as a key source of new knowledge, especially professional and market knowledge, implying a dynamic process of knowledge generation and diffusion between firms and clients in the London cluster. Personal meetings and networking with staff in other consultancies are also significantly more frequent amongst central London cluster firms than amongst their decentralised counterparts, as also are formal and informal collaborative arrangements with firms other than clients. Finally, the central London cluster is distinctively characterised by spatially-concentrated flows of professional staff with "embodied expertise" between firms, and especially from larger to smaller firms, within the London labour market: and three-quarters of such skilled recruits are acknowledged as being a source of new expertise and knowledge. Together, these findings thus provide strong support for the thesis that the growth of the central London cluster consultancy and its constituent firms has benefited significantly from the development of localised collective learning processes, knowledge acquisition and sharing, as a further and important determinant of clustering in this knowledge-intensive industry.

This said, a third clear finding from our study is that notwithstanding the benefits from local learning processes, access to global networks, clients and knowledge is also very important for smaller consultancies in the central London cluster. The survey results show that cluster SMEs are significantly more globally-oriented than their decentralised counterparts, in terms of client revenues, overseas offices, collaborative arrangements and even professional staff recruitment. In Amin and Thrift's phrase (1992), the central London consultancy cluster is a "neo-Marshallian node" (see also Nachum and Keeble, 1999) characterised by a high level of openness to and interaction with the global economy as an essential source of

knowledge, expertise and market opportunities. Globalisation has enhanced the importance of central London's international communications nodality and historically-evolved reputation as locational advantages for consultancies increasingly operating in a global as well as national market-place. Clustering by small and medium-sized professional service firms at the heart of a global city such as London thus appears simultaneously to enable processes of collective learning global networking, localised and complementary of competitive advantage sources for SME performance and growth.

The final conclusion from this study is that it provides clear evidence in support of an 'enterprising behaviour' explanation of the rise of small business service firms in outer, decentralised, settlements of southern England. Over half of the decentralised firm entrepreneurs responding to our survey were not previously working in the region where they established their firm, implying either migration to that region coincident with firm formation or previous long-distance commuting, probably to London. Equally, the survey shows that the overwhelming reason for choice of a decentralised location was personal residential preference, evident in the dominance of 'proximity to founder's home' as the reason for location, and the exceptionally high and distinctive rating of 'attractive living environment' as important for the firm's competitive performance. Their enterprising behaviour in establishing their firm in a rural or small town location which does not offer market proximity or clustering advantages has been assisted, on survey evidence, by lower costs of premises, labour and other overheads, while a high rating for 'access to good road or rail communications' clearly hints at the enabling effects of improved transport accessibility and availability of modern telecommunications within southern England as a whole. important qualification to enterprising behaviour an Finally. arguments is the clear finding that unlike trends in the 1980s, recent growth rates of decentralised consultancy SMEs, whether measured in absolute or relative terms, were appreciably poorer during the late 1990s than those achieved by their central London counterparts,

implying a tilting of the balance of locational advantage towards metropolitan clusters and away from decentralised rural or small town environments.

Notes

- Scott has of course recently published highly original work on the clustering of firms in other knowledge-intensive service industries, outside the business services sector, such as multimedia and film and TV production. See Scott (1998, 2000).
- Wood (1991) is one of the very few scholars who does examine the growth of business services within a flexible accumulation framework: but his paper does not directly address the issue of geographic clustering/agglomeration and its determinants.
- In this paper, a business cluster is defined simply as a substantial concentration of firms in a specific industry in close proximity within a small geographical area. This is somewhat less prescriptive than Porter's definition (1998, 78: see also Porter 1990, 131-165 and Sainsbury 1999, 3) of clusters as "geographic concentrations of interconnected companies and institutions in a particular field [which] encompass an array of linked industries and other entities important to competition", although as noted in the text, business services in London are explicitly identified by Miller *et al* (2001) as representing a cluster using the Porterian definition.
- This recent report of a European research network co-ordinated by Peter Wood of University College London examines in depth the recent evolution of knowledge-intensive services (KIS) in the European Union and points out that "regions of concentration [of KIS firms] are also major regions of high urban- or sector-based demand. Within favoured regions, corporate demand stimulates strategic KIS activity" (KISINN 1997, para.3.30).

- Two-thirds of these (66%) are in Division 74, "other business services", which includes numerous management, engineering and other consultancies: 33% are in computer consultancy, software and services, with 1% in R&D services.
- The last two service sectors account for less than 15% of employment in Section K, 85% being in business services such as management, engineering and other consultancies, technical and professional services, advertising, market research, computer services, accountancy and legal services, and other business services (Small Business Service, 2000).
- This original database was compiled from the 1990 Institute of Management Consultants company register and the sector's leading commercial directory, the Mitchell Directory of Management Consultants in the UK, 1990. See Keeble *et al* 1994.
- But note the accompanying CBR Working Paper 195 by Nachum and Keeble (2001) on the clustering of foreign and indigenous professional service firms (advertising, legal services and management consultancy) in central London.
- Indeed, the relative dearth of localized linkages and existence of a much wider South-East and Midland regional interaction field was empirically established for manufacturing firms in outer north-west London as long ago as the 1960s: see Keeble 1969.
- Defined as the following central London postcode zones: SW1, 3, 5, 7 and 10, W1, 2, 8, 11 and 14, N1, NW1 and 8, WC1 and 2, SE1, and EC1, 2, 3 and 4. See Nachum and Keeble (1999, 42) for a map of this area. In 1997, this area contained 40% and 28%, respectively, of Greater London's management and engineering consultancy firms, as recorded in Yellow Pages Directories, with the largest single concentration in the SW1 zone.

- For example, the 1997 CBR national SME survey (Cosh and Hughes 1998, p.126) achieved only a 29.8% response rate despite following exactly the same methodology as in this research. The response rate for engineering consultancies, which tend to be larger than management consultancies (see Table II), was in fact 63.5%, with 50.5% for management consultancies.
- A chi square test emphatically rejects the null hypothesis of a significant difference between the sectoral composition of the two samples, at the p=0.85 level (that is, there is an 85% probability that they are identical, from the same population).
- For chi square testing, 'very concentrated' and 'moderately concentrated' responses were combined into one category. Equally, for the regional analysis, testing was conducted aggregating responses into 'own region' concentration (London or East Anglia/South West), versus concentration in any other region.
- Again, responses were aggregated for chi-square testing into 'frequent' (once a week or month) and 'occasional' (once a quarter or year).
- When asked to rate various locational attributes as constraints on competitive performance, the only significantly greater constraints reported by clustered firms relative to their decentralised counterparts were of higher costs of premises, rates and professional and support staff, along with lower availability of premises. For decentralised firms, significantly higher constraint ratings were only reported for 'limited local client base/distance from clients', and 'poor provision of local business services'.

TABLES AND FIGURE

Table I The North-South Divide in business services growth in Britain, 1994-2000

	Employment								
		Busine	All Other Industries						
		(SIC I	and Services						
	1994	2000	Change 19	94-2000	Change 1994-2000				
	,000	,000	,000	%	,000	%			
Northern Britain	758	980	+222	+29.3	+354	+4.8			
Southern Britain	1,360	2,060	+700	+51.5	+1,075	+13.3			
within which, London	576	889	+313	+54.3	+266	+10.4			
Great Britain	2,452	3,530	+1,078	+44.0	+1,697	+9.2			

Note:

Division K of the 1992 SIC is dominated by business and professional services, but also includes real estate and renting. Northern Britain is defined as the North West, North, and Yorkshire and Humberside standard regions plus Wales and Scotland in 1994, and as the corresponding Government office regions (see text) in 2000. Southern Britain is defined as the South East, East Anglian and South West standard regions in 1994, and as the corresponding Government office regions (see text) in 2000.

Sources: Employment Gazette, October 1995: Labour Market Trends, February 2001.

Table II Sectoral and regional variations in professional business service SME characteristics, 1997

Sectoral variations, Great Britain								_
	No. of	Age	Employme	Turnover	Collaborati	Innovation		Competitors
	SMEs		nt		on %			
						New to firm %	New to firm and industry %	
Computer software and services	85	10	7.5	475	75.3	52.9	32.9	3
Accountancy	50	49	30	776	28.0	28.0	16.0	5
Market research	35	6	5	183	57.1	40.0	22.9	8
Management and business consultancy	110	8	5	350	50.9	36.4	26.4	5
Architectural, engineering and technical consultancy	251	13	11.5	650	45.8	27.1	19.5	5
Advertising	43	9	6	372	30.2	32.6	25.6	6
Personnel, recruitment and human resources	65	6	7	340	36.9	16.9	13.9	5
Other business services	162	9	4.5	255	39.5	24.7	19.8	4

Regional variations, southern Britain, all professional business service SMEs									
	No. of	Age	Employment	Turnover	Collaborati	Innovation		Competitors	
	SMEs				on				
					%	New to firm %	New to firm and industry %		
London	168	13	23.5	1225	50.0	30.4	24.4	8	
East Anglia	45	11	6	220	33.0	28.9	13.3	4	
South West	78	8	6	350	38.5	32.1	20.5	5	

Note: Figures are medians unless otherwise stated. 'Age' is in years to 1997, 'turnover' in £000 for latest year available. 'Collaboration' is % of firms reporting formal or informal collaborative or partnership arrangements with other organisations in last 3 years. 'Innovation new to firm' is % of firms introducing a new or significantly improved service product during last 3 years which is new to the firm but not to the industry: 'innovation new to firm and industry' is new to both. 'Competitors' is number of firms regarded by respondents as serious competitors.

Source: CBR SME Survey 1997

Table III Clustered and decentralized SMEs: key characteristics

	Clustered	Decentralized
No. of firms in sample	122	178
% business and management consultancies	66.4	62.4
% engineering consultancies	33.6	37.6
Employment size 1998	12.0*	5.0*
Absolute employment growth 1995-98	+3.0*	+1.0*
% employment growth 1995-98	+41.4	+20.0
No. of serious competitors	6.0*	5.0*
% of serious competitors which are large firms (over 50 employees)	66.6*	25.8*

Note: Figures are medians unless otherwise specified. Differences which are statistically significant at the 5% level or greater, using the chi square or Mann-Whitney U test as appropriate, are shown by an asterisk.

Table IV Origins, entrepreneurship and collective learning in clustered and decentralised firms

	Clustered	Decentralised
Origins		
% spinoffs from existing firms	18.0*	8.5*
% new startups	77.0*	85.2*
% other (acquisitions, mergers, joint ventures, etc.)	5.0	6.3
Age		
% established 1986-1998	52.0*	68.6*
Multiple founders		
% with 2 or more founders	66.9*	49.4*
Type of founder's previous employing organization		
% firm	91.3	83.5
% university/higher education institution	6.8	5.5
% other (local government, etc.)	1.9	11.0
Location of founder's previous employing organization		
% London or respective region (East Anglia or South West)	72.7*	47.8*

Note: Differences which are statistically significant at the 5% level or greater, using the chi-square or Mann-Whitney U test as appropriate, are shown by an asterisk.

Table V Clustering, informal networking and collective learning

	Clustered	Decentralised
% firms reporting 'previous personal contacts' as important or very important in obtaining work from clients	97.5	94.4
% firms reporting important personal contacts as being geographically:		
very concentrated	29.8*	24.3*
moderately concentrated	37.2	29.4
not concentrated	33.1*	46.3*
% firms reporting geographical concentration of personal contacts as being focussed on:		
London	76.4*	8.8
Rest of South East	20.8	20.9
East Anglia	_	20.9*
South West England	_	36.3*
Rest of UK	2.8	13.2
% firms reporting personal contacts with clients as important or very important for developing own firm's:		
professional knowledge	71.4*	57.4*
general market knowledge	73.7*	61.7*
knowledge useful for staff recruitment	17.2*	12.7*
% firms reporting occasional or frequent meetings with 'people from other firms in your industry'	95.1*	88.1*
% firms reporting such meetings as occurring:		
once a week	17.5*	8.5*
once a month	39.5	34.6
once a quarter	31.6	40.5
once a year	11.4*	16.3*

Notes: Differences which are statistically significant at the 5% level or greater using the chi-square test are shown by an asterisk. Ratings of 'important' or 'very important' were measured using a five-fold scale, 'not important', 'slightly important', moderately important', 'important' and 'very important'.

Table VI Clustering, collaboration and collective learning

	Clustered	Decentralised
% firms reporting formal or informal collaborative arrangements with other firms or organisations, excluding clients, during past 5 years	73.0*	61.4*
% collaborating firms reporting collaboration with other firms or organisations in:		
London	55.2	16.3
Rest of South East	20.7	22.1
East Anglia	_	22.1
South West England	_	30.8
Rest of UK	21.8	26.9
Overseas	51.7	11.5
% collaborating firms regarding geographical proximity in establishing and maintaining collaboration as:		
very important	19.1	26.9
moderately important	34.8	20.4
not important	46.1	52.8
% firms using associate consultants	73.8	72.2

Note: Differences which are statistically significant at the 5% level or greater using the chi-square test are shown by an asterisk.

Table VII Clustering, local skilled labour market flows and collective learning

	Clustered	Decentralised
% of recent professional staff recruits recruited from (immediately previous employer):		
small firm in your industry	20.7*	19.9*
small firm in other industries	6.9*	9.2*
large firm in your industry	23.8*	19.3*
large firm in other industries	17.9*	13.5*
self-employed	13.8*	20.5*
directly from university	12.9*	12.1*
other	4.1*	5.5*
% of recent professional staff recruited from immediately previous employers in:		
London	70.1*	8.8*
Rest of South East	13.0*	12.3*
East Anglia or South West England	_	56.6*
Rest of UK	8.2*	18.9*
Overseas	8.7*	3.5*
% of recent professional staff recruits who brought 'new expertise or knowledge into your firm, which you did not possess before':		
considerable new expertise	21.7	26.7
some new expertise	51.9	48.7
little or no new expertise	26.4	24.6

Notes: Differences which are statistically significant at the 5% level or greater using the chisquare test are shown by an asterisk. Firms were asked to report details for the last three professional staff recruited, and figures are therefore percentages of aggregate totals. Small firms were defined as employing 50 or fewer staff, large firms as employing more than 50 staff.

Table VIII Locational influences on clustered and decentralised SME establishment and performance

	Clustered	Decentralised
% responses to "why is your firm located in?"		
proximity to clients	32.3*	7.9*
proximity to founder's home	13.3*	55.3*
proximity to expertise	11.3*	3.7*
good business and personal contacts	11.3*	5.3*
convenient transportation	6.7	8.9
good international base	6.7*	0.0*
other	18.5	18.9
Importance of "the following attributes of your location in contributing to		
the competitive performance of your firm"		
% important or very important		
access to good road or rail communications	78.3*	58.1*
image or prestige of location as a way of signalling quality and credibility	68.3*	27.6*
proximity or accessibility to clients	62.5*	32.2*
access to good air communications	55.0*	26.4*
local availability of professional staff	50.0*	17.8*
access to local high-quality business services	46.7*	25.3*
proximity to other firms in your industry	32.5*	9.2*
attractive living environment for directors and staff	30.8*	69.0*
low cost of premises	19.2*	38.5*
low cost of government business rates	11.7*	16.7*
low cost of support staff	4.2*	16.7*
low cost of professional staff	5.0*	11.4*

Notes: Differences which are statistically significant at the 5% level or greater using the chi-square tests are shown by an asterisk. Ratings of 'important' or 'very important' were measured using a five-fold scale, 'not important', 'slightly important', 'moderately important', 'important', and 'very important'.

Table IX SME clustering, decentralisation and globalisation

	Clustered	Decentralised
mean % of revenue from clients overseas	20.7*	11.1*
% firms with one or more overseas office	27.9*	7.4*
% firms reporting collaborative arrangements in last 5 years with firms or	51.7*	11.5*
organisations, excluding clients, overseas		
% of recently recruited professional staff recruited from employers	8.7*	3.5*
overseas		
% firms reporting good international access as a reason for locational	6.7*	0.0*
choice		
% firms reporting access to good air communications as important or very	55.0*	26.4*
important for firm's competitive performance		

Notes: Differences which are statistically significant at the 5% level or greater, using the chi-square or Mann-Whitney U test as appropriate, are shown by an asterisk. Ratings of 'important' or 'very important' were measured using a five-fold scale, 'not important', 'slightly important', 'moderately important', 'important' and 'very important'.

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