The Use and Impact of External Advice by Small Firms

Paul John Alexander Robson

University of Edinburgh

February 2004

Summary

The Use and Impact of External Business Advice by Small Firms

This thesis explores the extent of use and the impact of a full range of the providers of external advice in Scotland and northern England using a very large scale postal survey of small and medium sized enterprises (SMEs), with over 1300 replies. This is the first large scale survey of Scotland which includes a comprehensive set of the sources of external advice.

Chapter 1 provides the reader with the general overview of the contribution to theory and concepts and in indication of the structure which is followed. Chapters 2 and 3 introduce the theoretical debates and the geography of business support and the previous analyses of previous business advice providers. Chapter 4 presents the methodology and the data sets which have been used.

In chapter 5 the levels of use and impact of private and public sector sources are reported. In chapter 6 a set of supplementary questions are used to gauge the levels of use and clients' assessments of Business Link (BL)/Small Business Service (SBS) and Business Shop (BS)/Small Business Gateway (SBG) which are the key mechanisms for the delivery of public sector business support. Chapter 7 assesses the central government support schemes such as Export Credit Guarantees and allows comparisons to be made with BL/SBS and BS/SBG.

The geography of business advice has remained a comparatively under researched theme and this thesis in chapters 8 and 9 seeks to explore the relationship between the location of the firms and how this influences the levels of use and the impact of business advice.

Chapter 10 brings together the main empirical results, shows the contribution to knowledge and the implications for policymakers in the design of external advice provider systems.

Contents

List of Appendices

List of Figures and Maps

List of Tables

Acronyms

BC	Business Connect
BL	Business Link
BS	Business Shop
CBR	Centre for Business Research (University of Cambridge)
ECGD	The Export Credit Guarantee Department
EU	European Union
IiP	Investors in People
JIMS	Judge Institute of Management Studies (University of Cambridge)
LEC	Local Enterprise Companies
REG	Regional Enterprise Grants
RSN	The Regional Supply Network
RSA	Regional Selective Assistance
SBG	Small Business Gateway
SBS	Small Business Service
SFLGS	The Small Firms Loan Guarantee Scheme
SfSB	Skills for Small Business
SMART	The Small Firms Merit Award For Research
SME	Small and Medium Sized Enterprise
SoE	Survey of Entrepreneurship (University of Edinburgh)
SPUR	Support for Products under Research (SPUR)
TCS	The Teaching Company Scheme
TEC	Training and Enterprise Councils

Acknowledgements

I would like to express my warmest thanks to Professor Richard T. Harrison who has supervised my thesis.

I would also like to thank Professor Robert J. Bennett for the encouragement he gave me in writing on external business advice.

My parents, John and Betty Robson, and my girlfriend, Mayumi Tanimoto, gave me support and encouragement throughout my studies and this was very much appreciated

I would also like to thank my friends for their support in writing this dissertation, Dennis Tourish, Sarah Jack, Alistair Anderson, Helen Haugh, Jimmy Huang and Mark Freel.

Declaration

The thesis is my own composition and the work is entirely my own. The work has not been submitted for any other degree or professional qualification.

Date 29th June 2004 .....Signature...

Chapter 1

Introduction: External Business Advice

1. Introduction

The purpose of this thesis is to provide an empirical based study of the level of use and the impact of external business advice in Scotland and northern England. This will provide an accurate picture of the state of business advice and how government policies may need to be altered to better meet the needs of small and medium sized enterprises.

Policies to directly assist new and small and medium sized firms are usually put in place where there is evidence of market failure. Many national, regional and local agencies such as the DTI, and the Small Business Service have such policies and programmes to directly support entrepreneurs, so as to increase the number of businesses or aid the competitiveness and expansion of existing small firms (Bennett et al., 1999). Such policy initiatives are generally aimed at assisting new and small firms to develop necessary skills, identify market opportunities, and assemble resources from the public and private sectors. A strong and healthy business structure in terms of the supply of private sector based external advice, such as accountants, banks, solicitors, customers, suppliers, is also crucial for entrepreneurs (Keeble, 2000). Hence public policies usually focus upon complementing these private sector services.

In the United States, the 1953 Small Business Act states that, "[i]t is the declared policy of the Congress that the Government should aid, counsel, assist and protect, insofar as possible, the interests of small business concerns in order to preserve free competitive enterprise". The 1953 Small Business Act argued that

small businesses should be supported to maintain competition and a balance between established, large enterprises and new, growing ones. It also suggested that there were linked political and social benefits so the motives were not purely economic. The 1953 Small Business Act set up a government agency, the Small Business Administration, which developed its mission as being "to serve America's small businesses to (1) help preserve free competition, (2) contribute to the strengthening of the Nation's economy, and (3) assist disaster-ravaged communities recover from their losses".

In the United Kingdom the Houses of Parliament have not passed a similar piece of legislation. However, in recent decades entrepreneurs and SMEs have been widely recognised as being particularly important for the economy because of their contribution to new jobs, innovation and flexibility. Moreover, in the development of the Small Business Service the UK government is committed to assisting SMEs to better compete domestically and internationally (Fuller et al., 2002).

External business advice is a service of a special kind which has both task-interactive and personal-interactive aspects, which require close relationships to develop between client and supplier. The use of external advice seeks to increase either the knowledge base or management/staff expertise of a firm. Its outputs are believed to be improved competitiveness, profitability, and growth and operate chiefly as a process to produce change to the customer (Dwyer et al., 1987; Riddle, 1986; O'Farrell and Moffat, 1991). This process requires a degree of joint activity by both sides which has been argued in many studies to require a relational exchange (see e.g. Hill and Neeley, 1988; Morris and Fuller, 1989; Dawes et al., 1992; Jackson et al., 1995; Clark, 1995; Brentani and Ragot, 1996).

There are four differentiating but overlapping characteristics of business advice and consultancy service which make relational aspects dominant: their intangibility, inseparability of interactions, heterogeneity, and perishability. Intangibility makes advice services difficult to sample before purchase and difficult to reproduce. Inseparability means that clients and advisors must interact intensively through a series of stages to refine need, select the advisor and develop the actual delivery of advice. Heterogeneity requires advice services to be re-tailored to each client with elements of uniqueness. This leads to problems of quality control which may increase the role of reputation, brand and other external indicators of quality, and also requires the customer to become closely involved with the production of advice in order to check appropriateness and fitness of purpose. Perishability arises, particularly for strategic advice, because the ownership of the benefits, including some of the intellectual property rights, transfer from the seller to the beneficiary, which the beneficiary can often reproduce internally, although this is not always a market transaction. This means that although it occurs, a new purchase of advice will usually be for help to solve a problem that is sufficiently different, or perceived to be by the beneficiary, from a previous one that the advice cannot be reproduced internally. Thus the supplier has to re-tailor the service on each occasion.

External business advice has become of increasing importance to firms over the last two decades (Moulaert and Todling, 1995). In Britain, employment has more than doubled in business service firms between 1981 and 1990 (Keeble et al., 1991), and has increased again in the late 1990s. Moreover, the use of external advice has been strongly linked to successful business growth (Harrington et al., 1991; Berry-Lound and Parsons, 1994; Ilersis, 1994; Bryson et al., 1997), particularly for the use

of management training (Hendry et al., 1991; CBI, 1993, 1995; Tordoir, 1994). Previous surveys in Britain have shown that between 80% and 95% of businesses use external advice from one source or more (Bennett and Robson, 1999a).

However, despite interest in the growth of external business services, there have been few large-scale surveys over a complete range of external advice sources, which include public and quasi-public intermediaries as well as private sector market suppliers, nor has there been an assessment of the relationships between firm characteristics and the use and impact of external advice. The Cambridge CBR Surveys of 1997 and 1999 are exceptions to the rule and are arguably the most comprehensive surveys of SMEs in Britain (Cosh and Hughes, 1998, 2000). The British economy is dominated by England and in particular by London and the South East of England and this was reflected in the sampling framework of the Cambridge surveys. Thus, the 1997 survey was predominantly an English survey, with only a very small number of firms from Wales (87 firms) and Scotland (141 firms) included in the sample. The 1999 survey tracked the survivors of the original 1997 survey and attrition reduced the total number of replies to 1287 firms in Britain, of which there were 47 firms in Wales and 71 firms in Scotland, respectively. Thus, the Cambridge surveys do not allow us to have an accurate large scale survey of SMEs and external advice in Scotland. In chapter 4 the methodology used in this study is explained, but it needs to be noted that northern England was included in the sample and this allows us to be able to perform regional comparisons between England and Scotland. In Scotland there are a comparatively small number of larger sized SMEs which have 100-500 employees. There were likely to be a sufficient number of SMEs of all sizes in order to examine the relationship between the use of external business advice and

size of firm in both the cross-tabulation analysis and also in regression analysis. Thus it was perceived to be desirable to boost the sample of larger sized firms by including firms from England. The northern counties of England of Northumberland, Durham, Tyne and Wear and Cumbria are parts of England which border Scotland and are at the geographical periphery from London and the South East of England. These counties are perhaps closer to Scotland in economic terms and geographical terms, than to London. Thus these northern counties of England were included in the sample. In addition to larger sized SMEs firms from across all sizes of SMEs were selected. In practice there were sufficient numbers of SMEs across all sizes in Scotland to perform cross-tabulations and multiple regression analysis. The sample of respondent firms from England were thus a bonus and allowed comparative work to be facilitated between England and Scotland.

There are now numerous bodies seeking to support the SME sector. These vary from ad hoc agencies in specific localities or targeting selected sectors, to national bodies which support business, especially SMEs, across the country using local networks or organisations. The organisations of Local Enterprise Companies (LECs) and their English counterpart of Training and Enterprise Councils (TECs), the approved/accredited Chambers of Commerce and Industry (CCIs) and the Business Link partnerships which have been replaced by the Small Business Service (SBS) in England and the Small Business Gateway (SBG) are all included in our survey. Given that the BL/SBS and BL/SBG is the main government backed supplier of external advice and it has not been extensively surveyed in Scotland and northern England using a large scale survey, the thesis makes an important contribution to policy makers and to knowledge. More specifically, it is the Business

Link (BL)/Small Business Service (SBS) (and their Scottish counterparts of Business Shop/Small Business Gateway) partnerships which are explored in greater detail in the Survey; and, the users of BL/SBS and BS/SBG were asked to indicate which specific services they had used and to assess their satisfaction with the service provided. Moreover, given that our survey was sent out to a random sample of firms, our replies are from businesses which have and have not used BL/SBS and BS/SBG and this allows further analysis and comparisons to be undertaken.

There has been much analysis, both by academics and policy-makers, on the history, structure and effectiveness of these business organisations and the various private sector suppliers. However, one area in which there has been very little analysis is their geography. This is considered as surprising, as geography impacts on the providers of external business advice in a number of ways. The geographic structure of SMEs could have a substantial impact upon the organisation of the supply of external business advice. In other words the distance between the advisor and the client could influence the provision of external advice. This thesis seeks to contribute to knowledge of the relationship between location of firms and providers of business advice and the use and impact of external business advice. That is the first part of the influence of geography.

Also, there has been relatively less attention paid to the role of distance as a possible influence on the choice of supplier. In other words, the distance in kilometres between the user and the supplier of external business advice continues to remain comparatively under researched in relation to the study of external advice. The role of transaction costs, specialisation and locality have all been suggested as important influences on the choice of advisor which would lead to distance from the

potential sources of supply being significant. Other things being equal, it might be expected that closer suppliers of advice would be chosen rather than more distant ones because they have lower transaction costs as a result of being cheaper or easier to access. Closer advisors should also have lower search costs, having greater ease of obtaining information, both in order to find the advisor and assess their quality. Closer located advisors should also have the potential to be more highly trusted either because they are more local, and hence it may be easier to interact with them, or because they are part of local networks of relationships that encourage interaction, or because they have better local knowledge. Despite these expectations there has been relatively little previous attempt to investigate the possible role of distance in influencing choice of business advisor and chapter 9 seeks to fill that gap using the evidence of the Survey of Entrepreneurship.

The underlying factors behind the trend of increased use of advice may be reduction in transaction costs between suppliers and those using business services (as argued by Coase, 1937; Williamson, 1975). Scott (1983,1986), for example, argues that that use of external advice and collaboration has been a means to reduce costs by allowing a greater role for market competition between service suppliers, which can be more efficient in controlling costs than internal bureaucracy. Additionally, greater economies of scale and scope in development of expertise may be available to an external supplier that allows it to reduce costs, or increase its rate of R & D and innovation, as argued by Stigler (1951). Furthermore external relationships may be developed as a means to reduce the power and restrictive practices of internal labour unions, thus reducing costs and increasing flexibility for the firm (argued by Storper and Scott, 1992).

Locations which are already particularly strong in business services, or have specialist access to the businesses are experiencing the greatest demand for services. This would tend to work in favour of locations with agglomerations of existing technical expertise, or located in proximity to the areas of greatest demand. This has led to recognition of areas within which high concentrations of business services are emerging (see e.g. Marshall, 1988; Daniels and Moulaert, 1991; Wood et al., 1993; Bennett and Graham, 1998). Such areas may possess advantages for the general development of their economies not only for the clients they service, but also may become a rich area for exchange of information or development of innovation between business service firms themselves. Thus, increasing concentration of service suppliers may encourage further and intensifying concentration in existing centres. This process may be reinforced by institutional and social relations within localities and regions between firms, developing joint collaboration and networks of both strong and weak ties (Vatne, 1995) or embeddedness and trust relationships (Granovetter, 1985; Zucker, 1986). Thus, some of the benefits of the economies of scale and scope of external inter-business relations may result from intense networking between business service firms themselves which allow so-called "home-region externalities" to stimulate strong client-customer networks of trust (e.g. O'Farrell and Wood, 1998).

Despite recognising the potential importance of such processes, there has been a relatively dispersed approach in previous research that seeks to assess the influence of location on the extent and form of external business relations. Those studies that have been undertaken also tend to control inadequately for the extent to which locational differences of external links arise from the effect of factors such as

firm structure, industry structure, and the role of government schemes and agencies (where the role of grants based on spatial eligibility criteria may have major influence on of the extent of external network development). Thus, although Storey (1994) has argued that location is one of the key influences on the development of SMEs (together with a firm's age, sector, size and ownership structure), it is unclear in applying this conclusion to external relations whether locational effects arise from some specific intrinsic reason of place, or from the variable geographical pattern of internal firm dynamics, industry structure and/or government intervention.

A further drawback of many previous studies investigating the influence of location has been that the sample size or the methodological design of the analysis have constrained the dimensions of location that can be assessed or have limited the range of other influence variables investigated. Thus, for example, regional differences, peripherality, or rurality, which have often been found to lead to a higher use of external government-related schemes may be less due to location than to structural characteristics of the firms in these areas, or to the structure of their local economies, or to the eligibility criteria for government support. Moreover, it has been difficult to measure and assess in quantitative studies the influence of local structures of institutional environments, embeddedness and inter-firm networks on the propensity to develop external relationships with specialist business service suppliers, or through the supply chain, or to public agencies. Differential structures of local environments therefore need further investigation and integration with investigations of other influences before a final conclusion on the role of location per se can be drawn.

Also, within the study of external business advice and SMEs there has generally been an absence of a comprehensive multivariate approach that simultaneously controls for all the main explanatory factors that may influence the use and impact of business advice. Furthermore, most previous studies have tended to focus on small samples and only a limited range of advice sources. This study explores relationships using crosstabulations and then uses logit estimation techniques to examine the effect of systematic client differences on the utilisation of external business advice by source. In the estimation of the impact of advice ordered logit techniques are used, because the dependent variable is ordinal, i.e. a perceived impact of 4 cannot usually be thought to be twice as high as a perceived impact of 2. See 5.4.

Good economic performance by SMEs is actively encouraged by policy makers and is reflected by the wide range of government backed sources of advice such as BL/SBS and other central government support schemes which have a much more focussed SME client in mind. Using econometric analysis this dissertation seeks to explore the relationship between SME growth and performance with the use of external advice. A wide range of measures are used which cover SME employment growth, turnover growth and also profitability. Whilst policy makers are predominantly concerned with employment growth, other measures such as profitability are of greater concern to the owners and managers of SMEs.

This thesis seeks to fill these gaps using new information from a 2001 survey focusing on use of advice by SMEs of up to 500 employees. The empirical results relate specifically to Scotland and northern England (County Durham, Tyne

and Wear, Cumbria and Northumberland), however, it should be possible to apply the conclusions to other countries

The Survey of Entrepreneurship in Scotland was a large scale postal survey which was mailed out in 2001. The survey was conducted by a research team at the University of Aberdeen. I was entirely responsible for the design of the questions on external business advice. I co-ordinated the sample structure, the mailing out of the questionnaires, and the coding-up of the results. Up to this time I am the only person who has used the external business advice questions. The Survey is described in greater detail in chapter 4.

1.2 Thesis Structure

Chapters 2 and 3 of the thesis introduce the theoretical debates and the previous analyses of external business advice providers. In chapter 2 we explore the nature of public sector business support and the arguments for and against the public provision of external advice services. We also look at business needs and demands and reconcile these to the current range of services provided. The background and history of the various local support agencies are explained in chapter 2. Additionally, the private sector suppliers of external advice are also discussed, and as precursor to their more detailed discussion in chapter 5, the nature of the trust relationships between advisors and clients are articulated.

In chapter 3 we explore the geography of business support, which is the basis of two substantive empirical chapters, 8 and 9; and also provide a literature review on the use of external advice and previous studies which have looked at geographical considerations. More specifically, in chapter 3 we explore the role of distance

between advisor and client and also the role of technology and their impact upon the use of external business advice.

Chapter 4 details the methodology used in the rest of the thesis and the data sets and methods employed. The SoE database and the main methodological issues associated with this thesis are discussed in chapter 4.

The empirical contribution of the thesis is developed in chapters 5 to 10.

The empirical analyses in chapters 5, 6, 7, 8 and 9 assess the influence on advice use and impact of: the age, employee size, and employment growth, as well as a series of dummy variables which measure whether the firms are manufacturing/services, exporters/non-exporters, are novel process innovators, novel product innovators, incremental process innovators or incremental product innovators.

The empirical analysis begins in chapter 5 with an investigation of the extent of use and impact of external advice for the full range of providers of advice. Thus the chapter provides an assessment of the private sector and the public sector sources of advice to gauge the levels of use and the satisfaction with each of the providers. Policy lessons for SME sang government will be drawn from the results.

Chapter 6 explores the use and impact of users of the BL/SBS government supported scheme. Because the users of BL/SBS are a sub-sample of the whole sample we are able to evaluate BL/SBS as a scheme and also relative to private and public sources of advice. The background, history and development of the main government supported schemes are explained in chapter 2.

Chapter 7 explores the use and the impact of central government provided external business advice schemes. The background and development of the central

government support schemes are explained in chapter 2. The central government schemes by definition provide a different delivery structure to the BL/SBS and it is important to establish which schemes are achieving the highest use levels and user satisfaction assessments. Whether the results of the localised BL/SBS or the central government schemes are superior will provide an indication for the future direction and development of all public-backed schemes, but especially the flag-ship BL/SBS.

Chapter 8 explores the influence of location on the use and impact of external business advice. A wide range of different locational characteristics have been used in earlier studies. Our aim here is to assess the role of each main type of locational classification whilst controlling for the influence of other variables. As discussed in chapter 8, these relate to both the demand characteristics of a location (such as the number and type of other businesses in the area), its location relative to other businesses, supply characteristics of where service firms are located, more specific geographical features such as the degree of peripherality and rurality, and the eligibility for government assistance.

Chapter 9 looks at the relationship between distance the user and the supplier of the external business advice. The same Geographical Information System Software (GIS) software which is used in chapter 8 allows the distance in kilometres to be calculated between the postcode centroids of the client and the supplier of external business advice. The calculation is a slow process in that the distance between each user and provider has to be calculated individually.

Lastly, chapter 10 draws together the main empirical results and relates these to our objectives. The last chapter indicates the contribution to knowledge of the

dissertation and outlines to policy makers and to SMEs the main changes which need to be made in the provision of external business advice.

1.3 Conclusion

Despite a debate over their effectiveness, it is clear that the importance of SMEs in economic growth and development will ensure the continued support of the SME sector by the public sector. This has led to the development of local business support organisations, the TECs/LECs, BLs which are generally tasked with the promotion of smaller firms in their defined areas. Additionally there are a wide range of private sector sources which SMEs can turn to for external advice.

This thesis seeks to perform the first comprehensive large scale assessment of the use of external business advice in Scotland, including the full range of public and private sector suppliers. A second objective is to assess the range of services and impact of the Business Link/Small Business Service and Business Shop/Small Business Gateway schemes. A third objective is to assess the level of use and impact of central government supported schemes to SMEs. Fourthly, the geography of business advice has remained a comparatively under researched theme and this thesis seeks to explore the relationship between the location of the firms and how this influences the levels of use and the impact of business advice. Fifthly, and following on from the fourth objective the thesis seeks to explore the relationship between the distance between the users and the providers of external advice. Sixthly, and lastly it is the objective to synthesis together the main results and to indicate to policy makers how the provision of business advice needs to be altered in order to better meet the needs of SMEs.

Chapter 2

Business Support and the Local Business Support Organisations

2.1 Introduction

The previous chapter provided the reader with a summary of the objectives of the thesis, the areas where the author seeks to make contributions to knowledge, and a clear map of the structure of the thesis. This chapter introduces the schemes involved in the market for external business advice. It begins by assessing the arguments in favour of business support before detailing the business needs and demands for business services which can be met by business support organisations. Despite a rapid growth in the professional services sector, it is believed that there exists a gap, or market failure, whereby smaller firms are not able to access all their requirements(Keeble et al. 1997). This has prompted government involvement in the SME sector through a series of business support initiatives to help businesses overcome these constraints. As it is believed that there are significant local variations in either the constraints and hence business needs and/or the best means of meeting them, the main business support organisations operate at the local scale. These local organisations are the focus of this chapter.

2.2 Public sector business support

2.2.1 The importance of SMEs to government

Theoretical and empirical research has stressed the importance of SMEs in the process of economic development. Schumpeter (1942) argued that it was through entrepreneurial innovation that economies develop. Although Schumpeter's view of innovation has been criticised for emphasising too strongly the break between the

'old' and the 'new' (see inter alia Abramovitz, 1989: 99), SMEs are still seen as an important source of innovations and hence crucially important for the competitiveness of economies (Sweeney, 1987: 5; Audretsch and Acs, 1994). It has been argued that the most dynamic economies have been those countries with a relatively larger SME sector and that an economy dominated by large firms is more likely to be 'sluggish' (Bolton, 1971; Curran, 1986; Bannock, 1987). As Bannock (1986: 17) wrote, 'we cannot look to large firms as the engine of development.' Moreover, the importance of small firm growth, particularly high technology and innovative firms continues to be a major focus of the present government (DTI, 1998) and is strongly supported by the Chancellor, Gordon Brown (1999).

Policy focus on SMEs has turned particularly on their role in job creation. Research by Birch concluded that between 1969 and 1976, 66% of new jobs in the private sector were created by firms employing less than 20 people (Birch, 1979). Although Birch's contention has been challenged (inter alia Fothergill and Gudgin, 1979; Binks and Jennings, 1986; Storey and Johnson, 1987; Rondinelli and Kasarda, 1992), there can be little doubt based on subsequent empirical research, that the SME sector in many western economies provides a significant number of jobs (Acs and Audretsch, 1990; Curran and Blackburn, 1991; Robson and Gallagher, 1994). A recent growth and competitiveness white paper by the European Commission wrote, '[SMEs] are considered to be the greatest potential job creators' (CEC, 1993: 71). Earlier European Commission (CEC, 1989: 14) research concluded that 'employment in small firms has continued to expand ... conversely employment in larger firms has been less dynamic.' However, research has found that it is not SMEs per se which create jobs but fast growth firms which start small and rapidly

progress (see inter alia Storey et al, 1989; Boeri, 1994). For example, an aggregate study by Storey et al (1987) found that out of a cohort of new firms, the fastest growing 4% will create half the number of net new jobs over a decade.

The benefits of employment growth, higher levels of competition and innovation derived from a strong SME sector have all resulted in an increased focus on the sector by policy-makers with he aim of promoting economic development (Coulson, 1990; Bennett, 1995: 1). Therefore, within Britain and post-1979, there has been a move in both national and local economic policies from influencing 'the distribution of employment to policies aimed at the generation of employment' (Miller, 1990: 197). This has resulted in considerable policy emphasis on SMEs and start-ups (Bennett, 1997) and has involved a shift away from public sector economic management towards partnerships between public agencies and the private sector, with the private sector undertaking different economic development activities (Huthinson, 1994: 336). As Storey concluded, 'the small firm sector in the UK has now reached a size and importance in which public policy towards it cannot be left entirely to those with a vested interest in smaller firms' (1994: 303).

2.2.2 Arguments in favour of public sector business support

The arguments in favour of public support to SMEs focus on overcoming constraints to foundation and growth and therefore, promoting employment growth. More than larger businesses, smaller firms tend to face significant constraints to growth. Their small size inevitably means that they often lack the internal resources to identify growth constraints and then to act to overcome them (Stanworth and Gray, 1991: 40; DTI, 1995: 4). These constraints may not only prevent growth but

result in firm closure (see, for example, Hall, 1992) and many small firms do not survive beyond a few years (Birley, 1998: 20). In particular, the lack of finance, skilled labour and technology have been frequently cited as key constraints to small firm growth (Barber et al, 1989: 10). Even as firms grow and acquire further internal resources, the need for external inputs remains important (Barber et al, 1989: 10), as a number of gaps can be identified in all SMEs where the internal resources are less 'than required for optimum effectiveness' (Scott et al, 1996: 87).

It can be argued, however, that there exists a market failure in that small firms are not able to overcome these 'gaps' through purchasing required inputs from the private sector. Research for the DTI concluded that 'market failure continues to be widespread in the small firm sector' and that private sector suppliers have not addressed this market failure (DTI, 1995a: 1). Hughes (1998: 63) found that the supply of external resources were significant constraining influences on growth. In particular, the difficulties in accessing finance are well documented (see, for example, Harrison and Mason, 1991, 1993; Moore, 1993; Killop and Barton, 1995; Peel and Wilson, 1996), but SMEs also experience awareness, time and resource problems when trying to acquire the information needed to run the business, acquire external expertise and training managers in business skills (DTI, 1995a: 34). This has encouraged policies to overcome these market failures and promote business growth, especially as part of local economic development policies through centralised government or local support mechanisms (inter alia Miller, 1990: 197-199; Adam-Smith and McGeever, 1995).

Some evidence of the effectiveness of business support organisations may be provided by use levels. Bennett and Robson (1999a; 1999b) found a use rate of BLs

amongst SMEs of 27% and of CCIs of 23%, although use tended to be higher in firms between 25-100 employees. Use of BLs has been steadily rising since they were launched (Business Link National Council, 1998). In addition, some evidence of market failure may be provided by evidence that smaller firms tend to use public/semi-public sources more than private sources (Smallbone et al, 1993: 284). The reasoning for this, however, is unclear – is this evidence of market failure or simply the use of subsidised resource? (Bennett, 1995). Certainly, Bennett and Wicks (1993: 44-45) found that demand for Chamber services fell significantly when members had to pay for them, suggesting that businesses tend to look for free information. In addition, there is also a spatial dimension with rural firms morel likely to use the public sector than the private sector (Smallbone et al, 1993: 281). This may be due to the distance of rural firms from the concentrations of business service firms which tend to be in the urban areas (see section 3.3.2).

There is some evidence to suggest that public policy intervention can promote business and economic growth. Research into the activities of Local Authorities found that business support may result in employment growth, although the authors made clear the theoretical difficulties with their estimates (Townroe and Brenton, 1987; Turok, 1988), and Barkham (1992: 240-241) argued that good market information positively influenced entrepreneurial performance. Similarly, investigations into the Loan Guarantee Scheme in the 1980s suggested the scheme resulted in a significant increase in the number of small firms (Robson Rhodes, 1985; Ridyard et al, 1989: 417). A report on TEC provided services concluded that they were extremely cost effective in generating employment and output benefits in client firms (DTI, 1995: 6). Evidence from Belgium found that firms using subsidised

services were more likely to expand than non-users (Donckels et al, 1996: 29) and research in America found that Government assistance programmes did explain manufacturing employment growth in some areas (Walker and Greenstreet, 1991). Therefore, the most recent competitiveness white paper writes, 'Government has a key role in acting as a catalyst, investor and regulator to strengthen the supply-side of the economy' (Cm4176, 1998: 6). In particular, a key objective of Government support programmes is to contribute to the removal of barriers to growth for small businesses at all stages of development (DTI URN99/185: 22). Government support to small firms, therefore, is not only an intervention to prevent a market failure from occurring but also alters the 'margins' so that more businesses can experience growth with the resultant virtuous cycle of economic growth.

2.2.3 Arguments against business support

A number of commentators, however, have warned against government involvement in the provision of business services. Government business support suffers from 'adverse selection', often helping those businesses which are struggling purely because of market forces rather than any market failure. In addition there is the issue of 'moral hazard' whereby business are less critical of potential risk given by the underlying support scheme and are less probable to accept the necessity of restructuring (see, for example, Bennett, 1995; Lingle, 1997). Some analyses have suggested that there is little hard evidence that the provision of Government funded advice agencies to SMEs actually contributes to any improvement in their performance (see inter alia Storey, 1994: 295; Bryson et al, 1997: 720). For example, research by Westhead and Storey (1996) has questioned

the validity of the perceived positive relationship between management training and firm performance and Keeble (1980: 960) showed that manufacturing employment grew in many peripheral areas despite the removal of assisted area status.

Furthermore, evaluation of public support initiatives is often highly complicated. It is very difficult to relate superior business performance, for example, employment growth, to only their receipt of support (Davies et al, 1986: 49). Surveys of businesses which have received support tend to be self-selecting and produce biased results (Coulson, 1990: 174). In the appraisal of the Business Link initiative by Hutchinson et al (1996), the scheme was criticised as 'too selective' and simplifying (Bryson et al, 1997). The lack of detailed analysis of the effectiveness of business service inputs is not only confined to the public sector, but also to the private sector (O'Farrell et al, 1995: 112). Therefore, although external assistance is generally appreciated by the small firm, it is more difficult to link unequivocally to improvements in performance (Storey, 1994: 294).

Another argument is that there is no need for government to solve problems of market failure because the market for business advice is already large and buoyant. Over the recent past, there has been a rapid growth in the private sector which can be related to a tendency to out-source non-core activities through vertical disintegration (Perry, 1992). Transaction cost economics argues that integration of activities within a firm was more likely when the costs of market exchange, as defined by issues including market uncertainty, frequency and asset specificity, is high (Coase, 1937; Williamson, 1975 and 1985). However, the external costs of acquiring business services, especially standardised services, is relatively low (Bagchi-Sen, 1997: 1154-1155). Therefore, a tendency to externalise business

services to a growing and increasingly competitive business service sector has been a major trend in the 1980s and 1990s (Wood, 1991: 165-66; Coffey and Bailly, 1992: 866), although work by Keeble et al (1991) suggested that externalisation represented a relatively minor part of business service growth. In addition, American research found that professional employees within the manufacturing sector actually increased between 1977-86 along with the producer service sector (Kutscher, 1988) and Beyer and Lindahl (1996: 372) concluded that vertical disintegration and cost-driven externalisation were not the major force driving producer services demand. However, they were perceived as being the most important factor in the demand for specialised technical expertise.

Between 1981-90, the overall employment in 'other business services' (which includes management consultants, market research, public relations consultants, employment agencies etc.) increased by 354,000 or 122% (Bryson et al, 1993: 265). Not only has there been a large increase in the business services sector, but the sector has also sought to develop close relationships with SMEs. For example, after the 1989/90 recession, banks have actively sought to improve their relationship with their SME clients and have been increasingly successful (Chaston, 1994). Furthermore, the size of the private business service sector may explain why businesses tend to use private sources more than public sources (Smallbone et al, 1993). Bolton (1971: 116) found that the private sector was the primary source of help for small firms. Accordingly, there is a view that government should let the private sector provide services and content itself to limiting its scope to the external generic environment which influences all firms, especially as many claimed entrepreneurial and management failures are often blamed on perceived market

failures (Bennett, 1995; Bond pers comm, 1999 – John Bond, *Group Chairman HSBC* plc). The Bolton report (1971: 136), argued, 'it is hard to demonstrate that the demand for management advisory services could not be met by the normal mechanism ... it is hard to see why the Government, which has no insights into the problems of industrial management which are denied to others, should be so heavily involved in disseminating advice on them'.

There are other fundamental problems with government support programmes. As Gibb (1993: 9) wrote, 'entrepreneurship is about decentralisation, differentiation and tolerance of chaos rather than about standardisation and order' which is often the approach adopted in policy intervention. The large SME sector exhibits enormous diversity which makes focussing or tailoring any policy initiative very difficult (Bennett, 1996b: 2), especially as many entrepreneurs and owner-managers tend to have a negative view of public sector support systems which tends to discourage their use (Houlder, 1996; IoD, 1996: 11). For example, research by Smallbone et al (1993) found that there is a reluctance by many SMEs to use outside subsidised assistance and Storey et al (1989) found that small firms tend to be more satisfied with their banks and accountants than with public support organisations.

2.3 Private Sector Suppliers

In the case of the two chief professional specialists, accountants and solicitors, advice is given within a very specific institutional framework of self-regulation, which should award them a high level of institutional trust. Accountants implement the statutory audit requirements, which apply to all SMEs except the very smallest (although exemptions from statutory audit for larger-SMEs have been implemented

since 1997). Solicitors implement a number of technical legal requirements, particularly related to loan and finance agreements for property and facilities/plant purchase or leasing. Both accountants and solicitors operate within government-backed self-regulating frameworks of training, qualification, code of conduct, trading standards, discipline, enforcement, and group insurance. These are regulated by the six accountancy associations and the Law Society. There have been criticisms of the depth of accountant and solicitor involvement with SMEs which suggest that their impact on performance can be limited (Kirby and King, 1997). There have also been considerable recent tensions within their associations between the few large and many small practitioners in each case between accounting bodies and government (see FT, 1996, 1998; The Times, 1996). Despite these caveats, accountants and solicitors work within a strong self-regulatory framework which offers a professional status, level of trust and quality control of advice that is not likely to be achievable in most other areas of advice because of lower levels of regulatory and self-regulatory controls.

Bank financial advice is also bound by regulatory framework. However, although the core business of banks is finance, most commonly associated with account, overdraft and other loan facilities, banks also play a role in giving wide advice, but this area is *not* subject to strict regulatory control. Ennew and Binks (1996) argue that banks can draw on the basis of the trust and confidence clients have in them, their approachability, and the information that flows to them as a result of their financial dealings with clients.

However, despite these positive aspects of banking advice, their services have been much criticised for gaps in provision, particularly a narrow focus on overdraft

facilities and/or the absence of wider advisory capacity, and problems of service quality (see e.g. Smith, 1989; Bannock and Doran, 1991; Deakins and Dussain, 1991; Cowling et al, 1991). Indeed the loyalty of customers has been interpreted as a consequence largely of inertia, high costs of switching banks, and a belief that there is little difference between banks. Hence, whilst Doggett and Hepple (1995) find that clients are in contact with their bank frequently for advice, they provide a relatively low rating for the quality of its services. Particularly negative views have focused on service charges for SMEs, inflexibility of financial products and inability to take a long term view (see e.g. Cowling et al, 1991), which is contrasted with the attitude of German banks (see e.g. Bannock and Albach, 1991). Hence, although banks may gain advantage from a high level of institutional trust, and certainly are recognised as having a high level of professional integrity among their staff, the level of institutional trust on which they can draw will be relatively low for their advice compared to their mainstream finance services.

The role of business friends or relatives as advisers draws on the wider social networks of the owners and managers of SMEs. Their use will draw on personal trust, but will be limited by the extent to which the relevant experience exists within an owner or manager's personal networks. In some cases friends and relatives act as the preferred and most valuable route for many of the smallest owner managers (DE, 1991a), who are often resistant to giving out information and believe that 'no one could know their business better than themselves' (DE 1991b: 23). Hence, for micro businesses and owner managers, friends and relatives may be perceived as the best way of getting value at a low price and with a high level of trust, with also a high level of confidentiality and retention of personal control by the owner.

Customers and suppliers are an important part of the information system of any business. At the most crucial level customers are a market signal of the success of the business's products and trading. Similarly, suppliers are a source of information on new technologies, opportunities to innovate, and reduction of costs. But this essential flow of information may also develop into quite important exchanges of advice. These exchanges can range from the informal to formal contractual arrangements or alliances between businesses.

A specific aspect of the role of customers and suppliers as sources of advice can be through networks and local embeddedness. In part this is an extension of the social networks of friends and relations discussed above. Networks of individual and institutional trust may stimulate inter-firm linkages, exchanges of information and innovation in a highly context-dependent structure; i.e. is deeply locally embedded (Brusco, 1982.; Sabel, 1989; Granovetter, 1985). This means that coercive market power may be supplemented or replaced by supportive exchanges and continuing relationships. Some evidence of this structure is claimed for business service firms in Britain (O'Farrell and Wood, 1998) and among financial service firms (Amin and Thrift, 1992). However, in detailed surveys Curran et al. (1993) and Curran and Blackburn (1994) find little evidence in Britain of extensive or supportive local supplier networks for SMEs. Indeed they find a general decline in the social context of inter-firm relations, and weaker development in newer and more rapidly growing firms.

Consultants are a key aspect of the advice sources available to SMEs, and their role has been stimulated by government initiatives (particularly the Enterprise Initiative) and more recently through Business Link. Consultants range over a wide

variety of different intensities of relationships with their clients, from short term and very specific advice to broader advice on management strategy, product development, marketing, technology, etc. Kirby and Jones-Evans (1997) show, moreover, that the consultant's objectives and approach can vary considerably. Wood et al. (1993) show that the demand for management consultancy and market research advice is strongly differentiated by firm size (higher for larger firms), by sector and to some extent by region, with consultancy covering a wide range of specialist and technical areas, from human resources and information technology, to business strategy, marketing and logistics. Hence it is important to differentiate the type of firms in any assessment. Wood et al. (1993) also show that the demand for consultancy is for specialist rather than generalist skills in over 50% of cases, and for a mix of specialist and generalist skills in a further 25% of cases. The generalist consultant therefore satisfies no more than about 25% of the market demand. This suggests that the choice of source of advice will tend to give preference to professional specialists where they exist (as in accountancy, law, finance), so that consultants as a generic category will tend to seek to differentiate themselves by specialism and branding. Generally the source of trust drawn on when recruiting a consultant is reputation, branding and personal recommendation (Bryson, 1997). These are essentially market mechanisms for signalling quality (see Shapiro, 1983). Hence consultants probably draw little on either personal or institutional trust and rely chiefly on market signals.

Sector and local business associations are used chiefly by a self-selecting group of businesses that choose to be members. Associations appear to fill a niche market for advice services where they 'brand name capital'. This is interrelated with a

relatively high level of institutional trust based on their duty to members (usually written into their constitution, Bennett, 1996) and gives them a privileged route for access and exchange of advice with their members. Detailed studies of business associations demonstrate that they are chiefly supporting advice requirements of low cost, moderate frequency and duration, but high human asset specificity (knowledge skills) and high interconnectedness with similar and other transactions (Taylor and Singleton, 1993; Schneiberg and Hollingsworth, 1991; van Waarden, 1991; Bennett, 1996). The volume of association advice to members can, however, be quite considerable: enquiries per member per year range from zero to 106 in sector bodies (Bennett 1998), and average five per member per year in chambers of commerce.

2.4 SMEs and their 'needs'

The business support organisations seek to promote economic development and growth through the provision of business services to smaller firms. In the private sector the main objective is about delivering a service profitably, and the wider benefits are only the means to achieve this objective. Effective public policy and business support, especially in the promotion of growth in the sector, requires an understanding of the constraints to growth which small firms face (Gibb and Davies, 1991; Storey, 1994: 253). There has been significant work undertaken into the constraints which firms face during expansion, although different terminologies complicate any analysis of business 'needs'. Previous analyses have researched many issues – demands, requirements, wants, needs, etc. – which although sharing a generic focus, have very different underlying objectives. When considering

secondary research into the service 'needs' of SMEs, therefore, there needs to be an underlying recognition of different terminologies, definitions and methodologies.

2.4.1 Business 'needs' and demands

Business needs have been identified in a variety of ways. Early research by Watkins (1982) identified the major 'crisis' issues in a sample of businesses. Although a fifth of the sampled firms claimed to have experience no crises, 38.1% had experienced crises in marketing, 31.2% in finance, 14.3% in managerial expertise and 13.0% in personnel issues. In a similar analysis, Hall (1992) investigated the factors associated with 300 small firm insolvencies in London between 1973 and 1983. Failings in operational management, particularly under-capitalisation, poor debt management and financial management, was identified as the most important issue in businesses becoming insolvent, although external shocks were also considered as important (Hall, 1992: 245).

There is evidence that businesses needs have changed little over the past decade. Stanworth and Gray (1991: 42) used a quarterly survey by the Small Business Research Trust to show that financial issues remained the most important constraints throughout the 1980s. Whatever the economic climate, financial issues remained dominant, although macro-economic fluctuations were important in determining the importance of other constraints. For example, the importance of the lack of skilled employees was found to be inversely proportional to the unemployment rate. Finance and training have also been identified as important in many other surveys (inter alia Hull and Hjern, 1987: 83; Hitchens and O'Farell, 1991: 66; Storey, 1994: 156; Barkham et al, 1996: 128). However, research into the

use of raised capital found that only 3% of companies sought external finance to invest in the training of personnel and 5% for research & development. With respect to future expected requirements, only 10% of businesses planned to access external finance to investment in training (BCC, 1994).

A study by Bennett and Wicks (1993) of business demands in the Kent, Manchester and Thames-Chiltern Chamber areas, found that on a 'low cost fee basis' financial, networking, advisory and legal services were demanded the most. Premises and marketing services were all considered important, although training and human resource development services had relative low levels of demand. This is somewhat contrary to the evidence sited in Barkham et al (1996: 128) which found that out of 18 constraints to growth, training was the second most important constraint and management development and training the sixth most important constraint. Similarly, a survey by Coopers & Lybrand on behalf of Business in the Community (1990) found demand was highest for direct financial aid; then businesses information and advice; training; and premises. Similarly, a series of surveys and conferences undertaken by the Institute of Directors, found that the top areas regarded by small businesses as priorities for government action included government grants; regulations; taxes including PAYE/NI; quality standards; and employee skills (IoD, 1996).

There is evidence to show that at a general level, businesses at different ages and sizes need and demand different services. For example, a BCC survey (1994) showed that training was significantly more important for larger firms than for their smaller counterparts. Smaller firms also tend to have different recruitment and personnel methods than their larger counterparts (Westhead and Storey, 1996). In

addition, financial needs also vary according to the stage of firm development. A number of studies have highlighted the fact that fast growth firms need capital to expand, whereas declining/stable or new firms have a greater need for cheap debt finance (Alpander et al, 1990; Hall and Young, 1991; Storey, 1994). Rising capital is a particular constraint which is more difficult for smaller businesses (Binks et al, 1992: 35; Mason and Harrison, 1992).

Research in America has identified the differential constraints firms experience at various ages. In an analysis of the problems newly established firms encountered in their first three years, a survey of 122 businesses found that the most critical problems were: finding new customers; obtaining finance; recruitment; employee relations; product pricing; business expansion; legal problems; product quality; and regulatory frameworks (Alpander et, 1990). Of the sample, 70% first identified these problems as important during the first year of operation, 16% first identified the problems in the second year and 14% in the third year. Furthermore, over the three years the nature of the problems changed from the initial issues of market demand, finance and recruitment to product quality, legal obstacles and administrative issues (1990: 12). In addition, other American research also identified the increasing importance of regulatory frameworks as businesses grow and become larger (Terpstra and Olson, 1993: 13).

It is apparent from this research that different types of small firms experience different constraints to growth. As such, the problems met in the initial stage of operation are typically internal issues, but as the firm grows and becomes older, increasingly external issues, especially legal and administrative, become more important. Whereas internal issues can be dealt through the application of specific

management skills, the latter constraints often require the use of external sources to reduce their impact. Thus it is important to bear in mind inter-firm differences when assessing business support organisations.

2.4.2 The Business Link bid 'needs' surveys

Of relevance to this thesis is the way in which needs have been perceived by business support bodies. In the case of the BLs, analysis of DTI information (see Bratton, 1997) reveals a list of business 'needs' cited in the BL bid surveys. The BL bid surveys were undertaken by the partnerships as part of the awarding process. The analysis used surveys from 50 BLs which were undertaken between 1990 and 1994. The average sample size was approximately 900 firms and the attained samples were all above 100 firms. The sample size varied between BL bids according to the survey methodology undertaken – the majority used interviews and questionnaires via the post or over the telephone.

Together, these BL bid surveys represent one of the largest single sources of information on business 'needs'. However, given the decentralised nature of the survey process (in some areas, it was undertaken by the TEC, in others by external consultants), there was considerable variety about what the BL bidders investigated in their surveys, especially as the actual definition of 'needs' is highly variable in the bid texts, with reference to demands, problems, market gaps, priorities and requirements. Such definitional issues combined with different methodologies may explain any differences between areas, but despite such problems, the analysis of the BL offers one of the most comprehensive analyses of business 'needs' that has ever

been possible in Britain. Table 2.1 identifies the list of business's 'needs' as assessed by the number of citations in the different bid documents and surveys.

As with other surveys, financial issues area a concern of small firms occupying the first and fourth positions. The second most cited 'need' is training and marketing and sales are also considered important by the responding firms. The second group of concerns includes business planning, exporting and legislation. Access to information is in the middle of this second group, surprisingly low down the rankings given the priority given it by the DTI and many of the Business Links. Lower ranked concerns included representation, production, recruitment, the environment and premises. The rank for European issues may be artificially reduced as many companies may have considered this to be an exporting issue. Likewise, taxation and VAT may have been included in the financial concerns which featured more prominently. The relatively low rankings for premises and recruitment, in 13th and 16th position respectively, may have been a result of the periods of the surveys at the end of the 1990 – 93 recession.

Although the BL surveys must be treated with caution, the results identified here do conform with other analyses detailed above. In addition, although the BL bid analysis has excluded Wales, research by the consultancy Pieda shows that the needs of businesses in Wales are strikingly similar. Grant availability (capital raising) is the most important ranked need, relevant to 82% of employers; followed by business development advice (74%); and training (69%) (Pieda, 1993: 15).

Table 2.1: Business Link Needs

Rank	Number of Citations	'Need'
1	45	Capital rising / management
2	44	Training / management training and staff development
3	40	Marketing / sales / market opportunities
4	38	Financial advice
5	31	Business planning
6	28	Quality / customer care
7	26	Exporting
8	26	Information
9	23	Innovation / technology / R&D
10	21	HSE legislation
11	21	Employment legislation
12	15	IT
13	13	Premises
14	12	Environment
15	11	Networking / supply & distribution
16	10	Recruitment
17	10	Europe
18	8	Production
19	7	Taxation / VAT
20	2	Representation

Source: Business Link bids (n=50)

2.4.3 Business 'needs': summary

There would appear to be substantial areas in which SMEs believe that constraints prevent their growth. Analysis of the resulting business demands/needs, however, remains confused by the mixed picture resulting from the different surveys.

Many surveys do not investigate the full range of business services available and there are significant methodology variations.

These needs have been defined at very generic level which itself is problematic. O'Neill wrote, 'one should, however, be cautious of generalisations regarding a universum composed of so many unique individuals as found in the small business sector' (1990: 58). This raises problems for business service providers, for example CCIs, which need to recognise distinct and unique markets and the diversity of needs and be able to 'match training support and provision accordingly if their 'message' is to 'connect' effectively with those they seek to help' (Goss and Jones, 1992: 14). The general finding, for example, that many SMEs lack management skills and need management training does not necessarily lead to a well-defined policy intervention of providing more training courses to meet SMEs' needs (Bennett, 1996b: 2). In actual fact, work by Westhead and Storey (1996) in an analysis of the link between management training and small firm performance concluded that there was no apparent link between management training and increased firm performance.

Despite these issues, a possible hierarchy of needs can be identified. Finance is consistently recognised as one of the most important constraints faced by businesses, especially younger and smaller businesses. This is subsequently translated into high demand for finance-related services by businesses. Marketing (which includes the identification of new market opportunities as well as help and advice on marketing products) and retaining staff are also found to be important requirements. These are however, extremely broad categorisations and individual aspects of each category may be more or less important than the above rank implies.

In addition, it is important to remember that business needs change as the firm grows. There are two issues: first, the very nature of service requirements change (Holmes et al, 1991); and second, the ability to internally resource needs also changes. As firms grow and become larger, external issues, for example administration, legislation and management skills, become more important. For younger firms, internal issues still dominate and for firms which are stable or declining, finance and marketing are priority needs. Training is essentially a need for companies aiming to boost sales and productivity or trying to anticipate the future. For fast growth firms, therefore, training may be considered more important than finance or vice versa.

2.5 The localisation of support

2.5.1 The localisation of business needs

Government policy over the past two decades has tended to favour increased localism in the delivery of business support initiatives, i.e. the development of SME support schemes, for example, through the Urban Development Corporations and Enterprise Zones, the RDAs, and the introduction of the TECs and BLs, all served to focus SME support at the local level, driven by the idea that only local agents can really understand the 'needs' of local companies. This argument derives from two inter-related strands of thought.

First, regional development theory argues that generic environments are important in determining the growth potential of SMEs and new firm formation rates (O'Farrell and Crouchley, 1984; Moyes and Westhead, 1990; Ashcroft et al, 1991; Keeble and Walker, 1994). In particular, the external environment is perceived to be an important influence on business growth (Barkham et al, 1996: 136). Favourable

environments are perceived to be those with an abundance of the factors of the production including labour supply, managerial expertise, availability of good premises, good infrastructure and access to markets, financial capital and developed institutions (Aydalot and Keeble, 1988). Accordingly, regional differences in economic activity could be explained by variations in entrepreneurial vigour, especially when entrepreneurs have to respond to significant differences in the supply side of an economy (population growth, capital accumulation etc.) and the demand side (market size, consumer tasters, etc.) (Wigley and Lipman, 1992: 21).

Certainly work by Moyes and Westhead (1990: 134) found a significant relationship between the level of entrepreneurial activity and the generic environment, with new firm formation rates lower in the older industrial and the peripheral rural areas due their 'poorer' socio-economic environments. For example, areas in the south-east tend to have a higher proportion 16-17 year olds in education, which may translate into a higher quality workforce (Champion et al, 1996: 48-49). It is perhaps not surprising, therefore, that the peripheral regions of the UK have been shown to exhibit low firm creation rates (Keeble, 1990; 1994). As a consequence, Ashcroft et al (1991: 405) concluded that any attempt to increase firm formation rates in the peripheral regions should aim to address certain aspect of the socio-economic structures rather than encourage entrepreneurship per se, although research by Peters (1989) concluded that there was little evidence of regional differences in the performance of small firms.

Second, differences in the industrial structures, either resulting from agglomeration economies, history or as the result of generic environments, may also result in spatial variations in business requirements. The above section identified

differences in business needs by firms in different sectors and sizes. It is clear that many sectors exhibit high levels of spatial agglomeration in particular locations (Porteous, 1995), with different industrial sectors exhibiting different geographies (Dicken 1992: 101). Geographic concentration of business activity resulting from agglomeration economies remains perhaps the most important issue in both economics and geography (Krugman, 1991: 4-7). Businesses tend to locate in certain locations due to the interplay of the required factors of production and the output markets as well as the benefits of scale economies resulting from agglomeration (Garner, 1967: 305) and, therefore, increasing returns to location are likely to be stronger for some sectors than for others (Porteous, 1995: 3).

The concentration of business activity has important historical and future implications as different industries have different geographies. Massey (1995: 125-126) highlighted the importance of history in explaining the geography of economic activity, especially the development of 'new' industries in the South East and Midlands of England. This has resulted in a visible split between services and manufacturing with disproportionately high levels of manufacturing employment in the north and service employment in the south (Minns and Tomany, 1995: 203). These geographical variations have been accentuated by recent economic developments. Work by consultants on behalf of the DTI showed that more than 80% of all Internet start-ups in the UK are located in London and SE England (Spectrum Strategy Consultants, 2000). Wood (1995: 2-3) showed that in 1989 over half of all UK 'management-related' business service employment was in London and the South East, with approximately one-third in London, a concentration which was accentuated through the 1980s.

Based either on structural differences or generic socio-economic environments, it would be expected, therefore, that there would be significant differences in business constraints between localities and that government policy should be highly decentralised to operate at the local scale to allow for such diversity and to cater to specific local needs (Hull and Hjern, 1987: ch. 9). For example, areas with relatively low quality labour forces would need a localised training focus to remove this local constraint. But an analysis of the performance of growth-oriented SMEs in the UK periphery (Scotland, Wales, Northern England and Merseyside) suggested that the adverse economic conditions in the periphery did not 'adversely affect the performance and growth of small and medium sized firms' (Vaessen and Keeble, 1995: 502). This may be because businesses in the periphery already have a greater range of public support structures to draw on which help to more than overcome their additional constraints and different strategies (North and Smallbone, 1995). However, work by Hitchens and O'Farrell (1991) compared the key constraints to growth in two groups, urban versus rural, of companies in England and Wales and found few major differences between them. Another comparison between manufacturers in Scotland and SE England found similarities between the use of business services (O'Farrell et al, 1993: 392).

Similarly Barkham et al (1996: 132-135) compared constraints to growth across four regions (N. Ireland, Hertfordshire, Wearside and Leicestershire) and found that there was a general consistency across the regions regarding the nature of the constraints to growth. Some regional differences identified by Barkham et al included a shortage of labour and premises in Hertfordshire, but otherwise there were few differences. Outside Britain, in an analysis of businesses in the Brussels

metropolitan area, Donckels et al (1996: 28-29) found that the external environment had no significant relationship with business expansion.

Research by Birley and Westhead (1992: 332), however, did identify significant differences in the business services used by start-up companies in 'assisted' and 'non-assisted' areas. In particular, firms operating in 'assisted' areas used financial services to a far greater than businesses in 'non-assisted' areas than in urban areas. In contrast, however, Curran and Blackburn (1994) found that most SMEs draw on national rather than local suppliers of services.

Research of the Business Link bids suggest that at the geographical level of the BL partnerships and Tec areas there are no significant differences in business needs (Bratton, 1997). The analysis of the large scale surveys developed for the BL bids to the DTI revealed that there were no significant differences in business 'needs' between TEC areas, generic environments and between urban and non-urban areas. Each categorisation yielded similar results which indicated that the null hypothesis advanced, that all the samples had come from similar populations, is valid and that business needs are relatively geographically homogeneous at this particular spatial scale. Although it is recognised that at smaller spatial scales differences in business needs may be more significant, at the scale at which the key support organisations operate, there are few, if any, significant differences.

2.5.2 Localised organisations

There are a number of business support organisations operating at the local level – from henceforth, known as local business support organisations. In addition to the private sector, the key local agents providing services to SMEs are enterprise

agencies, Chambers of Commerce (CCIs), Business Links (BLs), Training and Enterprise Councils (TECs) in England and Wales and Local Enterprise Companies (LECs) in Scotland and the Chambers of Commerce Training and Enterprise (CCTE). The CCIs and BLs provide a range of core services which are standardised across countries.

This research focuses on the larger local support bodies – the BLs. It does not consider in detail the Enterprise Agencies or the local Authorities. The Enterprise Agencies have increasingly been incorporated into the public local business support organisations either through sub-contractual arrangements or as partners in Business Link partnerships (Bennett, 1995a). In addition, although the Local Authorities have an important role in economic development, their activities tend to be relatively small. Only 30% of LAs employed more than 6 full time staff with economic development responsibilities and 40% employed only 2 or less (Coulson, 1990: 176). In addition, many LAs do not actively provide services to SMEs. A survey by Smallbone et al (1993: 289) found that only 4% of small firms had received some assistance from their Local Authorities which tended to involve help with premises or grants.

The following section details the CCIs, the TECs/LECs, the BLs in more detail, but given the focus of the research, the primary emphasis is on their geography and the underlying determinants of their geography.

2.6 The local business support organisations

2.6.1 Approved / accredited Chambers of Commerce and Industry

The chambers are collective organisations where membership is voluntary, but they are commercial bodies and are, therefore, somewhat different from the publicly funded organisations. The primary motive for businesses to join a Chamber is to gain access to services which are not generally available to non-members, i.e. specific or exclusive to members (Bennett, 1996a: 277). To this extent they are following Olson's logic of collective action (Bennett, 1998: 505; Olson, 1971: 5-7). The Chambers of Commerce are financed through members' subscription fees although the main source of income is through charges for services rather than subscriptions (Bennett, 1998: 504). The membership of Chambers is positively related to the volume and range of services offered and the size of the potential catchments (Bennett, 1998: 511). Although representation is cited by the Chambers as a key service provided, Bennett has demonstrated that few businesses join the Chambers to access this collective service, less than 5% of membership (1996: 656/675). The core services delivered by the Chambers are presented in Table 2.2, although not all are provided by all the chambers and some can be sub-contracted (BCC, 1998). In addition, Chambers may also develop local services, for example, IT consultancy, Internet web site design, fleet contract hire, legal advice, ethnic group activity and a direct mail service

Table 2.2: Services provided by the approved / accredited CCIs

Generic Service	Main services include
Information	Staff capable of answering problems and questions posed by member companies; database of member companies; referral system which provides business counselling to member companies; information library
Representation	Staff capable of advising on methods of lobbying effectively at all levels; regular assessments of members' views; contacts at local and regional levels with relevant public sector organisations including MPs, MEPs, TECs/LECs, RDAs and EU; must be involved with business-education links
International Trade	Staff capable of answering problems and questions posed by member companies; links with DTI and export clubs; access to databases or library information on export markets; able to identify market opportunities for member companies; list of accredited translators and interpretators; organised export and important training courses
Training	Seminar and training programmes; signposting of local training courses and educational facilities; awareness of requirements of local labour market
Networking	Lunch meetings; Conferences; Award Scheme; Small Business Service; employment Advisory Service; Health and Safety Club

Traditionally, the Chambers were localised groupings with some co-ordination provided by the umbrella group – the British Chambers of Commerce. This localisation resulted in variations in the quality of chamber activities, especially as coverage was not nationally uniform (Caulkin, 1997). Hence Birmingham had a strong and successful chamber whilst Kent, despite its size and relative economic importance, was poorly served by an array of small, weak, single-town chambers. In 1971, the Bolton Report (1971: 121) criticised the Chambers, arguing, 'small in membership, ill-financed and under-staffed, they are hard-pressed to perform even the representational and information functions which have traditionally been their main concern'. The report registered the committee's hope that they would see the development of larger and more ambitious trade associations / Chambers through a

significant reduction in their number, 'because only through this can the standard of their educational and advisory services to members be significantly improved' (1971: 121).

Shortly after the Bolton Report, the Devlin Report (1972) was commissioned to review the state of industrial and commercial representation and if necessary to make recommendations. The report concluded that the chambers of commerce needed to be reformed (1972: paras 8 & 282). It argued that the Chamber movement remained too geographically fragmented to effectively represent its members or provide effective services. The Report argued that the Chambers movement needed to have stronger structure and more powerful components within that structure.

Neither the Bolton nor the Devlin recommendations led to any immediate change in the organisation of the BCC. In October 1990, however, the BCC embarked on a re-assessment of its position as a business support organisation through the formulation and implementation of its Development Strategy in order to 'establish a system of effective business support', consistently and comprehensively across the UK (Middleton, 1991). The primary motivation of the Development Strategy was to 'assure the future survival and development of the Chambers of Commerce in the face of increasing external pressures' (BCC, 1993). An essential target of the Development Strategy was to achieve a Chamber network providing national coverage. This resulted in a detailed investigation of the Chamber geography in Bennett's (1993) analysis. Using the 'concept of critical mass necessary to provide local business services of standard equivalent to or better than those in the rest of Europe' Bennett proposed a geography of 48 CCIs (Bennett, 1993: 96).

There was a process of restructuring and rationalisation, but in contrast to Bennett's 48 CCIs the final CCI approved/accredited network had a total of 59 CCIs, although a number of these are partners of larger Chambers. The CCI network is detailed in map 2.1

Despite the intention of providing national coverage, it is clear that Bennett's objective of national coverage has not been met. All of the south west England from Dorset, Wiltshire and Avon are not covered by an approved/accredited CCI, although there are smaller associate Chambers operating in Somerset and Plymouth. Gloucestershire is also not covered by an approved/accredited CCI although it does have small associate Chambers operating out of Gloucester. Stockport remains outside the coverage of any approved/accredited CCI as is Cumbria, although there is an associate CCI in Carlisle closely connected with Cumbria Enterprise. Although the major population centres of Wales and Scotland are all covered by approved/accredited Chambers, large rural areas are without coverage. These gaps in the coverage may just indicate that some local economies remain too small to be considered part of an integrated local economy and too small to provide sufficient demand for an organisation to justify the marginal cost of coverage.

Importantly, however, the move towards accreditation has resulted in a number of significantly larger Chambers. For example, Leeds, Bradford and York are linked and serviced by Chamber Management Services Ltd and the North East Chamber is virtually a regional Chamber covering Durham, Tyne and Wear, Northumberland and Cleveland with a head office, five local offices and six training centres. In the West Midlands, Birmingham Chamber expanded to include Redditch, Solihull and Sandwells with links to Dudley. This remains the position in 2002 but

there is a pressure to change and adapt to meet members' needs and in order to increase the number of members.

2.6.2 Training and Enterprise Councils / Local Enterprise Companies

The creation of a national network of Training and Enterprise Councils (TECs) was announced in December 1988 in the White Paper, 'Employment for the 1990s'. The TECs were tasked to take responsibility for running the training and enterprise programmes previously organised and delivered by the Department of Employment's Training Agency (Wigley and Lipman, 1992: 95). In addition, they were to be responsible for the planning and administration of the DTI's Enterprise Allowance Scheme and the Small Firms Service. They were also to work to encourage and support small business support through co-operation with the private sector, especially the local enterprise agencies, to promote local economic growth and development (Miller, 1990: 207; Jones et al, 1996; Lourie, 1997: 7-8), although there has been little evidence of TEC-led enhancements in the delivery of business start-up support and their effectiveness (Jones, 1996: 513).

Map 2.1

The 1997 approved / accredited CCI network

Scale: approximately 1cm: 30km.

During 1989, employers were invited to submit bids to establish a TEC in their area. Within one year, 50% of the TECs were in development and within 2 years, 50% were operational (Bennett et al, 1994: 40). The first TECs became operational in April 1990. These were: Clydesdale & Kirklees; Cumbria; Devon & Cornwall; Hertfordshire; South and East Cheshire; and Thames Valley. The last TEC, Central London was launched in October 1991. There were initially 82 TECs. In April 1992, responsibility for Welsh TECs was transferred from the department of Employment to the Welsh Office. TECs are controlled by a Board made up of between 9 and 15 individual members of which two thirds are from the private sector and the remainder from the public sector (Bennett et al, 1994: 33). Further private sector involvement was also encouraged (Twomey et al, 1994: 496; Wigley and Lipman, 1992: 162).

The main focus of TECs is on training but they are also contracted by the government to 'promote and support the development of small businesses and self-employment within their areas' (DoEm 1988: 40). Small businesses, however, have criticised the range of services offered by TECs arguing that they do not focus enough on developing enterprise or providing services (IoD, 1996: 31). In a survey by PA Cambridge Economic Consultants on behalf of the DTI it was found that all the responding TECs provided information and advice; 95% provided business counselling and consultancy; and 93% provided business skills training (DTI, 1995a). The range of services provided by the TECs is detailed in Table 2.3.

Table 2.3: Service provided by BL/BS/BC

Service	Explanation
Gateway and Information Services	Information on company and product sourcing; Companies House and credit information; grants and finance; business and market intelligence; availability and cost of information; access to regional and national business information services; & access to a business library service
PBAs and Specialist Counsellors Design	Design audit; information on design briefs, consultancy selection and project management; & related information
International Trade	Market information; promotional support; advice and counselling; & strategic advice
Innovation and Technology	Process to help identify and take action on their technological and innovation needs; & related information
Consultancy Listing and Selection	Consultancy selection support including access to a quality assured consultant listing service; subsidised consultancy with public funds meeting no more than 50% of the total cost
Finance	Basic financial information and advice especially the requirement of revenue departments, credit referencing agencies, business insurance, bank services and availability of grants, a programme of financial management skills development; financial health checks;

	access to qualified local accountants; and a 'Finance Packaging Service' – access to an impartial and independent service to help clients explore the full range of products and secure appropriate finance.
Management, Training and Human Resources	Advice and support to develop the management and strategic skills of client businesses; information, awareness raising activities and access to management development opportunities and business skills training; information and advice on training, human resource development and employment issues; & access to specialist support on Investors in People and human resource development
Marketing	Access to specialist advice in relation to marketing issues; information on and access to training an development on marketing issues
Premises and Planning	Access to specialist advice in relation to marketing issues; information on and access to training and development on marketing issues
Regulatory Issues	Information and advice on regulatory issues
Supply Chain Development	Access to services of the regional supply office and other supply chain support available locally.

Source: Business Link Service Framework; 2nd edition; 12th March 1997

The TECs initially had no predetermined geographical boundaries, although the government did provide a set of principles for their geographical development. Bennett et al (1994: 38) detailed six criteria which were sought by the DoEm for TEC size: first, a 'labour market of some scale' defined as an 'average working population of 250,000', and normally at least '100,000 unless there are exceptional circumstances'; second, an area possessing 'its own sense of identity'; third, a budget range of £15-50m; four, a total number of TECs, above 100 for the whole of Britain, that should not 'exceed the number that can be reasonably supported and monitored for performance'; five, boundaries would not be prescribed but would reflect 'the diversity and local relevance that TECs are bringing to managing the delivery of training, enterprise and education services'; and six, a staff complement sufficient to justify at least one grade 7 and one SEO equivalent post (1994: 38).

It was planned that TEC boundaries would be developed by groups of employers in close proximity coming together and that each TEC application would consider 'what boundaries best reflect the economic, geographical and travel-to-work patterns of the local labour market and the size of the population to be served' (Bennett et al, 1994: 77). It was assumed, therefore, that each TEC would cover a particular local economy which would allow its resources to be more accurately targeted at local problems. But in an analysis of TECs/LECs and their local fit, Bennett et al (1994: ch5) highlighted the fact that very early on in the development of TECs this policy was soon abandoned. This shift can be traced to the need for fast implementation and the existence of historical 'strong' boundaries. As such, territory was increasingly 'carved up' in order to achieve deadlines often according to local authority boundaries in order to avoid prolonged confrontation which could

cause delay. This often meant the adoption of the pre-existing boundaries of the Local Area Manpower Boards or the Local Education Authority Boundaries (Lourie, 1997: 9).

The final boundaries of the initial TECs were defined, therefore, in a number of ways other than through the structure of local economies or LLMA characteristics (Twomey et al, 1994: 499). Bennett and McCoshan (1993: 186) state that political and administrative factors played a much more important role than labour markets in determining TEC boundaries. Many of the 'old' and 'conventional' boundaries have, therefore, survived intact and the boundaries of TECs continue to bear close resemblance to those of local authorities. The geography of the TECs/LECs is presented in Map 2.2.

Given the overwhelming emphasis of TECs on training and education rather than enterprise support this close fit with local authority boundaries may be appropriate. In addition, the irregular spatial distribution means that TECs vary significantly in size and population which has led to many difficulties in the ability of TECs to introduce locally driven policies (Lourie, 1997: 27). Bennett et al (1994: 79) wrote, 'given the number of these districts, but also considerable variation in the political complexion and economic development priorities, TECs have experienced considerable difficulties in developing coherent strategies.'

The Scottish Local Enterprise Companies (LECs) were announced in the White Paper, 'Scottish Enterprise', also published in December 1988 (Cm 534). The LECs had responsibility for the training and enterprise budgets of the Training Agency and also the remit of economic development previously the responsibility of the Scottish Development Agency (Lourie, 1997: 8).

Map 2.2

The Training and Enterprise Councils and Local Enterprise Companies

cale: approximately 1cm: 30km.

This wider remit meant that the LECs had responsibility for 'stimulating the growth of self-sustaining enterprise, encouraging the creation of viable jobs and the reduction of unemployment' as well as improving the skills of the workforce in its area (Cm 534: section 5.2).

All the LECs became operational in April 1991 with Scottish Enterprise taking responsibility for LECs in Lowland Scotland and Highland and Islands Enterprise taking responsibility for LECs in the Highlands and Islands. The geography of the LECs was structured from the outset in that the Scottish prospectuses contained maps and asked prospective applicants to relate their proposals to one of the areas shown on these maps. The boundaries of the proposed areas, however, were all based on local authority boundaries with little consideration of the underlying economic geography.

2.6.3 Business Link /Business Shop / Business Connect

Business Link was an initiative which sought to reduce the confusion from the delivery of local support and services (Bennett and Robson, 1999a: 108). Hesseltine as Secretary of State at the DTI appears originally to have envisaged the Business Links becoming the contracted structure through which the partners' services would be delivered, e.g. as developed in Wigan (Payne and Bennett, 1998: 8). The full range of the services provided by the Business Links is detailed in Table 2.3.

An important innovation of the Business Link partnerships was the role of the personal business advisors (PBAs). PBAs are responsible for the development of long term relationships with local SMEs and operate as gateways to the Business

Link services and activities (Bryson et al, 1997: 721). PBAs are very expensive but have the potential to fundamentally change the nature of public support to SMEs (Bushell, 1995: 172). PBAs are also complemented by Innovation and Technology counsellors, export counsellors and design counsellors.

Only one proposal per area was considered by the DTI, and each of these proposals had to show the active involvement of all the key business support organisation in the covered area (Bryson et al, 1997: 720). The boundaries of the BLs, therefore, were based mainly on the boundaries of the TECs (Bennett and Robson, 1999a: 107). London is a relative exception in that London Business Link which covered all of London holds its license directly from the DTI and then licensed the other Business Links operating in the region (Bryson et al, 1997: 720). Within the defined boundaries, there are a number of delivery structures including the 'hub and spoke' model and autonomous offices. This meant that there were a large number of outlets throughout the country, as detailed in map 2.3.

In Wales, a different first-stop-shop approach was followed which emphasised a basic information service with referrals to specialists called Business Connect (Bennett and Robson, 1999b: 108). Launched in January 1996, Business Connect (BC) is a loose consortium of public agencies and private sector organisations providing an information, advice and support network for SMEs (Business Connect, 1999). Particularly important are the local enterprise agencies which provide the majority of access points to BC and who also provided many of the information officers, business counsellors and advisors (Wales Enterprise Ltd, 1997). The services provided by or accessed via BC are limited to: business advice; business information; and referral to specialist services. Predominantly, access to the

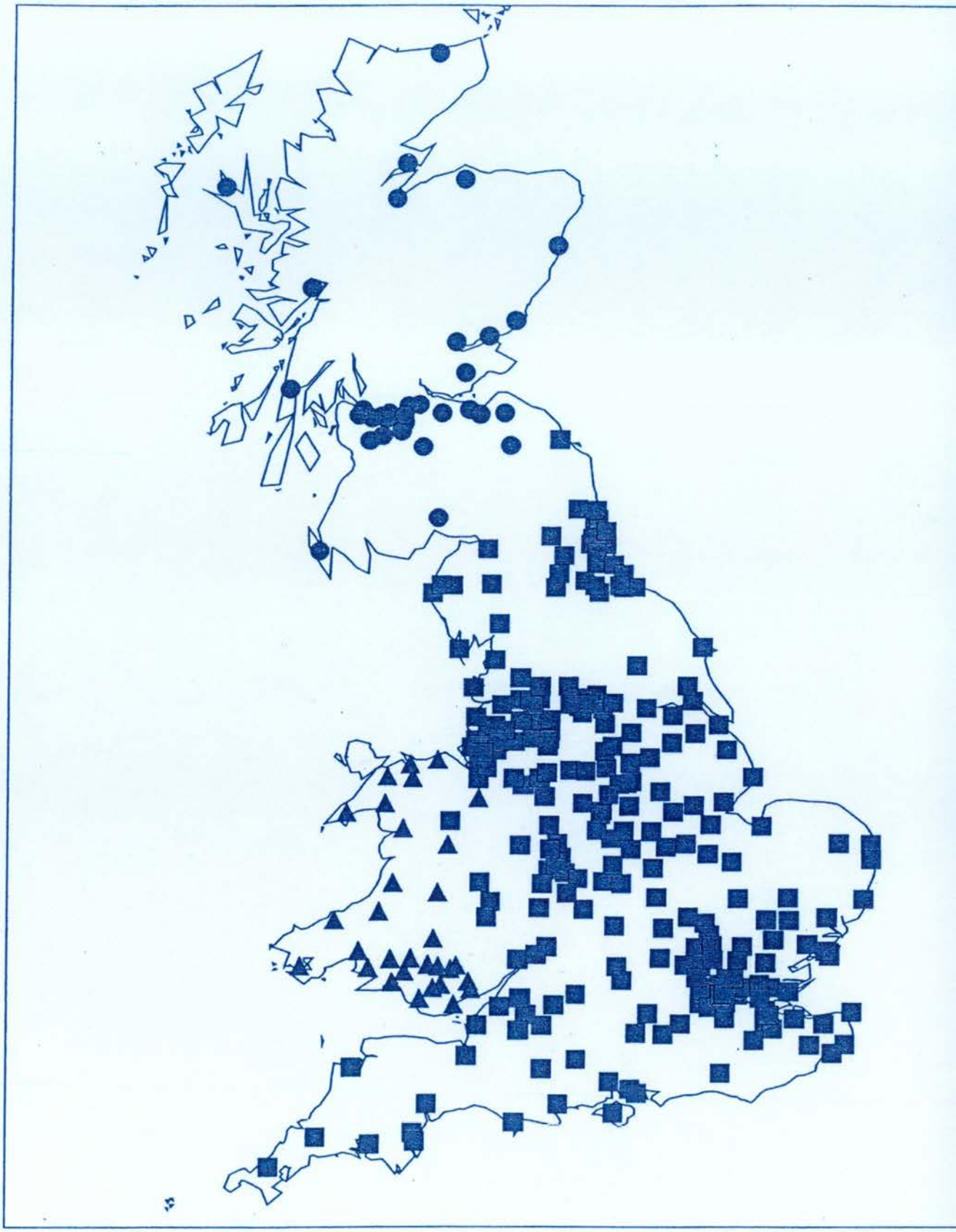
network is via a single telephone number (0345 969798 – 21,600 calls in 1998 (Business Connect Management Board, 1999)), although clients can also visit the premises and use e-mail / post.

In 1998, the Government announced that BC would be re-organised and relaunched (Welsh Office, 1998: 18). The reorganisation has five key aims: 1) increasing awareness of BC and promoting use of services provided by BC; 2)reducing duplication/overlap in service delivery; 3)improving overall co-ordination of business support in Wales; 4) improving quality; and 5) becoming more customer focussed (Business Connect Management Board, 1999). In addition, the geographies of the 8 BC consortia were realigned to match those of the TECs (Welsh Office, 1998a) and, as with the Welsh TECs, BC now operates with four defined areas.

In Scotland, the same one-stop-shop network was branded 'Business Shop' in the Scottish Enterprise and 'Business Information Source' in the Highlands and Islands region. There is a BS / BIS network in each LEC area acting as the delivery network for the partners, for example, the LECs, local authorities, enterprise trusts, trade associations and where appropriate, the Chambers of Commerce. As with the Business Links, BS / BIS provides a full range of services including: library resources; computerised databases; funding; legislation; training; market intelligence; networking; and health and safety issues. The services are available to all firms (Scottish Enterprise, 1997). There is, however, currently a review of the BS / BIS network in both the Scottish Enterprise and Highlands and Islands Enterprise areas.

Map 2.3

The Business Link, Business Connect and Business Shop outlets



Squares represent Business Link outlets, triangles represent Business Connect outlets and c

represent Business Shop outlets

Scale: approximately 1cm: 30km.

2.6.4 Regional Development Agencies

The success of Scottish Enterprise, Highlands Enterprise, the Welsh Development Agency and in Northern Ireland were LEDU (Local Enterprise Development Unit) and IDB (Industrial Development Board) led the Government to conclude that 'the right local environment for business success requires strong regional leadership' (Cm 4176: 42). The 9 new RDAs are London, North East, North West, Yorkshire and Humberside, West Midlands, East Midlands, /eastern, South West and South East. All of these became operational on 1st April 2000. The boundaries of the RDAs are shown in map 2.4.

The RDAs were formed by the absorption of several existing structures including the Rural Development Commission, English Partnerships, the Commission on New Towns, the Single Regeneration Budget and will incorporate the regional Government Offices into their structures. There were no additional resources for the RDAs at the outset, except for the funding inherited from the integration of existing structures. But resources have been subsequently increased. In terms of planned expenditure for the financial year 1999-2000, London receives the highest allocation (£245m.), followed by North West (£212m.), Yorkshire and the Humber (£146m., North East (£124m.), West Midlands (£112m.), South West (£70m.), South East (£62m.), East Midlands (£56m.) and Eastern (£25m.) (DETR, 1999: 11.5). RDAs are important as they will determine and drive the policies and priorities of the SBS local franchises within their areas. The RDAs will be expected to continually review the coherence and quality of business support in their area against the local and regional priorities identified in their regional economic strategies (Cm 4176: 43).

Map 2.4

The Regional Development Agencies

Scale: approximately 1cm: 30km.

2.6.5 Local Learning and Skills Councils

The Further Education Funding Council and the Training and Enterprise Councils were replaced from April 2001 by a national Learning and Skills Council as announced in *Learning to Succeed – a new framework for post-16 learning* (1999 Cm 4392). The national Learning and Skills Council will operate through a network of 47 local Learning and Skills Councils (LLSCs) (Cm 4392: 27). In partnership with other relevant agencies, these LLSCs will be responsible for the management of a discretionary budget; the identification and assessment of important local issues and needs resulting in the annual publication of an 'annual statement of priorities'; and the management of the bodies that they fund through an on-going policy of quality assessment in terms of value added, value for money and effectiveness of provision.

In addition, the LLSCs will be responsible for focussing local provision more closely to customer needs, disseminating information widely about training and education opportunities and developing new approached to workforce development (Cm 4392: 27-29). Particularly important is the SME sector, where they will work with the SBS to 'provide a seamless service to business and to integrate skills development with enterprise and business competitiveness' (Cm 4392: 41). They will also continue to be responsible for the implementation of the Investors in People standard, Modern Apprenticeships and National Traineeships (Cm 4392: 67). The LLSCs will be expected to work closely with the relevant RDA to ensure that their actions are appropriate given the priorities and development strategy adopted by the RDA (Cm 4392: 39).

The 47 LLSCs represent a significant reduction to the 76 TECs in operation in 2000 with a subsequent geographical restructuring at the local level. As with the TECs, *Learning to Succeed* does not define the geography of the LLSCs. Instead it highlights a number of principles which should shape the geographical structure. These are: first, the boundaries should reflect TTWAs and business geography; second, the boundaries should be coterminous with other important local economic and/or social organisations, especially the RDAs, their sub-regional areas, the local authorities and the local outlets of the Small Business Service; and third, each LLSC should have a population of at least 500,000 – the size believed to assure economies of scale and cost effectiveness (Cm 4392: 29). The close relationship between the LLSCs and the RDAs is reflected in the fact that the geographies will be proposed to the DfEE by the RDAs and the London Development Agencies.

2.6.6 The Small Business Service

In the 1999 budget, Gordon Brown, the Chancellor of the Exchequer, announced the formation of the Small Business Service and in June 1999, the DTI issued the consultation document *Small Business Service - a public consultation* (URN99/185). The SBS has been in operation since April 2000. The SBS has three main tasks: first, to represent small business within Government; second, to improve the coherence and quality of Government support for small businesses; and third, to help SMEs cope with government regulations (URN99/185: 4-6; DTI, 2000).

With specific reference to business support, it is intended that the SBS will deliver all Government support schemes directed primarily or mainly to small businesses (URN99/185: 20). As well as the current Business Link portfolio of

services, the SBS will also be the access point for DTI, DETR, FCO, MoD, MAFF and DoH services to small business as well as services supported by EU structural funds (URN99/185: annex A). It is hoped that this restructuring will result in greater coherence and focus for small firms (DTI, 2000). Additional services related to local needs and demands may be developed and provided using public funding in partnership with the private sector (URN99/185: 25).

In addition, although the Business Link partnerships focused on the needs of the growth companies in the 10-200 employee range, the SBS will assume responsibility for a number of initiatives and services targeted at micro-sized businesses (i.e. those with fewer than 10 employees), start-ups and the self-employed. The SBS is to be allocated an additional £10 million for these businesses as well as managing programmes set up under the new £180 million Enterprise Fund (URN99/185: 22-23). The SBS will also offer services to businesses employing up to 250 employees (URN99/185: 5). Compared to the Business Link partnerships, this represents a significant widening of the SBS's remit, but a key priority of the SBS is to transform the 'current Business Link partnerships into a slimmer, fitter, higher-quality network' (DTI, 2000: 13).

The SBS will be specific to England. Support for businesses in Scotland will continue to be delivered through the Scottish Enterprise and Highlands and Islands Enterprise networks of local enterprise companies and their Business Shop / Business Information Sources networks. In Wales, the reorganised Business Connect network will continue to be the single gateway to deliver business support for SMEs. In Northern Ireland, the Local Enterprise Development Unit will remain the agency providing Government support for small businesses.

The SBS represents a shift from the decentralised nature of the BL partnerships towards a more national standardised support system (Robson and Bennett, 1999b: 3). It will contract with a local provider of business support services to provide a comprehensive support service for SMEs within each defined geographical area on a franchise basis (URN99/185: 30). As with the Business Links, this provider may be a partnership of the leading organisations or may be the result of a new organisation formed from the existing local business support organisations, although it is more likely to be single organisation such as a CCI (Robson and Bennett, 1999b: 3). The franchise will be awarded for three years with performance reviews which will include input from local business (URN99/185: 31). The areas of the local franchises will be coterminous with the proposed boundaries of the local Learning and Skills Councils as determined by the RDA and DfEE. The 47 LLSCs will result in a rationalised geography at the local level (URN99/185: 32). In addition, the local SBS franchises will be expected to work closely with the RDAs to help RDAs achieve their economic development plans. The RDAs will be responsible for monitoring the quality of services provided and encouraging the development of services between the franchise holders within a region (URN99/185: 31).

The local franchisees will continue to operate under the Business Link brand (URN99/185: 33). It is also expected that the SBS local franchises will take over the management of the Business Link outlets and will assume responsibility for the future development of the BL network (URN99/185: 24). Although the local network of outlets will be important in the provision of support to small business, the consultation document argues that access to government support can be increased

through the use of new technologies, especially in rural or remote areas (URN99/185: 19). In line with an argument cited above with respect to provision of services though the BL network, the consultation document suggests that the SBS could combine technology-based solutions with face-to-face support, i.e. internal and call centres dealing with reactive enquiry work, complimented by business advisors providing site visits (URN99/185: 19). This may suggest a movement towards a more flexible delivery structure.

2.6.7 Central government SME support schemes

Despite the decentralization of many elements of SME advice to BL, central government also maintained a number of other schemes which are administered centrally, although often with the support of local partner bodies such as Training and Enterprise Councils (TECs). We briefly review each of these main schemes which are evaluated. These cover all the main government schemes for SMEs (see in the CBR survey, DTI, 1998c, and DTI website). None of these support schemes have a specific geographical domain to their delivery of services.

2.6.7.1 **The Teaching Company Scheme (TCS)**

The Teaching Company Scheme (TCS) which in 2003 has been renamed the Knowledge Transfer Partnership acts as a vehicle for transferring technology between the academic and business communities. By establishing partnerships between academia and business it is hoped that businesses will be able to gain access to the knowledge, skills, and technologies in universities. The academic community is believed to benefit from gaining access to practitioners in industry who can

provide feedback on the relevance of technology. It also offers industry-based training for graduates. TCS allows one or more graduates each working for two years on key technology transfer projects identified by the participating business. For programmes with small firms, the TCS offers a grant of 70% of the direct costs of the programme to the participating university, and the remainder of the costs born by the industrial partners. In 1999 there were 18 TCS centres.

2.6.7.2 **Investors In People (IiP)**

Investors In People (IiP) is a national quality standard which sets a level of good practice for improving an organisation's performance and training through its personnel and management. The IiP standard was developed in the early 1990s by the National Training Task Force in partnership with employees' and employers' representative organisations (including the CBI, TUC and the Institute of Personnel and Development). IiP was first piloted in 1991. It operates as an independent national body, in partnership with the TECs and Business Links which supply local assessments which are often subsidized by grants.

2.6.7.3 **Skills for Small Businesses**

Skills for Small Businesses is restricted to firms of less than 50 employees to help improve the skills of their workforce. A key worker is identified who is given training and the assessment skills necessary to develop the firms training programme. The programme is chiefly administered by TECs.

2.6.7.4 The LINK Scheme need to update references

The LINK scheme has a great deal in common with the Knowledge Transfer Partnership (formerly the TCS scheme), and indeed the LINK and TCS Boards were merged in September 1998 to form the LINK/TCS Board. The LINK scheme offers 50% grants to support pre-competitive research projects of 2-3 years duration between industry and research institutions. There are over 20 specific programmes in specific fields. LINK is a scheme which is particularly aimed at the SME community. This notwithstanding, multinational firms are also encouraged to participate in the LINK scheme, with the caveat that they must have significant manufacturing and research operations in the UK. In 1999 there were over 1,500 firms and 200 research organisations participating in LINK schemes. The LINK scheme is sponsored by several Government departments and Research Councils and encompasses a diverse range of products and technologies which fall into the following five main categories: (i) electronics/communications/IT, (ii) food/agriculture, (iii) biosciences/medical, (iv) materials/chemicals, and (v) energy/engineering.

2.6.7.5 The Regional Supply Network (RSN)

The Regional Supply Network (RSN) was launched in April 1995. It has a network of ten Regional Supply Offices (RSOs). The main objectives of RSN is to help purchasers find the most competitive sources of supply, provide new business opportunities for 'competitive suppliers' and encourage the spread of best practice of supplier development and local supply chains. The RSN attempts to overcome asymmetries of information and bring together purchasers and suppliers. In the event that purchasers are unable to be matched with a satisfactory local supplier then a nation-wide search is initiated, drawing upon the resources and databases of the other nine RSOs in the network.

2.6.7.6 The Export Credit Guarantee Department (EGCD)

The Export Credit Guarantee Department (EGCD) is a separate department from the DTI and seeks to provide exporting assistance for business. The ECGB typically issues over £3billion of policies per annum, and operates on a break-even basis. ECGB charges exporters at premium rates which are set on an individual contract and market rates basis. The level of support provided by EGCD is governed by international agreement (an OECD Consensus).

2.6.7.7 The Small Firms Loan Guarantee Scheme (SFLGS)

The SFLGS is one of the main government support schemes to business, valued at over £250m per year over the period 1994-97. It guarantees loans from banks and other financial institutions for small businesses who have viable business propositions, but who have been unable to secure a loan because of a lack of security

and/or a track record. The guarantee generally covers 70% of the loan, but can rise to 85% in inner city areas. The main eligibility criteria for the SFLGS is UK firms who have an annual turnover below £1.5million in general, or below £3million for manufacturing firms. The SFLGS offers loans over time periods of two to ten years. The value of the loans is from £5,000 (£500 in inner city areas) to £100,000, which can be increased to up to £250,000 for businesses which have been trading for in excess of two years. Most loans are less than £30,000. About 7,500 loans per year were made over the 1994-7 period.

2.6.7.8 Regional Selective Assistance/Regional Enterprise Grants

Regional Selective Assistance/Regional Enterprise Grants. Regional Selective Assistance (RSA) represents the DTI's main instrument of regional industrial policy. Regional Enterprise Grants. In the past, the RSA has endeavoured to achieve three objective (i) 'to create and safeguard jobs', (ii) 'to attract and retain internationally mobile investment'; and, (iii) 'to contribute to improving the competitiveness of disadvantaged areas'(DTI statement, in Government's Expenditure Plans, 1999-2000 to 2001-2002). In 1998/99 RSA grants are £112.2million. Figures from the DTI suggest that the average cost of creating and/or safeguarding a job is approximately £4,770. Three regions account for more than 60% of the RSA budget in 1998/99, in rank order: the West Midlands, the North West and the North East. After April 1997 RSA, REG and SMART/SPUR were combined in one RSA Scheme.

2.6.7.9 The Small Firms Merit Award For Research and Technology (SMART)

Small Firms Merit Award For Research and Technology (SMART) was launched in 1986 and expanded in 1988. Two further three year programmes cover the period up to 1998. SMART provides firms with up to 50 employees with grants of up to £45,000 to help with technical and feasibility studies of innovative technology. SMART was justified by the premise that venture capitalists would be reluctant to invest in small firm high technology projects which were small, defined as costs of less than £200k. This was justified by the argument that there are high costs incurred by venture capitalists in accurately gauging the expected rate of return of a project and assessing the likelihood of its project being successful, which could not be recouped from small projects. Awards are made competitively annually.

2.6.7.10 Support for Products under Research (SPUR)

Support for Products under Research (SPUR) is a DTI scheme launched in February 1991 for the development of new products and processes involving technological advice. The objective of the SPUR scheme is to facilitate SMEs to undertake more research and development (R&D) and to develop new products and processes. The SPUR scheme offers a fixed level of 30% support towards eligible costs up to a maximum of combined SMART and SPUR grant £162,000 (ECU 200,000). Because of the overlap of SMART and SPUR they are treated jointly in the survey. Their combined budget is about £70m.

2.7 Conclusion

There has been a rapid growth in the provision of external advice in the professional services sector. However, there is still believed to exist a gap, or market failure, whereby smaller sized firms are still unable to access all of their needs and requirements. Consequently the government continues to make available the provision of advice and assistance by funding support organisations. This support is provided because SMEs are seen as a potentially important source of innovation, employment creation, economic growth and increasing the level of competition in business.

Evidence of the gap in the provision of external advice can be measured by the levels of use of external advice which are provided by organisations such as BL. But clearly it is difficult to disentangle whether such levels of advice do actually reflect market failure, or the possibility of subsidised services. Moreover critics of government provision of external advice would argue that problems of adverse selection and moral hazard result in an inefficient use of public sector financial resources.

The existing evidence suggests that financial needs and problems are the most pressing area for small firms (Watkins, 1982; IOD, 1996; Hall, 1992). However, training and marketing and sales have also been found to be of importance. Similarly business planning, exporting and dealing with various legislation also represent other areas of concern to small firms.

The government policy towards small firms in the last twenty years has tended to focus upon increased localism in the delivery of business support initiatives, most notably with the BL organisation. Geographical location has been

seen to be important for two main reasons. Firstly, differences in industrial structures, either resulting from agglomeration economies, history or as a result of generic environments, may also result in spatial variations in business requirements. Secondly, the external environment is perceived as an important influence on business growth (Barkham et al, 1996). Thus resources in greater quality and quantity between and within regions has an important impact upon business behaviour and potential and performance.

The chapter has also introduced the reader to the private sector suppliers of advice, the localised organisations of Approved / accredited Chambers of Commerce, Enterprise Councils / Local Enterprise Companies, Business Link, Business Shop and Business Connect; Regional Development Agencies; Local Learning and Skills Councils; the Small Business Service; and centralised Government SME support schemes.

The Centralised Government SME support schemes are often very specific schemes with stringent entry requirements they are believed to be necessary to overcome market failure in SMEs search for external advice and assistance.

Thus this chapter has served to indicate the full range of external sources of advice which SMEs can use. The levels of use and impact of these public and private organisations are examined in the empirical chapters of the thesis.

The next chapter looks at previous assessments of business advice. The next chapter also identifies the main geographical issues in the provision and use of external business advice. The next chapter thus brings together a literature review on business advice.

Chapter 3

Previous Research on Business Advice and the Geography of Business Support

3.1 Introduction

The previous chapter provided an overview of the broad range of providers for business support and the local business support organisations, together with the main issues involved. This chapter serves to provide a comprehensive literature review of previous evidence on the use and impact of business advice, and in particular previous evaluations of Business Link. This chapter also advances our overall objective by indicating the role of distance, and geography in the provision and use of business advice. Lastly, previous research which has looked at the influence of location on the use of external advice is analysed.

3.2 Previous evidence on the use and the impact of business advice

There have been a number of previous studies of sources of advise to SMEs. General international reviews are given by Moulaert and Tödtling (1995), Harrington et al. (1991) and Illersis (1994). In Britain, as a basis for comparison with our own survey presented later, the most recent studies are summarised in Tables 3.1 and 3.2. Taking first the private sector suppliers, shown in Table 3.1, all studies demonstrate these to be the chief source of advice for most companies. Among the private sector suppliers the chief sources of advice in rank order are accountants, next either banks or solicitors, and then business associations, or consultants. The market appears, therefore, to be dominated by professional specialists, followed by the rather special bodies of sector and local associations, and then a broad range of consultants.

	Keeble et al. (1992)	Curran & Blackburn (1994)	Barclays (1994)	CBI (1994)	Doggett & Hepple (1995)	MORI (1994)*	Bank of England (1996)	Lloyds/SBRT (1998)
Date of Survey	1991	1990/1	1993	1994	1994	1994	1996	1997
Accountant	62	74.4	93.7	35	77.3	29	19	--
Solicitor	--	67.6	--	--	19.5	7	--	--
Banks	42	36.3	38	35	63.9	7	7	--
Business friend/relative	--	--	17	--	--	2	--	--
Customers	--	--	--	--	--	6	--	--
Suppliers	--	--	--	--	--	6	--	--
Consultants	37	16.0	7	55.0	15.8	37	8	--
Non-executive director	--	--	--	32.1 ╥	1.2	--	--	--
Chambers of commerce	--	23.7	2.3	--	--	5	14	31
Trade/professional associations	--	29.1	9.8	--	--	17	--	26
Respondents	1128	410	600	215	410	775	59	350
Sample frame	D&B in 3 types of areas, mostly under 100 employees	11 small service sectors in 7 areas	SMEs, 3-10 years old	CBI SME members	D&B mainly manufacturing. Turnover £0-200m	D&B 10-200 employees	Technology-based firms. Turnover £0-100m	SMEs 0-50 employees

Table 3.1: Previous recent surveys of use of private sector and business association advice services by source (% of respondents reporting use); a gap indicates that a survey did not ask or identify that source explicitly.

* Refers to final source of advice (MORI 1994: 12)

╥ Refers to those having a non-executive director

D&B is Dunn and Bradstreet

These results are comparable with those quoted by Harrington et al. (1991) or Illersis (1994). However, the comparative rankings in these surveys are not consistent, except for the primary role of accountants, nor are their sampling frames fully comparable.

Turning next to public sector sources, Table 3.2 reviews the findings of recent studies of use of advice services in Britain. This table can be compared with the summary given by Storey (1994 Table 8.6) covering the period up to 1992; i.e. before recent changes in the organisation of government support services. Storey found that the use of any support agency varied from 1% to 55% of businesses, with most studies finding less 10% of businesses using public sector sources. Exceptions to this are, first, the study by Smallbone et al. (1993), but this probably includes many start-ups and does not control for area eligibility, and second, the SBRC (1992) survey results for 1991 (Keeble and Bryson, 1996), and the Keeble et al. (1992) survey of 1991, where the Enterprise Initiative is shown to be used by over 30% of SMEs, with significant differences between areas. CBI (1994) in a more self-selective survey of their members also found use of the Enterprise Initiative to be high, 55% of businesses surveyed. The Enterprise Initiative may, therefore, have stimulated a degree of external demand far greater than previously. However, the messages from these surveys are confused by different sampling frames and different controls for the influence of other factors. Firm size is often an important factor influencing the extent to which external advice is sought, with major differences occurring between the smallest classes.

	Keeble et al. (1992)	Curran & Blackburn (1994)	Barclays (1994)	SBRC (1992)	CBI (1994)	MORI (1994)+	Doggett & Hepple (1995)	Bank of England (1996)	Lloyds/ SBRT (1998)
Date of survey	1991	1990/1	1993	1991	1994	1994	1994	1996	1997
TEC/LEC (includes SFS)	15	11.8	19	--	45	7	7	19	21
Business Link	--	--	--	--	5	1	--	22	26
Other Government*	31	19.5	--	33.4	55	16	10.5	--	--
Enterprise agencies	15	18.8	14	7	12	2	--	7	5
Regional/local development agencies	10	--	--	--	--	--	--	5	--
Colleges/University	--	12.7	--	--	--	4	--	--	--
Local authority	13	--	--	--	--	7	--	--	3
Respondents	1128	410	600	2028	215	775	410	59	350
Sample frame	D&B in 3 types of areas, mostly under 100 employees	Service industries	SMEs, 3-10 years old	D&B manufacturing & businesss services <500 employees	CBI SME members	D&B 10-200 employees	D&B mainly manufacturing. Turnover £0-200m	Technology-based firms. Turnover £0-100m	Technology-based firms. Turnover £0-100m

Table 3.2: Previous recent surveys of use of public sector-backed advice services by source (% of respondents reporting use); a gap indicates that a survey did not ask or identify that source explicitly.

* Includes DTI Enterprise Initiative consultants + Refers to first Contact source of advice (MORI 1994: 12).

TEC = Training and Enterprise Council; LEC = Local Enterprise Company; SFS = Small Firms Service; BL = Business Link; SE = Scottish Enterprise; D&B = Dunn and Bradstreet

	3i/MORI (1996)	3I/MORI (1997)	IoM/NCM (1997)	
Date of survey	1995	1996	1996	1997
TEC/LEC (includes SFS)	27	25	28	27
Business Link	11	14	42	48
Other Government*	20	16	--	--
Enterprise agencies	--	--	--	--
Regional/local development agencies	--	--	--	--
Colleges/University	--	--	--	--
Local authority	--	--	--	--
Respondents	1067	62		196
Sample frame	Owner managers Turnover £1-100m D&B plus 3I portfolio	Exporters £0-1m	Turnover £1-10m	Technology-based firms. Turnover £0-100m

Table 3.2: Previous recent surveys of use of public sector-backed advice services by source (% of respondents reporting use); a gap indicates that a survey did not ask or identify that source explicitly.

* Includes DTI Enterprise Initiative consultants + Refers to first Contact source of advice (MORI 1994: 12).

TEC = Training and Enterprise Council; LEC = Local Enterprise Company; SFS = Small Firms Service; BL = Business Link; SE = Scottish Enterprise; D&B = Dunn and Bradstreet

Also, where start-ups are involved a much higher level of use of public external agents is generally made (see e.g. Turok and Richardson, 1991; Birley and Westhead, 1992). Similarly, the type of advice field in which advice is sought, and the age, ownership, employment growth, production structure and level of exporting of the business are each also important factors likely to lead to differences in levels of external advice sought, which should be controlled for. It is clear, therefore, that to gain a proper insight into the extent and form of external advice, much better controls of sampling and analysis are required.

3.3 Previous Evaluations of Business Link

Many evaluation and ongoing monitoring studies of BL are being carried out by DTI. Awareness and use of the network has been investigated in a series of surveys by MORI (e.g. MORI, 1996). These show awareness of BL to have increased to 67% within 1-2 years of a local BL outlet opening. By the end of 1997, 9% of all firms with 1 employee and over were using BL, and 19% in the target size of 10-199 employee firms. In Wales 18 months after the launch of BL there was 65% general awareness of BC.

Evaluation of Business Link schemes has also been concerned with the quality of experience. There have been best practice assessments (Browne, 1995), mystery enquirer surveys (BPRI, 1995/6, 1997), training assessments (MRS, 1998) and a monitoring study by CARMA (1995). Other evaluation studies by KPMG (1994), Ernst and Young (1995, 1996) and continuing performance statistics made available to the Implementation Strategy Group (ISG) indicate variable management and partnership structures and variable quality between individual BL outlets with

some important limitations on performance, e.g. 38% of callers in the mystery enquirer survey finished their call with their query unresolved. Continued concern about the management incentives built into the system (e.g. Bennett, 1995) have shown that PBAs face pressure from DTI and partner organisations that mean that they cannot always operate as facilitator and are often pushed into a consultancy mode with fee potential as a major stimulus (Ernst and Young, 1996; Sear and Agar, 1996; Priest, 1998 a,b).

Impact studies by DTI (1997c) and Summon (1998) use control and comparison groups to assess BL performance based on growth and profitability. DTI (1997a) has also encouraged individual BLs to develop their own impact measures. The DTI (1996) recommends two impact measures: (i) 50% of clients reporting a benefit to their business, and (ii) 85% of action to be undertaken by BL, where agreed with client, achieved. The results of these studies have generally concluded that it is too early to evaluate fully the impact of BL advice and that impact measures will always be surrounded by great ambiguity. However, a large scale impact evaluation using control and comparison groups is underway by DTI which will report in late 2003.

We focus our evaluation here on the use levels of BL/BS/BC and satisfaction with services. Client satisfaction has been a key target for BL, and has also been focused on by HoC (1996a) as a key measure of performance. Satisfaction, indeed, has been focused on in part because of the difficulties of more traditional impact assessments using control and comparison groups. For the core services of BL, of advice, and of BS/BC of information provision, the outcomes are difficult to evaluate as impacts because the outcome is so bound up with client prior understanding and

diagnosis of their needs, expectations of the service, and a variety of change processes that tend to take place at the same time within the business when advice or information is used. As noted by Riddle (1986), O'Farrell and Moffat (1991) and Tann and Lafaret (1998), the outputs of business service advice and use of information are a *change process*, not an instantaneous transfer like the purchase of a good. It therefore involves a learning process of adaptation inside and outside the business. The outcome is that advice is often long-term, inherently intangible, and difficult to separate from the influence of other factors. It is therefore virtually impossible to be confident about the use of methodologies based on control and comparison groups.

DTI has established a range of satisfaction targets for BL which can be summarised as follows (DTI, 1996, p. 52; 1997b): (i) 80% of service delivered within agreed deadlines; (iii) 80% of clients contacted within promised time after receipt of service; (iii) 80% of enquiries receive an accurate response; (iv) 85% of services provided are appropriate to client needs; (v) 90% of diagnoses of client need are correct; (vi) 80% of referrals are appropriate; (vii) no more than 5% of complaints are unresolved; (viii) 80% of clients would or do return for future services as a first choice. It is apparent that these satisfaction targets tend to focus on the advice process rather than information provision or other services. The targets for BL all set a minimum of at least 80% for client satisfaction on any criterion, rising to 85%, 90% and 95% in some cases. Evaluations of satisfaction to date show 90 to 95% satisfaction in 1995 waves of analysis. Local evaluation also show high satisfaction levels, e.g. 89% in BL Tyneside in 1996 (NEMS, 1996).

Aggregate satisfaction studies of BL are subject to the obvious criticism that different services operate in different ways with potentially very different satisfaction potential. These contrasts are key dimensions of comparison and hence in chapter 7 the satisfaction data on BL and SBS is broken out for each of the services provided. The only previous detailed service-by-service comparison of client satisfaction is that by Priest (1998a). She found that for PBAs satisfaction with overall performance was 71%, with PBA professionalism 83%, responsiveness 79%, analysis of business needs 76%, understanding of the business 64%, and understanding of the markets in which the business operated 57% (combined figures for satisfied and very satisfied). In other words they are good and well meaning, do their job conscientiously but lack, relatively business specific knowledge. For specialist advisory services Priest found 75% satisfaction with the overall performance of Export Development Advisors, and 80% satisfaction with Innovation Technology counsellors. For information services she found 73% satisfaction, for start-up services 86% satisfaction, and 82% satisfaction for a variety of locally developed services. Priest found significant differences between users of BL services chiefly by firm size, to a lesser extent by sector, but chiefly related to the nature of the business's expectations of the service given its needs, whether or not a fee was paid for the service, and the level of experience of the business in using support services. A key aspect of Priest's findings is the significant difference in most cases between 'experienced' and 'less experienced' users. She defined experienced users as clients who had previously used another support organisation before using BL. In all cases, experienced users gain higher satisfaction, generally because they have clearer expectations of what they want from the service and can better specify their needs.

From the results of the previous evaluations by DTI and Priest we know that BL is in most cases at best only just meeting the 80% minimum for satisfaction, that satisfaction is likely to vary by the type of service sought and delivered, and by the type of firm, especially its level of experience and capacity to define its needs before seeking advice. We take these evaluations further below using the benefits of the large respondent base available via the CBR survey.

3.4 The role of distance

3.4.1 Distance and demand for business services, the evidence

There is a scarcity of research relating distance to the demand for business services, although the research undertaken has suggested a tendency to localisation when clients source external advice. Scott (1988: 177) argued that businesses involved in the production process will concentrate to minimise geographical transaction costs. Therefore, it would be expected that distances involved in the provision and delivery of business services would be limited as producers and consumers located in the major concentrations of business activity.

O'Farrell et al (1993: 395) showed that businesses tended to access business services which were local, 61% of business service inputs for Scottish businesses and 70% for South East based manufacturers and their English and Scottish business service firms derived approximately 60% of their business from local customers (O'Farrell et al, 1992: 523). Analysis by Marshall (1980: 15) of the service purchasing behaviour of manufacturing businesses found that the service firms used by the respondents were largely in their local area – 78.7% of all service purchases were made in the same planning region and 15.2% in the same local authority

district. Later research of business service firms found that 77.1% of income received was obtained from within 50 miles of the offices surveyed (Marshall, 1983: 1350). Illeris (1989: 87) in a review of a range of studies showed that regional interactions, i.e. less than 50 miles, accounted for between 60% to 80% of all service sales.

Locality, however, is defined by the geographical context. In an analysis of purchasing behaviour by manufacturing firms in mid-Wales, Hitchens et al. (1994: 101) found that one-third of the service firms used were located within Wales, with 22% in Birmingham and 20% in London. Given the business geography of Wales, however, 42% of service suppliers were located more than 150 miles from the business compared to 9% located within 50 miles. Similarly, business geography may explain the high degree of spatial concentration of producer service firm linkages within the Southeast region. For example, computer service firms in Berkshire sell just 4% of total sales in the county, but 50% to London and the rest of the Southeast (Coe and Townsend, 1998: 397). Wood et al. (1993: 688) showed that inner London management consultancies were highly localised with 40% of clients within 29 miles, compared to consultancies in the outer South East and North West where more than 40% of clients were located in other UK regions. This result could also be greatly influenced by the fact that London is the UK capital and in inner and greater London and beyond to the south east there are a substantial number of firms, in absolute terms and also in relative terms to the rest of the UK. In addition, there is evidence that smaller firms tend to be more reliant on their locality for inputs and outputs than their larger counterparts. New start-up businesses tend to source required purchases and satisfy demand in their immediate localities, although it is

often the supplying of products or services over longer distances which tend to be more profitable (Cornish, 1997: 161).

These findings tend to imply that the location of the firms and their potential sources of advice are factors which can influence the patterns of use of external advice. Different service types are associated with different distances. Harrington et al (1991) found that services associated with greater distance between the supplier and the purchaser were more expensive and had lower levels of standardisation. Analysis of English and Scottish business service firms found that 48% of graphic design businesses perceived travel time as a constraining factor to spatial expansion compared to only 23% for market research (O'Farrell et al, 1992: 525). Subsequently O'Farrell et al showed that whereas 84% of Scottish businesses purchasing graphic design purchased within Scotland, only 41% of Scottish businesses sourced R&D external services from within Scotland. Similarly, in the South East, 88% of manufacturers purchasing export advice bought within the region compared to 55% for training services (O'Farrell et al, 1993: 395). This is similar to research by Curran and Blackburn (1994: 78) which found that business service firms in advertising, marketing and design derived over 60% of total sales from outside the locality. In addition, research by Marshall (1983: 1350) identified a 'dichotomy' between services focussed more towards the local area (1-10 miles) and those more orientated towards national markets. For example, solicitors, finance companies and insurance brokers obtained between 50% and 70% of their income from the local area compared to computer services which obtained only 21.8% of their business locally. Van Dinteren (1987: 679) in an analysis of business service firms in Dutch towns with between 50,000 and 200,000 population, found that

although 43% of business service sales occurred beyond 30km. from the urban areas, there were significant differences by type of service. Legal services were strongly oriented towards the urban areas with 62% of sales in this area, compared to advertising services which derived 30% of turnover from urban areas and computer service businesses which recorded only 14% of turnover from the urban areas and 48% of turnover from areas further than 30km. From the urban areas.

A further analysis of computer service firms showed that 45% of business came from clients located outside the home region of the firms and only 10% of revenues came from clients in the same country (Coe, 1998: 2056), suggesting that demand for computer services may be less determined by the constraint of distance than some of the services investigated by O'Farrell et al. (1993). There were, however, some important differences according to the study area. For example, computer service businesses in Tyne & Wear were more dependent on their county (25% of sales) compared to those in Berkshire (less than 5%). At an even greater spatial scale, O'Farrell and Wood. (198: 116) showed that only 12% of business service companies had undertaken work in a foreign market, although there is evidence that management and engineering consultancy services and computer services are the most internationally focussed business services, although there are variations by type of computer service (Cornish, 1996: 1673).

There has been very little analysis undertaken on intervening distance when the service supplier is a business support organisation, even by the support organisations themselves. Research by Priest (1998) of demand for Business Link services showed that more businesses view local delivery as important in the provision of the higher order personal business advisors than for lower order

business information, for example, 58% for PBAs compared to 48% for business information services. In line with these results, she also found that 44% of respondents did not believe that PBAs could be provided effectively from regional centres. This finding, however, raises a significant contradiction about the appropriate scale of provision. The higher-order services with low frequency of interaction, low distance-decay functions and hence, large market areas, are also those which require a thorough understanding of the client businesses. Higher order services are often associated with the increasing importance of face-to-face contact (Bennett et al, 1999: 395) and customisation to the user's particular needs is a feature which often requires a local presence (Martinelli, 1991: 72). As Porter (1995: 36) argued, the competitive advantage for many companies lies in differentiation of products from their competitors which may encourage business service providers to avoid the actual delivery of higher-order services over the information superhighway and to still use business-to-business contact.

This literature review has highlighted a number of trends. First, the provision of business services tends to be local in nature; second, higher-order services, however, tend to be supported and delivered over greater distances and there is a spectrum of order even within generic categorisations such as 'computer services'. Third, a further trend is the possibility that advances in technology may change the distances involved in business service provision. This is discussed below.

3.4.2 The role of technology

It is argued that the development of information technology is having significant impacts on all aspects of economic activity – on industrial structure, firm

organisation and importantly, the geography of economic activity (inter alia Gershuny and Miles, 1983; Hepworth, 1990; Malecki, 1991; Daniels, 1993; Martin, 2002). In particular, developments in information technology and improved telecommunications have increased the mobility and tradability of services and service providers. The impact has been two-fold: first, services can now be produced, stored and delivered using a common storage and transmission medium; and second, it has enhanced connectivity across traditional spatial boundaries (Daniels, 1993: 29). Therefore, the development of the Internet and other advanced telecommunication networks is being associated with the 'death of geography and distance', especially in the service sector, where services can be produced and sold at a distance from the ultimate consumer (Carincross, 1998: 212). But this is a macro level argument and these new technologies may in fact make the geography of service provision less important or at least promote a more flexible geography with fewer geographical constraints to location (Gates, 1995: 6; Gates, 1999: 138; Daniels, 1985: 254). Hepworth (1992: 30) argued that the advance of information technology and the resultant information superhighway will effectively collapse time and space moving towards the idea of 'friction-free capitalism'. This will reduce the importance of agglomeration economies allowing business service companies to locate in a greater number of areas and that this ability to overcome traditional spatial constraints implies a weakening of the city (inter alia Abler, 1975: 133; Gottman, 1975).

However, these arguments are moderated by two issues. First, it is recognised that the impact of new technologies will vary between service industries and the type of service being delivered (Daniels, 1985: 264). Ilersis (1989: 69)

suggested that information services would be the most likely to experience locational changes as the consequence of new technologies. For example, The Economist (1997: 9) argued that, in general, on-line consumers are interested in making better-informed purchases rather than getting the lowest price, so the more tiresome a purchase is in the physical world, the more attractive the on-line alternative. Therefore, it is possible to view the use of improved technologies as a function of the characteristics of transactions as defined in transaction cost economics (Hepworth, 1990: chp6). Services which are provided on a frequent basis, on a standardised format to all businesses and which require no face-to-face contact are more suitable for delivery over distance using either the post, telephone or Internet. Such services may include basic market or export information, signposting or relative simple financial guidance, for example, grant availability and help with taxation issues. For example, Grayson (1996: 59) suggested that the information superhighway had the potential to provide nearly all the services demanded by firms including access to the assistance; business training; interactive training and SME self-help groups; market intelligence; business to business services; business opportunities; marketing; good practice and benchmarking data; and staff recruitment. In contrast, it will be difficult to provide services which are typified by high specificity and high trust through any of these delivery modes and these will continue to be delivered on a face-to-face basis for the foreseeable future.

The demand for technology will be influenced by the size of the firms, whether the firm exports goods and services, whether the firm is an innovator, and the growth record of the firms, and the level of resources.

Second, contrary to the decentralising potential of new technologies, it is suggested that telecommunications may actually accelerate the process of concentration (Marshall and Wood, 1995: 24). New computer systems enable a relatively small number of people to control and co-ordinate the provision of business services from any geographical location (Moss, 1987: 76). For example, the reduction in communication costs has not only created a global financial marketplace, but has also weakened the role of smaller urban centres and associated consolidation has accentuated the development of the major international financial centres, e.g. London in Europe and New York in North America (Moss, 1987: 77). Whilst business needs may be spatially variable, the centralisation of all business services delivered through a single delivery mode will almost certainly ensure that economies of scale are attained and profits are maximised (The Economist, 1997: 3). Howells and Green (1988: 213) concluded that although innovation and technological develop would suggest that the constraint of distance would be removed, in practice cumulative organisational and structural constraints significantly restrict the spatial development of the service industries, again highlighting the importance of agglomeration economies in the location of business services. The focus of service provision remains the historic centres of business activity, although Harrington (1995: 67) suggested that although improved information technology may allow businesses to become more centralised their actual location will become less important and they may, therefore, be able to exploit labour cost differentials – geographic dispersion with corporate centralisation.

The impact of new technologies and the associated reduction in the costs of communication will be significant, but given the scarcity of evidence, it remains

unclear what the spatial impact of new technologies will actually be for the specific delivery of business services. Business support organisations, however, can respond to and benefit from both a new way of organising business and conducting commerce, especially the new channels to the market which can reduce the costs of delivery lower order and more standardised services (Papows, 1998). The potential of the internet is slowly being realised by the business support organisations for service and information provision. According to the BCC 1997 Census, 32% of the accredited Chambers had a Web site and by 1999, this had reached 100%. However, having a website which functions as an advertising and marketing platform for products and services, and the method of delivery services are two different issues. This suggests that in the future a large proportion of business services delivered by the business support organisations could be supplied through advanced information technology, especially given their relatively strong focus on providing lower order services at the local level. If this were to be the case then it would have major ramifications for the provision structure of business support organisations both because of changes in the characteristics of the transactions and furthermore, the role and importance of geography. Businesses could receive services through the Internet with little regard to the location of the service provider. The Business Links in London, for example, already has a centralised telephone system which is the initial contact point for any business wishing to access advice and/or information whether the business is in Upminster or Hounslow. But, this may just be a rationalisation for switching methods of signposting, and not for service delivery. This is to be the model of the Small Business Service which replaced BL in April 2001.

Despite these developments, however, there is as yet no evidence of any large-scale restructuring of the organisations in response to these technological changes. Nor is there any systematic evidence to suggest that intervening distance between a business and its service providers is increasing over time. This in part, however, reflects the relative scarcity of information on the entire issue of distance and demand for business services as detailed in the previous section.

3.5. Previous Research and Geography

The extent, form and location of external advice and collaboration sought by a SME will result from the interaction between its internal needs or demands, on the one hand, and the possible suppliers available, on the other. Previous studies have investigated both demand and supply side features, as well as the two aspects jointly. These studies can be subdivided into four broad groups.

3.5.1 Uneven development

Many studies have demonstrated the very uneven development of external business suppliers in Britain. For example, in 1989 the SE Region contained 62% of total 'other business services' (8395 of the SIC) (Keeble, et al, 1991). Moreover, this category had more than doubled between 1981 and 1990, growing to 354,000 employees, an increase of 122% (compared to a 3.5% increase for all industry and services, and a decline of 17.5% for manufacturing employment). Keeble et al. (1991) also show, through calculation of location quotients, that employment in business services as well as being highly localised in London and the S.E., is also chiefly focused in major regional centres such as Manchester, Birmingham,

Glasgow, Edinburgh, Aberdeen and Cardiff. Indeed by employment, 43% of UK service firms are located in London, 62% in London plus the S.E., with Manchester and the W. Midlands also important centres (Keeble and Bryson, 1996).

For the case of the two specific services of market research and management consultancy the concentration is even higher, 80% in London and 93% in London plus the S.E. (Keeble et al, 1991). Similarly, both Howells and Green (1988) and Bennett and Graham (1998) demonstrate that there is the highest concentration of business clustering in London and a small group of regional centres in a hierarchy of four or five levels of centres of business location. Bennett et al. (1999) show that 76% of all British businesses are located in 126 business clusters, the 30 largest of which contain 43% of all businesses. Within this pattern business service firms are more highly concentrated than other firms, 83% in 126 clusters and 50% in the 30 largest. Since almost all studies of external business relations demonstrate the importance of the scale and structure of local/regional markets for service providers, it is likely that the major centres will continue to be the main locations for business services. Certainly Marshall and Wood (1992, pp. 1265-6) conjecture that there will be an increasing trend towards further concentration and agglomeration. However, whilst this group of studies demonstrate important regional differences in concentration in the supply of external business services, they give less evidence as to the reasons for this, which must draw largely on smaller scale survey-based research.

The importance of agglomeration economies is suggestive of a continuing pattern of relationships between businesses, and with their advisors, that will tend to increase the concentration of business further as time progresses. Porter (1990,

1998) argues that this is the result of the static comparative advantage of local 'clusters' of business concentration that helps firms to compete. Other authors argue that there are non-linear increasing returns to scale deriving from clustering and concentration (see e.g. Romer, 1986; Krugman, 1993, Martin and Sunley, 1996; Casson, 1997). These theoretical arguments are borne out to some extent in empirical findings of the importance of face-to-face contact in high order business exchanges (see e.g. Pred, 1980; Phelps 1992; Coffey and Bailly, 1992; Scott, 1993; Marshall, 1994; Harrison et al, 1996).

3.5.2 Micro-level studies

Second, there are many detailed survey studies which have sought to assess the extent of external services as a function of location. For example, Marshall (1982, Tables 5, 6 and 7) in a study of 357 manufacturing firms in 10 sectors in the urban centres and economic regions of Birmingham, Leeds and Manchester found statistically significant differences in the extent of external sourcing of insurance, legal, computing and stockmaking, against regions. Marshall also shows that size, technology, closeness to market, ownership, single vs. multiple sites, number of establishments and HQ vs. branch status are all also significant factors in influencing the extent of externalisation (op.cit., Table 8). Similar findings are those by O'Farrell et al. (1993) who confirm a high level of within-region sourcing. Whilst O'Farrell et al. (1992, Table 7) find that travel time and cost are the main factors that firms can use to compete for new business. Similarly Oakey and Cooper (1989) and Coe (1998) find strong local purchasing linkages whilst Curran and Blackburn

(1994) find 35% of manufacturing firms buying 50% or more of their purchases within 10 miles of their premises.

A further group of survey studies has investigated broad regional differences in types of services used. One intensive study is that by O'Farrell et al. (1992) comparing a matched pairs sample of 425 service firms in Scotland and S.E. England. Although the propensity to take up external advice differs only slightly between the S.E. (16%) and Scotland (13%). O'Farrell et al. found that there was a much higher and statistically significant level of use of external advice in the S.E. than Scotland. Similarly O'Farrell et al. (1993) found that in a parallel sample of 233 manufacturing firms there was a statistically significant difference between the proportions of external services that were 'imported' into the regions (39% in Scotland compared to 30% in the S.E.). Both findings suggest that it is probably differences in local supply conditions that influence these trends, although firm type, firm strategy and the level of sophistication of demand (for example the presence of local 'blue chip' companies) are important demand-side differentiating characteristics for the largest firms (O'Farrell et al, 1992, p. 525; 1993, p. 398).

3.5.3 Differences in regional 'entrepreneurism'

Interrelated with these findings, a third group of studies has argued that there are differences in entrepreneurial 'culture' between regions and localities that influence the openness of firms to external advice and other supports. The rate of new business formation is a useful indication of the link between entrepreneurship and service use. The higher the number of net firms created per region the greater the level of entrepreneurship within the region. A number of studies have found

significant differences on the performance of firms between regions. For example Hitchens and O'Farrell (1987) comparing the S.E. and N. Ireland, Lloyd and Mason (1984) comparing the N.W. and S. Hampshire, O'Farrell and Hitchens (1988) comparing Scotland and mid-west Ireland, and Thwaites and Wynarczyk (1996) comparing the SE and other UK regions. Mason (1991) interprets some of these findings to suggest that there are regional differences in attitudes and expectations towards entrepreneurism. In large scale studies of Britain as a whole, Moyes and Westhead (1990), Westhead and Moyes (1991) and Keeble et al. (1993) have assessed a wide range of influences on new firm foundation, finding many statistically significant features related to local industrial specialization, socio-economic structure, education levels, access to capital, market demand, and unemployment character. The urban character (population density) and institutional structures (such as availability for government assistance or the number of enterprise agencies) are also significant explanatory variables in some cases. However, in cross-national comparisons developed by Reynolds et al. (1994), the role of urbanisation on new firm births is shown to be significantly related chiefly to population density and the percentage of managers in the workforce, with little or no influence from government spending or assistance programmes.

These studies can be related broadly to Porter's (1990) 'diamond' of the four factors that affect regional growth and competitive advantage: (i) factor conditions (such as the availability of skills, infrastructure, capital, innovation and entrepreneurism), (ii) demand conditions (product development, industry structure, local purchasers and distribution system, market size and agglomeration), (iii) related and supporting industries (the presence of suppliers and customers that are also

leading-edge firms, including business service firms), and (iv) business strategy, structure and competition (affecting how firms are organized, created, managed, compete or cooperate with each other, including institutional structures and the role of government). Many studies find Porter's general factors, or groupings and subgroupings of them, to be significant explanations of the rate of new firm foundation and firm growth or success, see e.g. O'Farrell et al. (1992), Buckley, et al. (1990), and the studies cited in relation to local environments of entrepreneurism. However, fewer studies have evaluated the effect of these factors on the extent or location external advice and collaboration. Vaessen and Keeble (1985, p. 495), however, demonstrate that local competitive conditions are significant influences on the growth of business service firms growth but not on manufacturing. They also show (p. 502) significant differences between in-house and external sourcing of staff training services. Similarly Keeble et al. (1991) and Keeble and Bryson (1996) demonstrate the more rapid growth (of employment) and high degree of geographical localisation of business service firms in Britain in the areas of highest competitive conditions, particularly in London and the S.E. Also Keeble et al. (1991) demonstrate statistically significant differences in the concentration of business service firms and their rate of growth at both regional and county level which can in part be related to local competitive conditions.

An alternative, interpretation is provided by Rugman et al. (1993), Rugman et al. (1995), Peteraf (1993), and Dunning (1993, 1998). Where Porter argues that firms create, or encourage by their demand, the development of 'home region' core assets of supply, demand, related industries and strategic capacity, Rugman and Dunning argue that firms will increasingly seek external relationships to other

regions or countries to gain the advantage of those other region's core assets. Moreover Dunning argues that this collaboration with businesses in other locations will increase the higher is the level of innovativeness of the firm and the greater is its existing level of multi-national or multi-regional activity. A recent survey analysis of 131 predominantly large multinational enterprises shows that both local and foreign locations are used to capture these benefits, essentially as complements to each other (Dunning, 1996). This further suggests that firms do not adopt rigid views about localisation and collaboration but seek out the best external links irrespective of location.

At a more local level this conclusion tends to be confirmed in the studies of innovation behaviour of SMEs. For example Keeble et al. (1998, Tables 5, 6 and 8) demonstrate that there are only 30-31% close local links of high technology manufacturing and service firms in the Cambridge and Oxford regions, with the main links being to suppliers, subcontractors or service providers, and the most important sources being the rest of the UK, or outside the UK (see also Lawton-Smith, 1998). Again international SME studies suggest that it is firm structure or broad sector characteristics that determine the form of such links rather than local conditions (see e.g. Camagni, 1991; Camagni and Capello, 1997).

This then raises the following important issues. BL/SBS offer a local supply of generic or low level services for local SME (transitional) populations. Private sector (and technical specialist public sector services) provide a local and also a non local supply of high order services.

3.5.4 Location and embeddedness

A fourth strand of argument derives from the evidence in studies of urban-rural shift, which show some differences between urban and rural places in the extent of external links. For example, Keeble and Tyler (1995, Table 10) in a survey of 1128 firms in urban, accessible rural, and remote rural areas, demonstrate that "centrality/accessibility to clients, staff and suppliers" was the main feature differentiating success factors between urban and rural areas, favouring urban areas. It was the most important single success factor for any of the respondent businesses, whilst rural firms reported access to customers and business advice as statistically significant constraints on their development.

More detailed results of the same survey in Keeble et al. (1992, Table 7) show availability of staff, proximity to customers and access to business advice or training facilities all to be negative features of the remote rural areas, and in most cases also of accessible rural areas. In total, Keeble et al. (1992, Figure 5.4) demonstrate remote rural areas to be lower users of external advice from all sources, both public and private, with accessible rural areas as usually the highest users and urban as second highest. Ratings of "value" of each adviser are also quoted, with consultants rated most highly, followed by accountants, DTI Enterprise Initiatives consultants and the RDC. Banks, Enterprise agencies, local authorities and the Small Firms Service are all rated relatively low. But no statistically significant differences exist in ratings between areas. In another study Keeble (1993) demonstrates, using the 1991 CBR survey, that rural firms rank significantly more highly than urban firms the use of in-house technological expertise (60% compared to 51% in conurbations); rural firms also use external sources of technical information in developing new

products to a significantly greater extent (62% in rural locations compared to 53% in conurbations). Similarly Keeble (1998) shows that SMEs have a higher level of collaboration and external use of advice in the SE and in conurbations than in the periphery or more rural areas.

These arguments have been given a stronger theoretical basis by drawing on the role of local networks, local institutional structures and embeddedness. Deriving from the experiences of a number of localities, notably 'third Italy' (Brusco, 1982; Piore and Sabel, 1984), Baden-Württenberg (Sabel, 1989) and Massachusetts (Sabel et al, 1987) a growing body of analysis has suggested that inter-firm relations, including external sourcing of advice, and external collaboration for technology development and R & D, is stimulated by an institutional environment of high trust. Zucker (1986) suggests that a structure that encourages the development of trust depends on two dimensions; first, individual trust, which draws on social similarity between people within a market, which is therefore industry and context specific; and second, institutional trust deriving from broader social and regulatory contexts which is largely exogenous to the firm or industry. Zucker argues that the two types of trust depend on different sources. The first depends to a large extent on the form of personal networks. Granovetter, (1985) argues this encourages or discourages certain types of economic behaviour and derives a great deal from familiarity. In other words, from the frequency and intensity of relationships between managers or owners in different firms. Its context-specificness means that it is embedded, its depth depending on the strength of these relationships, which leads to different propensities to externalise in locations where high levels of embeddedness exist compared to others.

Zucker's second type of trust, institutional trust, draws on association structures, such as memberships of business and professional associations, and an intermediary mechanisms such as government regulation or third-party standards bodies (such as professional associations). Hence, locations with stronger development of these kinds of institutional structures may stimulate higher trust environments, which in turn stimulate a higher level of externalisation. In practice the two types of trust overlap with each other and may be difficult to separate.

Empirical assessments of the influence of these factors are relatively limited and tend to be applied to interpreting the success of best cases (such as 'third Italy') rather than being applied as a comparative metric (high-low trust) to different locational environments. This is in part because of the difficulties of measurement of trust. However, some recent studies have sought to interpret externalisation in part as a result of different environments of trust. For example, O'Farrell and Wood (1998) argue that this is an important aspect of the success of business services located in London and South East England, compared to Scotland. For specialist business services they argue that the close networks of interaction with clients, the concentration of 'home region externalities', and close institutional relations leads to major benefits for the London - South East market. But there is of course an important question of which comes first: trust or interaction? There is a case that trust is built through interaction (Harrison et al. 1996). Both sides of the potential provision of external advice need to explore and develop what they would like out of a relationship, and with each meeting and interaction there is the prospect of developing much more understanding and trust (See Saparito, 2001).

3.5.5 Counter-findings

Not all studies have found significant regional differences in demand and supply for external business advice, however. One of the most detailed studies is the stratified random sample of 233 manufacturing firms by O'Farrell et al. (1993). This demonstrates the dominating effect of firm size and service type on externalisation as well as the influence of many other variables including firm age, ownership structure (for independent plants), employment change, production structure and exporting. After controlling for these factors, the O'Farrell et al. study finds only small locational differences in their sample, between the two regions of Scotland and S.E. England, with Scotland using slightly more external services (12.4%) than the S.E. (10.3%), but the effect is not statistically significant. Moreover, there is little influence of regional differences for the take up of different types of business service.

Lack of differences between manufacturing firms in the S.E. and Scotland is also found in a detailed analysis of impact and satisfaction from external services by O'Farrell and Moffat (1995). Comparing these results with O'Farrell et al. (1992), which found strong regional differences for service firms, O'Farrell et al. (1993, p. 398) comment that this is due to the "less sophisticated service" demand towards more general management consultancy service since no corporate headquarters of major service businesses were included in their 1993 sample. Thus, local industry and firm structure, HQ functions, and size may be the most important determinants of the extent of interregional differences in the use of external advice. In later work (see O'Farrell and Wood, 1998) this is interpreted as differences in local networks and embeddeness.

Similarly Peters (1989) in a detailed study comparing firms in Southern and N.W. areas of Britain found few statistically significant differences in firm success, external sourcing or performance. Also Keeble and Bryson (1996, p. 927), using the 1991 Cambridge SBRC survey, found that there was no statistically significant differences in the take up of external advice of private sector services across the four-fold division of the S.E., outer Southern, Industrial Heartland and Periphery. The significant regional differences found in their sample all derive from government schemes, discussed further below. Furthermore, the large scale studies by Keeble using the 1991, 1997 and 1999 Cambridge surveys (Keeble, 1992; Cosh and Hughes, 1996, 1998) adopting a four-fold categorization of 8 conurbations, large towns (over 150,000 population), small towns (10,000-150,000 population), and rural areas (of under 10,000 population), also find no statistically significant differences in the use of external advice for private sector services (although significant spatial differences again exist for government initiatives). Bratton (1998), analysing the very large group of surveys prepared for local Business Link bids, which assess demand or 'need' for business advice services, also found no statistically significant differences between standard regions, or urban/rural locations in expressed 'need' for external advice.

In the assessment of local networks and embeddedness there is also considerable tension between different empirical findings. Bryson (1997), for example, finds that only 2% of clients choose their consultants on the basis of location or local availability, whilst Bryson and Daniels (1997) find business consultants predominantly to have 'weak ties' to their clients. Curran et al. (1993) and Curran and Blackburn (1994) find that owner-managers of SMEs tend to have

limited and non-extensive networks with little contact with external advisors, low level of use of social or family relationships for business purposes, and draw to a relatively limited extent from business associations (trade, professional and local Chambers) or Government business support. Moreover they find that the link of SMEs to their locality has been growing weaker, and is less likely to occur in newer or more rapidly expanding firms. Nor are SMEs strongly tied with larger firms (in local or other networks). Curran and Blackburn (1994, p. 116) conclude that the role of locality and local embeddedness has been greatly exaggerated. In other countries there has similarly been found little or no difference between regions in the use by firms of external advice (e.g. Vatne, 1995), although important differences in subcontracting and firm structures do occur.

These studies suggest that we must be very cautious as yet in concluding that there are significant differences between locations in the extent and form of external advice and collaboration as a result of the influence of location *per se*. Rather, differences in externalisation appear more as a result of the differential location of demand, differences in industrial structure and firm organisation, not of place *per se*. Wood et al. (1993, p. 696) also acknowledge that regional differences mainly reflect the client sectors served, the supply of small business firms, and the approach of different managers/founders in different places.

Those studies which do find significant differences in externalisation, therefore, may be doing so as a result of inadequate controls for the role of other factors, which we investigate further below. Similarly, Peters has made an important observation (1989, p. 333-4) that matched pairs methodologies, by selecting pairs matched on the basis of firm's product specifications, may be controlling out the

chief structural influences of products, markets and the supply of managerial skills that may be the key explanatory factors lying behind regional differentiation. Again this suggests the importance of controlling for demand differences deriving from firm size and industry structure.

3.5.6 The role of government assistance and support agencies

Demand and supply factors also influence the role of government assistance and support agencies. The supply side will be most influenced by the level of government resources which are made available. Also the greater the number of programmes that are up and running the greater the supply of external advice. However, this then raises the possibility of resource misspecification, which may occur when too much of the public sector resources are invested by government in schemes which have a very narrow set of entrance criteria and where only a small number of SMEs are eligible for the schemes. This then has the effect of causing a crowding out process: resources are finite and the use in narrowly focussed schemes prevents the use of schemes which are the true areas of need amongst businesses go under funded. It also raises questions which relate to issues of oversupply, gaps in the market for external advice, and distribution and access. There is thus the danger that certain areas of advice could be provided in too great a supply, and the excess capacity in the provision of external advice is wasteful and causes other areas to be under funded. There could also be gaps in the provision of external advice whereby there are needs in the SME community for external advice but this is not provided by the public sector. Lastly, there are issues of distribution and access. Should external advice be provided locally or nationally, and should advice providers come to the

firms' premises? Depending upon the perceived demand for and market for external advice for particular areas and particular types of firms it may be desirable to provide such services locally for ease of access, or if demand is low then a national framework may be more appropriate.

On the demand side there are many considerations which have in large measure been covered in 3.5.5. But the additional point needs to be made that public backed agencies although acting independently can suffer from joint success or joint failure, with firms using one source from the public sector, and if they have previously not used a public sector source, extrapolating and evaluating other programmes upon that basis. In other words, when firms use SBS and they receive a good level of service and are satisfied customers may then perceive that TECs/LLSC are also a public provided source of external advice and are also perceived of as being of equal good quality to SBS. Alternatively, if the use of a public sector source is bad the firm may then terminate the use of all public sector sources of advice, perceiving that they all will be of equal low quality. These points remain speculative, but clearly they do need to be considered.

A further important complexity is the need to control for the influence of different governmental grant and assistance programs which are geographically defined. The influence of government schemes on the level of use of external advice appears to result chiefly from the eligibility criteria that allow firms in assisted areas to access grant or other supports and preclude or diminish access in non-assisted areas. As to be expected, initiatives targeted on specific areas definitionally all show significant spatial variation. For example, for the take-up of Rural Development Commission supports (see Keeble and Bryson, 1996; Smallbone et al, 1993; Birley

and Westhead, 1993), or level of use of the Northern Ireland activities of LEDU (Barkham et al, 1996). These results largely confirm the importance of differences between areas in finance (via grants etc.) but not in firm behaviour. Indeed, those studies that have controlled for firm type between assisted and non-assisted areas find few if any geographical contrasts in external relationships except for access to finance. Thus, for example, Birley and Westhead (1993) in a study of 408 entrepreneurs found few significant geographical differences between the characteristics of the founders in assisted and non-assisted areas, and no significant differences in the sales revenues and dependency on major product lines or service groups, employment change, customer and supplier bases or competitive structures. Where significant differences in external supports occur these focus exclusively on the narrow areas of the number and type of sources of finance (reflecting grant availability, local venture capital availability, tax-free zones or 'soft' support assistance). The overall conclusion, confirmed in Vaessen and Keeble's (1995) larger scale study of the 1991 SBRC (1992) survey, is that business growth is possible in all types of environment, and does not depend on local factors. Moreover the perception by the entrepreneurs "of the environment may not reflect that described by the economic variables" (Birley and Westhead, 1992, p. 334). Any differences observed between areas in SME external relationships may thus be almost entirely due to policy initiatives not to firm motivation, local environment or economic growth characteristics.

However, some contradiction of the conclusion that eligibility alone is the determinant of differential take-up of external assistance has been suggested in other studies of government programmes. For example, assessments covering the 1980s

and early 1990s tend to show that the take-up of government assistance achieved by the DTI Enterprise Initiative did differ between areas; e.g. Keeble and Bryson (1996), found take-up to range from 27.1% in the SE to 38.3% in the industrial heartland and 39.8% in the periphery. Similarly Keeble and Bryson (1996, Table 9) found that take up of enterprise agency support was also much higher in the periphery (16.9% of firms) than the south east (4.7%), a finding echoed in the CBR 1997 Survey (Keeble, 1998) and in a smaller sample by Smallbone et al. (1993, Table 4). Similar results apply to new technology-based firms (Keeble 1994), to assistance from the Enterprise Allowance Scheme (Marshall et al, 1993; Allen, 1987), and to a broad range of consultancy and advisory schemes (Westhead, 1995).

A potentially important conclusion drawn from these studies is that assisted areas have higher take-up of government initiatives, whether or not they are specifically targeted on these areas. This has led to conjectures that firms in such areas become 'grant takers' or dependent. Because they are eligible for a group of specific schemes they are also made more aware of other supports and co-operate more in order to obtain this support. This may arise because the agencies through which they access assisted area schemes act as gateways to a package of other government assistance. Indeed the concept of a 'one stop shop' for such assistance emerged during the 1980s in many assisted areas before it was taken up nationally through the Business Link initiative. However, the studies cited above fail to fully differentiate how much of the increased take-up is due to the targeting and design of the policy initiative. The Enterprise Initiative, for example, was not nationally uniform, but between 1988 and 1993 gave a two thirds subsidy to consultants hired in assisted and urban programme areas compared to 50% in other areas. Similarly

enterprise agencies, technology supports and other consultancy schemes have all gained advantage from targeted government spending, local government or other initiatives focused on assisted areas.

A major aspect of all of the studies cited is also the extent to which a selection bias has entered. Firms which choose to receive grant aid or other supports may be self-selected, or selected by the agencies, or the analyst, as those with highest growth potential, better survival capacity, most likely to welcome support, or other criteria. Such self-selection or policy-selection is indeed a desired aspect of all policy interventions which are targeted at some firms rather than others. In evaluation of the marketing component of the DTI Enterprise initiative, for example, Wren and Storey (1998) find only small differences between 'treated' and 'untreated' firms, but they find that the differences would be much higher if they did not control for self-selection effects. They conclude (p. 27) that firms "tend to self-select themselves for assistance, and we find that the failure to take this into account severely biases the estimates".

3.5.7 Uncertainties of previous findings

From this review of the previous literature it is clear that whilst there are a number of theoretical expectations for differences to arise between areas in the extent of use of external advice and collaboration, and some empirical evidence to suggest that this occurs, there are also contradictory empirical results. Those studies that are most credible in finding locational differences suggest that it is differences in demand characteristics, especially locational agglomeration and embeddedness, that are the chief drivers. And it is these forces that account chiefly for the remarkably

high level of concentration of business services in London, the South East and a few regional centres. This of course does not mean that location is unimportant, rather the reverse. But it does suggest that it is the differences in the location of demand by scale, firm type, sector, organizational structure and inter-firm relations that influence the extent of external business relationships, rather than the supply role of location per se, such as its peripherality or other aspects of place. This conclusion is reinforced by the growing body of research suggesting that firms externalise very broadly, drawing on external assets wherever they are located, which in turn is encouraging greater interregional and international markets in external relationships to develop. This is a trend that is only likely to increase with the continuing development of globalisation and electronic communication.

In addition, assessment of the role of government initiatives that influence externalisation suggests that eligibility criteria play the key role; i.e. differences in eligibility between assisted and non-assisted areas are the chief determinants of whether grants, external government advice or other supports are used. There is at best only limited evidence to confirm arguments that firms in assisted areas are greater users of government external advice for reasons other than that it is more available, or more heavily subsidized in these areas.

However, in drawing these conclusions we have noted some central drawbacks of much of the previous research: first, that the samples drawn are often very small; second, that there is considerable inconsistency between surveys in the type of firms assessed (especially their size or whether they are start-ups and early stage, or not) and this limits the breadth of the conclusions that can be drawn; third, there has often been inadequate control for the influence of other features,

particularly of firm size and sector structure; fourth, there has frequently been inadequate control for the possible influence of self-selection and policy-selection bias. The following analysis seeks to overcome these difficulties, presenting a form of analysis that attempts to control for and evaluate all the main variables that might influence variation in the use of external advice and collaboration, thus giving a more definitive view of the influence of location.

3.6 Conclusion

We may summarise the findings of this earlier literature as follows. First, major differences in the level use of external advice, its source and field occur between different surveys. Generally most surveys have been relatively small sample and have inadequately controlled for differences between firms in their use of externalisation. Size, age and sector appear to be significant factors influencing the level and source of external advice which have not been fully controlled for in many previous studies.

Second, there have been significant changes over time in the mode of delivery and form of government support so that it is important to be clear about the period analysed and hence the institutional structures relevant at that time. The period 1988-94 saw a strong emphasis on the Enterprise Initiative as a central service. From about 1993 the TECs emerge as a local delivery system for business advice, and from about 1996 Business Link becomes more significant. We would expect some important contrasts to occur between these localised delivery structures and the more centralised system formerly followed.

A third aspect is the relationship of the advisor and the supplier. It is fairly clear from the discussion of previous findings that the likely extent of use of

particular sources largely depends on the level of trust that the client has of the supplier. In the case of accountants and solicitors the high level of use appears to derive from a 'professional trust' supported by government-backed self-regulation. This is a form of 'institutional trust'. This form of trust also applies to bank financial services, but applies less to bank general advisory services, and is not usually available to consultants. Consultants work in a low trust relationship largely drawing on market signals of quality such as reputation, recommendation or previous experience. For business associations 'constitutional trust' or institutional trust may characterise relationships where advice is backed by a confidentiality and high human asset skill specificity that puts these bodies in a special position with their clients. The use of friends and relatives relies on a 'social trust', whilst the use of suppliers and customers will depend less on trust than on the high level of technical and tacit knowledge that each possesses, as well as the exercise of coercive market power.

Government agencies and initiatives offering advice are clearly in a different position that cannot usually draw on any of these sources of trust or tacit knowledge. The use of such advice is therefore likely to depend on different factors. Whilst a level of institutional trust will exist for government-backed services, their use is likely to be mainly stimulated by financial subsidies and grants, their perceived quality, and will be considerably boosted by effective marketing (as occurred with the Enterprise Initiative). To the extent that these are the most important factors, the level of use will depend on the scale of grants and other supports available and the effectiveness with which awareness can be raised among clients.

Chapter 4

Methodology

4.1 Introduction

Chapter 3 outlined previous research which has been performed on external business advice, with a strong emphasis upon geographical considerations. The purpose of this chapter is to outline the methodology which has been used to obtain the empirical data used in chapters 5-10. More specifically, the methodology used in the Survey of Entrepreneurship is articulated, and the data from the Census of Employment which is used in chapter 9 is explained.

4.2 The Survey of Entrepreneurship

The data used in the writing of this thesis were collected as part of a wider 'Survey of Enterprise in Scotland and Northern England'. The survey was administered during April and May 2001. The overall objective was to gain a clearer understanding of how entrepreneurship was developing in those areas of the UK which were well away, geographically, from London and Southeast England which are the power-house of the UK (Cosh and Hughes, 1998, 2000)

The previous surveys of Britain which have been undertaken by researchers linked with the ESRC Centre for Business Research have the disadvantage that there are only a comparatively small number of firms in Scotland included in the Surveys. Whilst this comparatively small number is appropriate because it is the Southeast of England and in particular London which are the main economic drivers in Britain it does mean that our understanding of Scottish firms is somewhat limited because

there are insufficient firms to create break out samples from the Cambridge data sets to perform regional analysis.

Prior to the start of the survey, the names and addresses, telephone number and a named contact person (executive, director or proprietor), as well as other information about the firms was obtained from the Dun & Bradstreet UK Marketing Database. This information included the year of formation, legal status, business activity, and employment size. The main advantages of using the D&B UK Marketing Database over other commercial databases is that it provides such detailed information which is kept up-to-date.

The objective of the survey design was to create a panel of independent firms employing less than 500 workers, based in Scotland and northern England. In 2001 80% of businesses with employees employed fewer than 10 workers and less than 3% of businesses employed 50 or more people (DTI, 2002). In order to obtain usable numbers of larger sized SMEs it was necessary to over-sample this group. The result was that we sampled all manufacturing firms employing between 100 and 499 people and all business services firms employing between 50 and 499 people.

As Figure 4.1 illustrates, the sample is stratified in such a way as to under-represent the smallest firms (one to nine employees) and over-represent larger SMEs. Thus for our sample there are 42.4% of firms with 1-9 employees, 21.8% of firms with 10-19 employees, 18.4% of firms with 20-49 employees, and a total of 17.4 of firms with 50-499 employees. Surveys of micro-firms tend to report lower response rates and, in the case of innovation related surveys, poorer data quality (See Cosh *et al.* 1998). It is not anticipated that the deliberate skew in the 'representativeness' will greatly impact upon the analysis presented below.

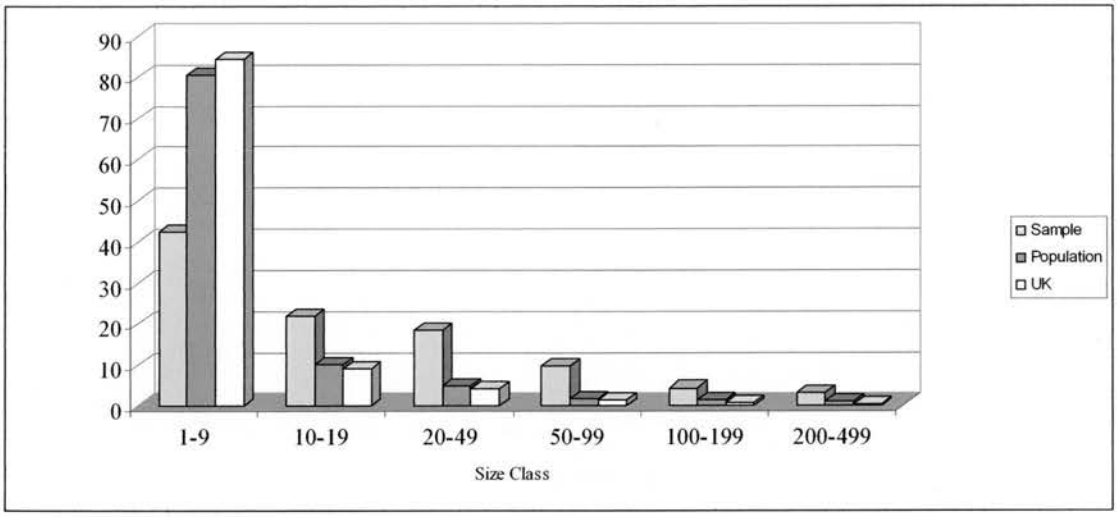


Figure 4.1: Relative Size Distribution of Sample

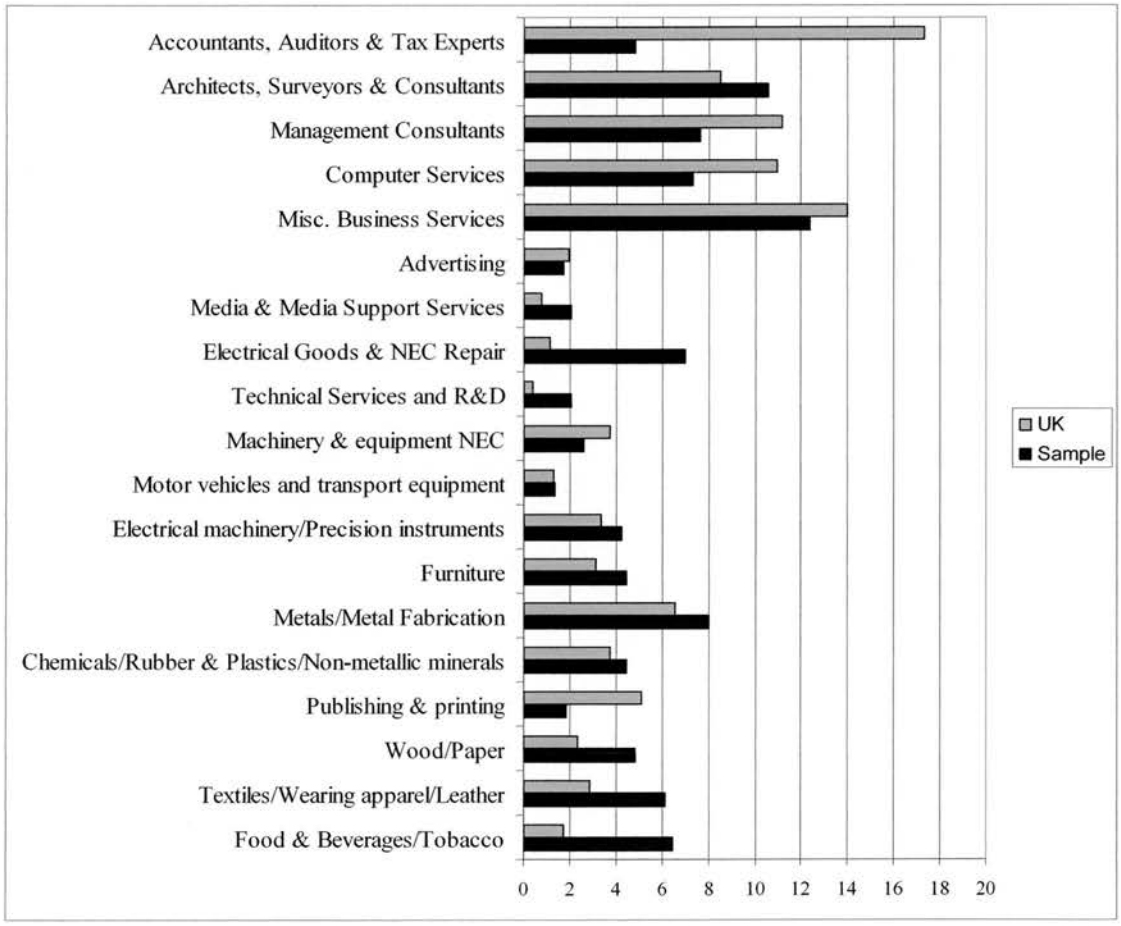


Figure 4.2: Relative Sectoral Distribution of Sample

Figure 4.2 shows a more detailed break-out of the sectoral distribution of our sample. With regard to the relative sectoral distribution of sample firms, Figure 4.2 indicates an over-surveying of food and beverages/tobacco, and textile and clothing firms and firms involved in the manufacture of wood and paper products (SIC (92) Divisions 15-16, 17-19 and 20-21, respectively) – relative to the pertinent population. By contrast, printing and publishing firms and manufacturing firms not elsewhere classified (NEC) are significantly under-represented in the sample (SIC (92) Divisions 22 and 36-37, respectively). The decision to over-survey firms in the identified manufacturing and service sectors was made with reference to recognised regional industrial clusters (DTI, 2001a). Over-representation of some sectors necessarily leads to under-representation of others. Accordingly, the decision was made to under-survey printing and publishing firms – since many of these are de facto business service providers – and also manufacturing firms NEC. With regard to the service sectors included in our sample we have deliberately over-sampled computer services, electrical goods and NEC repair (SIC (92) 72.2, 72.3 and 72.60, 52.7) and also Technical Services and R&D and media and media support services (SIC (92) 72.3, and 92.11). This resulted in a need to under-sample accountants, auditors and tax experts (SIC (92) 74.12) and architects, surveyors and consultants (SIC (92) 74.2). Advertising and miscellaneous business services have samples of similar size to the pertinent population.

Given that we have been able to assemble a large data set this leads us to believe that the results which are obtained in the next section of the paper are statistically significant. For instance, from a notional organization which has less than 500 full time equivalent employees (FTEs), and a manufacturing population of

approximately 15180 organizations, the 597 respondents represent a 3.9% sampling error at the 95% confidence level. For services, given an approximate SME population of 40555 firms, the 750 responses represent a 3.5% sampling error at the 95% level. In most survey research, error levels typically lie between 2 and 6 percent with 95% confidence limits (Oerlemans *et al.*, 2001).

In total, 1347 firms provided usable responses and this represents a 10.7% response rate. The response rate was explained by the fact that the postal survey was of 12 pages in length which required a considerable investment of time by the respondent; and resources were limited and constrained which prevented systematic reminder mail outs to the firms or systematic telephone chasing. With regards to the representativeness of the data, it is skewed towards manufacturing generally (44.3% of responding firms) and away from services (55.7%) and, in particular, retailing and agriculture (indeed it needs to be noted that the latter two are not represented in the data). In other words, relative to the actual number of manufacturing sector firms in the economy, our sample has a higher proportion of manufacturing sector firms. Our original sample included both manufacturing and service sector firms.

The Survey of Entrepreneurship was 12 pages in length (and is included in the appendix) which is towards the upper limit of what is acceptable for a postal Survey. The Survey consisted of 6 sections and can be seen in Appendix C. Section B looked at the use of business advice, and was the section of the Survey in which the author had the greatest input. The questions were designed to meet the objectives as stipulated in chapter 1. The questions were designed in such a way that respondents were required to tick boxes or circle values which would allow respondents to answer questions quickly, but at the same time provide valuable

information. The number of questions which required the respondents to write information was deliberately kept to a minimum in order to minimise the time burden on respondents.

Question B1 asked respondents a yes/no question of whether or not they had used each of a large range of public and private sources of external advice. For those respondents who had used a source of advice they were then asked to indicate on a scale of from 1 to 5 their assessment of the impact of the advice. On the 5 point scale the range of options were 1, no positive impact; 2, slight impact; 3, moderate impact; 4, important impact; and 5, crucial impact. The 5 point scale was selected in order to allow comparisons with the previous work of researchers from the Centre for Business Research, Judge Institute of Management Studies, University of Cambridge (Cosh and Hughes, 1998). It is also hoped that at some point in the future the Survey of Entrepreneurship can be repeated and co-ordinated with a survey of England and Wales by the CBR researchers.

In question B1 for those who had used a source of business advice they were asked to write in the geographic location – the main town or city where their advisor was based. We knew the postcode of the respondent and the town or city where the advisor was based and this enabled the author to calculate the distance in kilometres between the advisor and the client. This is used in chapter 9.

Question B2 was a supplementary question which was asked to those firms who had used BS/SBG or BL/SBS. More specifically the users were asked to indicate which of the services available they had and had not used. For those services which were used the respondents were asked to indicate on a scale of from 1 to 4 how satisfied they were with the advice which they received. The four point

scale ranged from 1, very dissatisfied; 2, dissatisfied; 3, satisfied; and 4, very satisfied. Again a 4 point scale was selected in order to allow comparison with earlier research by the CBR.

Question B3 asked the respondents if there were any additional services which the BL/SBS should offer to their customers. This question was included to gauge whether or not there were any gaps in the provision of advice services offered by BL/SBS.

Question B4 was a supplemental question which was asked to those respondents who responded yes to question B3. Respondents were asked to indicate up to 3 services which the BL/SBS should provide; and to indicate the maximum fee which they were prepared to pay for each service. For those who were not prepared to pay a fee they were asked to please specify 'zero fee'.

Question B5 looked at the range of SME support schemes which were provided by central government. Respondents were asked to indicate yes or no whether or not they had used each of the listed schemes. For those who had used a service they were asked to indicate their level of satisfaction with the scheme, from 1 to 4: 1, very dissatisfied; 2, dissatisfied; 3, satisfied; and 4, very satisfied.

This is an empirical based thesis and in chapters 5-9 the main empirical results are reported. The methodologies followed were to use a combination of crosstabulations, logit and ordered logit analysis. The cross-tabulation analysis was undertaken to establish one way relationships between characteristics of the firm against the levels of use and satisfaction with external business advice. This was then followed by multivariate analysis. The purpose of the multivariate analysis was to examine which characteristics of the firm do have relationships with the use of and

satisfaction of external business advice after controlling for all the relevant characteristics. In other words, in the crosstabulations there may be several realtionshiips between characteristics of the firm and the use and satisfaction with external business advice which are statistically significant. However, when all of the variables are examined together a sub-group of factors may be found to be statistically significant.

The logit econometric technique is a multivariate regression technique which is used when the dependent variable takes a binary response. Firms either used a particular source of advice or they did not. Whilst the ordered logit technique is appropriate where the responses take on a limited range of values. Thus users' satisfaction with external business advice is assessed using a scale from 1 to 4 and ordered logit techniques are employed.

4.3 Definitions and Categorisations

The other data set which was used in this thesis was the 1993 Census of Employment (CoE). The CoE database provides the number of businesses by total, by size category and by the Broad Industrial Groups for each of 2,615 postcode districts in Britain and is described in section 4.5. We now look at the sector categorisations which are used in chapter 9.

4.3.1 Sector categorisations

This research also uses a number of sectoral definitions based on the 1992 Standard Industrial Classification. This is a hierarchical system. At the first level of aggregation, whilst the 1980 SIC had 10 divisions, 1992 SIC is divided into 17 sections, each denoted by a single letter from A to Q. The sections are subdivided

into divisions (denoted by two digits) and in some cases, into subclasses (5 digits). In addition, there are nine broad industrial groups (BIG), devised for public domain access to the Census of Employment, which was the main focus used in this analysis. The definitions are outlined in Table 4.1.

Although comprehensive data is available at the BIG level, the majority of analyses into business requirements for services has been undertaken with the relatively broad differentiation of all manufacturing firms and all service firms (inter alia Cosh and Hughes, 1998; Bennett and Wicks, 1993; Priest, 1998a,b). There has been recent criticism of sectoral definitions in the analysis of economic activity, especially the apparent dichotomy between manufacturing and services (inter alia Wood, 1998; Harrington, 1998; Moulaert and Daniels, 1991: 2). The practice of differentiating between the primary (agriculture), secondary (manufacturing) and tertiary (services) sectors, however, was started by Fisher (1939) and later by Clark (1951), but although there is a certain consensus on what is generally understood to be a service there is no standardised or satisfactory empirical delimitation (OECD, 1978; Stigler, 1956: 47) and categorisations adopted are usually specific to research or organisations.

BIG	Definition	SIC92
1	Agriculture, fishing and forestry	01-05
2	Energy and water	10-14; 40-41
3	Manufacturing	15-37
4	Construction	45
5	Distribution, hotels and restaurants	50-55
6	Transport and communications	60-64
7	Banking, finance and insurance	65-74
8	Public administration, education and health	75-85
9	Other services	90-93

Table 4.1 The 1992 Broad Industrial Group (BIG)

The following categorisations are used in the analysis. The primary distinction is between manufacturing and services, where the manufacturing sector is defined as BIG 3 and the service sector as BIGs 5, 6, 7, 8 and 9. But the service sector is extremely broad encompassing a large number of businesses and it is debatable whether the demand for business services is homogeneous within the service sector (Greenfield, 1966; Daniels, 1985; Petit, 1986: 11).

This research recognises the need to differentiate within the service sector, but the degree of differentiation is limited by the use of BIGs. Where appropriate, therefore, this research categorises the services into private services and public services, i.e. the distinction between the market/non-market services (Dawson, 1991, Daniels, 1985: 13). There are also some more detailed analyses made with specific 3 digit groups. In this research, private services are defined as BIGs 5, 6, 7 and 9 and public services are defined as BIG 8. There is some overlap between the two in that BIG 9 does contain some economic activities which could conventionally be defined in the public sector, for example, trade unions and libraries, museums and art galleries, but the majority of activities in BIG 9 can be categorised into the private sector, for example, film production, news agencies, hairdressing, laundries and sewage disposal. This definition follows the categorisation of the British Chambers of Commerce and remains consistent with the manufacturing/service differentiation followed by the majority of business surveys, which tends to overlook the public sector.

Additional aggregations of the business service sector are also used in the analysis to allow an investigation into the geography of specific services. There is debate over the definition of the business service sector. Generally, business services

are seen as high order services resulting from the increasing externalisation of business activity and the growing importance of the service sector in mature economies. They can be differentiated from other consumer-orientated services since they serve 'intermediate business and public sector demand rather than consumers' final demand' (O'Farrell and Moffat, 1990: 167). Business services, therefore, as their name suggests, as those services produced by firms which are principally targeted at other firms involved in the production of goods or other services, for example, market research, management consultancy and marketing (Gershuny and Miles, 1983: 13).

There is however, an issue of terminology. Although this research adopts the term 'business service' with regard to this sector, much of the prior literature has tended to use the term 'producer services' with business services traditionally seen as a subset of producer services. Lentnek et al (1992: 468) defined producer services as a 'combination of financial, insurance and real-estate services (the FIRE services) and services to business management'. O'Farrell and Moffat (1995: 112) used a definition of producer services which included market research; advertising and marketing; product design; export advice; production planning, quality control; production engineering; computer/IT issues and training. Martinelli (1991) saw business services as a subset of producer services, although as Coffey and Polese (1987: 598) highlighted the term 'business service' has often been seen as synonymous and analogous with that of 'producer services'. Therefore, although the redefinition of the producer service sector as the business service sector is contrary to some terminology, it is seen as more appropriate for this specific research and its

target audience – the local business support organisations, especially the CCIs and the DTI.

The composition of this category was already pre-defined by Bennett and Graham and used when they accessed the 1993 postcode district data. Table 4.2 details the Census of Employment by sector.

Sector	**BIG Definition**	**Businesses**	**% of total**
Manufacturing	3	133,010	10.36
Service	5-9	1,056,387	82.29
of which			
Public service	8	177,263	13.81
Private service	5,6,7 and 9	879,123	68.48
of which			
Distribution	5	437,803	34.1
Transport	6	59,617	4.64
Banking	7	275,025	21.42
Other services	9	106,678	8.31
Business services	Appendix 4/2	235,712	18.36
of which			
Finance		45,905	3.58
Legal		15,017	1.17
Market Research and Advertising		6,744	0.53
Business and Professional organisations		1,602	0.12
All businesses	**1-9**	**1,283,811**	**100**

Table 4.2 The number of businesses in each sector categorisation, by Census of Employment

It should be noted that the total number of businesses cited in the table is different from the total number of units stated in Table 4.1. The difference is only 49 businesses – a difference of 0.004%. Both tables are based on different source data sets derived from NOMIS which explains the variation. Ignoring this slight discrepancy, of the 1.28 million businesses in the Census of Employment, the private service sector is largest accounting for 68.48% of all businesses. The public service

and manufacturing sectors account for 13.81% and 10.36% of total businesses, respectively. The business service sector accounts for 3.58% of all businesses and legal firms for 1.17% of all recorded businesses.

4.4 Spatial framework

Previous research has tended to use administrative areas in the analysis of business activity – either local authority districts, countries/metropolitan areas, or regions. This research, however, uses the postcode districts which allow for a far greater detail of analysis to be undertaken and also permits aggregation independently of administrative areas.

Postcode districts are subdivisions of postcode areas, where each postcode area, denoted by the first two alphabetic characters, is sub-divided into postcode districts which are denoted by a two digit number. The postcode district is then divided into sectors which is represented by the second part of the code. The final two alphabetic characters of the code are specific to a small group of addresses or may be specific to an individual address if the quantity of mail justifies it. The threshold limit is 25 items per day in urban areas and 50 items per day in rural areas (Raper et al, 1992: 33-4). In the UK, there are 120 postcode areas and 2,679 postcode districts. As a system so dependent on the economic activities, the postcode system is continually changed to reflect changes in postal volume, the building of new properties, or the demolition of existing property.

The geography of the postcode districts reflects the primary purpose of the system 'to speed and to reduce the cost of mail delivery' (Raper et al, 1992: 45). As such each postcode district has a median number of delivery points of 12. The vast

majority of mail is by business. Consumer stamped mail only accounts for 10.2% of the mail in 1990 (Raper et al, 1992: 47). This reliance on delivery points to define postcode areas, the fact that most mail is business mail, and the continues process of changing the postcodes to reflect the changing geography of economic activity, makes the postcode districts a highly appropriate spatial framework for the analysis of business geography. In addition, they are more numerous than the local authority districts and, therefore, allow more detailed micro-scale analysis of business trends than most previous analysis.

The postcode districts are shown in map 4.1 which shows the fine mesh involved. The postcode districts displayed are the 1996 boundaries. This was the closest date to 1993 for a GIS map available at the commencement of this research. The Post Office does not retain historical postcode geographies, so that the 1993 base which was that available from the NOMIS data had to be fitted to this map.

Number of pds	2,612
Minimum area (sq. km.)	0.22
Maximum area (sq. km.)	3,778
Average area (sq. km.)	85.80
Standard deviation	156.50

Table 4.3 The average size of the postcode districts

Table 4.3 details the average size of the postcode districts which is 86km. The use of postcode districts in this research offers a finer scale of analysis than previously undertaken. It allows a new spatial framework to be developed permitting more detailed analysis reflecting the fact that the majority of economic activity is essentially localised, for example, on a cumulative basis with postcode districts with

the most units being added together in descending order, 10% of the business units are located in only 0.410% of the British land area. This relatively high concentration of business activity means that for effective analysis, there is a need for more micro-scale differentiation; thus the smaller the spatial unit the better.

4.5 The Census of Employment

Information on the business population by size and sector and its geography is provided by data from the Census of Employment. The CoE data set is used in chapter 9 which identifies the major concentrations of business and economic activity in Britain. The data is for the individual postcode districts which is a finer spatial scale than the local authority districts traditionally used. In this analysis, the CoE is used in preference to the VAT register or the Census of Production and its aggregation of all firms with less than 100 employees into a single large category reduces its applicability to this research, especially when one of the research's focuses is SMEs and micro-sized firms. The use of the VAT register is limited by its availability only at the local authority district (at the time of this research) and a key aspect of this relationship is the movement away from local authorities as the framework for analysis to a finer spatial scale.

The 1993 Census of Employment (CoE) is used in preference to other dates or the more recent Annual Employment Surveys as it was the first full census of employers conducted since 1981 and is also the only to have ever fully estimated all 'business units' to the appropriate locations. Previously the Census had been based on biennial sample surveys, approximately a quarter of the size of the 1993 CoE (Thomas, 1995: 29).

Scale: approximately 1cm: 30km.

The 1993 census, however, covered all employers to provide a benchmark for the subsequent Annual Employment Surveys and to improve the quality of the economic statistics (Thomas & Smith, 1995: 370). It was undertaken on the 10th September 1993 and surveyed 1,134,013 units of which 894,010 (79%) had no previous contact, 149281 (13%) were single-site businesses previously contacted and 90,722 (8%) were multi-site businesses which had also been previously contacted. This compares to a sample of 318,000 units surveyed in the 1999 Census of Employment. The response rate of the census was 96%.

Due to financial limitations, the data is specific to one year and similar data is not replicated for any other year. This could be viewed as a constraint as it is argued that the use of single datum points ignores the continual transformation inherent in geography and may, therefore, be misleading (Johnston, 1991: 1). This lack of temporal analysis makes it very difficult to introduce a dynamic element to the research. The lack of any temporal element in the data is because the unit and SIC data from the Census of Employment (CoE) is not available at the postcode sector level until the 1987 Census, providing only 6 years difference to assess dynamic trends using postcodes at the spatial framework. (NOMIS does apparently have the 1984 CoE SIC and unit data at postcode district level which would have provided analysis almost over a full decade, but it is still in paper format and has not been entered into the computer system). In addition, the 1987 CoE was a sample survey about a quarter of the size of the full 1993 CoE with a different sampling framework. Any comparison with the CoE undertaken in the 1980s would also be complicated by the change in the standard industrial classification used – the SIC 80 being replaced by the SIC 92. Temporal change using the postcode districts is also complicated by

the fact that the geography of the postcodes undertaken is under continual review and changes frequently. Furthermore, there were budgetary constraints, since the 1993 postcode data are extremely expensive to access at the postcode level, and it would have been financially impractical to replicate the 1993 data for any date even if one was available.

The CoE is based on local units (LU) which is defined as each distinct business activity and workplace within a single company – establishments, not enterprises. This reflects the need for local area statistics. The use of LUs, however, raises a number of issues which need to be considered. First, in the majority of cases the LU will represent the entire business, but where a business has multiple work places, or where two or more distinct businesses activities are undertaken on the same premises, or where a business has a number of different PAYE operations, then one business may consist of a number of LUs. The 'unit' may in fact represent neither a firm or an establishment in its entirety. But as the Office for National Statistics confirmed, the significance of this mismatch is less significant for the analysis of small firms, which constitute the vast majority of businesses in the British economy, where PAYE schemes are confined to a single location and involve all the employees. Moreover, problems of allocation of the units with multiple sites were overcome in the 1993 Census for the first time by a secondary survey which allocated each unit to its appropriate location.

Second, for the micro-size enterprises, the RU may actually be the private accountant acting for the business. This could distort the results, but it is presumed that the majority of small enterprises lack the resources to travel far to their accountant and so the address of the RU would still be close to the address of the

enterprise. Third, it is also theoretically possible that there may be a number of business which employ staff with earnings below the PAYE tax threshold, which would therefore, be excluded from the Census. In addition, the Census excluded the self-employed which constitute the majority of business.

4.6 European Union Assisted areas

Assisted area status has been used in previous analyses of demand for business services (see, for example, Birley and Westhead, 1992) and are used in this analysis as they are indicative of different generic environments. To promote economic and social cohesion in the European Union, there are a number of structural policies concentrating on six objectives. Four of these objectives are geographically based with areas qualifying for Community regional aid according to the nature of their economic problems. They fall into four categories: Objective 1: promoting the development and structural adjustment of the regions whose development is lagging behind; objective 2: converting regions or areas seriously affected by industrial decline; objective 5b: facilitating the development and structural adjustment of rural areas; objective 6: promoting the development and structural adjustment of regions with an extremely low population density.

There are no objective 6 areas in Britain. In 1997, two regions in Britain qualified under Objective 1 – the Highlands and Islands and Merseyside (the whole of Northern Ireland is also an Objective 1 area). Objective 2 areas in 1997 included all parts of W Midlands, E Midlands, Yorks. And Humberside, North West England, West Cumbria and Furness, North East England, Industrial South Wales, Eastern and Western Scotland, parts of Greater London, Thanet and Plymouth. Objective 5b

areas include all or parts of Devon and Cornwall, Dumfries and Galloway, Rural Wales, Northern Uplands, East Anglia, English Marches, Lincolnshire, Derbyshire, Staffordshire, Borders, Rural Stirling/Upland Tayside and North West Grampian.

All areas were valid or the period 1994-1999 and are, therefore, valid for 1997. The assisted areas were based on the local authority districts. Objective 2 areas were defined using wards. Objective 5b areas were all based on wards and parishes. A small number of pds were covered by two different types of assisted areas. The solution adopted was that where a postcode district fell within the boundaries of an assisted area, no matter how limited the coverage, that postcode district was classified as being in an European Union assisted area. This methodology will slightly over-estimate the coverage of assisted areas and will particularly exaggerate the coverage of the Objective 5b areas.

This chapter has set out the research process and the data sources which are used in chapters 5-9. This has included an innovative use of postcode districts as the spatial framework for chapter 7. The choice of analytic technique is covered in the empirical chapters.

4.7 Conclusion

In the following empirical chapters, 5-10, but particularly in chapters 5-7 and 9, models are used to estimate the use and the impact of satisfaction with private and public sector sources of advice. Where the dependent variable is a binary variable logit regression techniques were used. Thus when modelling whether or not a source of advice or a particular service has been used the dependent variable is either 1 if the source or the service was used, and is 0 otherwise. Ordered logit models were used to estimate the users' assessment scores in a multivariate context. Thus when

users give a satisfaction or an impact score from 1 to 5 the ordered logit regression technique compares the different responses. In chapter 8 the regression technique which is used is Ordinary Least Squares to look at the relationship between the distance in kilometres (the Y variable) and the characteristics of the firm (the X variables). All three of these techniques are widely used and it was felt that it was not necessary to provide mathematical proofs of how each of the models functioned. Maddala (1992) provides proofs of these regression techniques.

Where problems and difficulties were encountered in the application of these three regression techniques because of small sample size or multicollinearity between explanatory variables these are reported in the main text. In the empirical chapters there are a substantial number of tables of crosstabulations and regression results. To allow the reader to have a better overall picture the cross-tabulation and regression results tables have been placed as near as possible to the relevant part of the main text where they are explained. The use of bar graphs has also been used to better convey the results.

Chapter 5

The Extent of Use and Level of Impact of External Business Advice

5.1 Introduction

The purpose of this chapter is to assess the extent of use and level of impact of 14 external service suppliers for Scottish firms and 13 external service suppliers for English firms. The Survey was designed to allow the respondent to identify any other source which they had used and to indicate the impact of that advice. Thus, the results are important because this is the first large scale survey which covers all providers of external advice in Scotland. More specifically the full range of external suppliers falls into six distinct categories: (i) the professional specialists (accountants, banks and solicitors), (ii) social contacts (business associates and friends or relatives), (iii) market contacts which take place through the supply chain (customers and suppliers), (iv) professional generalists (consultants – but this is potentially a heterogeneous group and can cover general advice and assistance or much more specialised and focused advice and assistance), business associations (trade and professional associations, and chambers of commerce) and government sponsored agents (Business Shop/Small Business Gateway, LECs or Scottish Enterprise, LEAs/Trusts and HIE – for Scotland; and Business Link/Small Business Service, TECs, LEA for England).

The use of external suppliers of business advice has become a major aspect of most firms' activities in both manufacturing and service sectors. A number of previous studies has argued that the supply of business services is different from that of other goods because they have mixtures of attributes, identified by Mills and Margulies (1980) and Clark (1995) as both task-interactive and personal-interactive,

which require close interaction between client and producer. Furthermore, services have specific characteristics of intangibility, inseparability, heterogeneity and perishability that require interactions to be particularly intense, and often prolonged. This can require detailed on-site appraisals and continued client-supplier exchanges which other goods rarely need (see e.g. Wilson, 1972; Cowell, 1984; O'Farrell and Hitchens, 1990; Clark, 1995). Intense interaction can be viewed as a means of overcoming information asymmetries on both sides: of the supplier's uncertainty about the specific form of the clients demands; and of the client's uncertainty about the type of service that is needed. The extent of the market in any specific field will depend on the ease with which interaction can be developed and these information asymmetries overcome. This will be easier for some types of supplier than others; for example, where suppliers possess recognised quality assurance procedures or are regulated, which can generate higher levels of trust between the client and the supplier.

This chapter concerns the use of business advice by small and medium-sized enterprises (SMEs). The advice assessed in our empirical study focuses on the range of different suppliers used and their "impact on meeting business objectives".

Our focus on a broad range of suppliers and advice processes follows from the widespread discussion in the literature on SMEs which has argued that SMEs often have a greater need than larger firms to buy-in external assistance, but a greater reluctance to do so (see e.g. Birley and Westhead, 1992; CBI, 1995; DTI, 1990; DE, 1991; Storey, 1994). This literature has also found that there are usually important differences between SMEs by size, with the smallest firms usually employing external advice to the least extent, with a rising level of use by size up to firms of 50-

100 employees, after which point there may be a saturated market(O'Farrell and Moffatt, 1995; Bennett and Robson, 1999a).

Because of a perceived general reluctance of SMEs to seek external advice, and a particularly strong reluctance identified among owner-managed businesses (DE, 1991; Storey, 1994), a number of government initiatives have sought either to stimulate the supply of advice or to encourage SME demand. In the 1998 period covered by our survey the main government approach has been developed through a network of local agents: BS/SBG (BL/SBS), LECs (TECs) and enterprise agencies. Each of these has sought to offer free or subsidized advisors, thus attempting to overcome supply constraints at a local level accessible to SMEs. By use of large scale local publicity campaigns, including mailing and local events these initiatives have also sought to stimulate SME demand.

A primary focus of this chapter is therefore on how advice differs between supplier types. Because of this focus, and because we wish to establish whether there exist any large scale statistical regularities between supplier types, we adopt a large scale survey format and have to use a mail out methodology. Unfortunately this precludes detailed assessment of the process by which advice is demanded and delivered. Also because of the wide range of other questions that had to be included in the survey, it was not possible to include questions about prior use of advice sources, frequency of use, and a number of other characteristics that would have been desirable. This chapter must be seen therefore as an assessment of advice intensity undertaken at a fairly broad level, with advantages of breadth and generality, but with disadvantages of lack of depth how the advice process works. However, we

seek to compare our interpretations against more detailed and smaller scale studies which we demonstrate, in general, to be in line with our conclusions.

5.2. Interaction intensity

Business services have been shown to be quite different from consumer services and from the purchase of manufactured goods (see e.g. Hill and Neeley, 1988; Morris and Fuller, 1989; Dawes et al., 1992; Jackson et al., 1995; Clark, 1995; Brentani and Ragot, 1996). Our analysis of advice services focuses on the central element of professional services: those that offer an increase in knowledge and expertise that is highly knowledge-based and intangible. They primarily "supply expertise and enhance the value of all other sectors' outputs, including that of other services" (O'Farrell and Moffat, 1991, p. 206). They are thus chiefly a *process* that produces change to the business customer (Dwyer, et al., 1987; Riddle, 1986) that requires an increase in the knowledge pool on both sides: 'production' of the service is in some senses a joint activity of the buyer and seller.

Professional business services require interactions based on relational exchanges (Clark, 1995; O'Farrell and Moffat, 1991) whereby the client's needs are established by the advisor, and advisor's ability and quality assurances are assessed by the client. In the information exchange process, personal relationships are important in allowing implicit assumptions and obligations to be explored, and trust to develop. This will usually combine task-interaction, where the client and supplier exchange information on problems to be solved and means to accomplish them, with personal-interaction, where the client's well-being is directly improved (by making internal tasks easier or by improving profitability and performance). As Clark (1995)

argues, these two interactions, identified by Mills and Margulies (1980), are not usually distinct. Clark (1993; 1995), reviewing earlier literature (for example Wilson (1972), Levitt (1981), Cowell (1984) and Marshall (1988)) has focused on four key differentiating but overlapping characteristics of business advice and consultancy services: their intangibility, inseparability of interactions, heterogeneity, and perishability. (i) Intangibility means that services do not take the form of a material product (see e.g. Walker, 1985). This makes them difficult to sample before purchase and difficult to reproduce. However, there are clearly degrees of intangibility so that some services are more intangible than others e.g. management training is highly intangible, but many mainstream banking services have product characteristics resembling tangible goods. Also it is important not to overemphasise intangibility since all services become tangible as part of final demand, whether that is in the form of a good or a service. (ii) The inseparability of services means that buyers and sellers must interact to refine the advice process, with a long series of stages to refine need, select the advisor and develop the actual delivery of advice. (iii) Heterogeneity of services means that they are not generally standardized. Advice services usually need to be re-tailored to each client with elements of uniqueness. This leads to problems of quality control and to the need for the customer to become closely involved with production to check appropriateness and fitness for purpose. Clark (1995) argues that a large part of the client assessment of appropriateness may depend on impressions and how they are managed by the advisor. (iv) Perishability occurs because services are destroyed during consumption and have to be repeated. For strategic advice the ownership of the service, including some of the intellectual property rights, transfer from the seller to the buyer, which

the buyer may reproduce internally. This means that although repeat business often occurs, the new purchase will usually be for a service that is significantly different from previous purchases, requiring new tailoring.

Hill and Neeley (1988) and Lapierre (1997) argue that the key distinguishing characteristics of professional advice services are the high level of expertise required (requiring high education, knowledge and experience levels), group and self-regulating identity among the advisors that creates an impression or reality of quality, a history of professional ethics, and an emphasis on fields of advice that have high cost and high importance to the business.

All of these characteristics result in a high human asset specificness of the business service supply process, which in turn depends chiefly on knowledge-based technical skills which are exchanged with the client. The importance of this knowledge base in turn means that there is often an information asymmetry between buyer and seller. The intense interaction process necessary for successful advice and consultancy is chiefly aimed at overcoming this asymmetry. There are two aspects to this information asymmetry - ex ante and ex post (see Nayyar, 1990; Gallouj, 1997). *Ex ante* asymmetries derive from lack of information by the buyer of the seller's service quality or characteristics. This makes it difficult for a buyer to select a service supplier: all suppliers may appear to be the same, or are indistinguishable. *Ex post* asymmetries derive from the buyer's inability to assess fully the actions taken by the supplier. On the one hand, services are inherently difficult to define in a contract and therefore the supplier has considerable scope to cut costs or quality without detection by the seller. Therefore the buyer finds it difficult to be sure if value for money has been obtained. On the other hand, the outputs often pervade a

wide range of management activities, including change behaviour or strategies of the managerial personnel, from which specific outputs are difficult to measure. Thus there are many difficulties of attributing increases in profit, turnover or productivity to the specific advice services received. The evaluation of outputs is particularly difficult for 'softer' (more intangible) fields of services such as advice, which are the focus of our empirical study, compared with more specific or technical services such as repairs, maintenance, production line development, etc.

As Holmstrom (1985), Nayyar (1990) Milgrom and Roberts (1992), and Gallouj (1997) note, there are a number of remedies for these asymmetries, and each has a different level of relevance to different sources of advice. Clark (1995, Chapter 4) identifies the three main remedies for information asymmetries as: *contractual structures, regulation (and self-regulation), and reputation or 'brand'*. Clark emphasises the importance of the signals which these different remedies give, particularly in the selection process, of how an advisor is chosen. This is an important interpretation for our analysis because it allows us to draw out important distinctions between types of suppliers of advice.

Contractual structures seek to control the advice process by detailed product specification, contingent fees, post-delivery contractual holdbacks conditional on performance, and output-related bonuses or penalties. Dawes et al. (1997), and Clark (1995) find that the cost element of advisors is not usually a key selection criterion, being a 'moderate' issue in the Dawes et al. study and being the seventh most important aspect of success in obtaining assignments in Clark's study. However, contracts in more general terms than cost alone have a somewhat greater importance, being used by 72% of O'Farrell and Moffat's (1995) sample of advertising and

marketing, graphic design, computer/MIS and training advisors, and used by between 33-90% of recruitment consultants for different aspects of their services in Clark's (1993) study. Day and Barksdale (1992) find that important aspects of contracts to the client are on-time on-budget delivery, and up-front schedules that are stuck to.

Regulation by government, or self-regulation by industries bodies, is a second way to reduce asymmetries. Clark (1995) argues that because of the extremely low barriers to entry to the advice and consultancy market, regulation of self-regulation might be expected to be important. In fact he argues that government regulation is "weak" and self-regulation is a "patchwork" (op. cit., p. 73) for the consultancy area. Some sources of the consultancy and advice are, however, highly regulated, as for example financial advice following IMRO and FSA rules. Other sources have a government framework of self-regulation that prevents market entry unless professional training qualifications have been attained and are routinely updated e.g. legal services via the Law Society, and accountancy and financial advice via the accounting bodies. The Government since 1997 is seeking to strengthen these standards further by separating the regulatory functions from representative functions of the accounting bodies. For government agencies themselves there are also extremely burdensome regulations defined by the parent government departments, although these are more often framed in terms of supplier performance on cost or activity criteria than client evaluations. For our analysis of suppliers, the extent of regulatory and self-regulatory frameworks, as an ex ante signalling of quality, is likely to be an important differentiating aspect between suppliers.

Reputation and 'brand' have been found to be the key selection criteria for advisors when studying most types of private sector consultants. Reputation derives

from a range of elements: existing relations with clients, the reputation of the individual consultant, the reputation of the consultancy firm, the general image of quality, and third party recommendation (Clark, 1995, Table 4.2). These features account for 70% to 93% of client rankings of selection criteria is Clark's study of recruitment consultants, with prior experience the most important criterion employed overall. Similar findings are reported for other types of consultants by Day and Barksdale (1992), Wheiler (1987), Dawes et al. (1992), and Bryson, (1997). Reputation and 'branding' are seen as key means by which *ex ante* information asymmetries can be diminished or overcome by Shapiro, (1983), Nayyar (1990) and Milgrom and Roberts (1992), who argue that they will be more important the more imperfect the information in the market between suppliers and their clients.

However, reputation and branding do not guarantee quality, they merely limit the effects resulting from asymmetries: of adverse selection and moral hazard. Their role will also tend to vary with the type of service and type of supplier. Recognising the importance of service and supplier type, Clark (1993) argues that there will be different mechanisms of exchange and interaction in different service markets, and that the mechanisms depend on the extent of trust between buyer and seller. For different suppliers, trust has differential roles in determining the extent to which reputation and brand, or other more formal regulatory mechanisms are used to signal quality and hence reduce information asymmetries. This means that in our supplier comparisons we seek to place a high emphasis on the different signalling processes used by different types of supplier.

Trust is generally argued to depend on two dimensions (see Zucker, 1986; quoted in Clark, 1993). The first is personal trust. Personal trust draws on social

similarity between people within a market, which is therefore firm, industry and context specific. The second dimension, institutional trust, derives from the broader social and regulatory context of each supplier, which is largely exogenous to a particular firm or industry. Zucker argues that the two types of trust depend on different sources. The first depends largely on the extent and the form of personal networks. Different types of personal networks encourage or discourage certain types of economic behaviour, as argued by Granovetter (1985). Zucker's second type of trust, institutional trust, draws on association structures, such as memberships of business and professional associations, and on intermediary mechanisms such as government regulation or third-party standards bodies (such as the British Standards Institutes BSI, or ISO). Suppliers with stronger development of these kinds of institutional structures may be able to signal a greater level of quality or reliability, reducing ex ante information asymmetry, uncertainty, and stimulating a higher level of trust, which in turn can stimulate a greater willingness to seek services from these particular external suppliers. If this trust is well-founded, this should lead to higher quality assurance and hence impact levels. In practise the two types of trust overlap with each other and may be difficult to separate in empirical studies.

Because of the difficulties of separating different types of trust in practice one way of proceeding is to assess client responses to different types of suppliers of advice that operate within different networks of trust. In empirical investigation we use this way of assessing trust; i.e. we attribute differences between suppliers to the different trust and reputation producing mechanisms that exist for different supplier types.

5.3. Empirical Assessment

5.3.1 Levels of Use

Overall the level of use of external business advice is high with 97.9% of the respondents having used one or more source of advice in the previous three years. This level of use is higher than the 95.0% found by CBR researchers in 1997, and 89.3% in 1999; and it is also higher than the 85.8% found in 1991 by the Small Business Research Centre which was also based at the University of Cambridge (SBRC 1992, Cosh and Hughes 1998, 2000). The results in Table 5.1 suggest that the market for external advice is very buoyant and is approaching a point where virtually all firms have sought external advice in some form or other.

It is clear that the different categories of external advice suppliers fall into a strongly differentiated rank ordering according to their level of use. The most used sources of advice are accountants (80.9%), banks (71.4%) and solicitors (65.3%) which are all used by at least two thirds of the respondents. The dominance of the private sector specialised sources in large part must reflect the institutional regulatory environment. In particular there is a need to have accounts prepared and audited. Whilst the holding of bank accounts provides a platform for the supplier to 'park' advice services. In other words, the possession of a bank account with a named company provides them the opportunity to solicit greater business when the firm has meetings to discuss their financial situation.

Taken together the use of these three private sector professional sources represents 36.9% of all external sources used (See Table 5.2). Given that this was a postal questionnaire and the space was limited, this precluded questions to measure the frequency of use with the providers of external business advice.

Advice Source	All	CBR (2000)	Services	Manufacturing	Micro	Small	Medium/ Larger	Declining	Stable	Medium Growth	Fast Growth
Accountant	80.9	78.9	83.2	79.3	80.0	81.9	80.6	81.7	79.0	85.2	79.0
Solicitor	65.3	-----	72.5***	60.2***	52.5***	74.2***	91.0***	63.3***	53.8***	83.6***	71.9***
Bank	71.4	53.5	72.1	70.9	71.1	71.7	71.2	67.3*	67.9*	79.7*	72.4*
Customers	46.5	25.4	46.4	46.6	43.9	48.3	52.3	45.5	43.1	56.1	49.5
Business Associates	47.2	-----	44.2	49.3	48.2	45.3	53.0	45.3	45.9	53.6	50.8
Friends/Relatives	32.4	-----	32.8	32.2	35.7**	28.4**	37.9**	31.4	34.8	35.2	33.0
Suppliers	48.5	16.9	52.3**	45.8**	45.0*	51.0*	56.1*	43.1***	42.8***	54.4***	56.2***
Consultants	40.1	31.0	46.8***	35.4***	29.8***	47.9***	57.6***	39.9***	28.8***	49.6***	48.1***
Local Chamber of Commerce	19.7	12.7	22.8**	17.5**	15.2***	23.5***	24.2***	18.9	18.8	16.9	18.4
Trade/Professional association	35.0	33.8	32.6	36.6	31.9	36.9	42.4	36.9	35.1	36.6	31.9
Local Enterprise Agency/Trust	33.5	33.8	37.6**	30.6**	26.4***	39.8***	39.4***	33.9***	23.1***	40.3***	38.4***
Local LEC or Scottish Enterprise	33.3	21.1	38.4***	29.9***	25.9***	39.4***	43.3***	31.1*	28.8*	34.1*	41.4*
Highlands & Islands Enterprise	7.7	-----	10.4**	6.0**	5.4***	9.2***	13.8***	8.7	9.4	9.6	6.8
Business Shop/ Small Business Gateway	27.4	7.0	33.1***	23.6***	24.9	28.8	35.8	27.8	25.2	28.6	27.5
Other	1.6	----	2.4*	1.0*	1.9	1.0	3.0	1.2	0.9	2.3	3.7
N	984	71	408	576	455	462	67	245	208	128	185

Table 5.1: Use of private and public sector advice sources in Scotland by sector, firm size, and employment growth (% of respondents reporting use, multiple responses allowed) (*** $p > 0.01$; ** $p > 0.05$; * $p > 0.1$). Using Mann Whitney test for two group comparisons, or the Kruskal-Wallis test for multi-group comparisons, between column entries. Types of business: micro-less than 10 employees, small business between 10 and 99 employees, medium/larger businesses between 100 and 499 employees. Employment growth of business during last three years: declining businesses with negative growth below 5%; stable growth from -5% to +5%; medium-growth greater than 5% and less than 50%; and fast - growth 51% or greater.

	Exporter				IncProc	Innov	NovProc	Innov	IncProd		NovProd	
Accountant	80.8	80.5	81.6	80.3	80.5	81.0	80.3	83.2	80.8	80.0	79.8	82.2
Solicitor	61.4***	76.5***	63.9	66.7	64.9	66.5	64.2**	73.4**	68.1***	58.7***	61.1***	74.7***
Bank	68.8	73.1	73.6	69.3	69.5	73.8	71.2	70.2	70.4	72.7	70.9	71.3
Customers	43.6***	54.3***	49.2	44.0	46.0	49.5	46.4	52.0	47.3	47.2	45.5	51.2
Business Associates	46.6	48.3	50.0*	44.6*	45.9	48.9	46.5	49.6	47.0	47.2	47.0	47.1
Friends/Relatives	31.9	34.5	35.3*	29.8*	31.6	35.3	32.2	37.6	31.4	36.5	32.5	33.4
Suppliers	47.6	50.4	48.9	48.1	47.3	52.5	48.3	54.4	48.4	51.0	48.5	50.5
Consultants	37.6***	49.6***	37.2*	42.8*	40.5	42.0	40.4	44.8	40.3	43.1	38.2***	47.3***
Local Chamber of Commerce	17.5**	23.4**	18.9	20.4	20.8	17.4	18.7	25.0	20.3	17.8	17.9*	23.2*
Trade/Professional association	32.6	37.3	33.1	36.7	33.3	37.5	33.8	40.8	34.0	36.9	36.1	32.2
Local Enterprise Agency/Trust	28.9***	44.4***	32.6	34.3	33.3	36.8	34.1	37.6	35.1	32.8	31.0***	42.0***
Local LEC or Scottish Enterprise	29.1***	42.0***	32.3	34.3	34.7	33.2	32.9*	41.8*	35.9	30.7	29.2***	45.6***
Highlands & Islands Enterprise	6.6**	10.9**	7.0	8.5	8.0	7.5	6.9**	13.4**	8.5	6.5	7.1	9.7
Business Shop/ Small Business Gateway	25.6**	32.4**	27.4	27.5	27.5	29.4	27.4	33.1	29.2	26.4	25.6***	34.6***
Other	1.9	1.1	1.7	1.5	1.3	2.2	1.6	1.6	1.3	2.3	1.6	1.7
N	619	266	472	518	595	321	791	125	666	260	629	297

Table 5.1: Use of private and public sector advice sources in Scotland by exporter, age, incremental process innovator, novel process innovator (% of respondents reporting use, multiple responses allowed). (*** $p > 0.01$; ** $p > 0.05$; * $p > 0.1$) Using Mann Whitney test for two group comparisons, between column entries. Types of business: older firms established in 1986 or earlier, and younger firms established after 1987. Novel innovators introduced innovations which were new to both the firm and to the industry and are denoted by Nov. Incremental innovators introduced innovations new to the firm but not to the industry and are denoted by Inc. Process and Product Innovations are reported and are denoted by Proc and Prod, respectively.

Advice Source	**Percentage of All Advice**	**Cumulative Percentage of All Advice**	**Percentage Level of Use**
Accountant	13.7	13.7	80.9
Bank	12.1	25.8	71.4
Solicitor	11.1	36.9	65.3
Suppliers	8.2	45.1	48.5
Business Associates	8.0	53.1	47.2
Customers	7.9	60.9	46.5
Consultants	6.8	67.7	40.1
Trade/Professional association	5.9	73.6	35
Local Enterprise Agency/Trust	5.7	79.3	33.5
Local LEC or Scottish Enterprise	5.6	85.0	33.3
Friends/Relatives	5.5	90.4	32.4
Business Shop/ Small Business Gateway	4.6	95.1	27.4
Local Chamber of Commerce	3.3	98.4	19.7
Highlands & Islands Enterprise	1.3	99.7	7.7
Other	0.3	100.0	1.6
	100.0		

Table 5.2: The percentage of all advice provided by each of the private and public sources of advice in Scotland

In these circumstances the percentage use by the combined uses of banks, solicitors and accountants could be a conservative estimate of the levels of use. This notwithstanding, the supply of external advice is therefore dominated by professional specialists. The levels of use are in line with the findings of other surveys (Bennett and Robson, 1999a).

The fourth to the sixth most used sources of advice are suppliers (48.5%), business associates (47.2%) and customers (46.5%). Thus, supply chain contacts are each used by approaching one half of the respondents. These results suggest that the prime focus for external inputs of advice is from individuals who have two key characteristics. Firstly, these sources are specialists, which appears to place a high emphasis on both high-level technical skills and/or tacit knowledge of the business through personal or market relations. Secondly, and arguably of equal importance the individuals are likely to be in positions of high levels of trust with their customers, suppliers and business associates. In each case the individuals could also be drawing upon their established trading relationships and possible social interactions, particularly with business associates. These three high trust sources of advice account for 24% of the use of business advice; and if the professional specialists of accountants, banks and solicitors are also included they together represent 60.9% of the use of business advice (See Table 5.2). Thus, the six most used sources represent in excess of sixty per cent of the used external advice.

Consultants are used by 40.1% and are the seventh most used source of advice. Consultancy work can be of a very general nature or it can be of a highly specific and bespoke nature. The level of trust can range from low to high. Higher levels of trust may be necessary for advice which is particularly sensitive and

requires access to the inner functioning and operations of the businesses. In isolation, consultants contribute 6.8% of the market for business advice. Consultants also have in common the characteristic that they are located in the private sector. However, in practice the use of consultants is supported by the existence of various public sector support schemes such as the SBS and SBG which are the main government supported schemes in England and Scotland, respectively.

Taken together the seven most used sources of advice represent 67.7% of the market for external advice (Table 5.2). In other words the seven most used sources of advice have in common that they are from the private sector and represent two thirds of the market for external advice.

Trade and professional sources of advice are used by 35.0% of respondents and in rank order are the eighth most important source of advice. These figures are in line with the estimates of their UK membership within the respective size categories (Bennett, 1996, 1998). However, this scale of development of advice from associations is fairly modest, confirming earlier findings that the associations fill rather specific niches in the market, drawing on their special positions as collective bodies. Taken together, professionals of accountants, banks and solicitors, combined with suppliers, customers, business associations, consultants, and trade and professional associations represents 73.6% of all responses. If we further also include chambers of commerce and friends this group of non-Governmental sources represents 76.9% of all responses.

Thus, Governmental sources of advice represent 23.1% of the market for business advice. Within the Governmental sector, Local Enterprise Agencies and Trusts and Local LECs or Scottish Enterprise are the most used sources; and overall

they are the ninth and tenth most used source of external business advice and are both used by one in three of the respondents. Closely behind the LEAs/Trusts and LECs and Scottish Enterprise are friends and relatives with 32.4%. Again this is a level of use around one in three of the respondents.

The Business Shop and Small Business Gateway Service is the eleventh most used source of advice and is used by 27.4%. This level of use should be a source of encouragement. It suggests that the use of business shop, with over one in four respondents having used it, is now approaching levels of use achieved by the English programme of Business Link. A detailed assessment of the BS/SBG services which were used by BS/SBG clients is presented in chapter 6.

Chambers of Commerce are the thirteenth most used source of advice and is used by approximately one in five of the respondents. The Highlands and Islands Enterprise is the fourteenth and the least most used source of advice with a level of use below one in ten users. The low levels of use for HIE must come as a disappointment for that scheme. For whatever reason it seems that firms are reluctant to use HIE and instead use the private sector or other sources such as BS/SBG for advice. For completeness the respondents were allowed to indicate if they had used any other source, and a very small number of respondents, 1.6%, indicated that other sources were used.

Figure 5.1 shows the levels of use of Scottish firms in the Survey of Entrepreneurship against the levels of use for Scottish firms which were included in the 1999 CBR Survey.

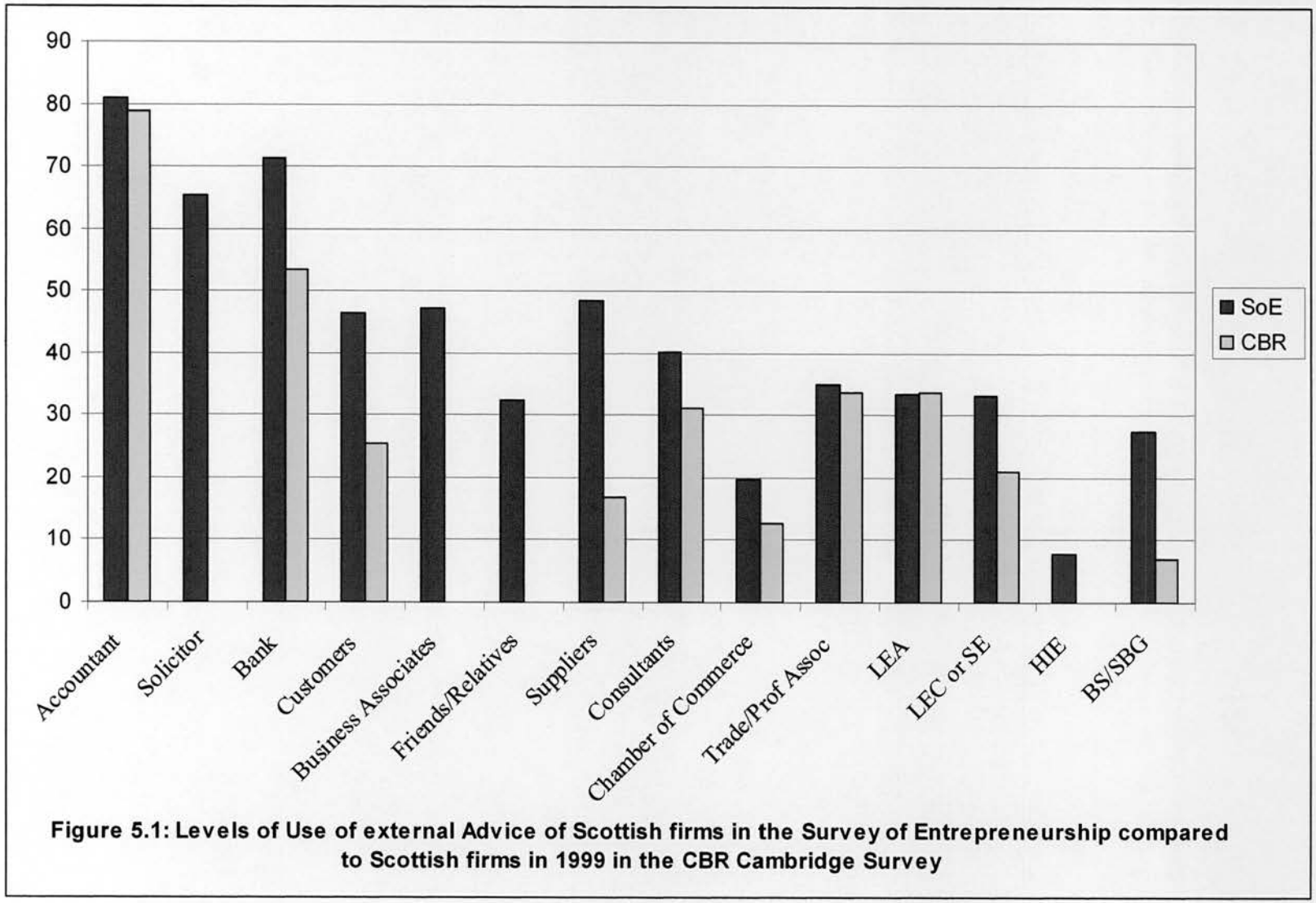


Figure 5.1: Levels of Use of external Advice of Scottish firms in the Survey of Entrepreneurship compared to Scottish firms in 1999 in the CBR Cambridge Survey

Firstly, it needs to be noted that the CBR Survey does not contain solicitors, business associates, and friends or relatives or HIE. In other words, the survey questions are very similar in the SoE and the CBR surveys, but the omission of the four sources in the CBR survey is important. Secondly, the sample frameworks are very similar so we are dealing with a like with like comparison. The comparisons between the SoE and CBR in Figure 5.1 are interesting. 78.9% of firms used accountants in the CBR Survey, compared to 80.9% in the SoE Survey. A similar level of use was also recorded for the use of trade and professional associations in the CBR (33.8%) and the SoE (35%) surveys. Also the levels of use of LEA/Trusts is very similar.

However, 71.4% of firms in the SoE survey used banks which was substantially more than the 53.5% found by CBR researchers. Similarly the level of use of customers was much higher in the SoE survey with 46.5%, compared to 25.4% in the SoE survey. The other supply chain source included in both surveys was the use of suppliers, which was 48.5% in SoE compared to 16.9% in CBR. This difference is substantial. The use of the BS/SBG was found to be 27.4% in the SoE survey which was substantially higher than the 7.0% recorded by the CBR survey. The difference in the levels of use in large part must reflect the greater sample size for the SOE compared to the CBR survey, with the greater sample size producing a more accurate picture of the levels of use of external advice. This point relates to sample error and confidence limits. The CBR survey was undertaken in the Summer of 1999 and the SoE survey undertaken in the period around Easter 2001 so it is less likely that time differences account for the difference in levels of use between the CBR and SoE surveys.

This section has provided a clear overview of the levels of use of external advice in Scotland and north of England. Clearly the private sector predominates, with the first seven most used sources all coming from the private sector and accounting for two thirds of all advice. Taken together LEAs, LECs or Scottish Enterprise, BS/SBG and HIE account for 17.2% of the advice provided by firms in our survey. The results thus suggest that there is a place for the public provision of external advice and the public backed sources are filling niches in the market for external advice.

5.3.2 Firm Characteristics Variables

As well as questions concerned specifically with the use of advice, the Survey of Entrepreneurship also included a set of questions which allowed the construction of a series of variables to define the background of the SMEs which enabled the development of a better understanding of the characteristics of SMEs in relation to external business advice. These variables, their construction, and the ex ante expectations of the relationships between these variables and the use and the impact of sources and fields of advice are now outlined.

First, there is the age of the SMEs. Extremely young firms such as start-ups would be expected to need substantial external advice and assistance. However, at this stage they might be not able to pay for it or have the network contacts to identify and access most potential sources of advice. However, even after the start-up stage it would be expected that the older a firm, the more experience that the management will have accumulated, especially for owner-managers, and this could reduce the need to seek external advice. Alternatively, as firms mature and their markets

evolve, management may lack the knowledge and the skills in new key areas and have to resort to some form of advice, either of a general nature or perhaps to target specific needs.

Second, there is the size of the firm. The size of the firm can be measured by the number of employees and also by the level of sales revenue or sales turnover. The models were run for both the number of employees, and also including the level of sales revenue or sales turnover, separately. There were found to be no real differences to the model results. This applied to both the relationships between size and the levels of use (and impact) and also whether the other variables included in the model were statistically significant.

Both the number of employees and the sales revenue or sales turnover are good representations of firm size. Policy makers and politicians have tended to prefer the number of employees, in large part because of the perceived job employment creation potential of SMEs. Given that policy makers and politicians are an important potential readership audience for this dissertation it presents a strong case to use the number of employees.

However, a second and arguably a stronger reason to include the number of employees rather than sales revenue or sales turnover is that the number of employees is that the number of employees is a lot easier to conceptualise in a reader's mind, and to divide into size classifications.

The model results which are reported are for the number of employees. Given that the results are similar for sales revenue or sales turnover this other variable is not reported or included in the appendices. The log of the number of

employees is the size variable which is included in all of the other econometric results which are reported in all of the chapters of this dissertation.

Third, it was felt desirable to include a variable to capture the performance of the firms. We are fortunate that the Survey of Entrepreneurship included the level of profitability. Ex ante, profitability can have either a positive or a negative relationship with the use and the impact of external business advice.

Unprofitable firms may have more of a need than profitable firms to seek advice as a possible catalyst to improve their ailing business position, but by being unprofitable the firm may be financially disadvantaged and unable to afford to pay fees for advice. Moreover, the managers and other decision makers in the unprofitable firms may be in a situation where their time and energy is used to concentrate on attempting to solve their day-to-day problems, and they then feel unable to spend time on external advice. Again this would suggest that unprofitable firms were less likely to seek external advice.

Profitable firms have greater resources to buy advice. The greater resources may mean that the managers are more willing to spend more money on external advice, perhaps in the belief that external advice will reinforce or improve existing strategies and profitability. Alternatively it could be the case that the managers in the profitable firms believe that external advice and external opinions are not needed.

Fourthly, it was desirable to include a measure of growth. The growth of SMEs can be measured in various ways. For much government policy research, as well as many management and economics sources, growth is measured in terms of increases in SME employment. It is this measure which has most relevance to many

government policy makers since SME growth has been seen as an important way of reducing unemployment (Birch, 1979; Storey, 1994).

Rather than employment growth, however, owners and managers of SMEs are usually most interested in financial performance. Similarly, government policy, in addition to interest in employment generation, has also been concerned about the contributions of SMEs to economic growth and competitiveness. This can be measured by the growth of sales or turnover growth (Bartlett, 1994). This is a measure of the firm's total level of activity.

Lastly, dummy variables are included to control for differences between the manufacturing/services sectors, exporter/non-exporter and innovator/non-innovator.

Ex ante there would be no strong expectations about manufacturing or service firms having differences in the levels of use of external advice or in the impact of the external advice.

Innovation is expected to have a considerable role in influencing the use and impact of advice. Innovation is defined using a series of variables. (i) Those firms who had introduced a process innovation which was not only new to the firm but also the firm's industry: 'a novel process innovation'. (ii) Those firms who had introduced a product innovation which was not only new to the firm but also to the industry: 'a novel product innovation'. (iii) Those firms who had introduced a process innovation which was not new to the industry but which was new to the firm: 'an incremental process innovation'. (iv) Those firms who had taken steps to introduce a product innovation which had been used by other firms in the industry but had not been used by that firm: 'an incremental product innovation'. Freel's

(2002, 2001) extensive work on innovation highlights the importance of incremental product innovation in the manufacturing sector.

We know whether the firms are exporters or non-exporters and this has been included as an explanatory variable in the regression model, and cross tabulations have been presented against the use and the impact of external advice. To compete in a domestic market can be a difficult task for SMEs; and competing for business outside the domestic market can result in greater difficulties and complexities (Storey, 1994).

This section has examined the relationships between characteristics of firms and the use of external advice. Identifying those characteristics of firms which do influence the likelihood of firms seeking advice from particular sources allows us to better understand the nature of external advice and to see if there are similarities between the characteristics of firms using public and private sources of advice.

5.3.3 Use of advice by firm type

Table 5.1 also provides an assessment of the variation in sources of advice by firm type and shows that differences are significant for sector, size, growth, and exporter. However, the four measures of firm innovation show few systematic statistically significant relationships with the use of business advice. Similarly the age of the firms shows very few systematic statistical relationships, and more precisely there are no statistically significant relationships at the 5% level or better.

Differences in size of firm show some of the largest differences. The use of solicitors increases from 52.5% amongst micro firms to 74.2% of small firms, to 91.0% of large sized firms. Similarly, the use of consultants increases substantially

from 29.8% of micro firms to 47.9% of small firms, to 57.6% of larger sized firms. Chambers of Commerce are used by 15.2% of micro sized firms and approximately one quarter of small and medium sized firms.

Three of the Government sources of business advice also show statistically significant differences at the 1% level in the levels of use by size of firm: Local Enterprise Agency/Trust, Local LEC or Scottish Enterprise, and Highlands and Islands Enterprise. Local Enterprise Agencies and Trusts are used by 26.4% of micro firms and by nearly 40% of both small and medium sixed businesses. A similar size effect is also found for Local LEC or Scottish Enterprise. Whilst in the case of Highlands and Islands Enterprise the levels of use increase from 5.4% of micro firms to 9.2% of small firms to 13.8% of medium sized firms.

When we examine the relationship between the growth rate of the SMEs and the levels of use we find that those firms which encounter declining or stable growth for six of the sources of advice – solicitors, banks, suppliers, consultants, LEAs/trusts and local LEC or the Scottish executive record lower levels of use than recorded for medium growth and fast growth firms. It also needs to be noted that for each of these sources of advice stable growth firms who have zero growth record levels of use which is also less than that recorded by declining growth firms.

Differences in sector also show some substantial and statistically significant differences for eight of the sources of advice. 72.5% of service sector firms used solicitors and 60.2% of manufacturing firms used solicitors. 46.8% of service sector firms and 35.4% of manufacturing sector firms used consultants. 34.4% of service sector and 29.9% of manufacturing sector firms used local LECs or Scottish Enterprise. Thus, in many instances approximately 10% more of the service sector

firms have used sources of advice than that recorded by manufacturing sector firms. 33.1% of service sector firms have used Business Shop or the Small Business Gateway. The corresponding figure for manufacturing sector firms is 23.6%.

There is a strong statistically significant relationship between the exporting activity of the firms and the use of business advice for BS/SBG, HIE, local LEC or Scottish Enterprise, LEA/trust, chamber of commerce, consultants and solicitors. For these eight sources the non-exporting firms were more likely than the exporting firms to have used business advice. In other words, the results suggest that although exporting is a difficult activity (Storey, 1994), firms which export think that they need less advice. These results are surprising as it was expected that exporting firms would be more likely than non-exporting firms to seek advice.

Age does not have any statistically significant relationship with the use of external advice. The result is different to previous surveys which have to a greater or lesser extent found some statistically significant relationships between age and the levels of use of business advice (Bennett and Robson, 1999a). The lack of statistically significant relationships for Scottish firms suggests that the age of the firm is no-longer an important factor in determining whether or not a firm seeks external advice. In other words, whether a firm is young or old, a recent start-up or a long standing trading entity does not have any statistically significant impact on the levels of use of external advice.

The cross tabulations results for innovation focus upon four different types of innovation and this approach allows for a better understanding for the nature of innovations with the use of external business advice. Whether or not the firm was or was not a novel process innovator, or whether or not the firm was or was not an

incremental process innovator does not have any statistically significant relationship with the levels of use, at the 1% level or better. At the 5% level novel process innovation is found to be statistically significant for the use of solicitors and also for HIE. Novel process innovators (73.4%) are much more likely than non-novel process innovators (64.2%) to have used solicitors.

Next we turn attention to product innovations. Non-novel product innovators are less likely than novel product innovators to have used solicitors, consultants, Local Enterprise Agencies or Trusts, Local LECs or Scottish Enterprise, and Business Shop or the Small Business Gateway; and these were statistically significant at the 1% level.

This section has looked at how the use of advice differs by type of firms. Whilst policy makers place great emphasis upon innovative firms and also growing firms, the results here suggest that innovation is not an important explanatory factor, and that growth is of some importance. Both factors rank behind sector, exporter and size in determining the use of external advice. Thus, policy makers would be better placed to use the size of firm as a targeting measure to judge the provision of external advice services. In addition policy makers should not focus decisions exclusively on 'innovation', especially in the implied sense of new technology based firms, as this is not a good predictor or correlate of other behaviours. Also, exporting firms are clearly very different to non-exporting firms and have a greater use of business advice. This then raises a concern to stimulating demand for external advice rather than expanding supply, in either the private or the public sector. It is demand such as size and exporting that leads to supply, not supply which leads to size, growth and exports.

5.3.4 Sole and Multiple Sources of Advice

Tables 5.1 shows that a large proportion of the respondents have used several different sources of advice over the previous three years. Table 5.3 shows the range of sources used. The mean number of sources used was 6.0 and the mode was 6.0. This is a higher value than that reported by Bennett and Robson (1999a) who found a mean number of sources of 4.5 and a mode of 4 sources of advice. Previous researchers have found lower number of sources used compared to the Scottish Survey. For example, O'Farrell and Moffatt (1995) found an average of 3.9 to 4.2 sources which was similar to the values reported by Keeble et al. (1992), Curran and Blackburn (1994), and Doggett and Hepple (1995).

The results of the Scottish Survey are more in line with the results of Vatne (1995) who found a mean of 7 sources used in his Norwegain case studies. The larger number (9) found in the Scottish Survey could in part be explained by the market for external business advice continuing to grow; government advertising and marketing may have helped to advance the cause of both public and private sources of advice. Also there is the possibility that the increased level of use of business advice in the 1980s and 1990s has resulted in a greater pool of business people who have used external business advice and can recommend to associates and friends the benefits of using external advice. The Scottish Survey did not contain a question which asked why the users were using the business advice source or whether they were attracted to the sources by advertising or word of mouth so the above remain possible explanations. Clearly this is an area for further research.

Approximately one half of the users of external advice are users of either a sole source, two sources, or three to five sources of advice; and approximately one

half of the users of external business advice are comparatively heavy users of advice. Thus the results support the idea that there are very different and distinct segments of SME users of external advice – the comparatively small and select users of external advice, using either a sole or two sources of advice – and medium users of external advice who draw upon the services of from three to five sources; and lastly there are the heavy users of external advice who draw upon many sources of advice. The profiling of the three types of users of external advice will be advanced in further research of a qualitative nature.

For the sole source users of external advice accountants make up nearly one half of this group, which is substantially more than the joint second most important sole sources of banks and consultants who each had 9.1% levels of use. When two sources of advice were used accountants continue to be the most important source with two thirds of this group having used accountants. Banks also continue to be an important source for the users of two sources of advice with approximately one third of this group having used banks. However, consultants only record 14.1% level of use which is only a small increase on the level reported by the sole source users. Instead it is solicitors who have dramatically increased in importance from joint eighth of the sole sources to a ranking of third in the two sources users with one quarter having used them. Trade and professional associations show substantial increases in their levels of use from 6.1% of single source users to 15.6% of two source users of advice.

The third group of users are those firms who had used three to five sources of external advice. Accountants (77.9%), banks (69.2%) and solicitors (58.4%) stand out as the most used sources for the third group of users. Thus the three private

professionals dominate this group with levels of use which is approximately double that recorded for the fourth, fifth and sixth sources in rank order of suppliers (32.6%), business associates (31.6%), and customers (29.4%), respectively.

Interestingly for the third group consultants are used by approximately one quarter of that type of user. Friends and relatives (19.4%), local LECs or Scottish Enterprise (18.9%), trade and professional associations (18.8%), local enterprise agencies and trusts (16.6%) and business shop/small business gateway (15.0%) all report levels of use approaching one in five. Thus for medium users of external advice it is the use of the private sector which predominates and more than two thirds of this group using at least two of accountants, banks and solicitors. The public sector seems to be providing more select gaps in the market for external advice.

Lastly, there are the heavy users of external advice who have used six or more sources of external advice. Accountants have been used by nine out of ten firms in this group and again is the most important source of advice. Banks and solicitors maintain their second and third place rankings with levels of use in excess of four out of five users.

The suppliers are the fourth most used source for the heavy users of external advice, which is the same relative position recorded for medium users of advice. However the percentage difference between the use of suppliers for these different groups is very different. Suppliers are used by 32.8% of medium users and 70.4% of heavy users of advice.

Similarly, customers and also business associates are used by more than two thirds of the heavy users of advice which is in both cases more than double the levels recorded by the medium users of advice.

Advice Source	**Sole source**	**2**	**3-5**	**6 or more**
Accountant	48.5	66.8	77.9	89.8
Solicitor	3.0	25	58.4	81.8
Bank	9.1	34.5	69.2	83.7
Customers	6.1	3.1	29.6	68.7
Business Associates	6.1	7.8	31.5	67.9
Friends/Relatives	0.0	9.4	19.3	48.1
Suppliers	3.0	3.1	32.8	70.4
Consultants	9.1	14.1	24.4	58.2
Local Chamber of Commerce	0.0	4.7	7.8	32.2
Trade/Professional association	6.1	15.6	18.8	52.3
Local Enterprise Agency/Trust	3.0	3.1	16.6	52.7
Local LEC or Scottish Enterprise	6.1	6.3	18.9	50.0
Highlands & Islands Enterprise	0.0	0.0	1.4	14.1
Business Shop/ Small Business Gateway	3.0	7.8	15	41.5
Other	0.0	0.0	1.1	2.4
N	33	64	371	503

Table 5.3: External source of business advice from sole and multiple sources in Scotland (percentage of respondents using each source who use it as a sole source, or as one of two, 3-5, or 6 or more services).

Consultants are the seventh most used source for the heavy users of external advice. Trade and professional associations, local enterprise agencies or trusts, and local LECs or Scottish Enterprise are all used by more than one half of the heavy users of external advice, and are ranked from eighth to tenth, respectively. These levels of use are approximately three times the levels recorded by medium users of external advice.

Friends and relatives are used by 48.8% of the heavy users of external advice. Business Shop/Small Business Gateway is used by 41.6% of the heavy users of external advice. Thus for those firms who have used at least six sources of advice the Business Shop/Small Business Gateway constitutes an important source of advice, but it is used less than Local Enterprise Agencies or Trusts, and Local LECs or Scottish Enterprise, but much more than HIE. HIE is used by 14.1% of the heavy users of external advice, and that level of use is extremely small compared to the levels of use recorded by all the other sources.

The results in this section provide support for a model of the following type. Firstly, there are single and low number of users of sources of external advice. The supplier is delivered on the basis of regulatory contact such as accountants, banks and solicitors. Secondly, there are the medium users of external advice who draw upon the services of from three to five sources. Lastly there are the heavy users of external advice who draw upon the services of many sources users of external advice. These are a demand driven use of multiple sources.

The heavy users of external advice were more likely to use both public and private sectors of advice. This group is the group which makes the most demands upon external advice. In sharp contrast are the users of one or two sources of advice

and are more likely to use advice sparingly for particular needs, and are less likely to use public sector sources. In terms of selling advice it is clear that this later group is the one which is most likely to be receptive to using advice.

5.5 Impact of Advice Sources

The assessed impact of the different suppliers is shown for Scotland in Table 5.4 and also in Figure 5.2. It demonstrates that four sources - customers, suppliers, business associates and consultants achieve better than a moderate impact rating (i.e. a 3 or above). Within this group customers record by far the largest mean assessment score at 3.57 and this is explained by the fact that one fifth and one third of their users perceived that the impact was of a crucial and an important level. Only 3% of the users of customers believed that the impact had no positive impact, and 14.4% indicated that the impact was of a slight level. In other words, less than one in five of the users of customers perceived that the impact was either slight or had no positive impact.

The other three sources of advice in the first group show similar profiles in the distributions of the users assessment scores. For suppliers, business associates and consultants less than one in ten of their users gave crucial impact assessments, approximately a quarter gave an important impact score, approximately a third gave moderate scores, approximately a fifth gave slight impact scores, and in the case of suppliers and business associates approximately five percent gave no positive impact scores. For consultants there were 11% who gave no positive impact scores which is the largest of the first group.

Advice Source	Mean	No Positive Impact	Slight Impact	Moderate Impact	Important Impact	Crucial Impact	N
Accountant	2.97	11.9	21.0	33.4	26.1	7.6	766
Solicitor	2.84	7.8	33.7	31.6	20.8	6.1	602
Bank	2.78	17.6	23.1	31.2	19.6	8.6	654
Customers	3.57	3.0	14.4	25.5	36.5	20.6	436
Business Associates	3.11	4.7	21.2	39.6	27.7	6.8	429
Friends/Relatives	2.99	8.3	28.1	29.5	24.0	10.1	288
Suppliers	3.13	5.9	21.4	36.6	26.2	9.9	443
Consultants	3.07	11.0	19.9	29.0	31.5	8.6	362
Local Chamber of Commerce	2.27	25.6	36.0	25.6	11.6	1.2	172
Trade/Professional association	2.78	14.4	24.0	33.9	24.7	3.1	292
Local Enterprise Agency/Trust	2.62	21.1	28.6	23.1	21.8	5.4	294
Local LEC or Scottish Enterprise	2.64	23.1	24.8	22.1	24.8	5.2	290
Highlands & Islands Enterprise	1.94	51.6	14.5	22.6	11.3	0.0	62
Business Shop/ Small Business Gateway	2.70	20.2	24.2	25.4	25.4	4.8	252
Other	3.44	0.0	0.0	68.8	18.8	12.5	16
All	2.92	12.6	23.8	30.7	24.9	8.0	5358

Table 5.4: Assessment of the impact of private and public sector sources in Scotland; mean impact (mean scores from 1=no impact, to 5=crucial impact).

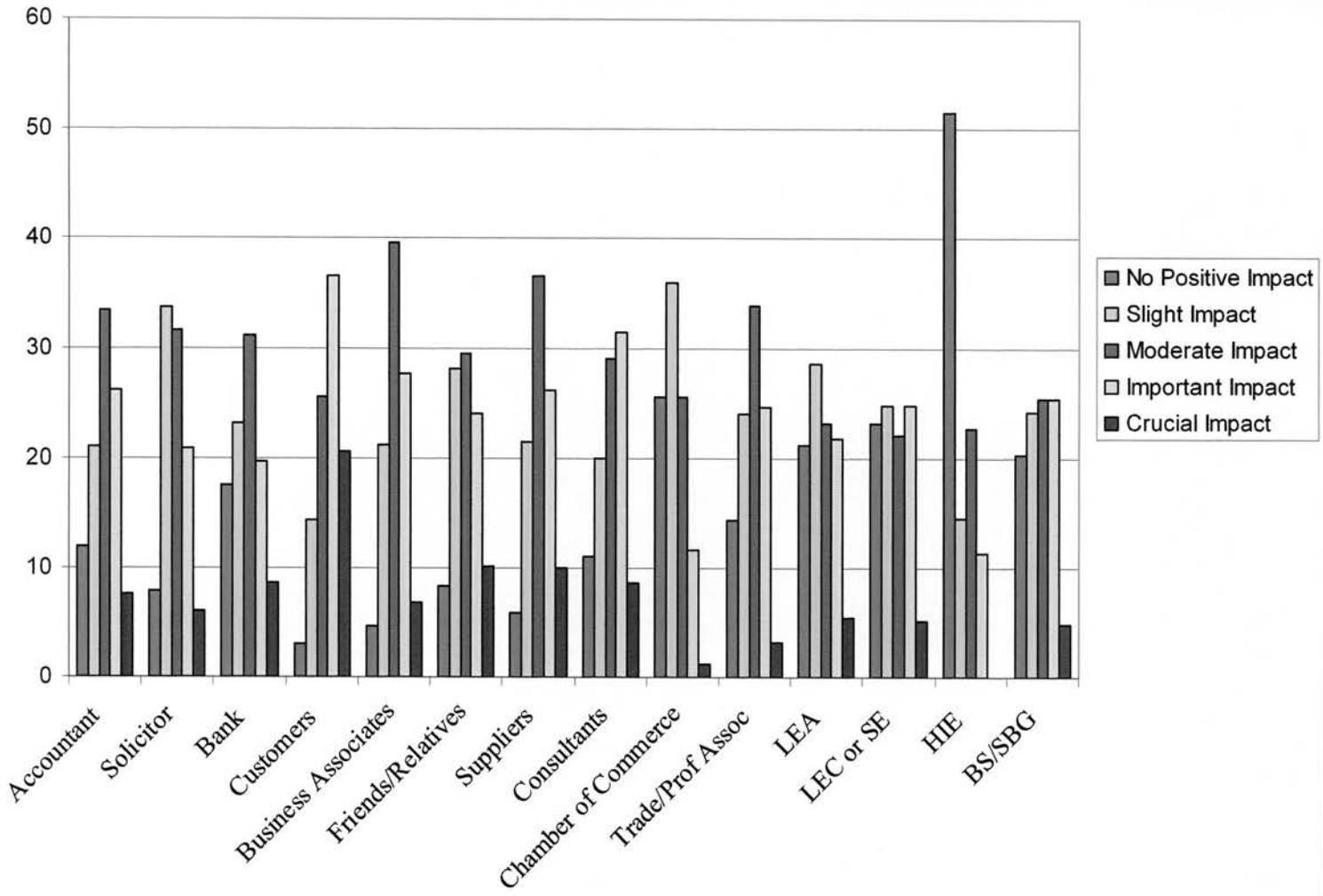


Figure 5.2: The Impact of External Advice in Scotland in the Survey of Entrepreneurship (% of respondents reporting impact scores from 1 no positive impact to 5 crucial impact)

They are followed by a second group who show assessment scores lying between 2.78 and 2.99 and are ranked sixth through to equal eighth, of friends/relatives (2.99), accountants (2.97), solicitor (2.84), bank (2.78) trade and professional associates (2.78). The third group are ranked tenth to twelfth and are business shop/small business gateway (2.70), Local LEC or Scottish Enterprise (2.64), Local Enterprise Agency Trust (2.62). This third group consists of Government backed sources of advice. Only approximately one in five of their users gave crucial impact scores. However, approximately a quarter of their users believed that the advice was of an important impact level. Similarly, about one in five of their users gave moderate impact scores. Unfortunately about one quarter of their users gave slight impact scores and approximately one fifth of their users believed that the advice was of no positive impact. Both of these sets of percentage scores are points of concern. It suggests that for Business Shop/Small Business Gateway, Local LEC or Scottish Enterprise, and Local Enterprise Agency/Trust approaching one half of their users perceived that the advice that they received had either no positive impact or only a slight impact.

There is then a substantial gap in performance to the fourth group which has two constituent members, Local Chambers of Commerce (2.27) and Highlands and Islands Enterprise (1.94). The performance of Highlands and Islands Enterprise lacks well behind the other Government backed sources of advice. More than a half of the users of Highlands and Islands Enterprise gave assessments of no positive impact. This is a high level of dissatisfaction. Equally of concern is that none of the users of Highlands and Islands Enterprise believed that their advice was of a crucial

impact. No other source of advice reported such a low level for the crucial category of advice.

The disappointing assessment scores for local Chambers of Commerce are in large part explained by the fact that one quarter and one third, respectively, of their users believed that their advice showed no positive impact or slight impact, respectively.

Table 5.5 reports the mean impact assessments using the CBR data for Scotland.

This section has looked at the impact of external advice. The results show that the supply chain contacts of customers (3.57), suppliers (3.13), business associates (3.11), and consultants (3.07) have the greatest impact. The first three of these are likely to have direct knowledge of the firm and the markets where the firm competes. The results suggest that firms would be best served to use these sources wherever possible. The public sector sources have respectable impacts, with BS/SBG (2.7) showing the highest mean score.

Whilst accountants, solicitors, and banks are the three most used sources of advice their impact is not ranked as highly. We do not know the exact nature of the advice provided by each of the sources used but it may be the case that the three private sector specialists are providing advice in realms beyond their core levels of expertise. This is speculative and it clearly needs to be explored in further detail in future research.

Advice Source	Mean	No Positive Impact	Slight Impact	Moderate Impact	Important Impact	Crucial Impact	N
Accountant	3.10	5.2	23.5	35.7	27	8.7	115
Solicitor	2.76	9.5	35.7	31.0	16.7	7.1	84
Bank	2.81	18.0	27	20.2	25.8	9.0	89
Customers	3.18	2.8	18.3	45.1	25.4	8.5	71
Business Associates	----	----	----	----	----	----	----
Friends/Relatives	3.04	3.7	25.9	42.6	18.5	9.3	54
Suppliers	2.89	9.1	29.5	31.8	22.7	6.8	44
Consultants	2.52	14.5	40.3	27.4	14.5	3.2	62
Local Chamber of Commerce	2.08	25.6	48.7	20.5	2.6	2.6	39
Trade/Professional association	2.51	18.4	30.6	38.8	6.1	6.1	49
Local Enterprise Agency/Trust	2.60	16.4	30.9	32.7	16.4	3.6	55
Local LEC or Scottish Enterprise	2.74	17.0	23.4	34.0	19.1	6.4	47
Highlands & Islands Enterprise	----	----	----	----	----	----	----
Business Shop	2.64	21.4	28.6	21.4	21.4	7.1	14
RDC/RDA	2.44	33.3	22.2	11.1	33.3	0	9
All	2.80	12.2	29.2	32.3	19.5	6.8	732

Table 5.5: Assessment of the impact of private and public sector sources in Scotland; mean impact using CBR data for 1997 (mean scores from 1=no impact, to 5=crucial impact).

5.5.1 Impact of Advice Sources by firm type

The differentiation of impacts between sectors of firms (Table 5.6) shows a relatively small level of differentiation of impacts. Service sector firms (46%) were more satisfied than manufacturing sector firms (33.7%). The same was true for satisfaction of LEA/trusts where 32.3% of service sector firms and 20.8% of manufacturing sector firms, respectively were satisfied. Differences between firms of different sizes show few statistically significant relationships. Satisfaction with the BS/SBG was 20.8% for micro firms which was much less than the 37.4% and 34.8% recorded by small, and medium and larger sized firms. The satisfaction with the LEC or Scottish Enterprise also showed a strong positive relationship with the size of the firm. 15.2% of micro firms, 37.3% of small firms, and 44.4% of medium and larger sized firms were satisfied. Thus the impacts in medium and larger sized firms was approximately three times the level of micro firms. Such a large difference in the levels of satisfaction is a source of concern as it suggests that either the larger the size of the firm the better the service, or the larger the firm the greater their capacity to utilize and implement the advice to good purpose.

If firms are all receiving a similar amount of public sector assistance then it is still possible that the number of satisfied customers differs across size categories. We might expect differences to emerge with respect to firm specific factors unrelated to the volume of public sector assistance. Either the larger sized firms are receiving greater amounts of help or are better placed to transform the advice into practical measures which will improve the business. Smaller sized firms could thus be lacking in expertise to ensure that the advice has beneficial impacts. Again this finding is an area which needs to be explored in greater depth in the future.

Advice Source	All	Services	Manufacturing	Micro	Small	Medium/ Larger	Declining	Stable	Medium Growth	Fast Growth
Accountant	33.7	33.4	34	33.8	34	30.8	28*	33.3*	42.2*	35.3*
Solicitor	26.9	24.1*	30.4*	27.4	25.2	43.5	25.2	29.5	27.9	29
Bank	28.1	27.4	29.2	25.8	30.2	30.2	23.8	26.3	28.9	34.4
Customers	57.1	58.1	55.7	53.2	59.8	61.8	55.1	55.3	58.2	68.2
Business Associates	34.5	35.8	30.6	37.6	31.8	32.4	31	37.2	26.6	43.8
Friends/Relatives	34	37.4	28.9	41.7***	24***	41.7***	31.4	46.9	30.2	29.1
Suppliers	36.1	34.3	38.5	33.2	38.6	36.1	38.6	37.8	31.7	37.6
Consultants	40.1	46**	33.7**	42.1	39	38.9	36	47.3	36.7	46.3
Local Chamber of Commerce	12.8	9.9	16	17.2	10.1	13.3	16.2	18.9	0	6.3
Trade/Professional association	27.7	26.6	29.6	35.7*	22.7	21.7	32.4	29	19	26.9
Local Enterprise Agency/Trust	27.2	32.3**	20.8**	26	29.2	17.4	22.2*	21.7*	31.1*	40.6*
Local LEC or Scottish Enterprise	30	26.8	33.8	15.2***	37.3***	44.4***	27.9*	14.8*	35*	39.4*
Highlands & Islands Enterprise	11.3	6.9	15.2	13.6	6.5	22.2	0	11.8	10	30
Business Shop/ Small Business Gateway	30.2	27.8	32.8	20.8**	37.4**	34.8**	32.8*	19.6*	22.9*	40.8*
Other	31.3	50	20	55.6*	0	0	0	50	0	42.9
All		33.1	32.6	32.6	32.9	34.9	30.7	32.8	32.7	41.2

Table 5.6: Satisfaction of clients with the private and public sector advice sources in Scotland by sector, firm size, and employment growth (% of respondents reporting use, multiple responses allowed) (*** $p > 0.01$; ** $p > 0.05$; * $p > 0.1$). Using Mann Whitney test for two group comparisons, or the Kruskal-Wallis test for multi-group comparisons, between column entries. Types of business: micro-less than 10 employees, small business between 10 and 99 employees, medium/larger businesses between 100 and 499 employees. Employment growth of business during last three years: declining businesses with negative growth below 5%; stable growth from -5% to +5%; medium-growth greater than 5% and less than 50%; and fast - growth 51% or greater.

Advice Source	Exporter	Non-Exporter	Young	Old	Not IncProc	IncProc Innov	Not NovProc	NovProc Innov	Not IncProd	IncProd Innov	Not NovProd	NovProd Innov
Accountant	32.9	33.8	35	32.5	31.1*	37.2*	32.8	35.6	32.8	34.4	32.8	34.4
Solicitor	28.4	26.6	28.8	25.3	26.8	26.1	24.8**	36**	27.1	23.9	27.1	23.9
Bank	33.5*	26*	29.3	27	28.2	27.1	27.3	31.2	29.5*	22.4*	29.5	22.4
Customers	62.6	57.5	57.7	56.5	57	57.5	55**	69.4**	61.4***	47.4***	61.4***	47.4***
Business Associates	31.4	35.5	39.2**	29.7**	34.8	36.2	34.7	39.3	36.5	31.8	36.5	31.8
Friends/Relatives	35.3	33.3	35.3	32.6	35.4	32.4	32.3	44.2	31.6	40.5	31.6	40.5
Suppliers	39.2	35.2	38.1	34.2	39.5*	30.6*	33.8**	49.2**	38.1	31.7	38.1**	31.7**
Consultants	41.1	39.8	45.7**	35.5**	40.6	39.8	38.8	48.2	39.1	42.9	39.1	42.9
Local Chamber of Commerce	14.8	12.4	13.6	12.1	15.6**	4.2**	10.1*	21.4*	10.9	15	10.9	15
Trade/Professional association	21.2	30.8	31.9	24.2	25.6	31.4	27.6	28.9	25	33.8	2.5*	33.8*
Local Enterprise Agency/Trust	30.6	26.5	32.4*	22.8*	24.6	30.6	28.6	17.1	25.4	31.5	25.4	31.5
Local LEC or Scottish Enterprise	33.7	32.1	30.4	29.7	30	31.2	28.8	38.3	29.2	34.3	29.2*	34.3*
HIE	8.7	14.7	10.7	11.8	12.8	11.1	14	7.1	8.5	25	8.5	25
Business Shop/ Small Business Gateway	35.8	29.5	31.5	28.9	33.1	28.4	29.5	41	33.7	23.8	33.7	23.8
Other	33.3	33.3	50	12.5	37.5	28.6	38.5	0	33.3	33.3	33.3	33.3
N	34.0	32.9	35.3	30.7	32.9	33.0	31.9	38.7	33.2	32.1	31.2	35.8

Table 5.6: Satisfaction of clients with the private and public sector advice sources in Scotland by exporter, age, incremental process innovator, novel process innovator (% of respondents reporting use, multiple responses allowed). (*** $p > 0.01$; ** $p > 0.05$; * $p > 0.1$) Using Mann Whitney test for two group comparisons, between column entries. Types of business: older firms established in 1986 or earlier, and younger firms established after 1987. Novel innovators introduced innovations which were new to both the firm and to the industry and are denoted by Nov. Incremental innovators introduced innovations new to the firm but not to the industry and are denoted by Inc. Process and Product Innovations are reported and are denoted by Proc and Prod, respectively.

Employment growth differences in impact of advice between firms (Table 5.6) are also generally small, with the fastest growth firms generally experiencing the highest impacts. The most significant differences between firms by growth record was for BS/SBG. The satisfaction was lowest for stable (19.6%) declining (19.6%) and medium growth (22.9%) firms which was less than the level recorded for fast growth (40.8%). Thus, fast growth firms record impacts which were more than twice the level recorded by all other groups of growth.

The results of the survey can be compared with other surveys assessing impacts. Unfortunately, there is only one direct comparison of Scotland and that is the CBR Survey. There was no impact question in the 1999 re-survey of survivors of the 1997 survey, and so for comparison purposes we can use the 1997 CBR Survey.

Figure 5.3 shows the mean scores by source of advice for the SoE and the CBR data. Comparing the results from the SoE Survey with the CBR data for 1997 we see that for 6 sources of advice the mean scores are very similar and these were solicitors, banks, friends/relatives, LEA/Trusts, LECs, and Business Shop. However, for 5 sources there were major to very substantial differences and those are statistically significant.

The CBR Survey found a higher mean impact for accountants (3.10) compared to the SoE (2.97) but this was not statistically significant. The main difference for accountants was that there were twice as many firms in the SoE survey (11.9%) who gave no positive impact compared to the CBR survey (5.2%). Similarly, with the impact of suppliers, 9.1% of CBR firms gave no positive impact, compared to 5.9% of SoE firms.

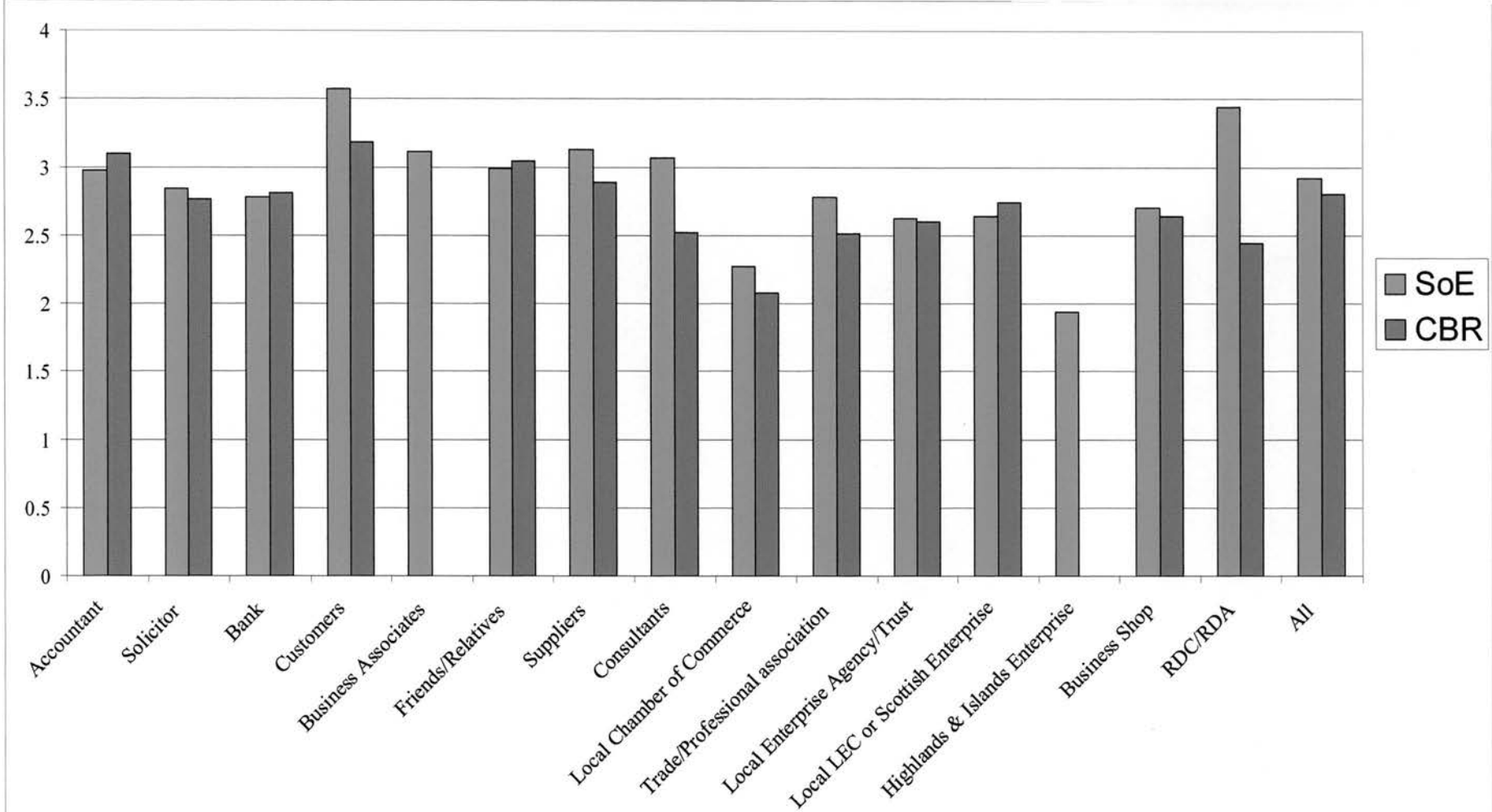


Figure 5.3: Mean impact of Scottish firms with external advice in the Survey of Entrepreneurship compared to Scottish firms in the CBR Cambridge Survey

The SoE survey found a much higher mean of 3.57 for customers, compared to the corresponding value of 3.18 found with the CBR data. This is statistically significant. Both surveys had very comparable percentages of firms who gave no positive impact and slight impact. However, for the other three impact scores there were substantial differences. 45.1% of CBR firms gave moderate impact, compared to 25.5% of the SoE firms. In other words, a substantial proportion of the CBR firms gave moderate scores. There were 25.4% of CBR firms who gave important impact scores which was more than 11% less than the 36.5% recorded by SoE firms. Lastly, 20.6% of SoE firms who used customers believed that they gave a crucial impact which was more than double the 8.5% reported by CBR data.

There was a major statistically significant difference between the impact assessment scores of consultants in the SoE and the CBR Surveys. Only 3.2% of CBR users of consultants gave crucial impact, compared to 8.6% of SoE firms. Similarly, only 14.5% of CBR firms gave important impact scores which was more than one half of the 31.5% reported for SoE firms. More than twice as many CBR firms (40.3%) gave slight impact compared to SoE firms (19.9%).

Whilst there is a substantial difference between the mean scores of the impact of local chambers of commerce in the CBR and SoE surveys, of 2.08 and 2.27, respectively, there were some similarities within their distributions. Very similar percentages of firms gave no positive impact and crucial impact. However, only 2.6% of CBR firms gave important impact, compared to 11.6% of CBR firms. In contrast, 48.7% of CBR firms gave slight impact which was substantially more than the 36.0% of SoE firms.

The mean scores of trade and professional associations was higher in the SoE survey (2.78) compared to the CBR survey (2.51). The main reason for the difference was that only 6.1% of CBR firms gave an important impact score for trade and professional association compared to 24.7% of SoE firms.

Few other surveys have sought to assess impact across a wide range of businesses. However, two other surveys do allow comparisons in this area. Doggett and Hepple's (1995) results, summarized in Table 5.7 show that fairly positive ratings are received for all sources, with 70-90% rated good. However, the professional specialists (accountants and solicitors), friends and consultants have the highest ratings of good, with the DTI and TECs having the lowest ratings. The Doggett and Hepple (1995) results in Table 5.7 are also interesting because they compare external and internal advice. Only the other/friend category exceeds the impact assessment of internal staff, but all sources have a higher frequency of use than internal staff. This survey appears to suggest stronger distinctions between sources than the present survey. This is less true in a satisfaction survey by 3i/MORI (1997). Although this shows the professionals having the higher levels of satisfaction, the DTI in this case gets a very high satisfaction rating.

The present SoE survey thus generally shows similar but less marked differences between sources in their impact than that found in other surveys. But there were some substantial differences between the impact of respondents in the SoE survey compared to the CBR firms in 1999 for consultants and customers in particular.

	Frequency advice sought			
	'Good'	'Fairly good'	≥6 per year	≤per year
Accountant	53.7	42.1	49.6	50.4
Banks: principal	34.8	53.6	31.0	69.0
Banks: second/third	39.5	44.2	53.6	46.4
Solicitor	56.8	33.8	49.5	50.5
Consultant	53.3	36.7	46.3	53.7
Other/friend	64.0	36.0	-	-
TECs	21.7	52.2	23.1	76.9
Department of Trade and Industry	17.9	59.0	25.0	75.0
Internal Staff	63.8	34.8	7.4	92.6

Table 5.7 Percentage of rankings of 'good' and 'fairly good' of external and internal sources of advice and frequency of use.
Source: Adapted from Doggett and Hepple 1995: table 15

However, it is an important conclusion to be drawn from our assessment of impact that there are only relatively small systematic differences between types of SME firms in the levels of impact they experience, with firm size being the main and the most significant differentiating characteristic between businesses. Generally, however (except for firm size and growth), the differences in impact between firm types are not statistically significant. Moreover, the average impact of 2.92 across all sources, indicates that external suppliers are generally filling important rather than crucial needs of their clients, and this is higher than the 2.80 average impact across all CBR firms in 1999. The important finding of the research is therefore that the most important contrasts exist in terms of the frequency of use of different sources of advice rather than type of client. This suggests a fairly marked segmentation of the market between suppliers, which in turn directs attention to the types of services supplied and the business objectives that the services are seeking to support.

5.6.1 Comparisons between Scotland and England -use

The inclusion of a panel of firms for the north east of England allows us to compare and contrast the levels of use and impact of external business advice in Scotland and England. The most striking finding is that with the exception of the comparison between Business Shop/Small Business Gateway and Business Link/Small Business Service, the levels of use of all other private and public backed sources are very similar. 27.4% of Scottish firms used the Business Shop/Small Business Gateway which was less than the 40.7% recorded by English firms for Business Link/Small Business Service (See Table 5.8). This comparison of the Government flagship for business advice was statistically significant at the 1% level.

But whilst the overall levels of use for Scottish and English firms is similar, when we look at the characteristics of the firms we see that many differences emerge. Sectoral differences were important for Scottish firms and were found to be statistically significant at the 1% level for six sources of advice. However, for the English firms sector did not appear to be an important variable and it was only statistically significant for the use of Business Link/Small Business Gateway. Business Link/Small Business Gateway was used by 31.8% of manufacturing sector firms and 51.4% of service sector firms (See Table 5.4).

There was a strong positively statistically significant relationship at the 1% level between the size of the firms in England and the use of solicitors, consultants and TECs. In the case of BL/SBS this provider was used by 41.2% and 44% of micro and small sized firms, respectively. These levels of use were more than twice the levels recorded for medium and larger sized firms.

For the English firms employment growth only had one statistically significant relationship with the levels of use of external advice and this was for consultants. In England 24.4% of stable employment growth firms used consultants for external advice which was approximately one half of the level of use of other growth categories of firms.

However, there is a substantial difference between the relationship between employment growth and seeking external advice for English and Scottish firms. Employment growth was statistically significant at the 1% level for four sources in Scotland: solicitors, consultants, LEAs/trusts, and at the 10% level for banks and local LECs or Scottish Enterprise.

Advice Source	All	Manufac-turing	Services	Micro	Small	Medium/ Larger	Declining	Stable	Medium Growth	Fast Growth
Accountant	80	83.1	76.3	81.2	80.0	76.5	81.1	77.8	89.2	72.9
Solicitor	64.4	66.1	62.5	47.0***	69.7***	85.3***	67.8	54.5	73.0	65.9
Bank	71.6	72.2	71.1	73.7	69.2	79.4	68.5	70.5	86.5	71.8
Customers	48.5	46.6	50.7	47.0	48.5	52.9	46.7	40.0	50.0	53.6
Business Associates	47.7	42.1**	54.3**	53.5	44.4	50.0	46.7	45.5	44.7	53.6
Friends/Relatives	31.6	28.1	35.8	40.0*	27.6*	29.4*	26.7	31.8	23.7	36.9
Suppliers	52.7	57.9**	46.7**	54.0	51.0	58.8	55.6	53.3	55.3	50.0
Consultants	43.0	47.2*	38.2*	25.0***	48.5***	64.7***	50.0**	24.4**	52.6**	40.5**
Local Chamber of Commerce	23.3	20.8	26.3	16.0*	25.5*	32.4*	21.1	20.0	31.6	21.4
Trade/Professional association	33.8	30.7	37.5	32.0	32.5	47.1	36.0	25.0	42.1	29.8
Local Enterprise Agency/Trust	31.5	34.3	28.3	25.0	33.2	41.2	31.1	20.0	42.1	32.1
Local TEC/SLC	30.8	31.8	29.5	23.5***	29.5***	58.8***	37.1	30.2	23.7	33.7
Business Link/ Small Business Service	40.7	31.8***	51.4***	41.2**	44.0**	20.6**	43.3	46.5	50.0	35.0
Other	4.2	2.8	5.8	2.9	5.6	0.0	2.2	2.1	5.3	3.5
N	335	180	155	104	197	34	90	45	38	84

Table 5.8: Use of private and public sector advice sources in England by sector, firm size, and employment growth (% of respondents reporting use, multiple responses allowed) (*** $p > 0.01$; ** $p > 0.05$; * $p > 0.1$). Using Mann Whitney test for two group comparisons, or the Kruskal-Wallis test for multi-group comparisons, between column entries. Types of business: micro-less than 10 employees, small business between 10 and 99 employees, medium/larger businesses between 100 and 499 employees. Employment growth of business during last three years: declining businesses with negative growth below 5%; stable growth from -5% to +5%; medium-growth greater than 5% and less than 50%; and fast - growth 51% or greater.

Advice Source	Exporter	Non-Exporter	Young	Old	Not IncProc	IncProc Innov	Not NovProc	NovProc Innov	Not IncProd	IncProd Innov	Not NovProd	NovProd Innov
Accountant	82.8	79.4	80.4	79.7	79.1	79.5	80.1	73.7	80.3	77.8	80.8	78.0
Solicitor	67.8	65.4	61.8	66.7	62.4	69.7	64.1	73.7	65.1	66.7	64.3	67.2
Bank	72.4	72.7	71.1	72.2	71.5	71.1	69.5	84.2	73.2	66.7	70.3	73.1
Customers	50.6	48.2	42.8	53.4	48.4	49.6	48.0	55.3	49.8	46.9	48.6	49.6
Business Associates	47.1	49.3	50.3	45.5	45.9	49.6	48.1	42.1	47.4	46.9	45.9	49.2
Friends/Relatives	31.0	31.8	33.8	29.8	31.9	30.9	31.5	31.6	32.3	28.4	30.1	33.1
Suppliers	52.9	52.3	46.1	58.4	58.1	47.2	50.9	73.7	52.4	56.8	53.6	53.4
Consultants	51.7	40.4	34.9	50.0	39.2	51.2	43.5	47.4	41.6	50.6	43.7	44.3
Local Chamber of Commerce	27.6	22.5	21.7	24.7	21.0	29.3	25.8	13.2	24.5	23.5	23.5	25.2
Trade/Professional association	29.1	35.5	32.9	34.7	34.1	36.9	35.2	35.1	35.2	34.2	35.9	33.6
Local Enterprise Agency/Trust	33.3	31.2	34.2	29.2	28.5	39.0	34.3	21.1	32.6	33.3	30.6	35.9
Local TEC/SLC	37.9	28.5	27.5	33.5	31.4	31.9	31.6	31.6	30.0	35.4	32.4	30.0
Business Link/ Small Business Service	40.2	40.4	43.0	38.9	40.8	41.2	41.4	37.8	40.4	45.0	42.2	40.6
Other	3.4	3.6	5.8	2.8	5.3	3.3	4.4	5.3	4.7	3.7	3.8	5.3
N	218	87	152	178	187	122	271	38	233	81	182	130

Table 5.8: Use of private and public sector advice sources in England by exporter, age, incremental process innovator, novel process innovator (% of respondents reporting use, multiple responses allowed). (*** $p > 0.01$; ** $p > 0.05$; * $p > 0.1$) Using Mann Whitney test for two group comparisons, between column entries. Types of business: older firms established in 1986 or earlier, and younger firms established after 1987. Novel innovators introduced innovations which were new to both the firm and to the industry and are denoted by Nov. Incremental innovators introduced innovations new to the firm but not to the industry and are denoted by Inc. Process and Product Innovations are reported and are denoted by Proc and Prod, respectively.

Sector and size of firm are thus the two variables which show the greatest relationship with the level of use of external advice in England. Being an exporter or a non-exporter, a young or an old firm or a type of innovator does not have any statistically significant relationship with the levels of use of external advice in England. In contrast we found that being an exporter or a non-exporter did have a strong relationship with the level of use of advice in Scotland.

Table 5.9 provides the levels of use of private and public sector sources of advice in both England and Scotland, using the Survey of Entrepreneurship and the Centre for Business Research data for 1997 and 1999. Accountants are consistently the most used source for both countries and three surveys with a level of use around 80%. The use of banks and solicitors is higher in the SoE than in the CBR surveys. The use of the supply chain of customers and suppliers is higher in the SoE survey than the CBR surveys, particularly the 1999 CBR survey.

The SoE has 40.7% of English firms using BL/SBS, compared to 27.4% of Scottish firms using the BS/SBG. These are higher than the 26.6% and 28.0% found in the CBR surveys of 1997 and 1999 in England, and also the 9.9% and 7.0% in 1997 and 1999 in Scotland. The use of TECs/SLC and LECs is higher in the SoE than in the CBR surveys, particularly the 1999 survey.

The difference in results is explained in large part by the much greater sample size of Scotland in the SoE survey compared to the CBR survey. The difference in the timing of the Survey is likely to be less important. The sample size for Scotland in 1997, but especially in 1999 is very small which again may contribute to differences with the results of the SoE.

Advice Source	**England SoE 2001**	**Scotland SoE 2001**	**England CBR 1997**	**England CBR 1999**	**Scotland CBR 1997**	**Scotland CBR 1999**
Accountant	80	80.9	82.9	74.0	83.0	78.9
Solicitor	64.4	65.3	56.0	----	60.3	----
Bank	71.6	71.4	61.4	47.8	64.5	53.5
Customers	48.5	46.5	47.3	24.0	51.1	25.4
Business Associates	47.7	47.2	----	----	----	----
Friends/Relatives	31.6	32.4	38.1	----	39.0	----
Suppliers	52.7	48.5	36.7	22.9	32.6	16.9
Consultants	43.0	40.1	31.4	27.8	44.7	31.0
Local Chamber of Commerce	23.3	19.7	23.2	21.3	27.7	12.7
Trade/Professional association	33.8	35.0	31.0	29.8	34.8	33.8
Local Enterprise Agency/Trust	31.5	33.5	12.6	8.6	40.4	33.8
Local TEC/SLC or LEC	30.8	33.3	21.7	12.9	33.3	21.1
Business Link/ Small Business Service or Business Shop/ Small Business Gateway	40.7	27.4	26.6	28.0	9.9	7.0
Other	4.2	1.6	----	----	----	----
RDC/RDA	----	----	4.4	2.8	6.4	8.5
HIE	----	7.7	----	----	----	----
N	335	984	2246	1178	141	71

Table 5.9: Use of private and public sector advice sources in England and Scotland, comparing the Survey of Entrepreneurship with the Centre for Business Research.

Advice Source	Percentage of All Advice	Cumulative Percentage of All Advice	Percentage Level of Use
Accountant	13.2	13.2	80
Bank	11.9	25.1	71.6
Solicitor	10.7	35.8	64.4
Suppliers	8.7	44.5	52.7
Customers	8.0	52.5	48.5
Business Associates	7.9	60.4	47.7
Consultants	7.1	67.6	43
Business Link/ Small Business Service	6.7	74.3	40.7
Trade/Professional association	5.6	79.9	33.8
Friends/Relatives	5.2	85.1	31.6
Local Enterprise Agency/Trust	5.2	90.3	31.5
Local TEC/SLC	5.1	95.4	30.8
Local Chamber of Commerce	3.9	99.3	23.3
Other	0.7	100.0	4.2
	100		

Table 5.10: The percentage of all advice provided by each of the private and public sources of advice in England

Table 5.10 shows the percentage of advice provided by each of the private and public sources of advice in England. Table 5.11 shows the external sources of business advice from sole and multiple sources in England. Comparing the results for England with the results for Scotland in Table 5.3 we see that BL/SBS has a greater role for firms who used 2 sources or 3-5 sources than the corresponding levels of use for BS/SBG in Scotland. 29.4% of the firms who used 2 sources of advice used BL/SBS but in Scotland there were only 7.8% of the firms who used BS/SBG. Similarly for firms who used 3-5 sources of advice it was found that 38.9% of this group used BL/SBS whilst in Scotland 15% had used BS/SBS.

Amongst the heavy users of business advice who had used 6 or more sources of advice the main difference between Scottish and English firms was for the use of LEAs/trusts which was 43.1% in England and 52.7% in Scotland; TEC/LECs were used by 42.6% in England and 50.0% in Scotland.

This section has provided a comparison between the levels of use in Scotland and in England. Several main findings emerged. Firstly, with the exception of BS/SBG and BL/SBS the levels of use are very similar for public and private sector sources. This suggests that in terms of the need to seek external advice firms in both countries have similar requirements, and similar needs.

Secondly, characteristics of the firm are much more important in Scotland than in England. This suggests that policy makers will have more capacity to identify different segments of firms in Scotland than in England. In other words, English firms are more homogeneous in terms of their pattern of use of external advice than the Scottish firms. Firm sector and employment growth record are particularly important in Scotland. Also policy makers need to be aware of the

manufacturing and services sector composition of the economy, and also the growth performance of firms. The former is more readily available.

Thirdly, BL/SBS had a greater role for firms who used 2 sources, or 3-5 sources than the corresponding levels of use for BS/SBG in Scotland. In other words, firms in England who used 2-5 sources are more likely to have used BL/SBS than the corresponding number for Scotland. Thus, policy makers may need to differentiate between light or medium users of advice and heavy users.

5.6.2 Comparisons between Scotland and England - satisfaction

Table 5.12 shows the assessment of the impact of private and public sources of advice in England. Customers recorded the highest mean score of 3.70. The high mean assessment score is explained by the very small number of users who gave no positive impact (5.8), and slight impact (9.7) scores and the very large number of users who gave important (32.9) and crucial (29.0) impact scores, respectively. In particular the fact that nearly three out of ten users of customers gave crucial scores greatly boosted the average score. Suppliers (3.26), friends and relatives (3.07), consultants (3.07) and business associates (3.03) also recorded mean scores above a moderate impact.

In the third group were accountants (2.95), trade and professional associations (2.88), solicitors (2.84), Local enterprise agencies and trusts (2.79), Small Business Service and Business Link (2.78) and Local TECs (2.76), and banks (2.70). In other words, within the third group are the sixth to the twelfth most important sources in terms of impact.

Advice Source	**sole source**	**2**	**3-5**	**6 or more**
Accountant	33.3	58.8	74.2	87.8
Solicitor	0	11.8	52.3	79.9
Bank	0	35.3	61.4	84.4
Customers	0	12.5	25.0	69.6
Business Associates	33.3	0	26.0	68.0
Friends/Relatives	0	6.3	14.2	47.0
Suppliers	0	12.5	34.4	70.7
Consultants	0	6.3	21.9	62.4
Local Chamber of Commerce	0	0	10.9	34.8
Trade/Professional association	0	0	20.5	47.2
Local Enterprise Agency/Trust	0	6.3	19.5	43.1
Local TEC/SLC	0	17.6	17.3	42.6
Business Link/ Small Business Service	0	29.4	38.9	44.3
Other	33.3	5.9	2.3	5.0
N	3	17	128	177

Table 5.11: External sources of business advice from sole and multiple sources in England (percentage of respondents using each source who use it as a sole service, or as one of two, 3-5, or 6 or more services).

Advice Source	Mean	No Positive Impact	Slight Impact	Moderate Impact	Important Impact	Crucial Impact	N
Accountant	2.95	12.3	22.1	30.7	27.9	7.0	244
Solicitor	2.84	10.6	34.3	25.3	20.2	9.6	198
Bank	2.70	19.6	25.4	28.7	18.2	8.1	209
Customers	3.70	5.8	9.7	22.6	32.9	29.0	155
Business Associates	3.03	5.3	30.7	30.0	24.0	10.0	150
Friends/Relatives	3.07	6.1	31.6	20.4	32.7	9.2	98
Suppliers	3.26	7.4	17.8	30.7	29.4	14.7	163
Consultants	3.07	14.2	14.9	31.3	29.1	10.4	134
Local Chamber of Commerce	2.38	20.5	31.5	37.0	11.0	0.0	73
Trade/Professional association	2.88	16.8	19.8	30.7	23.8	8.9	101
Local Enterprise Agency/Trust	2.79	15.8	25.3	30.5	21.1	7.4	95
Local TEC/SLC	2.76	10.1	37.1	22.5	27.0	3.4	89
Business Link/ Small Business Service	2.78	21.0	14.3	34.3	26.7	3.8	105
Other	3.43	0.0	0.0	71.4	14.3	14.3	14
All	2.97	12.3	23.6	29.0	25.1	10.1	1828

Table 5.12: Assessment of the impact of private and public sector sources in England; mean impact (mean scores from 1=no impact, to 5=crucial impact).

The mean assessment of the Small Business Service and Business Link is in part explained by the 21.0 per cent who gave no positive impact. 26.7 per cent and 34.3 per cent of users of the Small Business Service and Business Link gave an important or a moderate impact assessment, respectively and shows that there are many customers who have received a service where the impact of the advice is very good.

In the fourth group there is only one member and that was of Local Chambers of Commerce (2.38). The performance of Chambers of Commerce was very disappointing and was the worst performance of sources of advice in England. It is a similar level of performance to local Chambers of Commerce in Scotland. The poor performance of Chambers of Commerce in England is accounted for by only 11.0 per cent of their users giving important assessments and zero users giving crucial impact. Instead there were a comparatively large number of users who gave no positive impact – one fifth of users, or slight impact – nearly one third of users, respectively.

The satisfaction scores for English firms against the types of the firms are shown in Table 5.13. The results show that sectoral differences do not result in differences in impact, which was the case in Scotland where only two sources, LEA/trusts and consultants had statistically significant differences with sector.

Size of firm is statistically significant at the 10% or the 5% level for business associates, suppliers and LEAs. Interestingly satisfaction with BL/SBS has no statistically significant relationship with the size of the firm in England, which contrasts to the strong relationship in Scotland.

Younger firms (22.5%) were less satisfied than older firms (35.8%) in England, but younger firms (51%) were more satisfied than older firms (32.7%) in

England. However, there was no systematic pattern. Indeed the results for other firm characteristics are similar to the results found in Scotland.

This section has compared the levels of satisfaction between Scotland and England. The main finding for both regions is the importance of the supply chain contacts of customers and suppliers. This reinforces the need for firms to give careful consideration to the choice of source of advice that they use. In those instances where the problem falls within the remit of customers or suppliers, firms would be best served by turning to customers and suppliers.

A second finding is that the levels of satisfaction in England are not systematically related to the characteristics of firms. This is a finding in line with the results for Scotland. This has the strong policy implication that quality of advisor, rather than characteristics and qualities of the firm determine the level of client satisfaction. In other words, increases in client satisfaction will only be achieved by raising the quality of advisors. This could require greater amounts of public sector money to improve the delivery, content and structure of BG/SBG and BL/SBS and the other public sector backed sources such as LECs and TECs.

Advice Source	All	Services	Manufacturing	Micro	Small	Medium/ Larger	Declining	Stable	Medium Growth	Fast Growth
Accountant	34.8	33	36.2	27.5	39.3	33.3	34.8	42.9	33.3	35.7
Solicitor	29.8	32.6	27.5	36.2	26.8	33.3	32.7	30.4	29.6	25
Bank	26.3	25	27.5	24.6	28.9	15.8	22.2	25.8	24.1	30
Customers	61.9	59.5	64.2	70.5	55.9	72.2	57.1	66.7	78.9	60
Business Associates	34	37.5	30	44.9**	25**	47.1**	32.5	56.3	41.2	27.3
Friends/Relatives	41.8	41.5	42.2	50	38.5	25	50	57.1	55.6	26.7
Suppliers	44.2	54.5	37.1	42.9*	49.5*	21.1*	47.9*	50*	68.4*	32.5*
Consultants	39.6	37.7	40.7	41.7	35.2	54.5	35.7	37.5	33.3	41.2
Local Chamber of Commerce	11	7.9	14.3	6.7	14.9	0	5.9	0	25	11.1
Trade/Professional association	32.7	34.6	30.6	37.9	32.8	21.4	55.2**	18.2**	21.4**	17.4**
Local Enterprise Agency	28.4	20.5	33.9	39.1*	20.7*	42.9*	39.1	28.6	12.5	30.8
Local TEC/SLC	30.3	27.5	32.7	10	34.6	41.2	31	18.2	50	18.5
Business Link/ Small Business Service	30.5	27.6	34	27.6	31.9	25	22.6	29.4	35.3	30
Other	28.6	44.4	0	66.7	18.2	NA	50	0	0	0
N		35.1	35.2	37.0	34.2	35.6	36.4	37.3	37.5	31.4

Table 5.13: Satisfaction of clients with the private and public sector advice sources in England by sector, firm size, and employment growth (% of respondents reporting use, multiple responses allowed) (*** $p > 0.01$; ** $p > 0.05$; * $p > 0.1$). Using Mann Whitney test for two group comparisons, or the Kruskal-Wallis test for multi-group comparisons, between column entries. Types of business: micro-less than 10 employees, small business between 10 and 99 employees, medium/larger businesses between 100 and 499 employees. Employment growth of business during last three years: declining businesses with negative growth below 5%; stable growth from -5% to +5%; medium-growth greater than 5% and less than 50%; and fast - growth 51% or greater.

Advice Source	Exporter	Non-Exporter	Young	Old	Not IncProc	IncProc Innovator	Not NovProc	NovProc Innov	Not IncProd	IncProd Innov	Not NovProd	NovProd Innov
Accountant	31.8	37	35.7	34.1	29.7**	42.5**	33.5	44	33.1	39.7	33.1	39.7
Solicitor	37	28.4	22.5**	35.8**	29.1	31.2	28.6	38.5	31.2	26	31.2	26
Bank	21.2	28.7	26.9	25.7	21.8	32.4	25	32	25	28.6	25	28.6
Customers	62.8	60.8	65.1	59.8	64.4	58.3	62.2	60	65.5	54.1	65.5	54.1
Business Associates	32.4	34.3	38.9	29.5	35	33.9	33.9	40	36.8	28.6	36.8	28.6
Friends/Relatives	48	40.9	51**	32.7**	43.9	42.9	45.7	27.3	45.1	36.4	45.1*	36.4*
Suppliers	34.9	48.1	48.4	41.4	46.5	40.4	43.4	48.1	47.8	37.2	47.8	37.2
Consultants	41.9	39	42	38.1	40.6	40.7	41.1	35.3	45.2	29.7	45.2**	29.7**
Local Chamber of Commerce	17.4	8.5	6.3	14.6	13.5	8.6	10.4	20	14.5*	0*	14.5	0
Trade/Professional association	28	36.2	27.7	37	29.8	34.1	33.7	16.7	28.9	39.1	28.9	39.1
Local Enterprise Agency/Trust	30.8	30.2	25.5	31.3	34.8	23.4	27.1	50	21.1*	50*	21.1	50
Local LEC or SLC	31.3	28.8	23.7	35.3	30.2	33.3	29.3	45.5	26.6	43.5	26.6	43.5
BL/SBS	17.9*	35.7*	21.6*	38.9*	28.6	29.3	29.1	27.3	29	31.3	29	31.3
Other	33.3	12.5	22.2	40	30	25	25	50	27.3	33.3	27.3	33.3
N	36.0	32.2	34.2	36.0	34.9	35.8	34.7	39.5	35.6	34.6	34.0	37.2

Table 5.13: Satisfaction of clients with the private and public sector advice sources in England by exporter, age, incremental process innovator, novel process innovator (% of respondents reporting use, multiple responses allowed). (*** $p > 0.01$; ** $p > 0.05$; * $p > 0.1$) Using Mann Whitney test for two group comparisons, between column entries. Types of business: older firms established in 1986 or earlier, and younger firms established after 1987. Novel innovators introduced innovations which were new to both the firm and to the industry and are denoted by Nov. Incremental innovators introduced innovations new to the firm but not to the industry and are denoted by Inc. Process and Product Innovations are reported and are denoted by Proc and Prod, respectively.

Advice Source	**England SoE 2001**	**Scotland SoE 2001**	**England CBR 1997**	**Scotland CBR 1997**
Accountant	2.95	2.97	3.10	3.10
Solicitor	2.84	2.84	2.79	2.76
Bank	2.70	2.78	2.69	2.81
Customers	3.70	3.57	3.21	3.18
Business Associates	3.03	3.11	----	----
Friends/Relatives	3.07	2.99	2.98	3.04
Suppliers	3.26	3.13	2.78	2.89
Consultants	3.07	3.07	2.76	2.52
Local Chamber of Commerce	2.38	2.27	2.17	2.08
Trade/Professional association	2.88	2.78	2.44	2.51
Local Enterprise Agency/Trust	2.79	2.62	2.19	2.60
Local TEC/SLC or LEC	2.76	2.64	2.39	2.74
Business Link/ Small Business Service or Business Shop/ Small Business Gateway	2.78	2.70	2.36	2.64
RDC/RDA	----	----	2.18	2.44
HIE	----	1.94	----	----
Other	3.43	3.44	----	-----
All	2.97	2.92	2.77	2.80

Table 5.14: Mean impact assessments of private and public sector advice sources in England and Scotland, comparing the Survey of Entrepreneurship with the Centre for Business Research.

5.7 Econometric Regression Analysis

The previous sections of this thesis have examined the levels of use and the clients' assessment with impact using crosstabulations. The purpose of this section is to extend the analysis by looking at the levels of use and impact using regression analysis. More specifically whether or not the firms have or have not used external advice is examined using a logit regression model for each of the sources of advice. In the estimation of the impact of advice ordered logit techniques are used, because the dependent variable is ordinal i.e. a perceived impact of 4 cannot usually be thought to be twice as high as a perceived impact of 2. The empirical analysis in the thesis assesses the influence on advice use and impact of: the age, employee size, rate of employment growth, profitability, and skill levels of the firm, as well as a series of dummy variables which measure whether the firms are manufacturing/services, exporters/non-exporters, or are novel product, novel process, incremental product, incremental process innovators. The level of profitability and the level of skill are two continuous variables which were not included in our earlier crosstabulations analysis. The profitability used in the models is pre-tax profitability before the deductions of directors' emoluments.

5.7.1 Sources of advice - Scotland

In general, firm size, being an exporter and employment growth are the three most highly significant explanatory variables. It is apparent that the significant explanatory variables differ greatly between advice sources. However, this finding is not unexpected as we are dealing with a wide range of sources of advice, each of which has different specific capacity and marketing objectives. There is also a large

and potentially diverse user community. Hence it is important here to relate each estimate of the results in Table 5.15 to the characteristics of the different suppliers.

Looking first at accountants it is clear that none of the explanatory variables are statistically significant at the 10% level or better. This result is also consistent with the cross-tabulations results, and it suggests that accountants are a source of advice which the vast majority, approaching all, firms will seek external advice from their accountants. In such a scenario there would be no difference between the users since a high proportion, 80.9% of firms in Scotland used accountants.

Secondly, in the case of banks one variable is statistically significant at the 1% level and that is the level of skill of the firm. The relationship is negative in direction which suggests that the more skilled the employees in a firm the less likely the firm is to seek external advice from a bank. In the crosstabulations growth was weakly statistically significant, but after controlling for the variables which should logically be included in the regression model it was found that growth was not statistically significant.

For the last of the private sector chief professionals, solicitors, four variables are statistically significant at the 1% level, and these were: size of the firm, rate of growth, exporter, and skill. In the case of the skill variable this was found to have a negatively signed coefficient, and thus again it is found that the more skilled the personnel in the firm the less likely the firm to seek advice from solicitors. The size of the firm has a positive relationship with the probability of seeking advice, and may reflect the fact that larger sized firms have more business to conduct and a stronger need for legal advice. Unfortunately, this was a postal survey and this precluded asking for a detailed break-out of the areas where advice was sought. Exporting

firms and growing firms were characteristics associated with a higher probability of seeking advice from solicitors.

Our analysis of the crosstabulations found only one statistically significant relationship with the use of customers and that was for whether the firm was an exporter or a non-exporter of goods and services. The regression model confirms this relationship, and the fact that none of the other variables are statistically significant increases the confidence that the models are estimated correctly. If there had been a discrepancy between the model and the crosstabulations, with the model suggesting statistically significant relationships which were not found in the crosstabulations this would have been a problem. That would suggest that the model sample was behaving differently to the crosstabulations sample, perhaps because of the cumulative data loss from missing values in a model which contains several variables. Fortunately this did not apply to these results.

Business associations did not have any statistically significant relationships. For friends and relatives there is a negative relationship between the probability of using that source with the size of the firm.

For suppliers two of the variables were statistically significant, pre-tax profitability, and employment growth. This is only the second source where the pre-tax profitability of the firm is statistically significant. The positive sign on pre-tax profitability in the supplier model and in the solicitors model suggests that it is the firms who have more profits who are more likely to use these two advice sources, and also that firms with smaller profits or losses who are less likely to use solicitors. But for all of the other sources in Scotland it was found that the pre-tax profitability variable was not statistically significant. This result can be interpreted as suggesting

that whether a firm is successful and enjoying large profits or making losses does not have an undue influence on firms seeking external advice.

Employment growth has a strong positive relationship with the use of suppliers and this relationship was also found for the use of consultants. Thus higher growth firms appear to have a higher probability of using suppliers and consultants. The exact nature of the causality of growth and use and the impact of the advice cannot be determined. However, the results do act as a guide or a barometer of which sources have the strongest associations between employment growth and external advice.

For consultants the size of the firm and being an exporter were also associated with a higher probability of using that source of external advice. Again the results are suggesting that the nature of the business conducted by exporting firms, and the type of problems which they encounter is different to non-exporting firms. Within the private sector several sources of advice - consultants, suppliers, solicitors, and customers are more likely to be used by exporting firms than non-exporting firms.

Next we look at chambers of commerce and trade and professional associations. For chambers of commerce but not for trade and professional associations there was found to be a positive statistically significant relationship between the size of the firm and the likelihood of the firm using that particular source for external advice. Both of these sources are organizations where their membership is a self-selecting group of businesses where they 'brand name capital' and have a high level of institutional trust. For chambers of commerce exporting firms are also more likely than non-exporting firms to use them for advice. In contrast, our model

of trade and professional associations did not have any statistically significant relationships.

Lastly we focus attention upon the public sector sources of advice in Scotland. For LEA/trusts, LECs or Scottish Enterprise and HIE there are strong and positively statistically significant relationships with the size of firms and the probability of the firms using these sources. In the case of BS/SBG the size of firms was not a statistically significant variable.

For LEA/trusts and LECs or Scottish Enterprise there were very strong positive and statistically significant relationships with the rate of employment growth. But employment growth was not statistically significant in the models of HIE and BS/SBG. Again the exact nature of the causality cannot unerringly be made, but the results do suggest that LEA/trusts, LECs and Scottish Enterprise are associated with employment growth firms; whilst for HIE and BS/SBG there are not particular types of growth firms who are more (or less) likely to use them for external advice, compared to other employment growth behaviour firms.

Exporting firms were more likely than non-exporting firms to use LEA/trusts, but the exporting variable was not statistically significant for the other public sector sources of advice.

Novel product innovators were more likely than non-novel product innovators to use LECs or Scottish Enterprise and also BS/SBG. These are the only two models where one of the innovation variables are statistically significant. The results should be interpreted as a good sign of the development of the respective public schemes. Again whilst the exact causality must be treated with care the results suggest that BS/SBG and LECs and Scottish Enterprise are associated with

firms which are developing cutting edge and state of the art product innovations. This contrasted with the private sector sources where none of the four innovation variables were statistically significant.

This section has looked at multivariate analysis of the levels of use of external advice. Multivariate analysis is looking at establishing which of several possible characteristics of the firms are systematically related to levels of use, when controlling for all of the factors which should logically appear.

The results are important for policy makers and practioners alike because they allow each of the providers of external advice to know how they may better target potential users. By using logit analysis the models allow us to better identify the characteristics of firms which increase or decrease the propensity to seek external advice. Accountants provide the statutory services but are found to show no relationships with firms' characteristics. Thus the near universality of use means that not unsurprisingly there are no statistically significant differences across firm characteristics. The use of banks is negatively related to skill, only. Thus the firms with a low skill profile are turning to banks but the more skilled firms are eschewing banks. In the case of solicitors their use is systematically related to size, growth, exporter and skill. As with accountants we find no statistically significant differences between the use of business associates and also trade and professional associations with firms' characteristics. This result suggests that policy makers cannot accurately predict the levels of use of business advice. The use of suppliers is positively related to pre-tax profitability and also to growth. The use of consultants is positively related to growth but negatively related to firm age.

	Accountant	Solicitor	Bank	Customers	Business Associates
Log Age	-0.057 (0.290)	-0.254 (0.271)	-0.339 (0.252)	-0.326 (0.230)	0.060 (0.226)
Log no. of employees	0.041 (0.236)	1.223 (0.221) ***	0.256 (0.207)	0.132 (0.197)	0.153 (0.187)
Pre Tax Profitability	-0.0001 (0.0002)	0.0009 (0.0005) *	0.0001 (0.0002)	0.0002 (0.0002)	0.0001 (0.0001)
Rate of growth	0.0002 (0.0008)	0.001 (0.0007) ***	0.0009 (0.0007)	0.0001 (0.0006)	0.001 (0.001)
Manufacturing/services	0.328 (0.235)	-0.075 (0.212)	-0.002 (0.203)	0.039 (0.189)	-0.180 (0.187)
Export	0.201 (0.256)	0.423 (0.036) ***	0.305 (0.223)	0.224 (0.020) ***	-0.039 (0.199)
Skill	0.003 (0.005)	-0.017 (0.006) ***	-0.006 (0.001) ***	0.004 (0.004)	-0.0009 (0.002)
Novel Product Innovator	0.277 (0.283)	-0.079 (0.261)	-0.135 (0.248)	0.060 (0.223)	-0.013 (0.221)
Incremental Product Innovator	0.092 (0.266)	-0.201 (0.241)	-0.179 (0.236)	-0.036 (0.221)	-0.152 (0.220)
Novel Process Innovator	-0.299 (0.341)	0.214 (0.336)	0.291 (0.311)	-0.225 (0.277)	0.115 (0.273)
Incremental Process Innovator	-0.140 (0.240)	0.182 (0.218)	0.292 (0.211)	0.171 (0.194)	0.094 (0.193)
Constant	1.202 (0.200) ***	-0.261 (0.311)	0.876 (0.199) ***	-0.053 (0.277)	-0.345 (0.273)
N	565	563	564	552	560
Log-likelihood	-276.8	-314.7	-336.24	-376.60	-382.64
Correctly classified (%)	80.35	71.94	70.57	53.80	53.57

Table 5.15 Estimates of a logit model of the expectation of seeking external business advice, by service provider in Scotland (*** $p > 0.01$; ** $p > 0.05$; * $p > 0.1$).

	Friends/ Relatives	Suppliers	Consultants	Chambers	Trade/Prof Assoc
Log Age	-0.041 (0.237)	0.055 (0.228)	-0.401 (0.235) *	0.307 (0.283)	0.191 (0.241)
Log no. of employees	-0.183 (0.006) ***	0.088 (0.009) ***	0.833 (0.198) ***	0.513 (0.169) ***	0.486 (0.502)
Pre Tax Profitability	-0.0001 (0.0002)	0.0003 (0.0002) *	-0.0001 (0.0001)	-0.00007 (0.0002)	-0.0002 (0.0002)
Rate of growth	-0.0001 (0.0006)	0.001 (0.0006) **	0.0004 (0.0001) ***	-0.0003 (0.0007)	-0.001 (0.0007)
Manufacturing/services	-0.008 (0.195)	0.150 (0.187)	0.156 (0.191)	-0.094 (0.241)	-0.547 (0.404)
Export	0.323 (0.207)	0.012 (0.200)	0.266 (0.004)***	0.141 (0.007)***	0.011 (0.211)
Skill	0.001 (0.002)	0.001 (0.003)	-0.001 (0.002)	-0.011 (0.009)	0.003 (0.003)
Novel Product Innovator	0.229 (0.234)	-0.021 (0.223)	0.349 (0.229)	0.068 (0.282)	-0.403 (0.423)
Incremental Product Innovator	0.390 (0.329)	0.197 (0.220)	0.207 (0.228)	0.036 (0.287)	-0.169 (0.234)
Novel Process Innovator	0.034 (0.286)	0.138 (0.275)	-0.262 (0.282)	0.006 (0.336)	0.852 (0.886)
Incremental Process Innovator	0.124 (0.201)	0.199 (0.193)	0.052 (0.200)	-0.136 (0.250)	0.379 (0.307)
Constant	-0.737 (0.287) **	-0.542 (0.277) *	-0.956 (0.287) ***	-2.263 (0.365) ***	-1.181 (0.297) ***
N	560	560	558	558	557
Log-likelihood	-357.20	-379.13	-360.37	-262.70	-343.38
Correctly classified (%)	66.07	58.75	62.37	81.36	66.79

Table 5.15 Estimates of a logit model of the expectation of seeking external business advice, by service provider in Scotland (*** p > 0.01; ** p > 0.05; * p > 0.1).

	LEA/ Trust	LEC or Scottish Ent	HIE	Business Shop/ SBG
Log Age	-219 (0.239)	0.116 (0.244)	0.108 (0.400)	-0.306 (0.252)
Log no. of employees	0.653 (0.215) ***	0.837 (0.231) ***	1.029 (0.384) ***	0.413 (0.313)
Pre Tax Profitability	-0.0002 (0.0002)	0.0002 (0.0002)	-0.00001 (0.0002)	-0.0001 (0.0002)
Rate of growth	-0.0002 (0.0001) ***	0.0001 (0.00001) ***	-0.0006 (0.001)	-0.0002 (0.0006)
Manufacturing/services	0.085 (0.199)	-0.347 (0.209) *	0.206 (0.356)	0.180 (0.030) ***
Export	0.415 (0.207) **	0.164 (0.211)	-0.035 (0.358)	0.227 (0.221)
Skill	-0.006 (0.006)	-0.020 (0.007) **	-0.005 (0.006)	0.0006 (0.002)
Novel Product Innovator	0.319 (0.234)	0.507 (0.236) **	-0.026 (0.407)	0.504 (0.251) **
Incremental Product Innovator	0.190 (0.237)	-0.034 (0.247)	-0.134 (0.442)	0.239 (0.253)
Novel Process Innovator	-0.036 (0.287)	-0.057 (0.291)	0.489 (0.444)	-0.112 (0.310)
Incremental Process Innovator	0.298 (0.204)	0.055 (0.210)	0.044 (0.378)	0.434 (0.314)
Constant	-1.402 (0.204) ***	-1.671 (0.312) ***	-3.885 (0.580) ***	-1.560 (0.322) ***
N	559	554	543	554
Log-likelihood	-344.59	-332.16	-140.40	-314.45
Correctly classified (%)	68.52	67.69	92.08	72.92

Table 5.15 Estimates of a logit model of the expectation of seeking external business advice, by service provider in Scotland (*** p > 0.01; ** p > 0.05; * p > 0.1).

Taken together these results suggest that in order for policy makers to increase levels of use of external advice they would only be able to make narrow predictions focusing upon bespoke sources, rather than a universal or very widespread model adoption. In other words the large differences in the characteristics of firms which are systematically related to levels of use makes it more difficult to present a general firm characteristic which influences the use of all sources of advice. This notwithstanding firm size is positively related to the use of suppliers, consultants and Chambers of Commerce; and it is negatively related to business friends or relatives. Thus, for policy measures the size of firms remains the best overall prediction measure.

In the public sector the use of LEA/Trusts, LECs or SE and HIE are positively related to size. The use of LEA/trusts and LECs or SE were also related to employment growth. Novel product innovators are more likely than non-product innovators to use LEC or SE. Thus, within the public sector size of firm is again the prime factor which needs to be considered and the agents of economic development need to be aware of their constituencies and their size distribution. In order for the overall level of use of business advice, and particularly multiple advice to increase there needs to be an increase in the number of employees in larger sized firms, rather than an increase in the number of firms with low levels of employees.

5.7.2 Impact of advice - Scotland

Table 5.16 shows the results of the ordered logit models of the user's assessment of the impact of the advice upon their businesses. The impact of each source is assessed by respondents on a 5 point scale from 1 (no impact) to 5 (crucial

impact. As before, our emphasis on exploratory analysis means that we report the estimates for all variables and not the best predictive model.

Looking at the private sector specialists of accountants, solicitors and banks there are a mixed set of explanatory variables. The main common feature is the strength of innovation in influencing the users' assessment scores. Incremental innovation was positive and statistically significant at the 1% level with assessment with the impact of accountants. Incremental product innovators recorded lower impact assessment with the advice that they received from banks compared to non incremental product innovators.

Pre tax profitability had a positive statistically significant relationship with clients' assessment of advice from solicitors. The pre tax profitability variable was not statistically significant for the other two private sector sources. However, the sign of the pre tax profitability was negative for banks and accountants, which suggested that the higher the level of profitability the lower the clients' assessment with their advice from banks and accountants.

The size of the firm was positively signed in our regression results for the three private sector specialists of accountants, banks and solicitors, but it was only the banks which were statistically significant at the 10% level.

Sector was statistically significant at the 10% level for customers and consultants. The results showed that manufacturing firms tended to give lower impact assessments than service sector firms for advice received from customers and consultants.

Skill was statistically significant at the 5% level for users' assessment with advice from chambers of commerce. Thus, higher skilled firms were more likely to

give higher impact assessment scores. Of all the private and the public sector sources this was the only source where skill was statistically significant.

Incremental product innovation was statistically significant for business associates and suppliers. Incremental product innovators recorded higher impact assessment than non incremental product innovators for advice from business associates.

Non novel product innovators recorded lower impact with advice from suppliers and also from trade and professional associations and these relationships were both statistically significant at the 1% level. The results are interesting and are consistent with findings of the crosstabulations. The results suggest that for suppliers and trade and professional associations the cutting edge firms with regard to product innovation are less satisfied than other firms with the advice that they received.

For the private sector non professional specialist advisors size of firm was only statistically significant for assessment with advice from friends and relatives. The advice from friends and relatives was lower for respondents in larger sized firms. In other words, the impact of advice from friends and relatives was greater in smaller sized firms than in larger sized firms.

Lastly we examine the users' assessment scores with LEA/Trusts, LECs or Scottish Enterprise, HIE, and BS/SBG. Higher rates of employment growth were associated with higher impact for all of these public backed sources of advice. However, employment growth was only statistically significant at the 5% level for LEA/Trusts and BS/SBG.

	Accountant	Solicitor	Bank	Customers	Business Associates
Log Age	-0.132 (0.234)	-0.710 (0.670)	-0.247 (0.269)	-0.299 (0.299)	-0.154 (0.318)
Log no. of employees	0.229 (0.186)	0.290 (0.253)	0.386 (0.230) *	0.042 (0.258)	-0.213 (0.281)
Pre Tax Profitability	-0.00005 (0.0001)	0.0003 (0.0001) **	-0.00006 (0.0001)	0.0002 (0.0002)	-0.00007 (0.0002)
Rate of growth	-0.0002 (0.0006)	0.0002 (0.0006)	0.0009 (0.0006)	0.0009 (0.0008)	-0.0002 (0.0008)
Manufacturing/services	-0.025 (0.183)	0.016 (0.214)	0.191 (0.203)	-0.445 (0.261) *	-0.450 (0.275)
Export	-0.076 (0.199)	0.026 (0.218)	0.267 (0.217)	0.032 (0.262)	0.004 (0.287)
Skill	0.0009 (0.002)	-0.005 (0.007)	-0.005 (0.007)	-0.002 (0.002)	-0.0004 (0.002)
Novel Product Innovator	-0.005 (0.221)	0.132 (0.252)	0.127 (0.237)	0.537 (0.102) ***	0.267 (0.316)
Incremental Product Innovator	-0.059 (0.223)	-0.255 (0.261)	-0.012 (0.002) ***	-0.232 (0.295)	0.208 (0.306)
Novel Process Innovator	0.274 (0.276)	0.171 (0.287)	-0.237 (0.297)	0.633 (0.397)	0.592 (0.374)
Incremental Process Innovator	0.160 (0.007) ***	0.056 (0.218	-0.129 (0.212)	0.333 (0.255)	0.496 (0.260) *
N	435	351	369	255	244
Log-likelihood	-640.50	-479.26	-554.19	-345.47	-331.02
Cut1	-2.059	-3.494	-1.521	-3.754	-3.164
Cut2	-0.651	-0.884	-0.275	-1.967	-1.333
Cut3	0.766	0.498	1.181	-0.519	0.502
Cut4	2.656	2.322	2.685	1.294	2.438

Table 5.16 Multivariate estimates of an ordered logit model of the client assessments of impact of advice, by service provider in Scotland

	Friends/ Relatives	Suppliers	Consultants	Chambers	Trade/Prof Assoc
Log Age	0.090 (0.393)	-0.153 (0.287)	-0.007 (0.001) ***	-0.397 (0.485)	-0.267 (0.382)
Log no. of employees	-0.503 (0.114) ***	0.062 (0.249)	-0.173 (0.282)	-0.500 (0.574)	-0.153 (0.338)
Pre Tax Profitability	-0.0005 (0.0003)	-0.00005 (0.0001)	0.0003 (0.0002)	-0.0005 (0.0004)	-0.0004 (0.0003)
Rate of growth	-0.00008 (0.001)	0.0004 (0.0007)	0.001 (0.0009)	-0.001 (0.001)	0.0005 (0.0009)
Manufacturing/services	-0.305 (0.332)	0.111 (0.251)	-0.521 (0.272) *	0.861 (0.511)	0.242 (0.329)
Export	0.037 (0.323)	0.512 (0.458)	0.268 (0.275)	0.118 (0.498)	-0.438 (0.344)
Skill	0.004 (0.003)	0.002 (0.002)	-0.0006 (0.003)	0.043 (0.019) **	0.005 (0.004)
Novel Product Innovator	0.472 (0.372)	-0.136 (0.005) ***	0.120 (0.315)	-0.207 (0.513)	-0.314 (0.073) ***
Incremental Product Innovator	0.707 (0.667)	0.029 (0.288)	0.437 (0.342)	-0.806 (0.534)	0.182 (0.365)
Novel Process Innovator	0.416 (0.482)	-0.226 (0.364)	-0.303 (0.369)	0.682 (0.650)	0.817 (0.418)
Incremental Process Innovator	0.200 (0.317)	-0.427 (0.250) *	-0.166 (0.285)	-0.126 (0.440)	0.944 (0.334)
N	174	261	218	90	165
Log-likelihood	-248.03	-359.73	-319.01	-109.48	-232.63
Cut1	-2.545	-3.154	-2.598	-3.049	-1.860
Cut2	-0.861	-1.161	-1.013	-1.107	-0.449
Cut3	0.626	0.526	0.261	0.774	0.883
Cut4	2.521	2.428	2.189	2.982	3.473

Table 5.16 Multivariate estimates of an ordered logit model of the client assessments of impact of advice, by service provider in Scotland

	LEA/ Trust	LEC or Scottish Ent	HIE	Business Shop/ SBG
Log Age	**-0.162 (0.031)** ***	-0.593 (0.460)	-0.596 (1.441)	-0.728 (0.612)
Log no. of employees	0.093 (0.375)	**1.260 (0.370)** ***	-1.147 (1.170)	0.070 (0.328)
Pre Tax Profitability	**-0.001 (0.0006)** **	-0.0003 (0.0002)	-0.0002 (0.0007)	-0.00009 (0.0003)
Rate of growth	**0.002 (0.0009)** **	0.0004 (0.001)	0.005 (0.003)	**0.002 (0.0009)** **
Manufacturing/services	-0.076 (0.306)	0.104 (0.331)	1.464 (1.693)	0.299 (0.319)
Export	0.373 (0.314)	0.225 (0.315)	-1.045 (1.181)	0.118 (0.358)
Skill	-0.002 (0.012)	-0.016 (0.013)	0.004 (0.036)	0.003 (0.003)
Novel Product Innovator	0.206 (0.344)	**0.571 (0.142)** ***	0.267 (1.010)	-0.008 (0.386)
Incremental Product Innovator	-0.136 (0.396)	0.560 (0.421)	-0.142 (1.799)	-0.380 (0.421)
Novel Process Innovator	-0.161 (0.453)	0.002 (0.427)	0.222 (1.149)	0.290 (0.498)
Incremental Process Innovator	0.536 (0.521)	0.286 (0.326)	1.183 (1.021)	0.402 (0.333)
N	175	167	34	147
Log-likelihood	-253.38	-239.86	-109.48	-213.33
Cut1	-1.672	-0.358	0.545	-1.773
Cut2	0.039	0.867	1.384	-0.501
Cut3	1.082	1.996	2.775	0.367
Cut4	2.853	4.263	-------	2.798

Table 5.16 Multivariate estimates of an ordered logit model of the client assessments of impact of advice, by service provider in Scotland

The higher the level of pre tax profitability the lower the users' assessment with the public backed sources. However, it was only the LEA/Trust model where pre tax profitability was statistically significant at the 5% level.

This section has looked at users' assessment of the impact of external advice. Causality is difficult to establish but the results do indicate that certain types of firms achieve higher satisfaction impact results than firms without those characteristics. Size of firm is positively related to the impact of advice from banks, and negatively related to the impact of advice from friends and relatives. Pre-tax profitability is positively related to the impact of advice from solicitors, and age is negatively related to the impact of consultants. But strikingly there are no statistically significant relationships between the use of all of the sources of advice and the rate of employment growth, novel process innovator, and exporter. Taken together the results on the assessment of the impact of external advice indicate that it is difficult to systematically predict the impact of advice.

5.8. Comparisons with England

The main focus of the thesis is upon Scotland, but we are fortunate that our data set contains a substantial number of firms in the north east of England which allow us to gain a clearer picture of the operation of business advice and to also identify comparisons between Scottish and English SMEs. In this section our comparisons focus upon the logit and ordered logit models of the use and then the impact of external business advice.

5.8.1 Use of Advice

Table 5.17 shows the logit models of the expectations of the SMEs having used each of the sources of advice in England. None of the explanatory variables in the model of the use of accountants were statistically significant which was also found in Scotland. Size of firm is statistically significant in the model of solicitors in England. This was also found in Scotland, but in Scotland we also found that pre-tax profitability, employment growth, exporter, and skill were statistically significant.

None of the explanatory variables in the use of banks or customers were statistically significant in England. In Scotland skill was significant in the use of banks, and exporter was significant in the use of customers.

Manufacturing sector firms were less likely than service sector firms to use business associates for advice in England. In contrast in Scotland there were no statistically significant variables in our model of the probability of the use of business associates.

Size of firm was statistically significant in the case of friends and relatives in England, and appeared with a negatively signed coefficient indicating that the larger the firm the lower the probability of use. This was also found in Scotland.

Skill was statistically significant in the case of suppliers and chambers of commerce, and again appeared with negative coefficients. In other words the results are interpreted as indicating that the higher the level of skill the less likely the firms to use suppliers or chambers of commerce. The skill variable was not statistically significant in the Scottish models.

For the English firms there was only one statistically significant explanatory variables in the model of the use of consultants and that was the size of the firm.

Thus, whilst the crosstabulations found that sector, size, and growth were systematically related to the level of use of consultants, after regression analysis has been performed the results show that size is the only explanatory variable in our model. In contrast in Scotland the regression model showed that size, employment growth and exporting were systematically related to the use of consultants.

In Table 5.17 size was significant for chambers of commerce in England, which had also been found in Scotland. Thus the size of the firm is one of the most important variables in both England and Scotland.

For the public sector sources of LEA, TEC/SLC and BL/SBS there were no statistically significant explanatory variables in England. This is perhaps an area of greatest contrast to Scotland. We recall that the results for Scotland indicated that size of firm was positively related with the use of LEA/Trusts, LECs or Scottish Enterprise, and HIE. Employment growth was negatively related to the use of LEA/Trusts, and positively related to the use of LECs or Scottish Enterprise, respectively, in Scotland. Novel product innovators were more likely than non novel product innovators to use LECs or Scottish Enterprise, and also BS/SBG. Exporting was positively related to the use of LEA/Trusts. Lastly, skill was negatively related to the use of LECs or Scottish Enterprise and manufacturing firms were less likely than service sector firms to use LECs or Scottish Enterprise.

	Accountant	Solicitor	Bank	Customers	Business Associates
Log Age	0.307 (0.519)	0.148 (0.479)	0.242 (0.473)	0.936 (0.838)	0.196 (0.427)
Log no. of employees	-0.377 (0.415)	1.090 (0.365) ***	-0.190 (0.380)	-0.671 (0.632)	-0.561 (0.351)
Pre Tax Profitability	-0.0003 (0.0002)	3.19e-06 (0.0002)	-0.0002 (0.0001)	0.0001 (0.0001)	-0.0001 (0.0002)
Rate of growth	-0.002 (0.002)	-0.0006 (0.0009)	-0.0005 (0.0009)	0.002 (0.001)	0.0008 (0.0009)
Manufacturing/services	1.009 (0.895)	-0.066 (0.342)	0.373 (0.356)	-0.319 (0.318)	-0.602 (0.322) *
Export	0.494 (0.434)	-0.369 (0.369)	-0.039 (0.374)	-0.026 (0.340)	-0.151 (0.338)
Skill	0.006 (0.010)	-0.0009 (0.008)	0.007 (0.010)	0.001 (0.006)	0.012 (0.010)
Novel Product Innovator	-0.504 (0.457)	-0.193 (0.394)	-0.271 (0.418)	-0.137 (0.367)	0.233 (0.363)
Incremental Product Innovator	-0.589 (0.516)	-0.248 (0.448)	-0.486 (0.452)	-0.214 (0.416)	0.440 (0.413)
Novel Process Innovator	-0.297 (0.572)	0.259 (0.541)	0.825 (0.639)	0.609 (0.494)	-0.429 (0.498)
Incremental Process Innovator	-0.274 (0.405)	0.352 (0.365)	-0.210 (0.360)	0.724 (0.340)	0.170 (0.335)
Constant	1.389 (0.639) **	-0.645 (0.558)	0.964 (0.580) *	-0.548 (0.524)	0.479 (0.523)
N	200	199	198	200	200
Log-likelihood	-98.98	-118.14	-113.42	-131.58	-131.15
Correctly classified (%)	79.00	71.36	72.22	59.00	60.00

Table 5.17 Estimates of a logit model of the expectation of seeking external business advice, by service provider in England (*** $p > 0.01$; ** $p > 0.05$; * $p > 0.1$).

	Friends/ Relatives	Suppliers	Consultants	Chambers	Trade/Prof Assoc
Log Age	-0.191 (0.490)	0.623 (0.434)	0.550 (0.428)	0.132 (0.517)	-0.422 (0.459)
Log no. of employees	-0.843 (0.389) **	-0.038 (0.365)	0.582 (0.066) ***	1.291 (0.505) **	0.298 (0.373)
Pre Tax Profitability	0.0002 (0.0001)	0.0002 (0.0002)	-6.41e-06 (0.0001)	0.0001 (0.0002)	0.00003 (0.0001)
Rate of growth	0.002 (0.002)	0.0005 (0.0008)	-0.0007 (0.001)	-0.001 (0.001)	-0.0003 (0.001)
Manufacturing/services	-0.525 (0.353)	0.442 (0.329)	-0.231 (0.331)	-0.973 (0.817)	-0.676 (0.342) **
Export	0.118 (0.378)	-0.083 (0.341)	0.177 (0.341)	0.092 (0.408)	-0.541 (0.373)
Skill	0.014 (0.011)	-0.021 (0.013) *	0.009 (0.011)	-0.077 (0.026) ***	-0.007 (0.011)
Novel Product Innovator	0.149 (0.402)	0.129 (0.363)	-0.237 (0.373)	0.147 (0.456)	-0.369 (0.379)
Incremental Product Innovator	0.211 (0.463)	0.494 (0.416)	0.007 (0.417)	-0.614 (0.500)	-0.611 (0.441)
Novel Process Innovator	-0.081 (0.572)	1.023 (0.935)	-0.372 (0.507)	-1.598 (1.601)	0.234 (0.535)
Incremental Process Innovator	0.520 (0.374)	-0.252 (0.336)	0.196 (0.339)	0.927 (0.898)	0.374 (0.357)
Constant	-0.076 (0.574)	-0.873 (0.536)	-1.589 (0.548) ***	-1.865 (0.648) ***	0.191 (0.549)
N	200	200	200	200	198
Log-likelihood	-112.91	-129.34	-127.81	-94.82	-119.95
Correctly classified (%)	74.00	61.50	61.00	62.00	66.67

Table 5.17 Estimates of a logit model of the expectation of seeking external business advice, by service provider in England (*** $p > 0.01$; ** $p > 0.05$; * $p > 0.1$).

	LEA/ Trust	LEC or Scottish Ent	Business Link/ SBS
Log Age	-0.342 (0.447)	-0.138 (0.440)	0.168 (0.447)
Log no. of employees	0.512 (0.365)	0.389 (0.349)	-0.329 (0.366)
Pre Tax Profitability	0.0001 (0.0001)	0.00002 (0.0001)	-8.57e-06 (0.0001)
Rate of growth	0.0006 (0.0009)	-0.0006 (0.001)	-0.002 (0.001)
Manufacturing/services	0.005 (0.342)	0.097 (0.339)	-0.514 (0.330)
Export	-0.202 (0.361)	0.145 (0.350)	0.034 (0.351)
Skill	-0.009 (0.009)	-0.002 (0.007)	-0.006 (0.011)
Novel Product Innovator	-0.100 (0.380)	-0.407 (0.378)	-0.094 (0.377)
Incremental Product Innovator	-0.725 (0.448)	-0.169 (0.427)	0.252 (0.418)
Novel Process Innovator	-718 (0.594)	0.185 (0.497)	0.035 (0.515)
Incremental Process Innovator	0.597 (0.350) *	-0.248 (0.352)	0.332 (0.345)
Constant	-0.799 (0.554)	-0.814 (0.541)	0.205 (0.533)
N	200	199	197
Log-likelihood	-120.50	-123.43	-125.88
Correctly classified (%)	69.00	67.34	66.50

Table 5.17 Estimates of a logit model of the expectation of seeking external business advice, by service provider in England (*** $p > 0.01$; ** $p > 0.05$; * $p > 0.1$).

5.8.2 Impact of Advice

The main contrast for the regression results of users' assessment with external business advice is that there are much fewer statistically significant relationships between firm characteristics and users' assessments of impact for English firms (Table 5.18) than Scottish firms (Table 5.13). For seven sources in England there were no statistically significant relationships between any of the firm characteristics and user assessment of advice, and these were accountant, solicitor, banks, customers, friends and relatives, consultants and TECs or SLCs.

The size of firm was statistically significant in England for users' assessment with advice from business associates and suppliers. For both of these sources the greater the number of employees the lower the client impact assessment. In contrast for our Scottish firms we found size to be statistically significant for banks, friends and relatives and LECs or Scottish Enterprise.

Pre tax profitability was statistically significant with English assessment of advice from chambers of commerce and BS/SBG. The higher the rate of profitability the lower the users' assessment with advice from chambers of commerce and the higher the advice from BS/SBG, respectively. In contrast, in Scotland we found that pre tax profitability had a positive statistically significant relationship with advice from solicitors, and a negative statistically significant relationship with advice from LEA/Trusts.

Incremental product innovators was a statistically significant variable in our model of users assessment of the impact of chambers of commerce and LEA/Trusts in England. Incremental product innovators were more likely to give higher impact

assessment with LEA/Trust advice, and less likely to give higher impact scores than chambers of commerce.

Non exporters and less skilled English firms were more likely to give high impact assessment with advice from TECs or SLCs, and these relationships were statistically significant at the 5% level or better. This was the only source in England where these variables were statistically significant. In contrast in Scotland we found that skill was only related to the impact of advice from chambers of commerce.

An important finding of the regression analysis is to show that overall there are few highly statistically significant features of firms that affect the impact of advice from different sources – public and private. The regression results are important because the ordered logit models contain those characteristics of the firm which should logically be included. The results suggest that the market for external advice is not highly segmented by client type. Instead the results presented for Scotland and England suggest that firms choose their suppliers with respect to their individual needs on a case-by-case basis with relatively small influence from their profit, trading conditions and other features of the firm.

This finding should be set against the more general pattern of impacts between suppliers. As reported earlier in the chapter, all of the highest impact suppliers are in the private sector. In contrast, all the lowest impact suppliers are in the public sector.

This suggests that it is choice of supplier type and the general quality of their advisors that is the chief feature explaining impact differences, not differences between firms in choice of different suppliers.

	Accountant	Solicitor	Bank	Customers	Business Associates
Log Age	-0.026 (0.458)	0.153 (0.455)	-0.407 (0.507)	0.206 (0.594)	0.778 (0.532)
Log no. of employees	0.0003 (0.332)	-0.103 (0.437)	0.204 (0.366)	-0.824 (0.504)	-0.779 (0.109) ***
Pre Tax Profitability	-0.00006 (0.0002)	-0.0002 (0.0002)	0.00005 (0.0002)	-0.00003 (0.0002)	-0.0002 (0.0003)
Rate of growth	0.00004 (0.001)	0.0003 (0.001)	-0.0004 (0.001)	0.0003 (0.001)	-0.0003 (0.001)
Manufacturing/services	-0.197 (0.339)	-0.556 (0.380)	0.335 (0.351)	0.837 (0.648)	-0.292 (0.413)
Export	-0.041 (0.353)	0.780 (0.620)	-0.746 (0.617)	0.429 (0.451)	-0.381 (0.508)
Skill	0.003 (0.005)	0.016 (0.012)	0.0005 (0.005)	0.033 (0.028)	0.004 (0.005)
Novel Product Innovator	-0.513 (0.375)	-0.200 (0.424)	-0.105 (0.389)	0.048 (0.468)	0.641 (0.514)
Incremental Product Innovator	-0.339 (0.434)	-0.160 (0.463)	-0.576 (0.460)	0.045 (0.565)	0.290 (0.552)
Novel Process Innovator	0.665 (0.545)	0.639 (0.521)	0.838 (0.523)	-0.154 (0.617)	0.644 (0.730)
Incremental Process Innovator	0.416 (0.351)	-0.110 (0.399)	0.599 (0.386)	0.008 (0.450)	-0.480 (0.456)
N	141	122	125	95	95
Log-likelihood	-207.08	-172.69	-185.41	-129.94	-133.62
Cut1	-2.313	-2.158	-1.452	-2.779	-3.145
Cut2	-0.845	0.062	-0.319	-1.715	-0.707
Cut3	0.314	1.149	1.124	-0.463	0.595
Cut4	2.507	2.505	2.519	1.105	2.033

Table 5.18 Multivariate estimates of an ordered logit model of the client assessments of impact of advice, by service provider in England

	Friends/ Relatives	Suppliers	Consultants	Chambers	Trade/Prof Assoc
Log Age	-0.050 (0.770)	0.590 (0.537)	0.276 (0.553)	1.013 (1.268)	0.972 (0.870)
Log no. of employees	-0.651 (0.542)	-0.331 (0.016) ***	0.305 (0.482)	1.850 (1.689)	-0.074 (0.682)
Pre Tax Profitability	0.00001 (0.0002)	-0.0003 (0.0002)	0.0002 (0.0002)	-0.004 (0.002) **	0.0001 (0.0002)
Rate of growth	0.002 (0.001)	-0.0009 (0.002)	0.0009 (0.001)	-0.008 (0.007)	-0.003 (0.001) ***
Manufacturing/services	-0.048 (0.532)	-0.206 (0.454)	-0.512 (0.458)	-0.568 (0.780)	0.109 (0.648)
Export	0.523 (0.591)	-0.177 (0.493)	0.123 (0.459)	-1.643 (0.783)	-0.012 (0.583)
Skill	0.0005 (0.005)	-0.007 (0.015)	-0.0002 (0.005)	-0.028 (0.068)	0.002 (0.031)
Novel Product Innovator	0.507 (0.616)	-0.517 (0.490)	0.683 (0.513)	-0.490 (0.857)	0.617 (0.584)
Incremental Product Innovator	0.691 (0.679)	-0.266 (0.514)	-0.106 (0.550)	-2.241 (0.328) ***	1.936 (0.812)
Novel Process Innovator	-0.057 (0.982)	0.722 (0.575)	-0.149 (0.679)	1.666 (1.511)	-0.452 (0.933)
Incremental Process Innovator	-0.277 (0.567)	0.049 (0.431)	0.374 (0.472)	-0.818 (0.703)	-1.221 (0.567) **
N	58	95	81	44	60
Log-likelihood	-78.95	-140.67	-119.31	-44.18	-83.77
Cut1	-3.648	-2.934	-1.225	0.390	-1.492
Cut2	-0.928	-1.335	0.095	2.784	0.249
Cut3	-0.055	-0.021	1.608	5.489	1.693
Cut4	2.062	1.385	2.994	-------	3.604

Table 5.18 Multivariate estimates of an ordered logit model of the client assessments of impact of advice, by service provider in England

	LEA/ Trust	TEC or SLC	Business Link/ SBS
Log Age	0.249 (0.754)	0.831 (0.752)	0.093 (0.680)
Log no. of employees	0.102 (0.832)	0.491 (0.705)	1.234 (1.031)
Pre Tax Profitability	0.003 (0.0002)	0.00008 (0.0002)	0.0007 (0.0003) **
Rate of growth	0.002 (0.001)	-0.006 (0.005)	0.004 (0.003)
Manufacturing/services	0.749 (0.646)	-0.236 (0.601)	-1.155 (1.011)
Export	0.695 (0.700)	-0.605 (0.561)	-1.584 (0.576) ***
Skill	-0.031 (0.025)	-0.009 (0.021)	-0.060 (0.030) **
Novel Product Innovator	-0.334 (0.632)	-0.315 (0.595)	-0.323 (0.652)
Incremental Product Innovator	1.251 (0.378) ***	0.752 (0.751)	0.013 (0.650)
Novel Process Innovator	0.397 (0.982)	0.162 (0.763)	-0.324 (0.994)
Incremental Process Innovator	-0.585 (0.600)5	-0.290 (0.637)	0.836 (0.560)
N	59	58	66
Log-likelihood	-81.69	-70.26	-90.02
Cut1	-1.774	-0.245	-0.943
Cut2	-0.095	1.965	-0.129
Cut3	1.590	3.449	1.541
Cut4	3.129	6.706	3.793

Table 5.18 Multivariate estimates of an ordered logit model of the client assessments of impact of advice, by service provider in England

5.9 Conclusion

This study has sought to assess whether systematic differences between clients' influence the use and impact of a diverse range of provides of external advice. The analysis was advanced by firstly using crosstabulations and then secondly using regression analysis.

In terms of the use of external advice it was apparent that the private sector predominates as a provider. There is also a substantial public sector provision of advice, but it was found to play a more of a niche role.

Policy makers need to identify the characteristics of users of advice in order to make better provision of sources of advice. This information needs to be shared with the private sector in order for that sector to be better placed to meet the needs of firms. Size, exporter and sector were the three main firm characteristics to explain the use of advice in Scotland. With regard to the numbers of sources of advice used, two types of users emerge. Firstly, single and low volume number of users of external advice. Secondly, there are multiple users of sources of advice. The users of multiple sources were more likely to use the public sector sources and private sector sources together. The information for policy makers is that they need to work more closely with the private sector in order to avoid duplication of services, and also to facilitate maximum value creation in the provision of advice. Thus, there needs to be more emphasis upon public-private partnerships.

The results of the analysis of impact of external advice indicate that supply chain contacts of customers, suppliers, business associates and consultants have the greatest satisfaction impact. Impact is the clients' perception of the satisfaction that they have with the external advice received. The policy implication is that if firms

have a need for advice then these above sources offer the best impact. But clearly such a statement needs to be conditional as the analysis has focussed upon the sources of external advice and not the content. This is an area for further research.

Comparing the levels of use of external advice in England and Scotland the results show very similar levels of use. As there appear to be no regional variations this suggests that policy makers can use similar policies in both Scotland and in northern England.

Using a logit estimator for the use of external advice by source, in Scotland and England the size of the firm and the rate of employment growth are the two main explanatory variables, and this clearly identifies the firm characteristics which can be used to better predict future growth in demand, and how the supply sector should prepare itself. Interestingly, profitability is found to have a negative relationship with the usage of the public sector sources of LEA/Trusts, HIE and BS/SBG (although these relationships are not statistically significant) in Scotland. Profitability was found to have a positive and statistically significant relationship with the use of suppliers and solicitors in Scotland. This result indicates that the clients of these sources tend to be seeking advice when they are in difficulties.

However, in England it is the profitable firms which turn to LEA/Trusts and LECs/SLCs and the unprofitable firms which turn to BL/SBS, although theses relationships were not statistically significant.

Impact assessment has been much less common in previous research than surveys of level of use. Where impact has been measured, firm size has again been shown as the main explanatory variable (e.g. Doggett and Hepple, 1995; MORI, 1994). The analysis has been able to show that size is indeed the chief systematic

factor that relates characteristics of the firm to the level of impact of advice assessed by the client. It is also shown that other variables, other than growth record, have limited association with systematic differences in impact for sources of advice.

To repeat the point, an important conclusion of the findings is, therefore, that the choice of source of advice is highly segmented. This suggests that supplier sources are fairly highly specialized to different type of firm, and that once they have been selected the advice they receive chiefly leads to impact in line with supplier type rather than firm type. This in turn suggests that the market for choice of supplier may be working fairly efficiently in the sense that sorting and filtering of demand-supply decisions directs clients to the source of advice fairly efficiently by firm type, in that few systematic differences between firms exists in impact received within each supplier category. The range of impacts reported by clients is therefore explained chiefly by the different types of supplier quality related to the types of services demanded, not systematically to client differences.

The exception to this is the strong positive influence of firm size on impact, and to a lesser extent of firm growth and innovations. The influence of each of these variables suggests that firm size may be acting as a surrogate for the level of internal experience or expertise. The more efficient framing of the internal needs for which advice is used should lead to higher impact assessments; firm size seems to be the chief feature explaining the internal variations in capacity of use external advice efficiently. The secondary influence of firm growth and innovation suggest that it is those firms which are changing or growing most rapidly that can best frame their needs and manage their advisors.

Chapter 6

The extent of use and the level of impact of Business Shop, Small Business Gateway, Business Link and Small Business Service

6.1 Introduction

The Survey of Entrepreneurship in Scotland and northern England also offers a unique opportunity to assess the Business Shop (BS) and the Small Business Gateway (SBG), and the Business Link (BL) and the Small Business Service (SBS) both in its own terms, but most crucially relative to other sources of advice, and relative to other central government schemes. The sample does contain a small number of sole users of the BS/SBG or BL/SBS. However, we are dealing with a random sample of users who have and have not used BS/SBG or BL/SBS and other Government sources and/or private sources and this allows us to provide a clearer assessment of the performance of the BS/SBG and the BL/SBS schemes.

We recall from chapter 5 that 27.4% of the respondents had used the BS/SBG in Scotland, and that in England the corresponding level of the BL/SBS schemes was 40.7%. Users of these schemes were then asked a series of supplementary questions to establish exactly which services are used and their assessment of their satisfaction with the services provided.

The development of the SBS was announced from the Treasury by Gordon Brown in the March 1999 Budget, with detailed specification subsequently developed under Stephen Byers, Secretary of State for the DTI. Detailed proposals, and a formal consultation process on the form of the SBS, were launched in June 1999 (DTI, 1999a), with a final form of contracting process announced by Patricia Hewitt, Small Firms Minister, in November 1999 (DTI, 1999b). The SBS

reconstitutes BL as a network of outlets or 'franchises', which have been contracted to the SBS since April 2000, though with a transition process covering the period 2000-01. The objectives of the SBS BL system are to provide information, advice, help with government grants, and a referral service to other public and private sector suppliers. The principles that the SBS are seeking to satisfy cover two areas: regulation and the structure of business support (DTI, 1999a: 18-20, 29). The chief concern of this chapter is with the business support function where it is sought for the SBS to improve the coherence and quality of services, focussing particularly on developing a single gateway for all government services directed primarily or mainly at small businesses.

The service delivery arm for SBS advice and information for small firms through Business Link was originally launched in 1992, and by 1996 the whole of England was covered. The local structure was chiefly based on the boundaries of Training and Enterprise Councils (TECs). A system of 'Business Shop' (BS) in Scotland and 'Business Connect (BC) in Wales parallels developments in England, but the emphasis of these systems from the start was a single network as a gateway to other local suppliers. In England, the initial core activity of BL was to be a system of generalist advisors (personal business advisors – PBAs) as well as specialist advisors for exporting, design and innovation and technology, an information service, and administration of a number of specific schemes which allow access to grants, loans or other business supports, often in conjunction with other partner organisations. The partner organisations in BL include TECs, chamber of commerce, enterprise agencies and local government, with a range of other organisations playing a role in different locations. The partnership structure had the important aim, like the SBS, of

seeking to reduce confusion in the delivery of local business support services. Michael Heseltine (1992: 9), then Secretary of State at the DTI, sought BL to overcome the confusion where small firms were 'faced with a welter of advice and information of variable quality from a confusing maze of local agencies whose services often appear to be in competition with each other.' The resulting partnerships were structured around a network of local hubs (89 in 1999) many of which had local satellites (over 200 in 1999) which allowed partners to play different roles in either the management and/or the delivery of services at different scales.

The SBS has sought to move away from this partnership structure for management of local delivery. The geographical structures for franchises, which had been left very much to local partners and TECs to define for BL, was now predefined as 45 local areas. These areas coincide almost completely with the 47 areas for the development of Local Learning and Skills Councils which are the successor bodies of TECs (DfEE, 1999). Most important, however, instead of the DTI contracting TECs which then sub-contract local partners, there is now a direct contract between the SBS as a non-departmental public body (NDPB) within the DTI and each local area which is now referred to as a franchisee. Moreover, the franchisee must have the SBS as their only line of business, i.e. they must have an independent management, and be independent of partners and other 'host' organisations (DTI, 1999b: 22). Although existing BL partners were given a first opportunity to bid to be the local franchisee, the option could also be put out to open tender (DTI, 1999b: 1). In the first round of bidding 32 of the 45 bids had been successful by May 2000, with the remaining 13 being subject to open tendering.

SBS has also departed from BL in the way in which service objectives are defined. Whereas BL was conceived as a structure of core services (of which Personal Business Advisors (PBAs) and specialist advisers were a key part) as well as local flexibility to fit local partner capacities, the SBS works from the starting point of offering a "SBS Gateway". The Gateway is "designed to provide a comprehensive knowledge network of business support organisations, initiatives and information from the public, private and voluntary sector bodies and trade associations ... (with) a single national phone number (and website address) providing access to 'information managers' who will use (their knowledge of possible support bodies and other information) to answer queries" (DTI, 1999b, p. 8). The Gateway concept is a marked departure from the former BL in two respects. First, it allows a national system and uniform quality standard to be the entry point for the client, whereas entry to BL was dispersed across each of the 80 hubs with different contact points and logos, with variable quality and varying approaches. Second, SBS adopts an explicit objective of using the call centre structure to route clients to the best source of advice within or outside the BL system. Local handling by BL hubs has been demonstrated to encourage 'holding on' to clients within the system with very low levels of referral resulting. This has most recently been re-stated as a concern in a survey of IoD members (IoD, 2000). Third, the Gateway itself is seen as a major part of the system, perhaps handling the majority of all enquiries, many only lasting 2 or 3 minutes and being dealt with in the Gateway by a call centre 'information manager' or website, and never being referred to PBAs or specialist advisors. Under BL, local handling meant that PBAs and other advisors often had to deal with brief enquiries losing valuable time that could be devoted to

more intensive advice. Fourth, the national call centre structure will also coordinate a standardised IT-based client management system whereas BL had a wide range of management and IT software systems which were often incompatible and prevented integrated management or collection of fully comparable national statistics.

Many potential improvements in quality and consistency of the SBS system of BL should result from the development of the Gateway alone. In addition, the SBS has also modified a number of the other elements of BL. One important change is the widening of the targets for firms for which the service is designed. Under the initial BL objective firms of 10-200 employees "with growth potential" were the primary target (DTI, 1992, 1996). However, SBS is more open: its customers are all "SMEs of below 250 employees, including micro and start-up businesses, the self-employed and those thinking of forming their own business. The principal focus (remains) ... to enhance the performance of firms with growth and high growth potential. (But) It will also need to respond to all referrals from the SBS Gateway" (DTI, 1999b, p. 5). Second, the PBA advisor service will now be more highly focused: "to selected customers because they are growth or growth potential businesses and have a high strategic fit with regional economic strategies" (op. cit., p. 12). Third, referral or "brokerage" is a key output sought of "tailored packages of services ... rather than signposing or off-the-shelve solutions" (op. cit., p. 12).

A further shift of emphasis of considerable significance is the funding requirement for SBS. Although franchisees will have to achieve financial sustainability, they can plan on a "steady state funding" with "an agreed annual contribution" by DTI to local costs. Within this funding agreement there is an important change of emphasis. "Earning income is not the primary target ... and

should not dictate priorities to distort actions" (op. cit., p. 19-20). This contrasts with the earlier emphasis on BL as meeting self-financing targets, latterly 25% of fee income. However, the SBS guidance from DTI is ambiguous, because it is also stated that "charging for value-added services remains an important principle ... franchisees will therefore be expected to have an effective charging policy ... (which can) assume that the existing approach to income generation, including the current broad assumption of 25% of income from customers, will continue" (op. cit., p. 20). The importance of fees has been firmly restated by David Irwin, Chief Executive of the SBS: the service "won't be free. I do believe that people in business should be paying something for good quality advice. ... If we are being valued, then businesses should be willing to pay" (quoted in *Financial Times*, 2000). There remains, therefore, a clear DTI and SBS target of seeking to create a "sense of value" for services through the use of fees.

Most of the developments of BL made within the SBS mark important positive improvements, with the exception of the remaining perverse incentive effects of fee income targets on managers and advisors that may discourage referral or the most appropriate advice being offered. These perverse incentives have been demonstrated by Ernst and Young (1996); Sear and Agar (1996), Priest (1998) and Bennett and Robson (1999a).

However, the more centralised and consistent structure of the Gateway and the direct NDPB contract to franchisees should certainly help to overcome the most important criticism of the BL system: its variable local management quality and complexity (see e.g. BPRI, 1995/6, 1997; KPMG, 1994; Ernst and Young, 1995, 1996; Roche, 1997; HoC 1996). In particular, satisfaction surveys have

demonstrated the very variable nature of client assessments, running the full range from highly satisfied to highly dissatisfied (Priest, 1998; Bennett and Robson, 1999a).

The greater focus of advisor effort on a more tailored or 'brokered' service should also clarify management and personnel targets and allow a more effective focusing of resources. However, advisor quality still remains an important constraint on the system. The variable quality of advisors is shown to be one of the most important influences on evaluations of client satisfaction and other criteria by Ernst and Young (1996), Sear and Agar (1996), Tann and Lafaret (1998) and Bennett and Robson (1999a). The problem is recognised by DTI who are seeking to overcome it by enhanced emphasis given in SBS to advisor training, accreditation and continuous assessment.

We turn below to assessing how far these developments within the SBS are likely to overcome the problems that have been recognised in BL services.

6.2.1 Level of Use of Services – Business Shop/Small Business Gateway

The first column of Table 6.1 provides a picture of the use of the main BS/SBS services, used by just over the quarter of our sample that were BS/SBS users. It is immediately clear that general business information is the single most used service, by a substantial margin. More than four out of the five users of the BS/SBS sought general business information. Grants also stands out as an intensely used service, used by approaching one half of the BS/SBS users. Thus the impression is that the BS/SBG although a gateway service – is experiencing the highest demand for information, which is mostly of a fairly lower order kind.

After these two very popular services are a group of four services which are used by approximately one third of BS/SBS users, training and IiP (38.0%), diagnostic assessment (35.0%), sales and marketing advice (33.8%), personal business advisor (32.3%). After these, the following services in rank order were used by more than one fifth of the BS/SBS users, export advice (28.1%) and innovation and technology advice (22.1%). Three of the BS/SBS services are used by less than one in five users and these are finance and accounting advice (17.1%), education and university links (12.9%) and product and service design advice (12.2%).

Thus, the results are unambiguous and suggest that the BS/SBS are experiencing the highest demand for general business information, specifically, and for closely related information sources of a more specific inquiry nature. In other words the BS/SBS is acting as a gateway service as originally intended. Grants are the second most BS/SBS service and grants also act as an important stimulus to demand, whilst the importance of IiP and training indicate that BLs are acting as gateways to LECs for services. Aggregating all specialist fields of advice (except for PBAs) shows that 64.5% of the sample seek specific business advice. Including PBAs increases this to 76.7% of users. Hence the BS/SBS is also an important source of advice across a broad range of fields. However, the relatively low level of use of PBAs (32.3%) and diagnostic assessment (35.0%), compared with general business information, the specialist advice services, grants and training/IiP suggests that BS/SBS are chiefly serving specialist rather than general consultancy demand.

Table 6.1 also contains the levels of use in the CBR survey of 1997 for users in Scotland and in Wales. The combined levels of use for Scotland and Wales was

necessary because of the small sub-sample of BS users which was itself from a modest sample of users and non-users of external business advice.

Similar levels of use are reported in both the SoE and the CBR for the use of general business advice, sales and marketing advice, export advice and innovation and technology advice. However, the SoE reports 35.0% use for diagnostic assessment compared to 24.1% in the CBR survey. In the case of PBAs the SoE reports 32.3% usage compared to 17.2% in the CBR 1997 survey; product and service design advice usage was 12.2% in the SoE and 6.9% in the CBR survey.

Statistical differences in the levels of use where the CBR reported higher levels than the SoE were found for finance and accounting advice, 31.0% for the CBR and 17.1% for SoE; and, training and IiP, with 44.8% in the CBR survey and 38.0% in the SoE survey; education and university links, with 24.1% in the CBR survey and 12.9% in the SoE survey; and grants, with 72.4% in the CBR survey and 46.4% in the SoE survey. The small sample size of the CBR data for Scotland and Wales of 29 firms must mean that the CBR data has to be treated with extreme caution.

6.2.2 Use of Services by type of firm

Table 6.1 shows a comparatively small number of statistically significant differences between types of firms using the BS/SBS services. For age and firm growth there are no statistically significant differences in the levels of use of the BS/SBS services. In the case of firm sector three of the services show statistically significant differences at the 5% level or better. 20.6% of service sector firms used export advice but nearly twice as many manufacturing sector firms used exporting

advice. A similar pattern is present for the use of education and university links – 7.4% of service sector firms and 18.9% of manufacturing sector firms. 87.5% and 76.4%, respectively of service and manufacturing sector firms used general business information.

In table 6.1 the main firm characteristic which shows the most systematic and statistically significant differences in the levels of use is size of firm. More specifically six of the services show statistically significant differences at the 5% level or better in the use.

The use of general business information is highest for medium and larger sized firms at 100% and lowest at 72.2% of small sized firms. The use of personal business advisors declines with the size of the firm from 42.5% of micro firms to 27.0% of small firms to 12.5% of medium and larger sized firms.

The use of exporting advice has an inverse u-shaped relationship with size of firm, rising from 21.2% of micro sized firms to 35.7% of small sized firms to 20.8% of medium and larger sized firms.

Training and IiP is used by approximately a quarter of micro sized firms and approximately a half of the small and medium and larger sized firms.

The use of product and service design advice doubles from 7.1% of micro sized firms to 14.4% of small sized firms and then nearly doubles again to 25.0% of medium and larger sized firms.

6.2% of micro firms used education and university links. For small and medium and larger sized firms the levels of use for education and university links is nearly three times the level of use of micro firms.

	All	CBR 1997	Manufacturing	Services	Micro	Small	Medium/ Larger	Declining	Stable	Medium Growth	Fast Growth
General business information	82.1	79.3	76.4**	87.5**	89.4***	72.2***	100***	77.3	82.4	94.3	80.0
Diagnostic assessment	35.0	24.1	33.1	36.8	35.4	37.3	20.8	39.4	33.3	25.7	38.0
PBA	32.3	17.2	27.6	36.8	42.5***	27.0***	12.5***	37.9	33.3	31.4	24.0
Sales and marketing advice	33.8	27.6	37.8	30.1	33.6	35.7	25.0	30.3	23.5	34.3	32.0
Export advice	28.1	24.1	36.2***	20.6***	21.2**	35.7**	20.8**	25.8**	23.5**	31.4**	32.0**
Finance and accounting advice	17.1	31.0	16.5	17.6	16.8	15.9	25.0	18.2	13.7	14.3	18.0
Training/IiP	38.0	44.8	41.7	34.6	27.4***	46.0***	45.8***	39.4	27.5	48.6	48.0
Product/service design advice	12.2	6.9	14.3	10.3	7.1**	14.4**	25.0**	12.1	8.0	11.4	16.0
Innovation and technology advice	22.1	24.1	23.8	20.6	26.5	19.2	16.7	19.7	24.0	28.6	26.0
Education and university links	12.9	24.1	18.9***	7.4***	6.2**	18.3**	16.7**	9.2*	9.8*	17.1*	12.0*
Grants	46.4	72.4	48.8	44.1	45.1	50.8	29.2	42.4**	41.2**	51.4**	50.0**
Any advice	64.5	58.6	61	67.7	61.9	68.3	54.2	62.1	56.9	65.7	66
Any advice or PBA	76.7	58.6	77.2	76.4	80.5	77.8	54.2	72.7	74.5	82.9	74
N	263	29	122	136	113	126	24	66	51	35	50

Table 6.1: Use of Business Gateway and Business Shop Services in Scotland by sector, firm size, and employment growth (% of respondents reporting use, multiple responses allowed) (*** $p > 0.01$; ** $p > 0.05$; * $p > 0.1$). Using Mann Whitney test for two group comparisons, or the Kruskal-Wallis test for multi-group comparisons, between column entries. Types of business: micro-less than 10 employees, small business between 10 and 99 employees, medium/larger businesses between 100 and 499 employees. Employment growth of business during last three years: declining businesses with negative growth below 5%; stable growth from -5% to +5%; medium-growth greater than 5% and less than 50%; and fast - growth 51% or greater.
+ The CBR data is for combined Scotland and Wales.

	Non Exporter	Exporter	Newer	Older	Not IncProc	IncProc Innovator	Not NovProc	NovProc	Not IncProd	IncProd	Not NovProd	NovProd
General business information	81.8	83.1	85.2	79.3	79.7	84.8	82	79.5	78.3**	90.9**	82.2	80.6
Diagnostic assessment	35.1	32.5	39.1	31.1	39.9*	29.3*	35.1	41	35.4	36.4	40.1*	28.6*
Personal business advisor	35.1	26.5	32.8	31.9	35.4	28.3	33.2	30.8	30.7	39.4	36.3	27.6
Sales and marketing advice	32.5	31.3	34.4	33.3	38	28.3	34.6	33.3	34.4	33.3	34.4	33.7
Export advice	25.3	30.1	29.7	26.7	31.6	23.9	28.9	28.2	31.2*	19.7*	28.7	27.6
Finance and accounting advice	16.2	18.1	14.8	19.3	17.7	14.1	16.6	15.4	16.4	18.2	17.8	15.3
Training/IiP	35.1	44.6	39.1	37.0	39.9	35.9	34.6***	59***	41.3*	28.8*	35	42.9
Product/service design advice	11.0	14.5	9.4	14.8	12	10.9	10.4	17.9	13.8	7.6	10.8	14.3
Innovation and technology advice	24.7	21.7	23.6	20.7	16.5***	31.5***	24.2*	10.3*	21.7	21.2	19.7	24.5
Education and university links	11.7	14.5	12.5	13.3	12.7	13	10.4***	25.6***	14.3	9.1	11.5	15.3
Grants	42.2	53.0	50.0	43.0	48.7	43.5	49.3	33.3	49.2	37.9	44.6	49
Any advice	63.6	63.9	63.3	65.2	66.5	60.9	65.9*	56.4*	65.1	62.1	63.1	66.3
Any advice or PBA	78.6	72.3	76.6	77.0	79.7	72.8	77.7	74.4	76.7	77.3	77.1	76.5
N	154	83	128	135	158	92	211	39	189	66	157	98

Table 6.1: Use of Business Gateway and Business Shop Services in Scotland by exporter, age, incremental process innovator, novel process innovator (% of respondents reporting use, multiple responses allowed). (*** $p > 0.01$; ** $p > 0.05$; * $p > 0.1$) Using Mann Whitney test for two group comparisons, between column entries. Types of business: older firms established in 1986 or earlier, and younger firms established after 1987. Novel innovators introduced innovations which were new to both the firm and to the industry and are denoted by Nov. Incremental innovators introduced innovations new to the firm but not to the industry and are denoted by Inc. Process and Product Innovations are reported and are denoted by Proc and Prod, respectively.

This section has looked at the use of services by type of firm and the main finding is that the size of the firms is the most important factor. Medium and larger sized firms are much more likely to use services than smaller sized firms. This result suggests that if the take-up of services is to be increased this would most likely be achieved by targeting smaller sized firms. But such a policy would be dependent upon the assumption that the smaller firms are in need of more assistance than they currently use. Alternatively the opposite results could be inferred and that smaller sized firms are in less need of business advice, and resources should be more focussed upon medium and larger sized firms. Disentangling the exact nature of the results would require further quantitative analysis.

The second main finding is that BS/SBS is experiencing the greatest level of demand for general business information, specifically, and for closely related sources which are of a more specific inquiry or nature.

6.2.3 The Number of Services Used

Table 6.2 shows the pattern of use of the BS/SBS services for users of one, two, three, or four or more services. Users of 1 service are a small minority of 20/263 or 7.6%. Users of 2 services or 3 services are of approximately the same proportion with 64 and 66/263, or 24.3% and 25.1%, respectively.

We first have an overall assessment of the levels of use for the services, before looking at each of the four columns. General business information is used by 60% of the one service users and is used by 80-90% of the users who use 2, 3 or 4 or more services. Diagnostic assessment shows low levels of use amongst users of 1 or

2 services. The level of use of diagnostic assessment increases to 25% of users of 3 services and 62.8% of users of 4 or more fields.

Finance and accounting advice, product or service design advice, innovation and technology advice, and education and university links show low levels of use for users of 1, 2 or 3 services, and this level of use also remains low at about one quarter of the heavy users who used 4 or more services.

Personal business advisors, training and IiP have a higher penetration rate amongst the users of 2 or 3 services than is the case for many of the other services provided. For both personal business advisors and training and IiP the level of use amongst those firms who have used 4 or more services is approaching one in two.

Sales and marketing advice, and export advice show comparatively low levels of use for those who used 1, 2, or 3 services. Amongst those firms who have used 4 services the levels of use of sales and marketing advice, and export advice are high at 60.2% and 52.2%, respectively.

The use of grants increases substantially from 20% of the users of 2 services, to 36.4% of the users of 3 services, to 75.2% of the users of 4 services. Indeed amongst the heavy users of BS/SBS grants is the second most used source after general business information which had 83.2%.

We now look at the pattern of use of BS/SBG services for users of one, two, three, or four or more fields of advice. For users of one service, general business information is the most important source with a level of use of 60%. Exporting advice is the second most important source for one service used and had a level of use of 20%. Four other services each recorded 5% levels of use amongst the one

service use group and these were PBA, sales and marketing advice, training/IiP, and innovation and technology advice.

Thus, for one service users five services were not used at all and these were diagnostic assessment, finance and accounting advice, product/service design advice, education and university links, and grants. This suggests that the users of one service are a distinct but small group. With the specific exception of export, this suggests a hierarchy, with financial business advice the entry level service, to which others are added in due course.

For the users of two services general business information is again the most used service, with 79.7%. Training/IiP (26.6%), grants (20.3%), PBA (17.2%) and sales and marketing advice (15.6%) are the second to the fifth most used services for the firms who have used two services. Each of the other services recorded levels of use below 10%.

In the case of firms who have used three services general business information is used by nine out of ten firms. This was more than double the level of use of training/IiP (42.4%), grants (36.4%) and PBA (34.8%). Innovation and technology advice (27.3%) and diagnostic assessment (24.2%) are both used by approximately one quarter of firms who used three services. For all other services the levels of use remained low, ranging from 3.0% for education and university links to15.2% for sales and marketing advice.

The users of four or more services were the heaviest users of BS/SBG advice and they as a group consisted of 43.0% of BS/SBG users. General business advice is once again the most used service, although the level of use at 83.2% was less than the 89.4% recorded by the users of three services. Amongst the heavy users of

BS/SBG grants was used by 75.2% and this was a substantial jump from the 36.4% use for the users of 3 services. Similarly diagnostic assessment (68.2%) and sales and marketing advice (60.2%) were important services for the heavy users and the increase in the level of use compared with the levels recorded for the users of three services was very large.

The comparisons between the users of two services, three services and four or more services are interesting. The heavy users are drawing upon a very different range of services compared to the other groups. The majority of heavy users had used grants, sales and marketing advice, diagnostic assessment, and export advice. This section has examined the levels of use against the number of services used. The results show that general business information is a crucial service, with a level of use of 60% for single sources to 80-90% for 2 or more fields of advice.

However, one service users constitute only a small minority of firms. It is clear that the users of SBG fall into 3 main segments, those whoa re single sources users who are light users, those who use 2 or 3 services which are moderate users and account for 50% of users, and lastly there are the heavy users who use 4 or more services. Whilst there were substantial differences in the levels of use of services across the number of services used, general business information remains the most important service.

These results suggest that there is a role played by these organisations in "signposting" to other sources of advice. The signposting to other sources also allows firms to have greater access to a larger number of experts and experience and should result in the firm receiving advice which best serves their needs.

Field of advice	1 field %	2 fields %	3 fields %	4 or more fields %
General business information	60.0	79.7	89.4	83.2
Diagnostic assessment	0.0	7.8	24.2	62.8
Personal business advisor	5.0	17.2	34.8	44.2
Sales and marketing advice	5.0	15.6	15.2	60.2
Export advice	20.0	7.8	9.1	52.2
Finance and accounting advice	0.0	9.4	12.1	27.4
Training/Investors in People	5.0	26.6	42.4	47.8
Product/service design advice	0.0	1.6	6.1	23.9
Innovation and technology advice	5.0	9.4	27.3	29.2
Education and university links	0.0	4.7	3.0	25.7
Grants	0.0	20.3	36.4	75.2
N	20	64	66	113

Table 6.2: Number of fields of advice for Business Gateway and Business Shop users

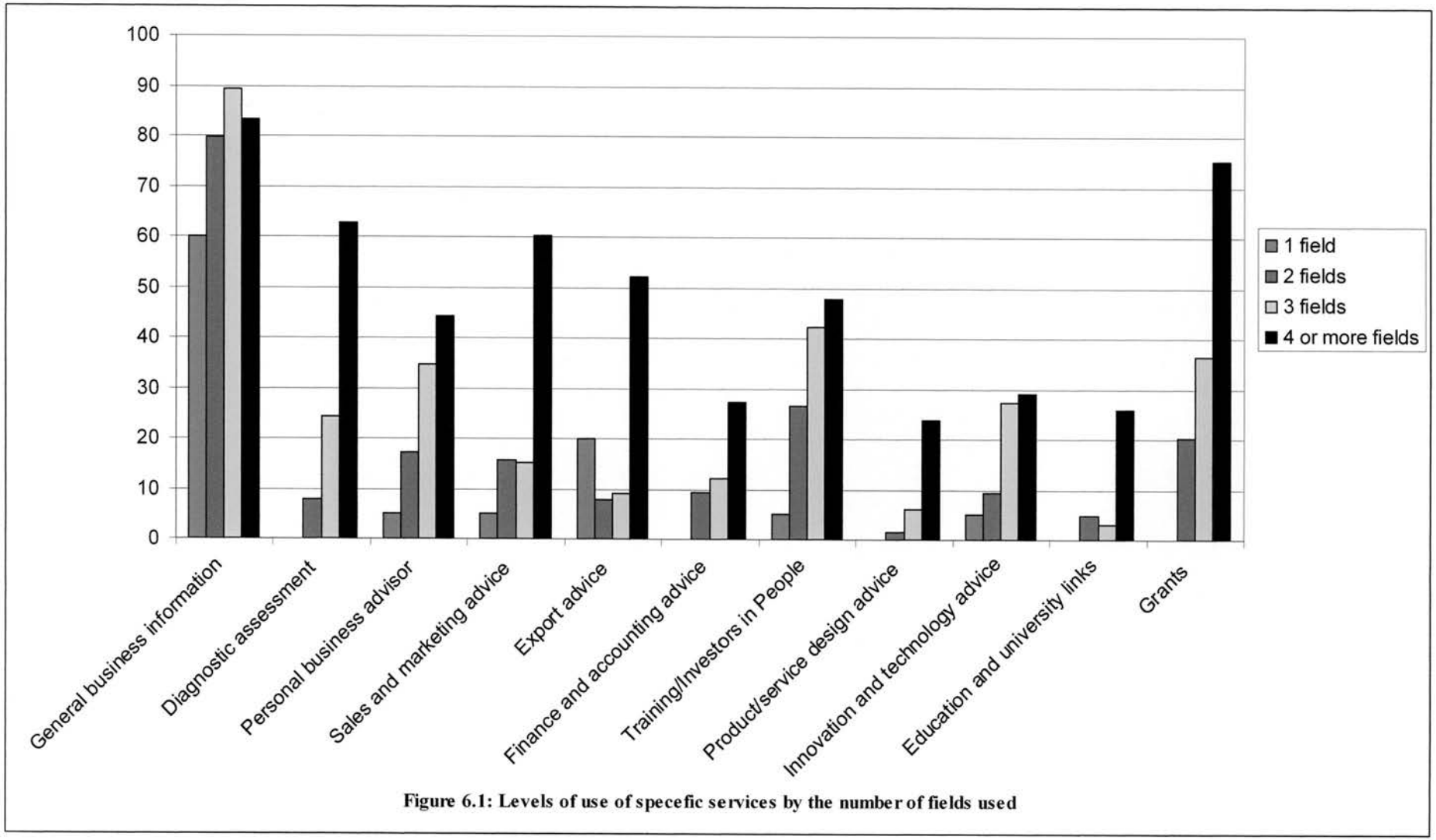


Figure 6.1: Levels of use of specefic services by the number of fields used

6.3 Satisfaction with BS/SBS Services

The satisfaction of clients with each of the BS/SBS services is assessed on a four point scale, very dissatisfied, dissatisfied, satisfied, and very satisfied. Table 6.3 reports the percentage of respondents who are satisfied or very satisfied. Table 6.4 shows the satisfaction on the four point scale. The average level of satisfaction for all the services is 75.4% with a range from 62.0% to 82.7%. Figure 6.2 shows the percentage of users of the SoE and the CBR respondents for 1997 who were satisfied or very satisfied.

Many of the BS/SBG services are meeting the DTI targets, which range from 80% upwards depending upon criteria, although none of the DTI targets are precisely comparable with the general measure of satisfaction assessed in the Survey of Entrepreneurship. This notwithstanding, the assessment here although a sign of an improving level of customer satisfaction does fall below the levels of satisfaction of those DTI surveys which have assessed satisfaction, which are high, and range from 90 to 95%.

However, it does need to be pointed out again to the reader that there is an important methodological difference between the DTI surveys and the Survey of Entrepreneurship. In our case BS/SBG was assessed by respondents at the same time as they also assessed a broad range of other advice services (which are analysed in chapter 5), whereas the DTI surveys assessed satisfaction purely among BS/SBG clients. The systematically lower estimate in our survey suggests that when set in the context of other services, satisfaction levels tend to be reported to a lower level. This would accord with the findings of other customer satisfaction studies that show the importance of comparative assessments of satisfaction against benchmarks of other

suppliers, or against expectations, themselves the result of experience with similar or alternative suppliers (see e.g. Bateson and Wirtz, 1991; La Tour and Peat, 1979; Woodruff and Gardial, 1996; Priest, 1998b). Whatever the cause of the differences between surveys of BL satisfaction, however, we believe that the results reported in Table suggest that BS is in large measures reaching DTI targets but that the levels of satisfaction still have a way to go to achieve virtually complete satisfaction as suggested by the DTI findings.

The highest satisfaction level is recorded for personal business advisors, export advice, and innovation and technology advice which each record 82% satisfaction. These services are closely followed by product and service design advice which has 81% satisfaction. Three of the other services which also record higher than average satisfaction are training and IiP, diagnostic assessment and grants which have 78% satisfaction. 71.2% of the BS/SBS users of general business information are satisfied with the service. This is the first of the four services where the satisfaction assessments are below the average score. Sales and marketing advice (65.6%), education and university links (64.9%) and finance and accounting advice (62.0%) are the services with by far the lowest levels of client satisfaction. Thus, the more specific the advice the lower the level of satisfaction

Interestingly there are very few statistically significant differences by the firm sector and the firm age. 63.9% of manufacturing sector firms are satisfied with general business information and the corresponding value for service sector firms is 77.0%. And in the case of firm age, 87.8% of older firms and 77.5% of younger firms are satisfied with export advice. Three services show statistically significant

differences according to the growth performance of the firms, and these are general business information, export advice, and finance and accounting advice.

The firm characteristic which shows the most statistically significant differences in satisfaction scores is the size of the firm. Four services with statistically significant differences at the 1% level are general business information, diagnostic assessment, finance and accounting advice, and training/IiP. There is a statistically significant difference between size of firm and satisfaction with export advice. The results for these services shows that satisfaction increases with firm size for diagnostic assessment, export advice, finance and accounting advice, training and IiP, and grants. Whilst with general business information the level of satisfaction appears to have a negative relationship with the size of the firm, from 86.4% of micro firms, to 63.0% of small firms, to 37.5% of medium and larger sized firms.

Unfortunately there are only a very small number of observations for the CBR data set for Scotland in 1997. Figure 6.2 shows that for all services the SoE reports higher levels of satisfied customers, compared to the CBR set of data. The exception to this rule is education and university links, where 64.9% of firms in the SoE survey and 85.7% in the CBR survey were either satisfied or very satisfied with the service that they received.

Overall 75.4% of the users of BS/SBG in Scotland were satisfied or very satisfied which compares to 57.0% for the respondents in the CBR data set. The services with the greatest difference in the level of customers' assessment of the service they received were finance and accounting advice, and sales and marketing advice. Figure 6.2 shows the differences very clearly.

	All	No. of firms	CBR 1997 +	No. Of firms	Manu-facturing	Services	Micro	Small	Medium/ Larger	Declining	Stable	Medium Growth	Fast Growth
General business information	71.2	219	63.6	22	63.9**	77.0**	86.4***	63.0***	37.5***	70.6*	88.0*	57.6*	70.0*
Diagnostic assessment	78.6	84	71.4	7	82.4	76.0	63.4***	92.9***	100***	80.0	80.0	100	76.5
PBA	82.8	87	40.0	5	80.6	84.3	81.6	82.9	100	76.0	82.4	91.7	83.3
Sales and marketing advice	65.6	90	25.0	8	68.8	61.9	70.0	61.4	66.7	65.0	76.9	72.7	66.7
Export advice	82.7	81	71.4	7	85.4	78.8	65.4**	90.0**	100**	72.2**	69.2**	100**	100**
Finance and accounting advice	62	50	22.2	9	69.6	55.6	28.0***	95.2***	100***	80.0**	30.0**	100**	87.5**
Training/IiP	78.8	104	50.0	12	78.8	78.8	61.8**	86.4**	90.9**	78.6	86.7	80	79.2
Product/service design advice	81.1	37	50.0	2	85.7	75.0	91.7	73.7	83.3	87.5	100	83.3	77.8
Innovation and technology advice	82.5	63	71.4	7	84.4	80.6	85.3	80.0	75.0	84.6	85.7	80	92.3
Education and university links	64.9	37	85.7	7	70.8	53.8	37.5	72.0	75.0	50.0	60.0	57.1	100
Grants	78.1	128	61.9	21	83.9	72.7	70.2	84.4	85.7	72.4	70.8	94.4	87.5
N	75.4	980	57.0	107	76.3	74.6	72.5	78.8	70.7	74.4	77.5	79	81.1

Table 6.3: Clients' Satisfaction with Small Business Gateway and Business Shop Services by sector, firm size, and employment growth (Percentage of respondents who are satisfied or very satisfied) (*** p >0.01; ** p>0.05; * p>0.1). Using Mann Whitney test for two group comparisons, or the Kruskal-Wallis test for multi-group comparisons, between column entries. Types of business: micro-less than 10 employees, small business between 10 and 99 employees, medium/larger businesses between 100 and 499 employees. Employment growth of business during last three years: declining businesses with negative growth below 5%; stable growth from -5% to +5%; medium-growth greater than 5% and less than 50%; and fast - growth 51% or greater.
+ The CBR data is for combined Scotland and Wales

	Non Exporter	Exporter	Newer	Older	Not IncProc	IncProc Innovator	Not NovProc	NovProc	Not IncProd	IncProd	Not NovProd	NovProd
General business information	73.2*	60.9*	75.0	67.3	68	75.6	73.6**	56.3**	66.4*	78.7*	76.2**	60**
Diagnostic assessment	77.6	87	80.4	76.3	81	70.8	77.9	78.6	81	70	75.9	84
PBA	77.8*	95.7*	83.7	81.8	77.6	92.3	83.1	76.9	83.1	81.5	82.8	82.1
Sales and marketing advice	74.5**	45.8**	61.7	69.8	66.7	56	60.6	78.6	64.6	61.9	69.8	54.5
Export advice	85	86.2	77.5	87.8	80	87	83.3	75	80.6	87.5	83.7	79.3
Finance and accounting advice	58.6**	93.3**	56.0	68.0	59.4	64.3	59	71.4	61.8	64.3	57.6	73.3
Training/Investors in People	78.9	81.1	80.4	77.4	80.3	73.5	78.7	76	80.2	70	79.3	76.7
Product/service design advice	77.8	93.3	87.5	76.2	81.8	83.3	84.6	75	79.3	85.7	84.2	76.5
Innovation and technology advice	82.5	83.3	82.4	82.8	80	82.1	84.9	40	81.8	78.6	81.8	80
Education and university links	72.2	69.2	57.9	72.2	63.6	66.7	68.2	58.3	69	50	66.7	64.7
Grants	76.5	86.7	80.9	75.0	78.8	73.8	75	92.9	81.3**	63**	72.6	84
N	73.3	77.5	75.9	75.0	74.3	75.5	75.4	71.2	75.1	73.4	76	76.9

Table 6.3: Clients' Satisfaction with Small Business Gateway and Business Shop Services (Percentage of respondents who are satisfied or very satisfied) by exporter, age, incremental process innovator, novel process innovator. (*** $p > 0.01$; ** $p > 0.05$; * $p > 0.1$) Using Mann Whitney test for two group comparisons, between column entries. Types of business: older firms established in 1986 or earlier, and younger firms established after 1987. Novel innovators introduced innovations which were new to both the firm and to the industry and are denoted by Nov. Incremental innovators introduced innovations new to the firm but not to the industry and are denoted by Inc. Process and Product Innovations are reported and are denoted by Proc and Prod, respectively.

Field of advice	N	Very Dissatisfied	Dissatisfied	Satisfied	Very Satisfied
General business information	219	10.5	18.3	56.6	14.6
Diagnostic assessment	84	6	15.5	64.4	14.3
Personal business advisor	87	4.6	12.6	63.2	19.5
Sales and marketing advice	90	8.9	25.6	48.9	16.7
Export advice	81	1.2	16	60.5	22.2
Finance and accounting advice	50	22	16	38	24
Training/Investors in People	104	10.6	10.6	56.7	22.1
Product/service design advice	37	10.8	8.1	51.4	29.7
Innovation and technology advice	63	11.1	6.3	61.9	20.6
Education and university links	37	16.2	18.9	54.1	10.8
Grants	128	10.2	11.7	48.4	29.7
All	980	9.5	15.1	55.5	19.8

Table 6.4: Clients' Satisfaction with Small Business Gateway and Business Shop Services

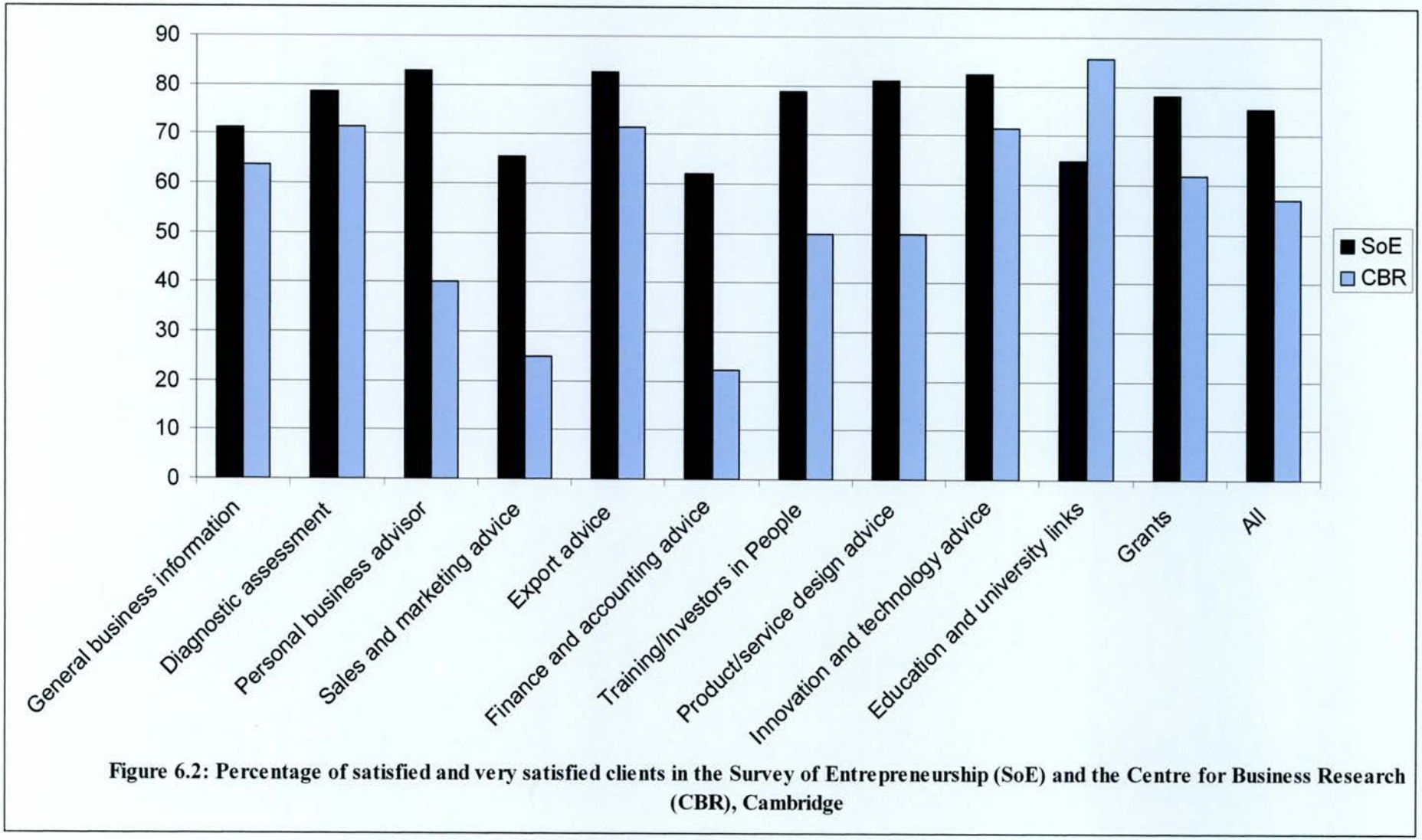


Figure 6.2: Percentage of satisfied and very satisfied clients in the Survey of Entrepreneurship (SoE) and the Centre for Business Research (CBR), Cambridge

It is clear that the variation in quality remains too high for BG/SBS. The quality variation is either attributable to the calibre of the advisors or to the expectations of the customers, or a combination of both reasons. Low satisfaction may result in a firm not using the BG/SBS again, and could generate unfavourable opinion amongst the dissatisfied firm's network which could in turn inhibit the penetration rate of BG/SBS.

6.4 Comparison of Users and Non-Users

Because our survey looked at the levels of use of the full range of external business advice we are able to compare the different patterns of use for all services by those firms who did use BS/SBG compared with those who did not use the BS/SBG.

Tables 6.5 and 6.6 compare the pattern of use of advice for BS/SBG users and non-users across the whole range of public and private sector sources of advice. Only one firm used the BS/SBG as their sole source of advice. If we aggregate those firms who used the BS/SBG and one to three other sources of advice we have 34 firms which is 12.9%, or approximately one in eight of the BS/SBG users. 24 firms used the BS/SBG and four other sources of advice which is 9.1%. An equal percentage used the SBS/SBG and five other sources of advice. 181 or 68.6% used the BS/SBG and 6 or more other sources of advice.

The BS/SBG users and non-users are very different. 4.3% of the non-BS/SBG users sought advice from a single source. Where a total of two or three sources of advice are used we see that this represents a higher proportion of the non BS/SBG users than the users, typically by a factor of greater than three to one.

Advice Source	**All (BS/SBS users)**	**sole source**	**2 (BS/SBS and 1 other advisor)**	**3 (BS/SBS and 2 other advisors)**	**4 (BS/SBS and 3 other services)**	**5 (BS/SBS and 4 other services)**	**6 (BS/SBS and 5 other services)**	**7+ (BS/SBS and 6 or more other advisors)**
Accountant	83.0		40.0	55.6	70.0	87.5	66.7	89.0
Solicitor	72.2		20.0	22.2	50.0	33.3	66.7	85.0
Bank	71.2		0.0	44.4	60.0	50.0	75.0	78.5
Customers	52.9		0.0	11.1	10.0	20.8	29.2	67.8
Business Associates	52.9		0.0	0.0	15.0	25.0	25.0	67.8
Friends/Relatives	40.2		0.0	0.0	15.0	16.7	33.3	49.4
Suppliers	55.9		0.0	0.0	10.0	29.2	45.8	69.6
Consultants	50.0		0.0	22.2	10.0	16.7	20.8	64.6
Chamber of Commerce	26.7		0.0	0.0	0.0	8.3	8.3	36.5
Trade/Professional Associations	45.4		20.0	0.0	5.0	33.3	33.3	55.6
Local Enterprise Agency/Trust	52.5		0.0	0.0	15.0	12.5	37.5	67.4
Local LEC or Scottish Enterprise	65.3		20.0	44.4	35.0	50.0	48.0	75.4
Highlands & Islands Enterprise	29.5		0.0	0.0	5.0	16.7	25.0	35.3
N	264	1	5	9	20	24	24	181

Table 6.5: External sources of business advice from sole and multiple sources who are Business Shop/Small Business Gateway users.

Advice Source	**All (non BS/SBG users)**	**sole source**	**2 advisors**	**3 advisors**	**4 advisors**	**5 advisors**	**6 advisors**	**7+ advisors**
Accountant	79.9	37.9	31.5	76.2	80.6	79.2	92.8	93.1
Solicitor	63.0	3.5	27.8	52.4	68.8	63.2	73.5	83.8
Bank	72.0	10.3	38.9	64.3	75.3	76.8	84.3	89.7
Customers	44.2	6.9	3.7	16.7	25.0	44.0	54.2	79.4
Business Associates	45.4	6.9	9.3	17.9	28.0	48.0	61.5	75.5
Friends/Relatives	29.9	0.0	9.3	15.5	12.9	29.6	38.6	52.5
Suppliers	45.9	3.4	3.7	16.7	35.5	46.4	56.6	79.9
Consultants	35.9	10.3	16.7	14.3	21.5	34.4	39.8	62.8
Chamber of Commerce	16.7	0.0	5.6	4.8	6.5	12.0	16.9	36.3
Trade/Professional Associations	31.5	6.9	16.7	7.1	15.1	30.4	32.5	59.8
Local Enterprise Agency/Trust	26.1	3.4	3.7	10.7	11.8	24.0	31.3	50.0
Local LEC or Scottish Enterprise	21.1	10.3	5.3	9.5	18.3	14.4	24.1	38.7
Highlands & Islands Enterprise	0.0	0.0	0.0	0	0.0	0.0	0.0	0.0
N		29	54	84	93	125	83	204

Table 6.6: External sources of business advice from sole and multiple sources who are non Business Shop/Small Business Gateway users.

Similarly, where a total of four or five sources of advice are used we see that again there are greater numbers of non BS/SBG users than the users, by approximately a factor of two to one. Comparing the BS/SBG users and non-users we see that only where a total of six sources of advice are used is there a close degree of proximity, 9.1% and 12.4%, respectively.

68.6% of the BS/SBG users sought advice from the BS/SBG and six or more other sources, which is more than twice the 30.0% of non-BS/SBG firms who used a total of seven or more sources of advice

Thus in summary it is apparent that for the BS/SBG users approximately two thirds of this group used a total of seven or more sources of advice, but for the non BS/SBG users approximately two thirds of this group used advice from six or fewer sources of advice. BS/SBG users thus tend to be less targeted on a few sources than the non-users. This may result in an overlap and/or a duplication of advice by the BS/SBG users.

Tables 6.5 and 6.6 also show in detail the levels of use of public and private sources of advice for the BS/SBG users and non-users. Interestingly, only the BS/SBG users used the Highlands and Islands Enterprise. That is to say, none of the non-BS/SBG users chose to use the services of Highlands and Islands Enterprise. This result could reflect an issue in the perception of the delivery of the service in the minds of the respondents.

Comparing the users and non-users we see that Local LECs or Scottish Enterprise are used by more than three times as many of the SB/SBG users than the non-users. Similarly, 52.5 % of the BS/SBG users also used a LEC or Scottish Enterprise and this is more than twice the 26.5% level of use recorded by non

BS/SBG users. Other sources which are used by more than 10% more of the BS/SBG users than the non-users are friends/relatives, suppliers, consultants, chambers of commerce and trade/professional services.

Various factors may be at work to explain the differences between the users and the non-users of BS/SBG. We have seen in earlier discussion, for example, that a firm's size, age, sector, and growth history are significant features of BS/SBG use. Tables 6.5 and 6.6 do not control for these firm-type differences. In order to test more precisely whether there are significant differences between BS users and non-users, Table 6.7 reports Analysis of Variance (ANOVA) tests. These test for differences between BS/SBG users and non-users, controlling for their sector, turnover growth and employee growth history, with covariate controls for the firm's age and employee size. The results are reported separately for BS/SBG and BL/SBS. The ANOVA tests were also repeated including the four innovation variables, but none of these variables were statistically significant. Moreover, none of the variables included in Table 6.7 noticeably changed in magnitude, or in significance (and non-significance).

The results displayed in Table 6.7 can only be taken as indicative because of the range of other possible differences between firms that may be significant. However, the results do confirm strongly in each case that there is little or no major significant difference between users and non-users of BS/SBG and BL/SBS by the type of the firm. BS/SBG does have a small statistically significant difference between users and non-users through the overall effects of the 'main effect' variables, but the level of explained variance is tiny, indicating that the differences between types of firm measured here have only marginal importance in

differentiating users and non-users. This finding is a strong contrast with the PACEC (1998) study and tends to confirm doubts about their sample frame for non-users being representative. For BL/SBS, in contrast, there are no statistically significant explanatory effects at all to explain user/non-user differences. This confirms that BL/SBS is selecting firms largely on a case-by-case basis rather than subject to general targeting criteria.

6.5 Comparison between Scotland and England

We now look at the level of use and satisfaction of clients with the BL/SBS and compare the results with the performance of the BS/SBG.

6.5.1 Comparison Use of Services

Within the general level of use, Table 6.8 shows that three BL services stand out as the most highly used: general business information (used by 87.9% of clients), grants (52.3%) and personal business advisor (PBA) (50.8%). After these, a range of different areas of advice are prominent, in rank order: diagnostic assessment (35.6%), training/IiP (31.8%), sales and marketing advice (28.8%). Less used are export advice (21.2%), innovation and technology advice (18.2%), education and university links (15.9%), finance and accounting advice (13.6%) and product/service design advice (7.6%). Thus, the general impression is that BLs are experiencing highest demand for information, which is mostly of a fairly low order kind but acts as gateway services. Grants are also important, and appear to act as an attraction or leverage of demand, whilst the IiP and training levels of use indicates that BLs are acting as an important gateway to TECS/SLC services.

	BS/SBG		BL/SBS	
	Sum of Squares	F	Sum of Squares	F
Main Effects	1.888	2.000	0.400	0.995
Sector	0.403	1.109	0.234	1.004
Growth category	0.228	0.989	0.020	0.040
Exporter	0.339	1.207	0.156	0.506
Turnover category	0.322	1.008	0.201	0.723
Covariates	0.674	1.304	0.106	0.674
Age	0.500	1.105	0.111	1.106
No. of employees	0.475	0.794	0.200	0.687
2-way interaction	0.555	0.604	0.332	0.645
Explained sum of squares	13.05	13.004***	1.185	1.112
Residual sum of squares	256.66	------	20.57	-----

Table 6.7: Analysis of variance to test for differences between BL/SBS and BS/SBG users and non-users controlling for the firm type differences ((*** $p > 0.01$; ** $p > 0.05$; * $p > 0.1$)

	All	Bennett & Robson 2000 +	Bennett & Robson 1999 ++	Manufac turing	Services	Micro	Small	Medium/ Larger	Declining	Stable	Medium Growth	Fast Growth
General business information	87.9	56.7	59.7	87.5	88.2	85.0	88.2	100.0	94.9	80.0	89.5	85.7
Diagnostic assessment	35.6	17.7	22.9	39.3	32.9	42.5*	35.3*	0.0*	20.5	45.0	26.3	32.1
PBA	50.8	32.2	29.1	48.7	53.6	50.0	51.8	42.9	51.3	40.0	42.1	60.7
Sales/marketing advice	28.8	33.4	30.9	32.9	23.2	27.5	28.2	42.9	20.5	35.0	31.6	35.7
Export advice	21.2	28.8	23.6	22.4	19.6	7.5*	28.2*	14.3*	23.1*	10.0*	26.3*	21.4*
Finance/accounting advice	13.6	10.0	15.9	7.1*	18.4*	22.5	10.6	0.0	12.8	10.0	10.5	10.7
Training/IiP	31.8	33.7	40.5	35.7	28.9	10.0***	38.8***	71.4***	28.2	30.0	26.3	39.3
Product/service design advice	7.6	9.0	6.8	7.1	7.9	7.5	8.2	0.0	5.1	0.0	10.5	7.1
Innovation and technology advice	18.2	15.1	16.6	12.5	22.4	25.0	15.3	14.3	20.5	20.0	15.8	21.4
Education/university links	15.9	13.2	13.6	26.8***	7.9***	2.5**	21.2**	28.6**	15.4	15.0	15.8	14.3
Grants	52.3	37.2	50.4	51.8	52.6	47.5*	57.6**	14.3**	46.2	60.0	57.9	39.3
Any advice	64.3	62.4	57.9	64.5**	46.4	65	54.1	42.9	61.5	50	52.6	60.7
Any advice or PBA	76.8	73.3	65.8	81.6	73.2	87.5	75.3	57.1	79.5	75	78.9	82.1
N	132	311	573	56	76	40	85	7	39	20	19	28

Table 6.8: Use of Small Business Service and Business Link Services in England by sector, firm size, and employment growth (% of respondents reporting use, multiple responses allowed) (*** $p > 0.01$; ** $p > 0.05$; * $p > 0.1$). Using Mann Whitney test for two group comparisons, or the Kruskal-Wallis test for multi-group comparisons, between column entries. Types of business: micro-less than 10 employees, small business between 10 and 99 employees, medium/larger businesses between 100 and 499 employees. Employment growth of business during last three years: declining businesses with negative growth below 5%; stable growth from -5% to +5%; medium-growth greater than 5% and less than 50%; and fast - growth 51% or greater.
+ Bennett and Robson (2000) and ++ Bennett and Robson (1999) report the levels of use in the CBR surveys of 1999 and 1997, respectively.

	Non Exporter	Exporter	Newer	Older	Not IncProc	IncProc Innovator	Not NovProc	Nov Proc	Not IncProd	Inc Prod	Not NovProd	Nov Prod
General business information	87.2	88.6	87.5	88.2	88	87.8	88.2	85.3	84.8	94.4	88.2	86.5
Diagnostic assessment	36	25.7	37.5	33.8	38.2	30.6	37.3	21.4	33.7	38.9	35.5	34.6
PBA	48.8	51.4	45.3	55.9	52	51	51.8	50	55.4	44.4	50	55.8
Sales/marketing advice	31.4	25.7	31.3	26.5	28	26.5	26.4	35.7	25	36.1	25	32.7
Export advice	15.1***	37.1***	14.1*	27.9*	25.3	16.3	22.7	14.3	23.9	16.7	18.4	26.9
Finance and accounting advice	16.3	5.7	17.2	10.3	13.3	14.3	14.5	7.1	14.1	11.1	13.2	13.5
Training/IiP	31.4	34.3	29.7	33.8	30.7	36.7	32.7	35.7	32.6	30.6	30.3	34.6
Product/service design advice	10.5**	0**	9.4	5.9	8	6.1	8.2	0	5.4	11.1	9.2	3.8
Innovation and technology advice	17.4	20	17.5	19.1	21.3	14.3	20	7.1	17.4	19.4	19.7	15.4
Education and university links	16.3	20	12.7	19.1	16	18.4	18.2	7.1	16.3	16.7	13.2	21.2
Grants	48.8	51.4	53.1	51.5	53.3	53.1	52.7	57.1	53.3	50	46.1	61.5
Any advice	55.8	62.9	59.4	54.4	60	49	55.5	57.1	56.5	55.6	53.9*	59.6*
Any advice or PBA	76.7	82.9	76.6	79.4	80	73.5	77.3	78.6	80.4	72.2	73.2	84.6
N	86	35	64	68	75	49	110	14	92	36	76	52

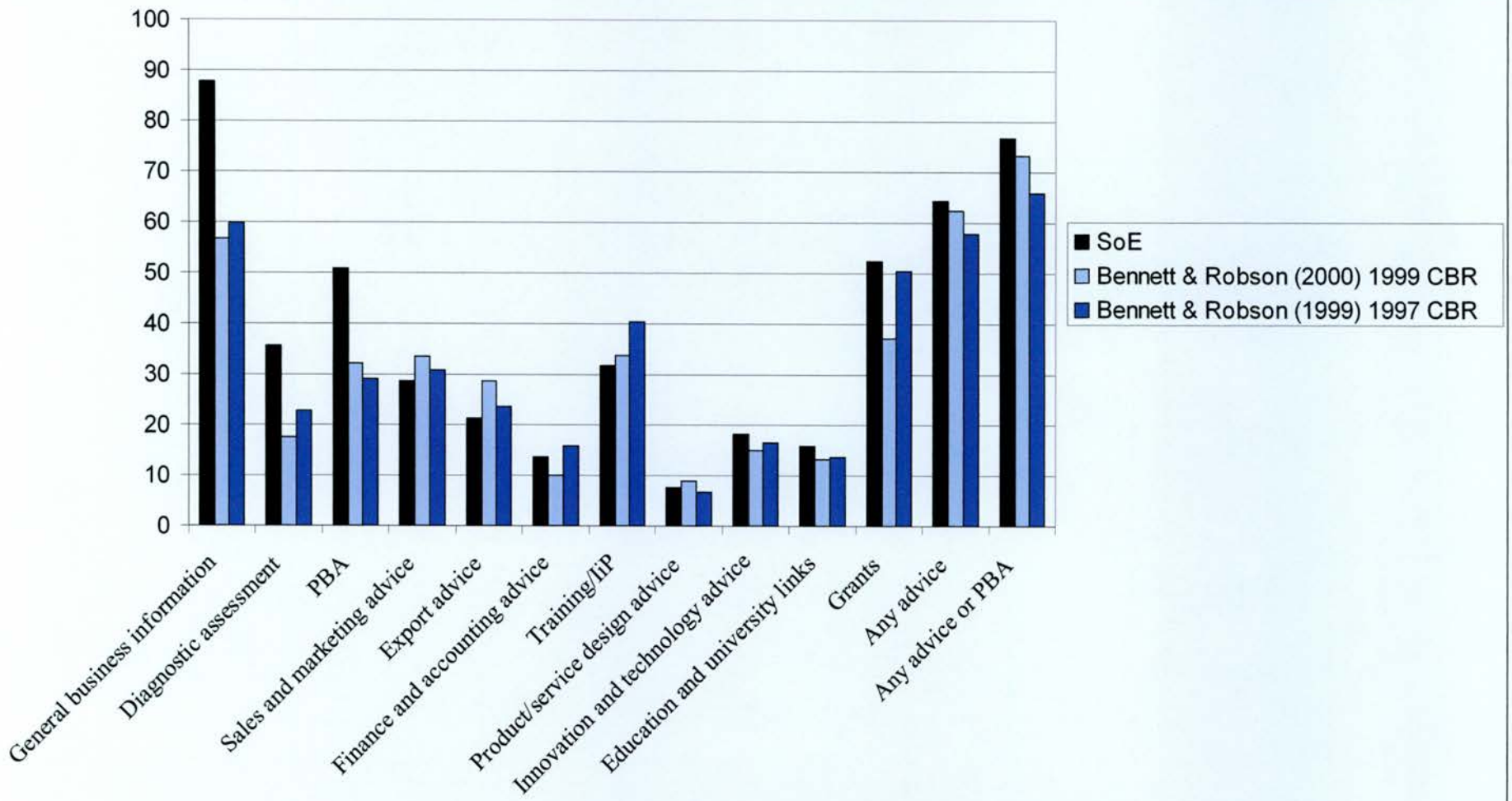
Table 6.8: Use of Small Business Service and Business Link Services in England by exporter, age, incremental process innovator, novel process innovator (% of respondents reporting use, multiple responses allowed). (*** $p > 0.01$; ** $p > 0.05$; * $p > 0.1$) Using Mann Whitney test for two group comparisons, between column entries. Types of business: older firms established in 1986 or earlier, and younger firms established after 1987. Novel innovators introduced innovations which were new to both the firm and to the industry and are denoted by Nov. Incremental innovators introduced innovations new to the firm but not to the industry and are denoted by Inc. Process and Product Innovations are reported and are denoted by Proc and Prod, respectively.

Advice services are also important and fall across a range of categories. Aggregating all sources of advice categories demonstrates that advice is a major aspect of BL services, accounting for 76.8% of use including PBAs, and 64.3% excluding PBAs. The emphasis of advice on sales and marketing advice, exports, innovation and technology, and finance and accounting suggests that BLs are being used chiefly for advice on specific business services.

PBAs and diagnostic assessment were two of the key new services added to the local support network by the BL initiative. The mixed level of use, 50.8% for PBAs and 35.6% for diagnostic assessment, suggest that this aspect of the BL design is experiencing a mixed level of demand – high for PBA and lower for diagnostic assessment, compared with the other areas of development. In contrast, the three services derived from developments of the decentralisation from the DTI and the Design Council to BLs (Export Development Counsellors, Innovation and Technology Counsellors and Design Counsellors) experience similar levels of take-up to diagnostic assessment, but a lower level of demand than PBAs, for any one, two or three areas of these.

Our results are in line with DTI management statistics and suggest that, as viewed by the clients, the main demand for BL services is not for a range of specific but rather for general business advice and information, where each may be better served by more general PBAs rather than specific advisors (DTI, 1998c).

The results in Table 6.8 also show the levels of use of BL which were found by Bennett and Robson (2000) and Bennett and Robson (1999b) for England using the CBR data for 1997 and 1999, respectively. The results of all three surveys are also shown in Figure 6.3.



6.3: Levels of use of specific services in the Survey of Entrepreneurship compared to the CBR data for 1997 and 1999

The results for the SoE are broadly in line with the CBR data for 1997 and 1999. The general exceptions are general business information, diagnostic assessment, PBAs, grants, and exporting. In the first four services the levels of use of the SoE firms were higher than the firms in the CBR data for 1997 and 1999. The results suggest that the high need for basic and generic information is increasing.

In the case of exporting the SoE level of use for that service was 21.2% which was less than the 28.8% found using the CBR data for 1999. This later result could be explained by a deterioration in the position of manufacturing firms and increased difficulty in exporting. There is no substantial variation in the sector composition of the samples, so differences in samples are not a possible explanation.

The main differences between the levels of use of BL/SBS compared to BS/SBG are in the following areas. PBAs are used by 50.8% of English firms compared to 32.3% of Scottish firms. This finding is consistent with the different emphases which each of the two networks has placed upon the role and targeting of PBAs. Secondly, exporting advice is used by 21.2% of English firms and 28.1% of Scottish firms, and as with PBAs is statistically significant at the 1% level.

Next we turn attention to the different types of business users of BL. 26.8% of manufacturing firms used education and university links compared to 7.9% of service sector firms. This was the only sectoral difference in England and contrasted with Scotland where sectoral differences were present for three services: general business information, export advice, and education and university links.

Size of firm was statistically significant and showed an inverse shaped u pattern for diagnostic assessment, export advice, and grants. Size of firm was also statistically significant and showed a positive relationship with the level of use for

education and university links, and training/IiP in England. The size of the firm was the business characteristic which explained the most differences in the levels of use of services in England. However, compared with the Scottish results (Table 6.1) there were a much fewer number of statistically significant relationships.

Employment growth only showed one statistically significant relationship and that was for the service export advice. Thus, the overall conclusion from this assessment of BL/SBS services is that there is little evidence that the general targeting to firms with 10-200 employees used in the early stages of the BL initiative, which is still to a lesser extent a focus today, has a major impact on the use of services, or that the take-up varies greatly with growth experience. In contrast in Scotland the employment growth characteristic was statistically significant for export advice, education and university links, and grants.

In England where there were important differences in size or growth effects, these generally relate to specific services such as training/IiP and education and university links, which is probably most readily explained by the difficulties of the smallest firms having sufficient management time to devote to these two areas.

Innovation was not statistically significant for any of the services in England. This contrasted sharply with the results for Scotland (Table 6.1) where incremental process innovation was significant for innovation and technology advice; and also for novel process innovation which was statistically significant for training/IiP, education and university links, innovation and technology advice, and any advice.

Exporting was not a significant variable in either England or Scotland; and age was only significant for export advice in England, used by 27.9% of older firms and 14.1% of newer firms, respectively.

As with BG/SBS we see that general business information is the most important service, but in the case of BL there is a very high level of use at 88%. Other services are used less intensively, particularly product/service design advice with 7.6%. Whilst there is obviously a need for the provision of a wide range of services, additional resources which are to be spent could be spent on widening the suit of general business information.

6.5.2 Comparison Use of Services – Number of fields of advice

In Table 6.9 we see the services which were used by BL/SBS firms who were narrow and specific sole service users, or middle range users of two services, or three services, or heavy users who used four or more services. We see that general business information is the main service covered for all of the highly targeted users of BL/SBS. General business information is used by 77.8% of the single service users, 86.2% of the two service users and 81.1% of the three service users. For the one and two service users the levels of use of general business information is much higher in England than in Scotland.

The use of PBAs and diagnostic assessment is a very large proportion of BL/SBS users only for those users who use three or more services of BL/SBS advice. This is strongly at odds with the design objectives of BL that PBAs and diagnostics would be part of a gateway into a range of BL/SBS services. Rather, the majority (56.8%) of all BL/SBS clients use only one, two or three BL/SBS services, and they are very minor users of PBA and diagnostic assessment services compared to those users who use PBAs and diagnostics as one of many BL services. Diagnostic assessment was not used by any of the users of one or two BL/SBS services.

Hence, the PBA and diagnostic assessment is acting as a possible supplement rather than a core service, whilst for the most targeted and majority of users of BL/SBS their chief focus is on information, grants and training/IiP. Beyond these, various aspects of specific advice account for the major advice focus, with sales and marketing, and exporting advice the most important for the most targeted users.

An important finding is the mixed role of the PBA and diagnostic assessment in the SME community. Overall the level of use of PBAs was high in England but PBAs did not have an important role within specific users of BL/SBS services – instead it was with the heavy users of services that their role was greatest. The survey results suggest instead that the most important aspects of BL that appear to be developing are, first, its role as a 'gateway' to access information, government grant support and training/IiP, and second, as a response to demand for specific advice services, chiefly in the fields of sales and marketing, exports, innovation and technology, and finance and accounting. This in turn confirms the importance of the DTI's decision to decentralize and allow flexible local development of their formally centralized services of advice on exports, innovation and technology, and design counsellors.

6.5.3 Comparison Use of Services – Satisfaction

We are fortunate that although the sample size of firms in England was smaller than in Scotland the higher level of use of the BL/SBS scheme compared to BS/SBG means that we do have a large enough sample to look at the characteristics of businesses and their relationship with firms' assessment of satisfaction with BL/SBS services.

Field of advice	1 field %	2 fields %	3 fields %	4 or more fields %
General business information	77.8	86.2	81.1	94.7
Daignostic assessment	0.0	0.0	27.0	64.9
Personal business advisor	11.1	31.0	51.4	66.7
Sales and marketing advice	0.0	13.8	16.2	49.1
Export advice	0.0	10.3	8.1	38.6
Finance and accounting advice	0.0	10.3	8.1	21.1
Training/Investors in People	0.0	17.2	29.7	45.6
Product/service design advice	0.0	3.4	8.1	10.5
Innovation and technology advice	0.0	3.4	21.6	26.3
Education and university links	11.1	0.0	8.1	29.8
Grants	0.0	24.1	40.5	82.5
N	9	29	37	57

Table 6.9: Number of fields of advice for Small Business Service and Business Link users

An important implication of the results is the relatively high satisfaction levels achieved by BL/SBS services compared to BS/SBG. Product and service design advice has 92.3% of users giving a very satisfied or satisfied response. In Table 6.10 the percentages refer to the combined satisfied and very satisfied scores. In this section we use the term satisfied to refer to this combined level of satisfaction. Product and service design achieved 81.1% satisfaction in England which is more than 10% lower than in Scotland.

Diagnostic assessment has 89.4% satisfied users which compared to 78.6% in Scotland. Training/IiP had 88.0% satisfaction in England and was the third ranked service in order of satisfaction, and again the level of satisfaction was more than 10% higher than the scores achieved by their Scottish counterparts. Education and university links was ranked fourth and achieved 85.0% satisfaction in the BL/SBS scheme which was a full 20% higher than the level achieved with BS/SBG.

Innovation and technology advice was ranked fifth with 84.6% (Table 6.10) and this was very comparable with the 82.5% in Scotland. Personal Business Advisors were ranked sixth in England with 84.3% satisfaction. Interestingly this is only slightly higher than the 82.8% satisfaction recorded in Scotland. Export advice was the seventh most important with 83.9% in England and again this was narrowly higher than in Scotland which achieved 82.7% satisfaction.

Sales and marketing advice was ranked eighth and achieved 80% satisfaction in England which was nearly 15% more than the 65.6% satisfaction in Scotland. Again this is a very substantial difference in satisfaction between users of the two schemes.

Finance and accounting advice was one of only two services in England to not achieve an aggregate satisfaction of 80% or above. This notwithstanding it was substantially higher than the 62.0% recorded in England. Interestingly finance and accounting advice achieved the lowest satisfaction in Scotland.

Lastly, grants were the service with the lowest level of satisfaction in England with 78.4%. This was very similar to the 78.1% recorded in England.

Thus an important finding of our survey is the very marked difference in user satisfaction between businesses in Scotland and in England. The BL/SBS service recorded much higher satisfaction than the users of BS/SBG for the following services: (i) product and service design, (ii) diagnostic assessment, (iii) training and IiP, (iv) education and university links, (v) sales and marketing advice, and (vi) finance and accounting advice.

Table 6.10 shows tests of statistical difference between satisfaction and the characteristics of the businesses in England. The most important conclusion to be drawn is there are few statistical differences between firms in their satisfaction levels, which suggests that the quality of BL/SBS service is a generic issue rather than varying between specific types of client. In turn this suggests that variations in satisfaction levels are more likely to be the result of variations in performance of individual BL/SBS outlets, or their staff of advisors, rather than client differences. Possible non-response bias by firm type does not appear to affect these conclusions.

By sector there were no differences between manufacturing and service sector firms and satisfaction in England (Table 6.10). This was a result which was also found in Scotland. Size of firm was statistically significant at the 10% level for sales and marketing advice, finance and accounting advice, and innovation and

technology advice. This sharply contrasted with the Scottish businesses where size of firm was highly significant for general business information, diagnostic assessment, export advice, finance and accounting advice, and training/IiP.

Employment growth was statistically significant at the 5% level for export advice, where stable employment growth and fast growth firms recorded much less satisfaction than declining and medium growth firms. Export advice was also significant in Scotland. In addition in Scotland we found that finance and accounting advice user satisfaction was statistically related to employment growth.

Generally the level of innovation activity was not systematically related to users' satisfaction with the BL/SBS services. This is a common finding with the users' satisfaction scores with BS/SBG services. Indeed in England for our four measures of innovation activity there were only three instances of statistically significant satisfaction responses. (i) Whether the firm was or was not an incremental process innovator with the satisfaction of general business information. (ii) Whether the firm was or was not an incremental process innovator with the satisfaction with export advice. (iii) Whether the firm was or was not a novel product innovator and satisfaction with diagnostic assessment.

The age of the firm was not systematically related to any measure of satisfaction in England or in Scotland. Three services were statistically significant for satisfaction with BL/SBS services and these were for diagnostic assessment (96.8%, 70%), PBA (77.3%, 94.7%), and grants (85.1%, 63.2%) where the first figure in parentheses is the satisfaction score for non-exporters and the second figure is for exporting firms, respectively.

	No. of firms	All	Manu-facturing	Services	Micro	Small	Medium/ Larger	Declining	Stable	Medium Growth	Fast Growth
General business information	117	75.2	68.6	80.3	84.8	70.1	85.7	60.5*	86.7*	82.4*	83.3*
Diagnostic assessment	47	89.4	90.5	88.5	88.2	90.0	NA	87.5	88.9	83.3	88.9
Personal business advisor	70	84.3	78.8	89.2	90.0	80.9	100	77.3	100	87.5	88.2
Sales and marketing advice	45	80.0	87.5	75.9	91.7*	80.0*	33.3*	90.0	85.7	90.	70.0
Export advice	31	83.9	85.7	82.4	66.7	85.2	100	90.9**	0**	100**	71.4**
Finance and accounting advice	24	79.2	87.5	75.0	63.6*	92.3*	NA*	71.4	66.7	100	100
Training/Investors in People	50	88.0	87.0	88.9	80.0	92.5	60.0	92.3	83.3	100	81.8
Product/service design advice	13	92.3	100	85.7	100	90.0	NA	100	NA	100	100
Innovation and technology advice	26	84.6	71.4	89.5	90.9*	85.7*	0	88.9	75.0	100	83.3
Education and university links	20	85.0	86.7	80.0	100	88.2	50.0	83.3	66.7	100	75.0
Grants	74	78.4	80.6	76.7	63.6	84.3	100	73.7	76.9	81.8	75.0
N	517	81.8	80.9	82.5	80.5	81.3	72.2	77.4	81.4	89.5	81.9

Table 6.10: Clients' Satisfaction with Small Business Service and Business Link Services by sector, firm size, and employment growth (Percentage of respondents who are satisfied or very satisfied) (*** p >0.01; ** p>0.05; * p>0.1). Using Mann Whitney test for two group comparisons, or the Kruskal-Wallis test for multi-group comparisons, between column entries. Types of business: micro-less than 10 employees, small business between 10 and 99 employees, medium/larger businesses between 100 and 499 employees. Employment growth of business during last three years: declining businesses with negative growth below 5%; stable growth from -5% to +5%; medium-growth greater than 5% and less than 50%; and fast - growth 51% or greater.

	Non Exporter	Exporter	Newer	Older	Not IncProc	IncProc Innovator	Not NovProc	NovProc	Not IncProd	IncProd	Not NovProd	NovProd
General business information	76.3	74.2	78.6	72.1	82.1**	62.8**	72.4	91.7	73.1	77.1	75	73.3
Diagnostic assessment	96.8**	70**	91.3	87.5	89.3	86.7	89.7	75	87.1	92.3	96*	78.9*
PBA	77.3*	94.7*	83.3	85.0	85.7	84	86.7	71.4	85.2	81.3	87.5	80
Sales and marketing advice	84.8	80	82.6	77.3	70.8	87.5	81.8	57.1	82.1	71.4	72.7	85
Export advice	92.9	80	72.7	90.0	85.7	77.8	80.8**	100**	84.6	80	85.7	82.4
Finance and accounting advice	77.8	75	76.9	81.8	73.3	85.7	85	0	72.2	100	90.9	63.6
Training/Investors in People	88.2	84.6	87.0	88.9	85.2	90.9	90.2	75	88.2	86.7	89.3	85.7
Product/service design advice	100	100	83.3	100	100	66.7	91.7	NA	100	80	88.9	100
Innovation and technology advice	83.3	85.7	75.0	92.9	88.2	75	86.4	66.7	75	100	93.3	70
Education and university links	84.6	85.7	75.0	91.7	91.7	75	84.2	100	80	100	88.9	81.8
Grants	85.1**	63.2**	75.7	81.1	81.8	74.1	77	90	77.4	78.9	81.1	74.3
N	83.8	83	80.6	82.9	83.7	77.6	81.9	64.3	80.6	82.9	83.8	77.9

Table 6.10: Clients' Satisfaction with Small Business Service and Business Link Services (Percentage of respondents who are satisfied or very satisfied) by exporter, age, incremental process innovator, novel process innovator. (*** $p > 0.01$; ** $p > 0.05$; * $p > 0.1$) Using Mann Whitney test for two group comparisons, between column entries. Types of business: older firms established in 1986 or earlier, and younger firms established after 1987. Novel innovators introduced innovations which were new to both the firm and to the industry and are denoted by Nov. Incremental innovators introduced innovations new to the firm but not to the industry and are denoted by Inc. Process and Product Innovations are reported and are denoted by Proc and Prod, respectively.

Table 6.11 and Figure 6.4 shows the percentage of firms in England in the SoE who were satisfied or very satisfied with the individual BL/SBS service which they used, compared to the earlier research of Bennett and Robson (2000) and Bennett and Robson (1999b) who used the CBR data of 1999 and 1997, respectively.

Table 6.12 shows a breaking out of the four satisfaction categories for each of the 11 services in the BL/SBS scheme. The examination of the figures reinforces the earlier comments on users' satisfaction with specific services.

This section has compared satisfaction levels between the users of services in England and Scotland. Whilst there are services which record similar satisfaction such as grants with 78% in England and Scotland, the results overall show that more customers are satisfied with the service in England than in Scotland. This may reflect the different operational styles of the two systems, the BG/SBS with an emphasis upon gateway provision to services and BL/SBS with more of an emphasis on a one stop shop approach.

	Survey of Entrepreneurship	N	Bennett and Robson (2000) CBR 1999	N	Bennett and Robson (1999b) CBR 1997	N
General business information	75.2	117	84.2	171	73.5	336
Diagnostic assessment	89.4	47	74.1	54	63.3	128
Personal business advisor	84.3	70	87.6	97	63.2	163
Sales and marketing advice	80.0	45	78.0	100	60.7	173
Export advice	83.9	31	81.4	86	66.9	133
Finance and accounting advice	79.2	24	70.0	30	68.2	88
Training/Investors in People	88.0	50	94.9	98	72.0	225
Product/service design advice	92.3	13	89.3	28	64.9	37
Innovation and technology advice	84.6	26	80.4	46	65.6	93
Education and university links	85.0	20	89.7	39	68.8	77
Grants	78.4	74	74.3	113	59.6	285
N	81.8	517	82.6	862	66.5	1738

Table 6.11: Clients' Satisfaction with Small Business Service and Business Link Services in the Survey of Entrepreneurship compared to Bennett and Robson (2000) and Bennett and Robson (1999b) who used the CBR data for 1999 and 1997, respectively.

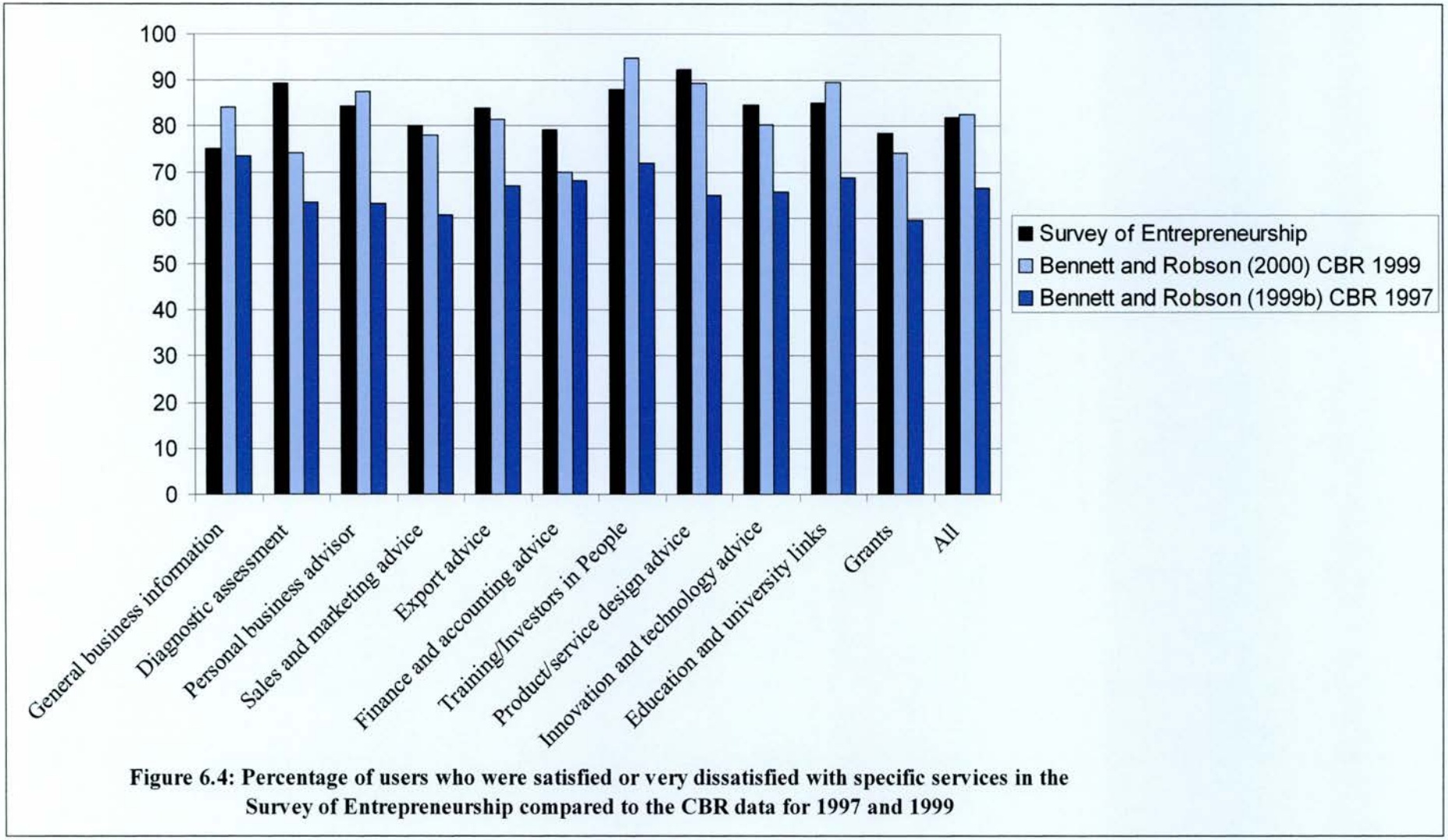


Figure 6.4: Percentage of users who were satisfied or very dissatisfied with specific services in the Survey of Entrepreneurship compared to the CBR data for 1997 and 1999

Field of advice	N	Very Dissatisfied	Dissatisfied	Satisfied	Very Satisfied
General business information	117	10.3	14.5	62.4	12.8
Daignostic assessment	47	0	10.6	66	23.4
Personal business advisor	70	2.9	12.9	67.1	17.1
Sales and marketing advice	45	4.4	15.6	60	20
Export advice	31	3.2	12.9	74.2	9.7
Finance and accounting advice	24	12.5	8.3	37.5	41.7
Training/Investors in People	50	6	6	64	24
Product/service design advice	13	7.7	0	61.5	30.8
Innovation and technology advice	26	11.5	3.8	53.8	30.8
Education and university links	20	0	15	65	20
Grants	74	10.8	10.8	50	28.4
All	517	6.8	11.4	60.7	21.1

Table 6.12: Clients' Satisfaction with Small Business Service and Business Link Services

6.5.4 Comparison of Users and Non-Users

We are in the fortunate position that the Survey of Entrepreneurship contains firms which did and did not use the BL/SBS service. Table 6.13 and 6.14 shows the levels of use of private and public sector sources of advice for firms who did use BL/SBS or did not use BL/SBS, respectively. These results can also be compared to the patterns of use of external firms in Scotland who did and did not use the BS/SBG.

The main area of difference between the users and the non-users of the main flagship Government scheme is in the number of heavy users of external advice – who used 7 or more sources of advice. We see that amongst the non BL/SBS users, heavy users of external advice accounted for 35.3% of this group. The corresponding value for the scheme in Scotland was 30.4%. However, for the BL/SBS users, the heavy users accounted for 47.0% of this group; and in Scotland the corresponding percentage was 68.6%. Thus, amongst the heavy users of external advice the users of BS/SBG were found in greater numbers than for the users of BL/SBS. This was also reflected in the BS/SBG users possessing a higher likelihood of using most of the other private and public sector sources, compared to their counterparts in England, or also compared to the non-BS/SBG and the non-BL/SBS users. This suggests that BS/SBG as a supplier is complementary to not competing with or displacing the private sector providers of advice. In other words it is filling a market need.

Advice Source	All (BL/SBS users)	sole source	2 (BL/SBS and 1 other advisor)	3 (BL/SBS and 2 other advisors)	4 (BL/SBS and 3 other services)	5 (BL/SBS and 4 other services)	6 (BL/SBS and 5 other services)	7+ (BL/SBS and 6 or more other advisors)
Accountant	81.1		40.0	77.8	78.3	82.4	87.5	83.9
Solicitor	62.1		0.0	22.2	62.5	70.6	43.8	74.2
Bank	67.4		20.0	22.2	60.9	70.6	56.3	82.3
Customers	42.4		0.0	22.2	8.7	5.9	43.8	71.0
Business Associates	43.5		0.0	25.0	8.7	29.4	31.3	69.4
Friends/Relatives	32.1		0.0	0.0	8.7	5.9	50.0	50.0
Suppliers	46.2		0.0	11.1	17.4	41.2	62.5	62.9
Consultants	40.9		20.0	0.0	8.7	17.6	50.0	64.5
Chamber of Commerce	23.5		0.0	0.0	4.3	17.6	12.5	40.3
Trade/Professional Associations	31.3		0.0	22.2	8.7	23.5	20.0	48.4
Local Enterprise Agency/Trust	31.8		0.0	11.1	13.0	17.6	12.5	53.2
Local TEC or SLC	36.9		20.0	0.0	13.0	17.6	33.3	59.0
N	132	0	5	9	23	17	16	62

Table 6.13: External sources of business advice from sole and multiple sources who are Business Link/Small Business Service users.

Advice Source	**All (non BL/SBS users)**	**sole source**	**2 advisors**	**3 advisors**	**4 advisors**	**5 advisors**	**6 advisors**	**7+ advisors**
Accountant	79.5	33.3	66.7	56.5	65.0	84.8	80.0	95.5
Solicitor	66.1	0.0	16.7	30.4	60.0	57.6	80.0	92.4
Bank	73.9	0.0	41.7	39.1	63.2	81.8	80.0	93.9
Customers	51.6	0.0	18.2	4.2	47.4	48.5	46.7	82.4
Business Associates	50.0	33.3	0.0	33.3	26.3	30.3	53.3	80.9
Friends/Relatives	31.1	0.0	9.1	8.3	15.8	24.2	26.7	54.4
Suppliers	56.8	0.0	18.2	25.0	63.2	36.4	66.7	82.4
Consultants	43.7	0.0	0.0	20.8	31.6	33.3	56.7	64.7
Chamber of Commerce	22.6	0.0	0.0	12.5	15.8	12.1	20.0	39.7
Trade/Professional Associations	34.9	0.0	0.0	25.0	5.6	30.3	33.3	57.4
Local Enterprise Agency/Trust	31.6	0.0	9.1	33.3	5.3	27.3	20.0	51.5
Local TEC or SLC	26.5	0.0	16.7	16.7	15.0	27.3	30.0	35.3
N	190	3	12	23	20	33	30	67

Table 6.14: External sources of business advice from sole and multiple sources who are non Business Link/Small Business Service users.

6.6 Regression Results

The previous sections of the chapter have looked at the use and impact of external advice using crosstabulations. This chapter takes the research further and examines the use and impact of the main government schemes using logit and ordered logit regression techniques, respectively.

6.6.1 Regression Results - Use

Table 6.15 shows the regression results from the logit models of each of the individual BS/SBG services for the BS/SBG users. In the models there are 150 BS/SBG users which is a good sample for the regression analysis. The inclusion of pre tax profitability reduced the sample size but it was important to include a measure of performance other than employment growth.

The most important explanatory variable in explaining differences in the probability of use of each of the individual BS/SBG schemes was the size of the firm. More specifically, size of firm was statistically significant and positively related to the use of training/IiP, product and service design advice, education and university links, PBAs, and export advice. These relationships were also found to be statistically significant in our earlier analysis of the cross-tabulation results.

The innovation activity of the firm is found to be a good predictor in explaining differences in the levels of use of the individual services. Novel product innovators were less likely to use diagnostic assessment than non novel product innovators. Incremental product innovators were more likely than firms without this characteristic to use general business information, and were less likely to use export advice, and training and IiP.

	General Business Information	Diagnostic Assessment	Personal Business Advisor	Sales and Marketing Advice	Export Advice
Log Age	0.811 (0.583)	-0.548 (0.503)	-0.057 (0.536)	-0.083 (0.495)	0.110 (0.505)
Log no. of employees	0.174 (0.505)	0.638 (0.418)	0.512 ***	0.021 (0.443)	0.743 (0.077) ***
Pre Tax Profitability	0.001 (0.0008)	0.0003 (0.0004)	-0.0001 (0.0004)	-0.0003 (0.0005)	-0.0003 (0.0004)
Rate of growth	-0.0001 (0.001)	0.0003 (0.001)	-0.002 (0.001)	0.0005 (0.001)	0.0002 (0.001)
Manufacturing/services	-0.881 (0.467) *	-0.139 (0.387)	0.111 (0.389)	0.131 (0.385)	0.582 (0.110) ***
Export	-0.118 (0.505)	0.413 (0.443)	-0.387 (0.457)	0.490 (0.448)	0.199 (0.460)
Skill	0.006 (0.014)	-0.029 (0.017) *	0.007 (0.007)	-0.040 (0.026)	-0.019 (0.017)
Novel Product Innovator	0.298 (0.526)	-1.080 (0.483) **	0.174 (0.495)	-0.496 (0.470)	-1.306 (0.900)
Incremental Product Innovator	1.230 (0.655) *	-0.467 (0.479)	0.590 (0.485)	-0.250 (0.478)	-1.699 (0.547) ***
Novel Process Innovator	-0.076 (0.657)	0.637 (0.611)	0.472 (0.601)	-0.163 (0.640)	-0.712 (0.700)
Incremental Process Innovator	0.163 (0.487)	-0.909 (0.403) **	-0.478 (0.413)	-0.252 (0.394)	-0.091 (0.419)
Constant	2.077 (0.746) ***	0.352 (0.050) ***	-0.168 (0.057) ***	-0.158 (0.050) ***	-0.929 (0.158) ***
N	151	151	151	151	151
Log-likelihood	-68.177	-89.24	-87.18	-89.27	-81.64
Correctly classified (%)	80.79	72.19	68.21	68.87	74.17

Table 6.15 Estimates of a logit model of the expectation of seeking external business advice, by service provided by BS/SBG in Scotland (*** $p > 0.01$; ** $p > 0.05$; * $p > 0.1$).

	Finance and Accounting Advice	Training/IiP	Product/service design advice	Innovation and technology advice	Education and university links	Grants
Log Age	0.043 (0.636)	-0.048 (0.464)	0.159 (0.747)	-0.442 (0.541)	-0.250 (0.669)	-0.690 (0.479)
Log no. of employees	0.727 (0.558)	0.039 (0.008) ***	0.439 (0.078) ***	0.210 (0.446)	0.607 (0.222) ***	0.244 (0.402)
Pre Tax Profitability	-0.0002 (0.0004)	0.0002 (0.003)	0.0002 (0.0004)	-0.0005 (0.0007)	-0.001 (0.001)	0.00009 (0.0003)
Rate of growth	0.001 (0.001)	0.003 (0.003)	-0.002 (0.002)	-0.0004 (0.001)	-0.0007 (0.002)	0.006 (0.001) ***
Manufacturing/services	-0.969 (0.789)	0.226 (0.365)	0.672 (0.572)	-0.030 (0.421)	0.776 (0.171) ***	0.321 (0.365)
Export	0.259 (0.542)	0.510 (0.417)	0.001 (0.645)	-0.217 (0.483)	0.035 (0.629)	0.747 (0.422)
Skill	-0.030 (0.029)	0.008 (0.011)	0.006 (0.004)	-0.003 (0.010)	-0.020 (0.031)	-0.013 (0.014)
Novel Product Innovator	-0.200 (0.614)	0.815 (0.678)	-0.097 (0.653)	0.455 (0.519)	-0.529 (0.691)	-0.206 (0.448)
Incremental Product Innovator	0.962 (0.609)	-0.540 (0.006) ***	-1.432 (0.867)	-0.385 (0.562)	-0.167 (0.686)	-0.821 (0.466)
Novel Process Innovator	0.059 (0.722)	0.314 (0.111) ***	0.288 (0.841)	-0.673 (0.167) ***	0.545 (0.928)	-1.181 (0.620)
Incremental Process Innovator	-1.025 (0.529)	-0.142 (0.381)	0.225 (0.606)	0.952 (0.436) **	0.513 (0.590)	-0.258 (0.379)
Constant	-1.767 (0.814) **	-0.269 (0.007) ***	-1.934 (0.933) **	-1.133 (0.036) ***	-2.539 (0.965) ***	0.572 (0.610)
N	151	151	151	151	151	151
Log-likelihood	-62.59	-96.11	-50.51	-76.47	-49.65	-95.55
Correctly classified (%)	84.11	66.23	88.74	76.16	88.74	58.94

Table 6.15 Estimates of a logit model of the expectation of seeking external business advice, by service provided by BS/SBG in Scotland (*** $p > 0.01$; ** $p > 0.05$; * $p > 0.1$).

Novel process innovators were more likely to use training and IiP, and less likely to use innovation and technology advice than firms without this characteristic. The fourth innovation variable included in our models was incremental process innovator and this was statistically significant at the 5% level for innovation and technology advice and diagnostic assessment. The direction of the relationships were positive for innovation and technology advice and negative for diagnostic assessment.

The age of the firm and exporting activity were not systematically related to the use of any of the individual BS/SBG services. Again these findings are consistent with the crosstabulations results.

Our models contain two measures of firms' performance, pre tax profitability and employment growth. Pre tax profitability is not statistically significant in any of the models. Thus whether firms are making losses or are profitable to a lesser or a greater extent has no relationship with the likelihood of firms using specific BS/SBG services. Employment growth is statistically significant in the model of grants and has positive sign. But disentangling the direction of causality is difficult. Is it the case that growing firms are more likely to receive grants, or is it that the receipt of a grant and the associated increased levels of resources increases the growth of the firm? Export advice, education and university links had demonstrated statistically significant relationships with employment growth in our analysis of the cross-tabulation results. However, once the other characteristics of the firm are included and we move to multivariate analysis it is found that employment growth is not as important an explanatory variable as firm size. There is the possibility of lagged effects influencing the results. Size could be a function of previous use of external

advice. If this relationship holds it would imply that causality is that advice use is the consequence of size and previous growth. However, further data would need to be gathered at a later time period to examine the nature of the relationship between previous use of external advice and its impact upon size and growth.

The sector of the firm was found to be positively statistically significant for education and university links, and export advice; and negatively statistically significant for general business information.

The skill level of the firm was negatively statistically significant with the use of diagnostic assessment, but this was the only instance where skill was significant. In other words in most instances whether the firm is highly skilled or less skilled does not have any statistically significant relationship with the likelihood of using individual services.

6.6.2 Regression Results Impact

Table 6.16 shows the multivariate estimates of an ordered logit model of the clients' assessments of satisfaction of advice, by service provided by BS/SBG. Generally there were no problems in estimating the models with the sample sizes remaining robust even when including the pre-tax profitability and the level of skill variables. However, there was one exception. For the education and university links satisfaction model there were insufficient observations to run the model and have a reliable set of regression model results. The model could have been re-estimated with several of the explanatory variables dropped to increase sample size but this option was not pursued. The dropping of variables would then have entirely removed any degree of comparability with the other services in Scotland – or in

England, and that would have detracted attention from the other results and the overall picture which they are presenting.

Size of firm was statistically significant for five services in Scotland: finance and accounting advice, training and IiP, general business information, diagnostic assessment and export advice. In each case the sign of the coefficient had appropriate sign. General business information had a negative sign which was consistent with the cross-tabulations results which found that satisfaction declined with the size of the firm. For the other services where satisfaction was significant the results suggested positive relationships between size of firm and business satisfaction.

Pre-tax profitability was statistically significant for three services: training and IiP, innovation and technology advice, and PBAs. For training and IiP and innovation and technology advice the coefficients had positive sign which suggested that the higher the degree of profitability the higher the degree of user satisfaction. For PBAs the pre-tax profitability variable had a negative signed coefficient which suggested that the higher the degree of profitability the lower the level of satisfaction.

Employment growth was not statistically significant in any of the models. Sector was significant at the 5% level for general business information and had a negative coefficient. This confirmed the cross-tabulations results that manufacturing firms were less satisfied than service sector firms. Exporting was statistically significant at the 1% level for PBAs and sales and marketing advice.

Surprisingly the level of skill of the employees and the managers in the businesses was not systematically related with businesses' satisfaction and none were

statistically significant. The models were all re-run with the level of skill included as a log variable rather than a percentage but again none of the models showed statistically significant relationship between skill and user satisfaction. Then as a third attempt to see if skill was related to satisfaction a crude dummy of skilled/unskilled was included where skilled was 60% and above, and unskilled was less than 60%. Again the results did not generate any instances where skill was significant. The other variables in the model remained very similar to those reported and again showed the general robustness of the models. We are left with the finding that the level of skill of the employees and managers does not have any statistically significant relationship with users' satisfaction responses.

The innovation dummy variables were generally not related to users' satisfaction scores. The only exception was for users' satisfaction with general business information where novel product innovators and novel process innovators were statistically significant at the 1% level. The novel process innovator had a negatively signed coefficient and the novel product innovator had a positively signed coefficient and these were both consistent with the findings of the cross-tabulations.

In this section the main finding was that users' satisfaction scores were higher for larger than for smaller sized firms. This then raises further questions. Are the larger sized firms better equipped to receive the advice than the smaller sized firms? If this is the case it may be that the BG advisors need to devote more time to smaller sized firms to achieve similar levels of firm satisfaction. This would then increase quality appraisals and quality, but the question would be whether such a policy was an efficient use of resources. This notwithstanding it is also important to consider the possibility of external advice having a lagged effect upon firms.

	General Business Information	Diagnostic Assessment	Personal Business Advisor	Sales and Marketing Advice	Export Advice
Log Age	0.817 (0.495)	0.695 (0.999)	-0.653 (0.795)	0.009 (0.954)	-0.107 (0.783)
Log no. of employees	-0.167 (0.007) ***	0.566 (0.103)***	0.410 (0.660)	0.274 (0.657)	0.987 (0.333) ***
Pre Tax Profitability	-0.0003 (0.0003)	-0.0009 (0.0009)	-0.001 (0.0007) ***	-0.0009 (0.0009)	-0.0001 (0.001)
Rate of growth	0.0007 (0.001)	-0.001 (0.002)	0.007 (0.006)	-0.003 (0.002)	0.00006 (0.002)
Manufacturing/services	-0.216 (0.056) ***	0.8010 (0.726)	1.013 (0.798)	0.776 (0.669)	0.766 (0.709)
Export	-0.617 (0.448)	-0.288 (0.843)	0.355 (0.006) ***	-0.627 (0.210) ***	1.035 (0.751)
Skill	-0.007 (0.005)	0.004 (0.036)	0.012 (0.011)	-0.016 (0.053)	0.012 (0.041)
Novel Product Innovator	-0.0339 (0.0114) ***	-0.377 (0.852)	-1.940 (1.073)	-1.030 (0.803)	-1.112 (0.861)
Incremental Product Innovator	0.479	-0.981 (0.892)	-0.510 (0.889)	-0.249 (0.852)	-0.625 (0.982)
Novel Process Innovator	0.894 (0.259) ***	-0.169 (0.988)	-0.122 (1.102)	2.573 (1.191)	-0.548 (1.525)
Incremental Process Innovator	0.211	-0.468 (0.827)	0.174 (0.752)	-0.328 (0.687)	0.393 (0.692)
N	122	50	48	46	48
Log-likelihood	-136.28	-41.12	-39.08	-51.07	-41.30
Cut 1	-1.665	-3.276	-4.537	-2.692	-0.391
Cut 2	-0.238	-0.934	-2.291	-0.945	2.801
Cut 3	2.571	2.892	1.563	1.693	----

Table 6.16 Multivariate estimates of an ordered logit model of the client assessments of satisfaction of advice, by service provided by BS/SBG in Scotland

	Finance and Accounting Advice	Training/IiP	Product/service design advice	Innovation and technology advice	Education and university links	Grants
Log Age	0.797 (0.987)	-0.634 (0.645)	-12.362 (5.633)	-1.138 (1.099)	**Not**	0.310 (0.634)
Log no. of employees	0.678 (0.109) ***	1.699 (0.619) ***	6.095 (5.194)	1.186 (1.384)	**Estimated**	0.900 (0.595)
Pre Tax Profitability	-0.001 (0.002)	0.0007 (0.0003) *	0.003 (0.002)	0.005 (0.002) **		-0.0006 (0.0004)
Rate of growth	0.003 (0.002)	0.003 (0.002)	-0.024 (0.019)	0.007 (0.004)		0.002 (0.002)
Manufacturing/services	0.396 (1.004)	-0.217 (0.526)	-2.106 (1.929)	0.280 (0.992)		0.074 (0.549)
Export	0.629 (1.235)	-1.119 (0.936)	-6.721 (5.698)	0.130 (0.857)		0.317 (0.548)
Skill	-0.021 (0.069)	-0.003 (0.003)	0.004 (0.005)	-0.121 (0.086)		-0.002 (0.020)
Novel Product Innovator	0.932 (1.292)	0.063 (0.657)	-7.451 (6.687)	0.151 (0.906)		0.498 (0.558)
Incremental Product Innovator	-0.323 (1.109)	-0.231 (0.713)	10.790 (6.696)	1.274 (1.219)		-0.0996 (0.672)
Novel Process Innovator	-0.797 (1.327)	-0.015 (0.776)	5.029 (3.199)	-1.191 (3.166)		0.163 (0.813)
Incremental Process Innovator	0.745 (1.003)	0.548 (0.605)	12.803 (9.044)	0.529 (0.904)		-0.0259 (0.503)
N	29	65	20	37		71
Log-likelihood	-30.75	-64.74	-14.17	-31.82		-79.49
Cut 1	-0.210	-1.299	-14.910	-1.907		-0.836
Cut 2	0.613	-0.139	-13.04	-1.434		0.258
Cut 3	3.208	3.046	-9.697	2.308		2.499
Cut 4	----	----	----	----	----	

Table 6.16 Multivariate estimates of an ordered logit model of the client assessments of satisfaction of advice, by service provided by BS/SBG in Scotland

6.7 Comparisons between Scotland and England

We now compare the regression results of the logit models of the use of external advice from the BS/SBG in Scotland to the results for the BL/SBS in England; and then compare the ordered logit regression models of the impact of external advice from the BS/SBG in Scotland against the results for the BL/SBS in England.

6.7.1 Comparisons between Scotland and England - Use

Table 6.17 reports the logit regression models of the expectation of seeking external business advice, by service provided by BL/SBS. For two of the models there were problems in performing the regression analysis and this applied to finance and accounting advice and to product and service design advice. In the case of the finance and accounting advice model the novel process innovator variable was dropped by the computer software because it was a perfect predictor of the use or non-use of that individual BL/SBS service. In the product and service design model there was a high degree of multicollinearity between the exporting and the novel process innovation variable, and it was necessary to drop the two variables. Clearly the results reported for finance and accounting advice and for product and service design advice need to be treated with some degree of caution. In those two instances the reduced sample size created problems of analysis, but these were the only areas where actual problems were encountered.

Comparing the results of Table 6.17 with the earlier analysis of Scottish firms the main difference is the fewer number of characteristics of the firm in England compared to Scotland which are systematically related to the use of individual

services. In England none of the explanatory variables of general business information use were statistically significant, but in Scotland we found that manufacturing sector firms were more likely than service sector firms, and incremental product innovators more likely than non incremental product innovators to use general business information.

Size of firm was significant at the 1% level in the model of the use of diagnostics assessment in England. In contrast, skill, novel product innovators and incremental product innovators were all statistically significant for the use of diagnostic assessment in Scotland.

There were no statistically significant firm characteristics variables for the use of PBAs in England, but for the same service in Scotland we found that the size of the firm was statistically significant at the 1% level.

The level of skill of the employees was positively related to the use of sales and marketing advice in England, but none of the firm characteristics were significant in Scotland. The level of skill was also positively related to the use of exporting service in England and again the relationship was statistically significant at the 1% level. However, skill was not significant for the Scottish firms. The age and the size of the firm were also significant explanatory variables for the use of the exporting service in England. There was some degree of similarity wit Scotland where size but not age were statistically significant in our model of the use of the exporting service.

In the model of the use of finance and accounting advice for English firms service sector firms and less skilled firms were found to be more likely to use the

service. In contrast in Scotland there were no statistically significant variables for the use of finance and accounting advice.

In both England and in Scotland the larger the firm the more likely the firm to use training and IiP. However, in Scotland there were two other explanatory variables which suggested that non incremental product innovators and novel process innovators were more likely to use training and IiP.

Size of the firm was highly statistically significant in the use of product and service design advice model in Scotland. In contrast there were no statistically significant variables in the case of the English firms, although again the results for England are treated with caution.

Two of the innovation variables – incremental process innovator and novel process innovator were strong explanatory variables to explain the use of innovation and technology advice, in Scotland. Interestingly, for the English firms the innovation variables were not statistically significant, and in contrast to Scotland pre tax profitability was found to have a negative and statistically significant relationship with the use of innovation and technology advice.

In both England and in Scotland we found that manufacturing sector firms were more likely than service sector firms to use education and university links services. In Scotland the size of the firm was also highly statistically significant. But in contrast size of firm was not significant in the English model.

The last of the individual service models which was estimated was grants. Again there were differences, with size of the firm being statistically significant at the 1% level in England, and the rate of growth statistically significant at the 1% in Scotland, for the individual grants service.

	General Business Information	Diagnostic Assessment	Personal Business Advisor	Sales and Marketing Advice	Export Advice
Log Age	0.378 (1.246)	0.901 (0.774)	0.890 (0.672)	0.212 (0.779)	2.204 (1.001) **
Log no. of employees	-0.575 (1.030)	-1.159 (0.079) ***	0.211 (0.595)	-0.158 (0.705)	0.351 (0.081) ***
Pre Tax Profitability	0.001 (0.002)	-0.0002 (0.0005)	0.0002 (0.0003)	-0.0009 (0.0008)	-0.002 (0.001)
Rate of growth	-0.005 (0.004)	0.003 (0.003)	0.004 (0.003)	-0.0006 (0.003)	0.001 (0.004)
Manufacturing/services	0.766 (0.932)	0.765 (0.589)	0.013 (0.537)	-0.591 (0.534)	0.350 (0.771)
Export	0.327 (0.944)	-0.702 (0.617)	-0.292 (0.536)	-0.637 (0.652)	1.458 (0.703) **
Skill	0.058 (0.068)	0.022 (0.029)	-0.018 (0.026)	0.049 (0.005) ***	0.024 (0.006) ***
Novel Product Innovator	0.566 (1.110)	0.333 (0.698)	-0.271 (0.631)	0.652 (0.761)	-0.714 (0.976)
Incremental Product Innovator	0.520 (1.171)	0.279 (0.752)	0.031 (0.664)	1.040 (0.804)	-0.625 (0.955)
Novel Process Innovator	-0.040 (1.378)	-0.386 (0.947)	-0.721 (0.830)	-0.393 (0.947)	-0.739 (0.800)
Incremental Process Innovator	-0.275 (0.984)	0.499 (0.647)	-0.260 (0.556)	-0.104 (0.658)	Dropped
Constant	1.341 (0.276) ***	-1.423 (0.223) ***	-0.914 (0.291) ***	-1.540 (0.332) ***	-3.459 (1.210) ***
N	84	84	84	84	75
Log-likelihood	-24.26	-46.51	-55.16	-43.33	-31.12
Correctly classified (%)	90.48	73.81	57.14	75.00	81.33

Table 6.17 Estimates of a logit model of the expectation of seeking external business advice, by service provided by BL/SBS in England (*** $p > 0.01$; ** $p > 0.05$; * $p > 0.1$).

	Finance and Accounting Advice	Training/IiP	Product/service design advice	Innovation and technology advice	Education and university links	Grants
Log Age	1.633 (1.486)	-0.283 (0.720)	-1.056 (2.389)	-0.734 (1.038)	0.193 (0.917)	-0.022 (0.673)
Log no. of employees	1.580 (1.468)	0.583 (0.104) ***	0.047 (2.003)	-0.271 (0.773)	0.341 (0.883)	0.436 (0.156) ***
Pre Tax Profitability	-0.002 (0.002)	-0.0002 (0.0003)	0.004 (0.004)	-0.003 (0.0001) ***	-0.0004 (0.0004)	0.0004 (0.0006)
Rate of growth	0.011 (0.006)	-0.003 (0.003)	0.023 (0.023)	0.005 (0.003)	-0.001 (0.003)	-0.003 (0.003)
Manufacturing/ services	-3.541 (1.451) **	0.697 (0.604)	-1.865 (1.984)	-1.503 (0.872)	1.496 (0.324) ***	-0.393 (0.542)
Export	-1.555 (1.136)	-0.335 (0.631)	Dropped	0.802 (0.686)	0.319 (0.752)	-0.011 (0.545)
Skill	-0.362 (0.089) ***	0.039 (0.028)	0.023 (0.097)	0.047 (0.039)	0.034 (0.032)	0.014 (0.027)
Novel Product Innovator	-1.479 (1.398)	0.296 (0.720)	-4.605 (2.903)	-0.649 (0.892)	0.762 (1.003)	1.203 (0.963)
Inc Product Innovator	-1.818 (1.377)	0.027 (0.740)	0.707 (2.157)	1.213 (0.996)	1.113 (1.062)	0.871 (0.680)
Novel Process Innovator	Dropped	0.872 (0.863)	Dropped	-1.126 (1.199)	-0.158 (1.305)	1.332 (0.946)
Incremental Process Innovator	2.285 (1.249)	0.119 (0.617)	-2.993 (2.232)	-1.729 (0.874)	-0.056 (0.823)	-0.026 (0.569)
Constant	-1.919 (0.474) ***	-1.933 (0.951) **	-1.054 (2.263)	0.410 (0.111) ***	-4.306 (1.539) ***	-0.257 (0.802)
N	75	84	49	84	84	84
Log-likelihood	-18.87	-46.71	-10.55	-33.11	-30.58	-52.71
Correctly classified (%)	89.33	70.24	89.80	83.33	85.71	65.48

Table 6.17 Estimates of a logit model of the expectation of seeking external business advice, by service provided by BL/SBS in England (*** $p > 0.01$; ** $p > 0.05$; * $p > 0.1$).

The main finding in this section was that there are much fewer characteristics of the firm which are statistically significant in explaining the levels of use in England compared to Scotland. One of the few areas of differences was found to be the innovation variables which were found to be stronger explanatory variables to explain the use of innovation and technology advice in Scotland, compared to England. But, the general lack of systematic differences does mean that it would be much harder to extrapolate and predict future business advice needs for firms in England than in Scotland.

6.7.2 Comparisons with England impact

For six of the BL/SBS individual services there were sufficient observations to perform the mulitivariate assessment of clients' satisfaction with individual services. However, for finance and accounting advice, training and IiP, product and service design advice, innovation and technology advice and education and university links there were not sufficient observations and the low degrees of freedom resulted in extremely low log-likelihood values and unreliable estimates. Thus those results are not reported. Re-estimating the models of services with a greatly reduced number of explanatory variables was an option but was ruled out for two reasons; firstly, it removed direct comparability with the other services in England and in Scotland; secondly, the results could have been attacked as data mining and/or it focussed attention upon a small number of services rather than the overall picture; and thirdly, the number of observations was sufficiently small for these services that even when explanatory variables – most notably pre tax profitability and employment growth were dropped from the model the log-

likelihood values were still worrying low and the standard errors were very questionable. Thus for these reasons only the results which were robust are reported.

Notwithstanding the estimation difficulties we are able to draw some important findings. Firstly and most importantly, in a multivariate analysis context there were very few statistically significant explanatory variables. Secondly, where there were statistically significant relationships there were no consistent patterns emerging. Employment growth was positively related with satisfaction with general business information. Novel product innovators were less likely to be satisfied with diagnostic assessment than non novel product innovators. The size of the firm as captured by the number of employees was negatively related to satisfaction with sales and marketing advice. Lastly, export advice was also negatively related to the clients' satisfaction with advice from the individual service of grants.

Comparing the multivariate results for Scotland which are shown in Table 6.15 with the results for England which are presented in Table 6.18 it is clear that there are more statistically significant relationships in Scotland than in England. In particular the size of the firm was found to be an important variable to explain differences in users' satisfaction scores in Scotland for general business information, diagnostic assessment, export advice, finance and accounting advice, and training and IiP.

Thus in this section we have compared the impact of advice in Scotland and England. Lack of observations prevented the running of some models in England. Despite the problems the main result is that there were more statistically significant relationships in Scotland than in England.

	General Business Information	Diagnostic Assessment	Personal Business Advisor	Sales and Marketing Advice	Export Advice
Log Age	-0.342 (0.658)	1.196 (1.777)	-1.466 (1.074)	-3.334 (2.089)	-1.0008 (1.555)
Log no. of employees	0.329 (0.569)	1.438 (1.652)	1.455 (0.996)	-0.376 (1.672)	1.098 (1.666)
Pre Tax Profitability	-0.00009 (0.0002)	0.003 (0.003)	0.0008 (0.0005)	0.003 (0.004)	0.0002 (0.0005)
Rate of growth	0.006 (0.002) **	0.012 (0.080)	0.0006 (0.004)	0.023 (0.200)	-0.0009 (0.005)
Manufacturing/services	-0.549 (0.518)	-2.669 (2.033)	2.723 (0.807)	-3.311 (2.876)	-0.413 (1.125)
Export	0.184 (0.562)	-1.371 (1.865)	0.807 (0.929)	1.209 (1.364)	-0.650 (1.152)
Skill	0.001 (0.024)	-0.085 (0.073)	-0.043 (0.043)	-0.009 (0.075)	-0.020 (0.052)
Novel Product Innovator	-0.018 (0.640)	-5.018 (2.412) **	-1.075 (1.178)	-0.264 (1.554)	0.738 (1.270)
Incremental Product Innovator	0.664 (0.694)	-1.360 (2.258)	-0.634 (1.346)	-1.922 (1.702)	1.064 (1.480)
Novel Process Innovator	-0.048 (0.845)	-1.048 (2.136)	3.018 (2.382)	-2.329 (2.036)	-1.321 (1.243)
Incremental Process Innovator	-0.455 (0.565)	3.209 (1.931)	0.205 (1.032)	1.900 (1.555)	-2.128 (1.151)
N	76	25	43	25	31
Log-likelihood	-79.15	-13.67	-31.699	-13.924	-19.05
Cut 1	-2.394	-3.239	-4.479	-7.850	-4.782
Cut 2	-1.089	2.614	-2.390	-2.276	0.358
Cut 3	2.078	----	2.107	----	

Table 6.18: Multivariate estimates of an ordered logit model of the client assessments of satisfaction of advice, by service provided by BL/SBS in England

	Grants
Log Age	0.175 (0.922)
Log no. of employees	1.981 (1.578)
Pre Tax Profitability	-0.004 (0.002)
Rate of growth	-0.005 (0.004)
Manufacturing/ services	-0.060 (0.732)
Export	-1.509 (0.733) **
Skill	-0.018 (0.031)
Novel Product Innovator	1.200 (0.846)
Incremental Product Innovator	0.509 (0.876)
Novel Process Innovator	0.683 (0.843)
Incremental Process Innovator	0.169 (0.723)
Constant	-0.496
N	0.875
Log-likelihood	3.556
Correctly classified (%)	

Table 6.18 Multivariate estimates of an ordered logit model of the client assessments of satisfaction of advice, by service provided by BL/SBS in England. Finance and accounting advice, training/IiP, product and service design advice, innovation and technology advice, and education and university links were not estimated due to small sample size.

The fewer statistically significant differences implies that quality variation is attributable to the nature of the provider of the business advice services. Thus for England more so than in Scotland the variation in quality can be explained by the quality and the nature of the advice provider.

6.8 Conclusion

This chapter has provided an up-to-date picture of the use of BS/BL and other private and government-backed business advice in Scotland and in northern England, and a clear indication of the challenges facing the SBG/SBS.

A major part of the chapter has assessed the levels of use and satisfaction with BL/BS and their replacements SBS/SBG. The analysis confirms that BL/SBS is consolidating its position to become the most widely used government-backed source, with 40.7% use. The BS/SBG, although having a lower overall level of use at 27.4% compared to 33.3% for local LECs or Scottish Enterprise, and 33.5% for Local Enterprise Agencies and Trusts appears also to be making progress in its level of use.

The use of BS/SBG was found to be highest for general business information (82.1%), grants (46.4%), and training and IiP (38.0%), with secondary importance to a range of specialist advisors. The services with the lowest levels of use were education and university links (12.9%) and product and service design advice (12.2%).

The three most used BL/SBS services were general business information (87.9%), grants (52.3%), and PBAs (50.8%). Analysis of the relationships between the use of BS/SBG and BL/SBS services with the characteristics of the firm showed

that the size of the firm was the most important explanatory factor. This relationship was stronger for firms in Scotland than for firms in England

With regard to the number of fields of advice the main important finding was the mixed role of the PBA in the SME community. The use of PBAs in England was greatest amongst the heavy users of services – rather than in the narrow users of BL/SBS. This suggests that SBS managers need to re-assess the deployment of PBAs in the SME community.

The analysis of BS/SBG users and non-users shows that there are substantial differences between these two groups of firms and their use of private and other government-backed sources of external advice. However, interestingly the analysis of variance found that firm characteristics were generally not statistically significant in explaining the differences between the BS/SBG users and non-users.

The next problem facing the SBG managers, despite some very positive findings in the chapter for improved general performance of SBG, is the need to improve the consistency and reduce the quality variation across the system. Whilst 75.3% satisfied or very satisfied is credible, the very dissatisfied are still 9.5% and exceed 10% for general business information, finance and accounting advice, training and IiP, product and service design advice, innovation and technology advice, education and university links, and grants.

The inconsistency was worst for finance and accounting advice, and education and university links where 22% and 16.2% of users were very dissatisfied. But, over 10% very dissatisfied is not very good when the services in question are general business information, training and IiP, and grants, which are also three of the most popular services.

An important finding is the relatively higher satisfaction levels achieved by BL/SBS compared to BS/SBG. Overall 81.8% of the users of BL/SBS were satisfied or very satisfied, compared to 75.3% in the BS/SBG. However, the BL/SBS has in common with the BS/SBG that they cannot become complacent. 6.8% very dissatisfied customers represents a quality variation in the provision of services. Moreover, there were no very dissatisfied users of diagnostic assessment and education and university links in England. This suggests that they can provide an excellent service. This notwithstanding there were over 10% very dissatisfied for general business information (10.3%), innovation and technology advice (11.5%) and finance and accounting advice (12.5%), and worryingly general business information is the most used BL/SBS service.

Analysis of the crosstabulations and the ordered logit regression models found very few statistically significant relationship between the users' satisfaction scores and the characteristics of their firms. This suggests that the quality of BL/SBS services is a generic issue rather than varying between specific types of clients.

Interestingly in Scotland the crosstabulations and the ordered logit regression models showed substantially more statistically significant relationships between the characteristics of firms and the users' impact scores than was found in England for the BL/SBS. In particular, the size of firms was found to be important for five sources: finance and accounting advice, training and IiP, general business information, diagnostic assessment and export advice. This suggests that remedial measures by BS/SBG managers could be more complex in Scotland than in England, combining some generic issues with specific types of clients, particularly related to firm size.

Chapter 7

The Extent of Use and Level of Impact of Central Government Support Schemes

7.1 Introduction

A key aspect of Heseltine's BL approach was to decentralize delivery to local partnerships which were to combine the resources to the local agents that dealt with SMEs, preferably leading to co-location or even merger. A second key aspect of BL was to provide an intensive core service, with general and specialist advisors developing a portfolio of companies with which they stayed in regular contract. The main element of this approach was personal business advisors, or account managers. A third key element was a targeting of support on established SMEs of 10-200 employees 'with growth potential' (DTI, 1992), although in practice most BLs have allowed a relatively flexible targeting (PRIEST, 1999).

The new SBG/SBS has largely abandoned specific targeting, opening up a major emphasis on start-ups and seeking to act as a support accessible to all SMEs (DTI, 1999). The emphasis on PBAs is also being down-played. BL itself will become part of the SBS by being contracted to it, but in smaller number of areas, with no specialist provision either for local satellite outlets or a particular partnership structure. Each local area has been managed by a franchisee, which may be a partnership of local agencies, but has in practice been more likely to be a single body such as a chamber of commerce or a consortium of enterprise agencies.

The SBS has, therefore, shifted the pendulum back from the decentralized local management by partners that developed with BL towards a more uniform

national government SME support service with many local agencies playing a role chiefly as specialists for referral.

7.2 Levels of use of central government SME support schemes

Table 7.1 shows the level of use of the central government SME support schemes outlined in the previous section. It is clear that the level of use is very low for all schemes, with only two of the nine support schemes recording a level of use in excess of 10%. For five of the services the level of use is below 5%. And, the assessment of the use of any of the support schemes records a level of 37.0%. Whilst there are schemes where the eligibility criteria can preclude access for some firms, when attempts are made to control for eligibility the results remain unaffected. This is in large part explained by the fact that the sample is already stratified to focus upon SMEs in the eligibility categories.

The assessment of Table 7.1 shows that IiP is the most used of the central government SME support schemes with a level of use of one in five respondents. This is followed by Regional Selective Assistance and Regional Enterprise Grants with 14.3%. The Small Firm Loan Guarantee (8.5%) and the Teaching Company Scheme (7%) are the third and the fourth most used schemes. Export Credit Guarantees and Export Information Services (4.1%) and SMART or SPUR (3.7%) appear fifth and sixth, respectively in rank order. The LINK scheme with a level of use of 2.2% is approximately one half of the level recorded by SMART or SPUR, and is ranked number seven in order of use. The eighth and the ninth most used schemes are Regional Supply Network (1.5%) and the Skills for Small Businesses (1.3%).

Table 7.1 shows how the levels of use of the central government SME support schemes are influenced by firm sector, size and growth record. More manufacturing sector firms use all of the schemes than service sector firms with the exception of Skills for Small Businesses. Of the services are statistically significant: IiP, the teaching company scheme, and Regional Selective Assistance/Regional Enterprise Grants. For the later two schemes more than twice as many manufacturing sector firms than service sector firms use the schemes.

The size of the firm has statistically significant differences upon the levels of use for all schemes, with the exception of Skills for Small Business. More specifically there is a positive, statistically significant relationship between firm size and the levels of use of the central government SME support schemes. This suggests that there may be an absorptive capacity issue with larger sized firms better able to absorb and make use of business advice than smaller sized firms. The issue and the policy consequences are developed in the last chapter. This relationship is most noticeable for IiP where the level of use increases from 8.0% of micro firms to 26.0% of small firms to 50% of medium and larger sized firms. Also, in relative terms the use of the LINK scheme increases substantially with firm size. The use of the LINK scheme increases from 0.3% of micro firms to 2.9% of small firms, to 9.3% of medium and larger sized firms.

Analysis of the employment growth performance of the firms shows that for all schemes, except Skills for Small Businesses, Regional Supply Network, and Export Credit Guarantees and Export Information Services, stable firms with zero employment growth are less likely than declining or growing firms to use central government SME support schemes.

Government Business Support Schemes	All	Manufact-uring	Services	Micro	Small	Medium/ Larger	Declining	Stable	Medium Growth	Fast Growth
Teaching Company Scheme	7.0	10.8***	4.2***	0.9***	12.2***	9.3***	9.7	4.4	8.5	6.5
Investors in People	19.6	23.8**	16.6**	8.0***	26.0***	50.0***	22.3**	12.5**	26.6**	17.4**
Skills for Small Businesses	1.3	0.9	1.5	1.7	1.0	0	0.0	1.3	2.1	2.6
LINK	2.2	2.7	1.8	0.3***	2.9***	9.3***	2.0	0.6	1.1	2.6
Regional Supply Network	1.5	2.1	1.1	0.3***	2.1***	5.6***	1.5	1.9	1.1	2.6
Export Credit Guarantees/ Export Information Services	4.1	5.4*	3.1*	2.0**	5.7**	5.6**	2.9	3.1	6.4	5.2
Small Firms Loan Guarantee Scheme	8.5	9.0	8.1	6.8	9.6	11.1	10.7	5.0	8.5	7.7
Regional Selective Assistance/ Regional Enterprise Grants	14.3	21.7***	9.0***	4.8***	21.6***	24.1***	14.1***	5.6***	20.2***	15.5***
SMART or SPUR	3.7	4.5	3.1	0.9***	5.7***	7.5***	3.4	1.9	2.1	5.8
Used Any Scheme	37.0	46.8***	29.9***	17.8***	50.7***	64.8***	40.5***	20.3***	51.1***	38.1***
All	789	332	457	351	384	54	206	160	94	155

Table 7.1: Financial Assistance or Advice from Government Business Support Schemes in Scotland (Percentage of respondents reporting use) (*** p>0.01; ** p>0.05 * p>0.10) Using Mann Whitney test for two group comparisons and Kruskal-Wallis test for multi-group comparisons.

Government Business Support Schemes	**Exporter**	**Non-Exporter**	**Young**	**Old**	**Not IncProc**	**IncProc Innov**	**Not NovProc**	**NovProc**	**Not IncProd**	**Inc Prod**	**Not NovProd**	**NovProd**
Teaching Company Scheme	12.8***	5.0***	5.2*	8.6*	6.3	8.3	6.6	9.3	7.5	5.9	5.9*	9.4*
Investors in People	26.5***	17.2***	16.2**	22.9**	18.7	22.1	17.6***	33.3***	20.3	19.0	17.1***	25.7***
Skills for Small Businesses	1.4	1.0	1.6	1.0	1.2	1.6	1.3	1.9	0.9	2.5	1.4	1.2
LINK	4.1	1.6	1.3	3.0	2.4	1.6	1.7*	4.6*	2.2	2.0	1.0***	4.5***
Regional Supply Network	3.2***	1.0***	1.0	2.0	2.0	0.8	0.9	5.6	1.6	1.5	1.0*	2.9*
Export Credit Guarantees/ Export Information Services	6.8***	3.0***	4.7	3.4	4.1	4.3	4.2	3.7	4.6	2.9	3.5	5.3
Small Firms Loan Guarantee Scheme	13.7***	5.8***	9.9	7.1	9.6	7.5	8.3	12.0	7.7*	11.7*	8.1	10.2
Regional Selective Assistance/ Regional Enterprise Grants	21.9***	11.8***	14.1	14.5	14.6	13.8	13.5	19.4	15.1	12.7	12.0***	19.6***
SMART or SPUR	6.4**	2.6**	2.4*	4.9*	3.7	4.3	3.9	3.7	4.2	2.9	2.0***	7.8***
Used Any Scheme	53.4***	31.1***	32.5**	41.2**	36.1	40.5	35.6***	49.1***	37.2	39.2	33.3***	46.9***
All	219	500	382	407	492	253	637	108	548	205	508	245

Table 7.1: Financial Assistance or Advice from Government Business Support Schemes in Scotland (Percentage of respondents reporting use) (*** p>0.01; ** p>0.05 * p>0.10) Using Mann Whitney test for two group comparisons and Kruskal-Wallis test for multi-group comparisons.

Exporting firms are more likely than non-exporting sector firms to use the central government SME support schemes. Indeed all of the schemes show statistically significant differences in the levels of use between exporting and non-exporting sector firms.

With regard to age, younger firms tend to use less central government SME support; and this is statistically significant for IiP, LINK, and SMART or SPUR. Younger firms record higher levels of use than older firms for Skills for Small Businesses, Export Credit Guarantees and Export Information Services, and Small Firms Loan Guarantee Schemes.

7.3 Satisfaction with central government support schemes

Table 7.2 and Figure 7.1 present users' satisfaction with the government support schemes. Users were required to evaluate the schemes which they had used on a four point scale: 1, very dissatisfied; 2, dissatisfied; 3, satisfied; and 4, very satisfied.

The SMART or SPUR schemes have the greatest number of very dissatisfied users at 28.1%. This is a very high percentage. In contrast LINK and Regional Supply Network record zero very dissatisfied users. This notwithstanding the SMART or SPUR schemes also have by far the highest percentage of very satisfied users at 56.3%. Thus more than one half of the SMART or SPUR scheme users are very satisfied. This high percentage of very satisfied and very dissatisfied users may in part reflect the high risk nature of the outputs from the SMART or SPUR schemes, with the outputs reflecting innovation failures and successes.

Government Business Support Schemes	Mean	Very Dissatisfied	Dissatisfied	Satisfied	Very Satisfied	N
Teaching Company Scheme	3.07	12.3	0.0	56.1	31.6	57
Investors in People	3.02	9.0	7.1	56.8	27.1	155
Skills for Small Businesses	1.17	8.3	66.7	25.0	0.0	12
LINK	3.13	0.0	0.0	87.5	12.5	16
Regional Supply Network	2.82	0	18.2	81.8	0	11
Export Credit Guarantees and Export Information Services	2.80	13.3	0	80.0	6.7	30
Small Firms Loan Guarantee Scheme	2.92	15.4	13.8	33.8	36.9	65
Regional Selective Assistance and Regional Enterprise Grants	3.01	11.2	2.8	59.8	26.2	107
SMART or SPUR	3.00	28.1	0.0	15.6	56.3	32
All	2.95	11.7	6.8	53.8	27.6	485

Table 7.2: Clients' Satisfaction with Government Business Support Schemes in Scotland (Percentage of respondents who are satisfied or very satisfied)

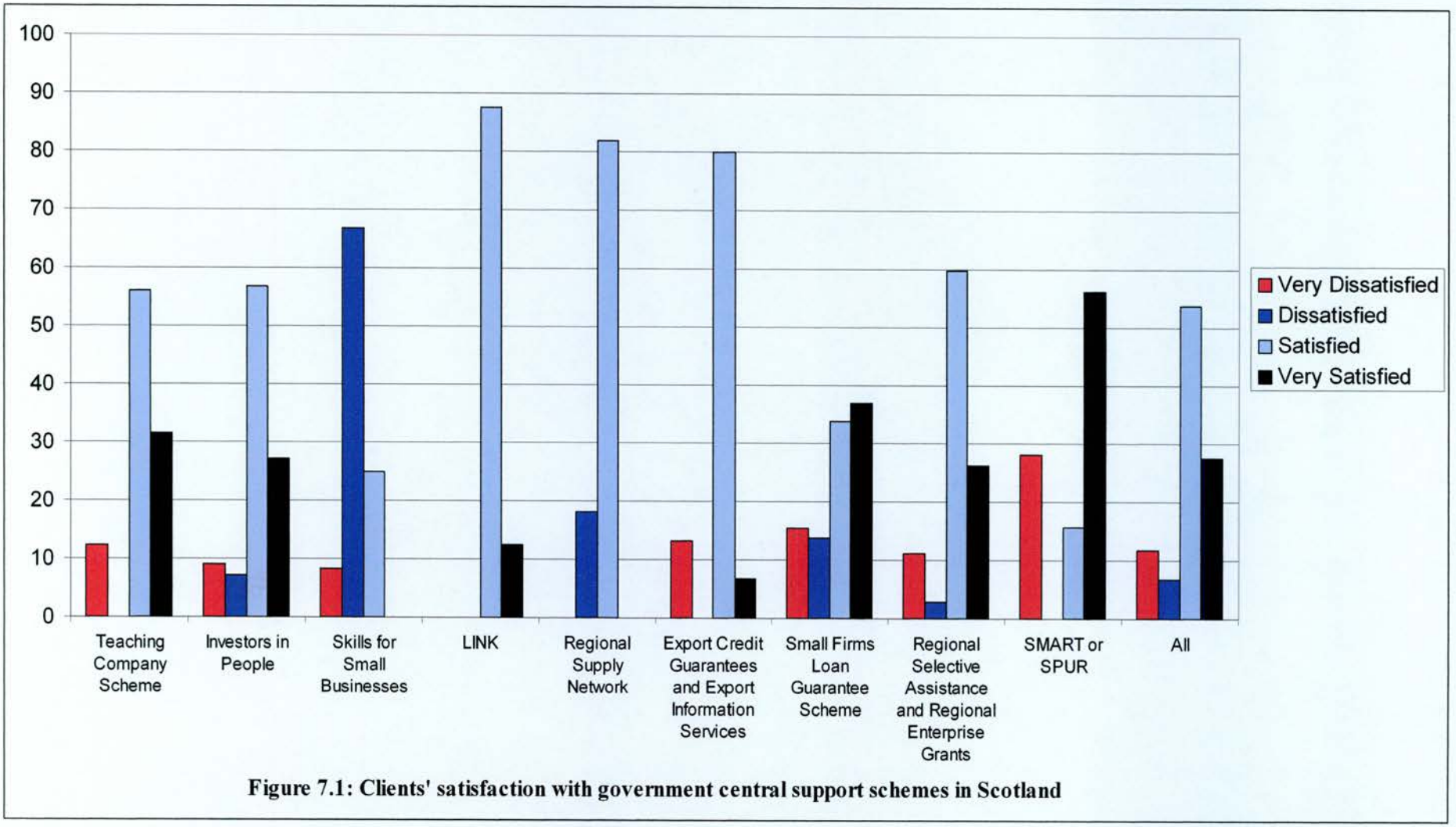


Figure 7.1: Clients' satisfaction with government central support schemes in Scotland

In Table 7.3 satisfaction percentages are reported for the very satisfied and satisfied categories combined. The satisfaction levels range from 25.0% to 100% with a mean of 81.4% for all central government SME support schemes. Skills for Small Businesses with 25% satisfied users is by a huge margin the weakest of all the central government support schemes.

70.8% of the users of the Small Firms Loan Guarantee Schemes and 71.9% of the users of SMART or SPUR are satisfied. Thus, only 3 of the schemes fail to meet the DTI target of 80% satisfied users. And in the case of Regional Selective Assistance and Regional Enterprise Grants (86%), Export Credit Guarantees and Export Information Services (86.7%) and the Teaching Company Scheme (87.7%) the satisfaction is closer to a level of 90%.

Table 7.3 also tests to see if the users' assessment satisfaction scores are systematically related to the characteristics of the firms. Incremental process innovators were less likely than firms without that characteristic to use the teaching company scheme. 71.4% of novel process innovators were satisfied or very satisfied with regional selective assistance and this was less than the 90% corresponding value for non novel process innovators. 33.3% of novel process innovators were either satisfied or very satisfied with the SMART or SPUR scheme and again this was substantially less than the 80.8% recorded by non novel process innovators. In the case of the incremental product innovation variable this was statistically significant at the 10% level for only one service, IiP. 74.4% of incremental product innovators were either satisfied or very satisfied with IiP which was less than the 87.3% recorded by non incremental product innovators. Growth record, employment growth, sector, exporting, and age showed no statistically significant relationship

with the users' assessment of satisfaction with the central government support schemes. The size of the firm was found to be the highly statistically significant, at the 1% level for skills for small business, and the export credit guarantees or the export information services, and was statistically significant at the 5% level for regional selective assistance and regional enterprise grants. In each of these three sets of statistically significant services, the satisfaction scores systematically increased with the size of the firm.

7.4 Comparisons between Scotland and England

We now turn our attention to the use of central government support schemes in England and compare the results with the Scottish firms, before examining the users' assessment of the schemes.

7.4.1 Comparisons between Scotland and England – Levels of use

Table 7.4 shows the levels of use of the central government support schemes in England. Overall 48.5% or approaching one half of the users in England had used one or more of the central government support schemes and this was substantially higher than the 37.0% which was found for Scotland.

Regional selective assistance and regional enterprise grants were used by approximately a quarter of the firms in England and this was the most used scheme in England. The level of use of regional selective assistance was 10% higher in England than in Scotland.

IiP was used by 20.4% of English firms and was ranked second in order of use; and the level of use was very comparable to the 19.6% found for IiP in Scotland.

Government Business Support Schemes	No. of firms	All	Manufact-uring	Services	Micro	Small	Medium/ Larger	Declining	Stable	Medium Growth	Fast Growth
Teaching Company Scheme	87.7	57	85.0	89.2	100	87.2	80.0	100	100	62.5	81.8
Investors in People	83.9	155	83.1	84.6	73.3	87.9	80.8	80	94..7	84.0	92.9
Skills for Small Businesses	25.0	12	25.0	25.0	0.0***	75.0***	NA***	NA	50	0	20
LINK	100.0	16	100	100	NA	100	100	100	NA	100	100
Regional Supply Network	81.8	11	71.4	100	NA	75.0	100	66.7	100	0	100
Export Credit Guarantees/ Export Information Services	86.7	30	93.3	80.0	55.6***	100***	100***	83.3	60	100	100
Small Firms Loan Guarantee Scheme	70.8	65	65.5	75.0	73.9	66.7	83.3	81.8	71.4	62.5	83.3
Regional Selective Assistance/ Regional Enterprise Grants	86.0	107	88.2	82.1	62.5**	89.7**	92.3**	77.8	87.5	83.3	100
SMART or SPUR	71.9	32	66.7	78.6	100	76.0	40.0	71.4	50	25	88.9

Table 7.3: Clients' Satisfaction with Services in Scotland (Percentage of respondents who are satisfied or very satisfied) (*** p >0.01; ** p>0.05; * p>0.1; tested as in Table 1).

Government Business Support Schemes	**Exporter**	**Non-Exporter**	**Young**	**Old**	**Not IncProc**	**IncProc Innovator**	**Not NovProc**	**NovProc**	**Not IncProd**	**IncProd**	**Not NovProd**	**Nov Prod**
Teaching Company Scheme	85.7	88.9	85.0	89.2	93.8*	76.2*	88.4	80.0	90.5	75.0	83.3	91.7
Investors in People	85.7	83.0	85.2	83.0	87.0	78.2	81.1	91.7	87.3*	74.4	84.9	82.5
Skills for Small Businesses	33.3	14.3	33.3	16.7	28.6	25.0	22.2	50.0	50.0	0	14.3	50.0
LINK	100	100	100	100	100	100	100	100	100	100	100	100
Regional Supply Network	83.3	80.0	33.3	100	80.0	100	80.0	83.3	88.9	50.0	75.0	85.7
Export Credit Guarantees/ Export Information Services	91.7	87.5	82.4	92.3	84.2	88.9	84.6	100	88.0	66.7	80.0	92.3
Small Firms Loan Guarantee Scheme	72.4	69.0	63.9	79.3	66.7	78.9	72.5	61.5	69.0	72.7	74.4	64.0
Regional Selective Assistance/ Regional Enterprise Grants	87	85.7	84.3	87.5	85.3	87.9	90.0**	71.4**	87.5	82.6	85.7	87.2
SMART or SPUR	73.3	66.7	80.0	68.2	70.0	75.0	80.8*	33.3*	76.0	57.1	63.6	76.2

Table 7.3 Clients' Satisfaction with Services in Scotland (Percentage of respondents who are satisfied or very satisfied) (*** p >0.01; ** p>0.05; * p>0.1; tested as in Table 1).

Government Business Support Schemes	All	Manufacturing	Services	Micro	Small	Medium/ Larger	Declining	Stable	Medium Growth	Fast Growth
Teaching Company Scheme	8.3	6.8	9.5	2.6**	11.4**	6.7**	13.7	5.4	3.1	11.1
Investors in People	20.4	14.5**	25.0**	9.1***	21.5***	43.3***	27.4	16.2	15.6	22.2
Skills for Small Businesses	2.3	1.7	2.7	2.6	1.3	6.7	0.0	2.7	3.1	2.8
LINK	6.4	4.3	8.1	5.2	5.7	13.3	5.5	2.7	12.5	5.6
Regional Supply Network	6.8	3.4*	9.5*	2.6	8.9	6.7	5.5	5.4	6.3	6.9
Export Credit Guarantees/ Export Information Services	6.8	5.1	8.1	5.2	8.2	3.3	6.8	5.4	3.1	6.9
Small Firms Loan Guarantee Scheme	10.5	8.5	12.1	11.7	9.5	12.9	8.1	10.8	12.5	11.1
Regional Selective Assistance/ Regional Enterprise Grants	24.4	16.2***	30.9***	10.4***	29.1***	35.5***	27.0	16.2	31.3	23.6
SMART or SPUR	8.7	6.0	10.8	3.9	11.4	6.7	9.6	5.4	15.6	9.7
Used Any Scheme	48.5	58.4***	35.7***	22.1***	57.1***	71.0***	53.4	35.1	59.4	47.9
All	264	149	115	77	158	30	73	37	32	72

Table 7.4 Financial Assistance or Advice from Government Business Support Schemes in England (Percentage of respondents reporting use) (*** p>0.01; ** p>0.05 * p>0.10) Using Mann Whitney test for two group comparisons and Kruskal-Wallis test for multi-group comparisons.

Government Business Support Schemes	**Exporter**	**Non-Exporter**	**Young**	**Old**	**Not IncProc**	**IncProc Innov**	**Not NovProc**	**Nov Proc**	**Not IncProd**	**IncProd**	**Not NovProd**	**Nov Prod**
Teaching Company Scheme	16.2**	5.9**	7.3	9.2	7.3	10.1	7.8	12.1	7.7	10.0	7.1	9.6
Investors in People	27	18.8	21.0	19.9	19.2	24.2	21.7	18.2	20.5	21.7	19.9	21.9
Skills for Small Businesses	4.1	1.8	1.6	2.9	2.7	1.0	1.4*	6.3*	2.6	0.0	0.7	3.5
LINK	8.1	6.5	7.3	5.7	7.3	4.0	6.5	3.0	6.7	3.3	4.3	7.9
Regional Supply Network	8.1	7.1	4.8	8.5	7.3	4.0	5.5	9.1	7.2	3.3	4.3	8.8
Export Credit Guarantees/ Export Information Services	8.1	6.5	5.6	7.8	7.3	6.1	7.8*	0.0*	7.2	5.0	5.7	7.9
Small Firms Loan Guarantee Scheme	10.7	10.6	12.9	8.5	10.5	11.1	11.0	9.1	10.3	11.5	9.2	12.3
Regional Selective Assistance/ Regional Enterprise Grants	34.7**	21.8**	21.8	26.8	22.4	26.3	22.0*	36.4*	20.5**	34.4**	22.5	25.4
SMART or SPUR	16.2**	6.5**	6.5	10.6	7.9	10.1	8.3	12.1	9.7	5.0	4.3***	14.0***
Used Any Scheme	62.7	45.2	44.4	52.1	46.4	53.1	47.9	56.3	45.9	56.7	44.7	53.1
All	74	170	124	140	152	99	217	33	195	60	141	114

Table 7.4 Financial Assistance or Advice from Government Business Support Schemes in England (Percentage of respondents reporting use) (*** p>0.01; ** p>0.05 * p>0.10) Using Mann Whitney test for two group comparisons and Kruskal-Wallis test for multi-group comparisons.

Thereafter the levels of use drop substantially in England, and the small firms loan guarantee scheme is ranked third with a level of use of 10.5%.

The remainder of the central government support schemes in England have levels of use below 10% and were in rank order as follows, SMART or SPUR (8.7%), teaching company scheme (8.3%), regional supply network (6.8%), export credit guarantees (6.8%), LINK (6.4%), and skills for small business (2.3%). The lowest level of use in England is 2.3% for skills for small business which was higher than the 1.3% recorded in Scotland, and it was also higher than the 1.5% level of use for regional supply network.

In Table 7.4 the levels of use was tested to see if they were systematically related to the characteristics of the firms. The most striking finding is that there were much fewer statistically significant relationships in comparison to our earlier analysis of Scottish firms. Employment growth showed no statistically significant relationships with the levels of use of the central government support schemes. In contrast in Scotland we found that growth was statistically related to IiP, regional selective assistance and regional enterprise grants, and to used any scheme.

Size of firm was statistically significant at the 5% level with the use of the teaching company scheme. The use of the teaching scheme appeared to show an inverse u shaped relationship with firm size, increasing from 2.6% of micro firms to 11.4% of small firms and then declining to 6.7% of medium and larger sized firms. Alternatively, the results may be explained by a change in focus of the TCSs to SME firms, and also the re-branding of the TCS as Knowledge Transfer Partnership. The use of IiP and regional selective assistance and used any scheme were all highly statistically significant at the 1% level with the size of the firms. In contrast we

recall that the size of the firm was the strongest explanatory variable and showed positive relationships with the levels of use of all schemes with the exception of skills for small businesses.

Exporting firms were more likely than non exporting firms to have used the teaching company scheme, regional selective assistance and regional enterprise grants, and SMART or SPUR. For these three schemes exporting firms levels of use were approximately 10% higher than the levels of use reported for non exporting firms. When we compare the results with Scotland which are shown in Table 7.1 again it needs to be noted that in Scotland exporting firms were more likely than non exporting firms to have used all of the central government support services, with the exceptions of skills for small business and the LINK scheme. For these two services the tests of statistical significance were just outside the 10% level.

Age is not statistically significantly for any of the services provided in England. Again this contrasts with the Scottish firms where older firms were more likely to have used the teaching company scheme, IiP, SMART or SPUR, and used any scheme.

Looking at the four innovation variables for England there are very few statistically significant relationships with the levels of use of the central government support services. 14.0% of novel product innovators used SMART or SPUR which was substantially higher than the 4.3% level of use for non novel product innovators. This was the only instance where novel product innovation was statistically significant. In contrast in Table 7.1 it was apparent that novel product innovation was statistically related to the use of 5 services and to used any services; and these schemes were teaching company scheme, IiP, LINK, regional supply network,

regional selective assistance and regional enterprise grants, SMART or SPUR, and used any scheme.

34.4% of incremental product innovators used regional selective assistance and regional enterprise grants which was higher than the 20.5% level of use for non incremental product innovators. This relationship was statistically significant at the 5% level. For the Scottish firms the incremental product innovation variable was also found to not be an important explanatory variable and was statistically significant at the 10% level for the use of small firms loan guarantee scheme.

There are three statistically significant relationships between the novel process innovation variable in England and three of the central government support schemes, and these were skills for small business, export credit guarantees and export information services, and regional selective assistance and regional enterprise grants. There were also three statistically significant relationships in Scotland but they were for different central government support schemes than in England. In Scotland novel process innovation was statistically related to the use of IiP, LINK, and used any scheme.

7.4.2 Comparisons between Scotland and England - Satisfaction

Table 7.5 shows the mean scores for the satisfaction of the users of central government support schemes. Overall the users' assessment is higher at 3.03 in England, compared to the 2.95 recorded for Scotland, but the result is not statistically significant. Whilst the number of observations in England is approximately a half of the number of observations in Scotland it is only the skills for small businesses which had a very small number of users' satisfaction score assessments.

The small firms loan guarantee scheme has the highest mean score of 3.42 which is well above satisfied. This very good assessment score is explained by 58.3% of users being very satisfied which was the highest percentage for any service in England or in Scotland. There were also only 8.35 very dissatisfied and 0% dissatisfied with the small firms loan guarantee scheme.

The teaching company scheme had the second highest mean assessment score in England with 3.14 which was higher than the 3.07 for Scotland. Regional selective assistance and regional enterprise grants (3.07) and IiP (3.04) also reported mean scores above satisfied in England; and in Scotland the assessment scores for both schemes were lower at 2.82 and 3.02, respectively.

Skills for small businesses was the scheme with the lowest users' assessment scores, with a mean of 2.25 in England. This was also the worst performing central government advice scheme in Scotland, where the mean was 1.17.

Whilst the number of observations is low for both England and Scotland there is no reason to doubt the validity of the users' responses. We have used a very large scale survey to identify users of central government support schemes and to indicate their satisfaction with the various schemes.

The results are important because the firms have also generally used other sources of external advice, and we are not just dealing with a group of users of central government support schemes identified by the management of the schemes.

SMART or SPUR did perform worse in England than in Scotland. Specifically the mean scores in England in Scotland for SMART or SPUR were 2.82 and 3.00, respectively. The main reason for the result was the higher number of very satisfied users, 56.3%, in Scotland compared to the 34.8% in England.

Government Business Support Schemes	Mean	Very Dissatisfied	Dissatisfied	Satisfied	Very Satisfied	N
Teaching Company Scheme	3.14	9.1	0.0	59.1	31.8	22
Investors in People	3.04	7.5	9.4	54.7	28.3	53
Skills for Small Businesses	2.25	25	25	50	0	4
LINK	2.94	0.0	12.5	81.3	6.3	16
Regional Supply Network	2.80	0.0	20.0	80.0	0	15
Export Credit Guarantees/ Export Information Services	2.93	7.1	0.0	85.7	7.1	14
Small Firms Loan Guarantee Scheme	3.42	8.3	0.0	33.3	58.3	24
Regional Selective Assistance/ Regional Enterprise Grants	3.07	6.9	5.2	60.3	27.6	58
SMART or SPUR	2.82	26.1	0.0	39.1	34.8	23
All	3.03	8.7	6.1	58.1	27.1	229

Table 7.5: Clients' Satisfaction with Government Business Support Schemes in England (Percentage of respondents who are satisfied or very satisfied) (*** p>0.01; ** p>0.05 * p>0.10) Using Mann Whitney test for two group comparisons and Kruskal-Wallis test for multigroup comparisons.

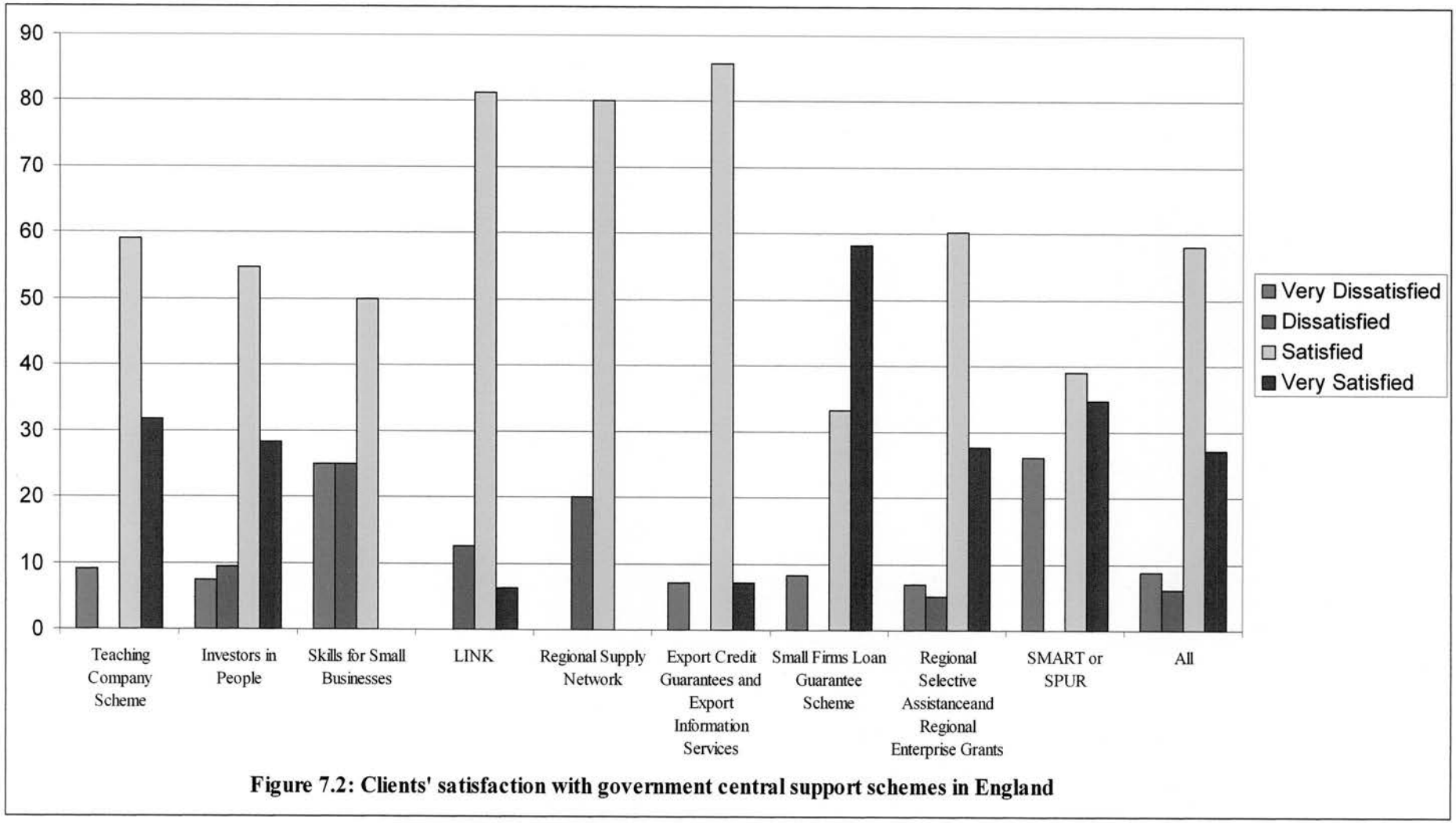


Figure 7.2: Clients' satisfaction with government central support schemes in England

Table 7.6 shows the percentage of firms who were either satisfied or very satisfied with the central government services in England. Overall 85.3% of clients were either satisfied or very satisfied in England which is greater than the 81.4% in Scotland. The tabulations of the satisfied and the very dissatisfied also reinforces the performance of each of the schemes. In England we see that Skills for small business (50.0%), SMART or SPUR (73.9%) and regional supply network (80.0%), and IiP (83.0%) are the four worst performing schemes, whilst the other central support schemes have very good users' assessment scores. Export credit guarantees and export information services (92.9%), small firms loan guarantee scheme (91.7%), regional selective assistance and regional enterprise grants (87.9%), LINK (87.5%) are services in England where only 12.5% or less of the users' are giving dissatisfied or very dissatisfied scores. Whilst all 100% of the users of LINK gave either a satisfied or a very satisfied score the number of users at 16 was insufficient to boost the overall assessment for all services in Scotland. The overall assessment of the Scottish firms was also diluted by the lower percentages of satisfied and very satisfied users of skills for small businesses (25.0%), small firms loan guarantee scheme (70.8) and SMART or SPUR, compared to their English counterparts.

In Table 7.6 there are remarkably few statistically significant relationships between the characteristics of the firms and the users' satisfaction assessment scores. Sector, employment growth, export, age, and novel product innovator did not generate any statistically significant relationships with the users' satisfaction scores.

The size of the firm was the most important explanatory variable and was statistically significant for the use of skills for small businesses, export credit guarantees and export information services, and regional selective assistance and

Government Business Support Schemes	No. of firms	All	Manufact-uring	Services	Micro	Small	Medium/ Larger	Declining	Stable	Medium Growth	Fast Growth
Teaching Company Scheme	90.9	22	85.7	100	100	94.4	66.7	90.0	100	100	95.0
Investors in People	83.0	53	80.6	88.2	83.3	88.2	69.2	95.0	80.0	100	76.5
Skills for Small Businesses	50.0	4	50.0	50.0	0.0	100	0.0	NA	NA	0	50.0
LINK	87.5	16	90.9	80.0	0.0***	100***	100***	75.0	NA	100	100
Regional Supply Network	80.0	15	81.8	75.0	NA	78.6	100	75.0	0	100	75.0
Export Credit Guarantees/ Export Information Services	92.9	14	100	83.3	66.7	100	100	100	100	100	83.3
Small Firms Loan Guarantee Scheme	91.7	24	85.7	100	100	92.9	66.7	83.3	100	100	85.7
Regional Selective Assistance/ Regional Enterprise Grants	87.9	58	89.7	84.2	50.0**	92.9**	90.0**	89.5	75.0	100	81.3
SMART or SPUR	73.9	23	68.8	85.7	100	73.7	66.7	50.0	100	100	87.5

Table 7.6: Clients' Satisfaction with Services in England (Percentage of respondents who are satisfied or very satisfied) (*** p >0.01; ** p>0.05; * p>0.1; tested as in Table 1).

Government Business Support Schemes	**Exporter**	**Non-Exporter**	**Young**	**Old**	**Not IncProc**	**IncProc Innov**	**Not NovProc**	**NovProc**	**Not IncProd**	**IncProd**	**Not NovProd**	**NovProd**
Teaching Company Scheme	100	75.0	87.5	92.9	100	80.0	88.2	100	93.3	85.7	90.9	90.9
Investors in People	81.8	86.2	88.0	78.6	86.7	78.3	87.0	57.1	87.5	69.2	75.0	92.0
Skills for Small Businesses	33.3	100	100	33.3	33.3	100	66.7	0	66.7	0	50.0	50.0
LINK	100	77.8	75.0	100	90.9	100	92.3	100	92.3	100	100	88.9
Regional Supply Network	100	70.0	60.0	90.0	100	75.0	90.9	100	91.7	50.0	83.3	87.5
Export Credit Guarantees/ Export Information Services	85.7	100	100	88.9	90.0	100	92.3	100	90.9	100	100	85.7
Small Firms Loan Guarantee Scheme	100	87.5	92.9	90.0	100	81.8	90.9	100	94.4	83.3	91.7	91.7
Regional Selective Assistance/ Regional Enterprise Grants	90.9	85.3	80.0	93.9	93.1	84.6	80.6	90.9	86.1	95.0	90.0	88.5
SMART or SPUR	83.3	63.6	75.0	73.3	81.8	66.7	68.4	100	78.9	50.0	57.1	81.3

Table 7.6 Clients' Satisfaction with Services in England (Percentage of respondents who are satisfied or very satisfied) (*** p >0.01; ** p>0.05; * p>0.1; tested as in Table 1).

regional enterprise grants in England. The importance of firm size was also found for our Scottish firms. The lack of statistically significant relationships was also found in Scotland. Thus taken together, whilst there are differences in the overall quality of the services provided to English and to Scottish firms, the relationships between the characteristics of the users is very similar in both countries.

7.5 Econometric Regression Analysis

The previous sections of the chapter have looked at crosstabulations of the levels of use and the impact of advice. This section of the chapter takes the analysis further and as in the previous chapters uses logit models to estimate use and ordered logit models to estimate the impact of advice, of central government support schemes.

7.5.1 Central government support schemes in Scotland

The main finding of the regression results of the logit models of the expectation of the firms using the central government support schemes in Scotland was that the size of the firms was the main explanatory variable. The sizes of the firms was positively related to the use of the teaching company scheme, IiP, LINK, regional supply network, small firms loan guarantee scheme, regional selective assistance and regional enterprise grants and SMART and SPUR.

Pre tax profitability had a negative and statistically significant relationship with the teaching company scheme. However, this was the only instance where profitability was statistically significant. Thus, whether firms are making substantial profits, substantial losses or are just keeping their heads above water does not have any systematic relationship with the use of the central support schemes in Scotland.

Employment growth and sector were not statistically significant in any of the models. This contrasted with the exporting variable which was statistically significant at the 5% level, or better, for IiP, export credit guarantees and export information services, small firms loan guarantee scheme, and regional selective assistance and regional enterprise grants. In one respect it was not unreasonable to predict that exporting would be an important variable for the export credit guarantees and export information services, but it was surprising that exporting activity was strongly and systematically related to several other central support schemes.

The level of skill was related to only one service and that was skills for small business. Specifically the more skilled the firm the less likely the firm to use skills for small business. Then lastly for Scotland attention centres upon the four innovation variables, and these are found to generally not influence the use of the central government support services. There are exceptions and these were, novel product innovator was positively related to the use of SMART or SPUR, and LINK, and incremental product innovators were positively related to the use of the small firms loan guarantee scheme.

However, these results are what we would expect and the association with novel product innovation is a positive outcome for policy makers.

The ordered logit regression models could only be run for four models in Scotland, and these were the teaching company scheme, IiP, small firms loan guarantee scheme, and regional assistance and regional enterprise grants. There were only four instances of statistically significant variables in the models in Table 7.8. Level of skill was negatively related to users' assessment of satisfaction with IiP and the small firms loan guarantee scheme. Thus, the more skilled a firm the lower the

	Teaching Company Scheme	IiP	Skills for Small Businesses	LINK	Regional Supply Network
Log Age	0.244 (0.418)	-0.334 (0.303)	-0.998 (1.102)	-0.933 (0.852)	0.429 (0.767)
Log no. of employees	1.611 (0.514)***	1.812 (0.314) ***	1.399 (1.108)	2.283 (0.967) **	1.282 (0.313) ***
Pre Tax Profitability	-0.0009 (0.0002) ***	-4.92e06 (0.0002)	-2.42e-06 (0.001)	0.00005 (0.0004)	-0.0002 (0.0003)
Rate of growth	0.005 (0.004)	-0.0005 (0.0008)	0.00009 (0.003)	-0.0002 (0.002)	-0.0003 (0.002)
Manufacturing/services	0.130 (0.394)	-0.288 (0.264)	-0.628 (0.910)	-1.066 (0.784)	0.095 (0.693)
Export	0.441 (0.382)	0.577 (0.072) ***	0.771 (0.872)	0.313 (0.730)	0.674 (0.669)
Skill	-0.018 (0.015)	-0.003 (0.002)	-0.254 (0.049) ***	-0.045 (0.040)	-0.007 (0.014)
Novel Product Innovator	-0.304 (0.453)	-0.084 (0.322)	1.704 (1.559)	1.677 (0.443) ***	0.442 (0.864)
Incremental Product Innovator	-0.262 (0.466)	0.204 (0.334)	18.065 (1.296)	1.637 (1.516)	0.600 (0.953)
Novel Process Innovator	0.106 (0.548)	0.451 (0.372)	0.067 (1.232)	0.963 (0.910)	1.093 (0.733)
Incremental Process Innovator	0.378 (0.400)	0.536 (0.484)	-0.100 (0.852)	0.292 (0.858)	-0.467 (0.884)
Constant	-4.459 (0.695)	-3.331 (0.466) ***	-2.034 (0.555) ***	-2.539 (0.384) ***	-6.693 (1.395) ***
N	455	455	455	454	454
Log-likelihood	-111.00	-194.68	-28.29	-35.07	-44.32
Correctly classified (%)	92.09	81.10	98.45	98.02	97.58

Table 7.7 Estimates of a logit model of the expectation of seeking external business advice, by Government Business Support Schemes in Scotland (*** $p > 0.01$; ** $p > 0.05$; * $p > 0.1$).

	Export Credit Guarantees/ Export Information Services	Small Firms Loan Guarantee Scheme	Regional Selective Assistance/ Regional Enterprise Grants	SMART or SPUR
Log Age	-1.400 (1.100)	-1.046 (0.845)	-0.716 (0.658)	0.172 (0.542)
Log no. of employees	0.824 (0.552)	1.320 (0.460) ***	1.640 (0.390)***	1.334 (0.646) **
Pre Tax Profitability	-0.00001 (0.0003)	-0.0004 (0.0005)	-0.00009 (0.0002)	-0.0004 (0.0004)
Rate of growth	0.0005 (0.001)	-0.0003 (0.001)	0.0004 (0.0008)	-0.002 (0.002)
Manufacturing/services	0.144 (0.550)	-0.484 (0.397)	0.156 (0.322)	-0.147 (0.513)
Export	1.208 (0.556) **	0.939 (0.380) **	0.826 (0.313) ***	0.518 (0.505)
Skill	0.007 (0.006)	-0.014 (0.017)	-0.013 (0.011)	-0.009 (0.014)
Novel Product Innovator	-0.537 (0.653)	0.591 (0.484)	0.033 (0.368)	1.189 (0.689) *
Incremental Product Innovator	-0.387 (0.670)	0.903 (0.488) *	0.064 (0.400)	0.412 (0.789)
Novel Process Innovator	-4.195 (3.822)	-0.352 (0.516)	-0.396 (0.440)	-0.430 (0.721)
Incremental Process Innovator	0.275 (0.530)	-0.611 (0.421)	-0.103 (0.334)	-0.012 (0.533)
Constant	-2.962 (0.813) ***	-2.940 (0.630) ***	-3.266 (0.547)***	-5.529 (1.025) ***
N	455	455	455	454
Log-likelihood	-64.06	-115.61	-153.08	-70.02
Correctly classified (%)	96.26	91.43	87.03	95.82

Table 7.7 Estimates of a logit model of the expectation of seeking external business advice, by Government Business Support Schemes in Scotland (*** $p > 0.01$; ** $p > 0.05$; * $p > 0.1$).

	Teaching Company Scheme	IiP	Small Firms Loan Guarantee Scheme	Regional Selective Assistance/ Regional Enterprise Grants
Log Age	1.234 (1.146)	-0.820 (0.562)	-0.435 (0.850)	-0.991 (0.756)
Log no. of employees	3.036 (2.205)	0.907 (0.629)	1.863 (1.620)	1.382 (0.304) ***
Pre Tax Profitability	0.001 (0.002)	0.0004 (0.0004)	0.001 (0.0009)	0.00009 (0.0004)
Rate of growth	0.0002 (0.005)	0.0003 (0.001)	0.005 (0.003)	0.003 (0.003)
Manufacturing/services	1.609 (1.412)	-0.269 (0.514)	-2.243 (1.929)	-1.173 (0.995)
Export	-0.288 (0.960)	0.391 (0.503)	0.659 (0.825)	-0.022 (0.674)
Skill	-0.039 (0.075)	-0.008 (0.003) **	-0.167 (0.049) ***	0.023 (0.024)
Novel Product Innovator	-2.227 (2.118)	-0.738 (0.574)	-0.217 (1.065)	-0.432 (0.785)
Incremental Product Innovator	-1.418 (1.307)	-0.669 (0.617)	-0.645 (1.142)	0.221 (0.854)
Novel Process Innovator	-1.758 (1.696)	0.652 (0.609)	1.893 (1.216)	0.006 (0.931)
Incremental Process Innovator	-2.814 (1.152) **	0.046 (0.513)	-0.438 (0.921)	-1.565 (0.687)
N	35	89	37	54
Log Likelihood	-23.25	-88.94	-36.66	-48.62
Cut 1	0.725	-3.007	-3.237	-3.293
Cut 2	4.916	-2.184	-1.941	-2.875
Cut 3	------	0.859	0.353	0.320

Table 7.8 Multivariate estimates of an ordered logit model of the client assessments of satisfaction of advice, by Government Business Support Schemes in Scotland (*** $p > 0.01$; ** $p > 0.05$; * $p > 0.1$).

Satisfaction of the firms with IiP and the small firms loan guarantee scheme. The size of the firm was positively related to the regional selective assistance and the lower regional enterprise grants. Lastly, incremental process innovators recorded lower satisfaction than firms without this characteristic for the TCS.

7.6 Comparisons between Scotland and England

7.6.1 Comparisons between Scotland and England - The levels of use and impact of central government support schemes

Table 7.9 reports the logit models of the expectation of using the central government support schemes in England. With over 160 observations this was a good sized sample. Unfortunately there were difficulties in estimating the skills for small businesses model where the novel process innovation variable was a perfect predictor of use of the scheme. When the variable was dropped from the explanatory variables the incremental process innovation which narrowly failed to be statistically significant in the cross-tabulations, was also found to be a perfect predictor of use of the scheme.

Clearly for the skills for small businesses scheme novel process innovation was an important variable. The model without either the novel or the incremental process innovation variable would clearly be mis-specified and the results for the use of that scheme in England are not reported.

The results in Table 7.9 show that the size of the firm is again the most important variable and was statistically significant for the teaching company scheme, IiP, and regional selective assistance and regional enterprise grants. Thus in both England and in Scotland the size of firm is an excellent predictor of the use of central

	Teaching Company Scheme	IiP	LINK	Regional Supply Network
Log Age	0.364 (0.822)	-0.878 (0.539)	-1.401 (1.009)	1.734 (1.518)
Log no. of employees	1.986 (1.027) *	1.583 (0.497) ***	1.268 (0.822)	0.569 (1.178)
Pre Tax Profitability	-0.0008 (0.0009)	0.00002 (0.0001)	-0.0001 (0.0004)	-0.004 (0.003)
Rate of growth	-0.003 (0.003)	-0.002 (0.002)	-0.003 (0.003)	0.002 (0.001)
Manufacturing/services	-0.826 (0.724)	0.281 (0.451)	0.382 (0.863)	-0.613 (0.088) ***
Export	1.558 (0.672)	0.271 (0.450)	-0.417 (0.866)	0.708 (0.911)
Skill	-0.039 (0.029)	-0.002 (0.007)	0.017 (0.009) *	-0.0006 (0.022)
Novel Product Innovator	-0.140 (0.852)	-0.260 (0.491)	0.299 (0.849)	0.321 (1.112)
Incremental Product Innovator	0.326 (0.854)	-0.139 (0.576)	-0.083 (1.273)	0.065 (1.459)
Novel Process Innovator	0.400 (1.020)	-0.386 (0.662)	-0.875 (1.218)	-0.720 (1.233)
Incremental Process Innovator	0.959 (0.747)	-0.097 (0.452)	-1.969 (1.762)	-1.222 (1.257)
Constant	-5.740 (1.507) ***	-2.222 (0.769) ***	-2.595 (1.304) **	-7.174 (2.246) ***
N	168	168	168	168
Log-likelihood	-38.27	-79.18	-30.62	-20.26
Correctly classified (%)	91.07	77.38	94.64	94.07

Table 7.9 Estimates of a logit model of the expectation of seeking external business advice, by Government Business Support Schemes in England (*** $p > 0.01$; ** $p > 0.05$; * $p > 0.1$). N.B. Skills for Small Businesses was not estimated.

	Export Credit Guarantees/ Export Information Services	Small Firms Loan Guarantee Scheme	Regional Selective Assistance/ Regional Enterprise Grants	SMART or SPUR
Log Age	1.176 (1.166)	-0.253 (0.803)	-0.014 (0.521)	0.380 (0.792)
Log no. of employees	-0.313 (1.055)	0.248 (0.699)	0.997 (0.502) **	0.911 (0.762)
Pre Tax Profitability	-0.0003 (0.0008)	-0.0005 (0.0009)	0.0001 (0.0002)	-0.00002 (0.0002)
Rate of growth	-0.002 (0.003)	-0.0003 (0.002)	-0.0007 (0.001)	-0.005 (0.003)
Manufacturing/services	0.312 (0.859)	-0.236 (0.583)	0.024 (0.437)	-0.037 (0.632)
Export	0.837 (0.783)	0.210 (0.579)	0.370 (0.435)	0.673 (0.213) ***
Skill	-0.044 (0.063)	-0.021 (0.029)	-0.008 (0.010)	-0.024 (0.023)
Novel Product Innovator	-0.110 (0.910)	0.563 (0.678)	0.118 (0.513)	1.641 (0.545) ***
Incremental Product Innovator	-0.454 (1.036)	0.291 (0.805)	1.012 (0.755)	0.406 (0.985)
Novel Process Innovator	Dropped	-0.035 (0.881)	0.869 (0.283) ***	-0.261 (0.865)
Incremental Process Innovator	-0.456 (0.808)	0.097 (0.596)	0.355 (0.451)	0.327 (0.617)
Constant	-4.667 (1.436) ***	-2.142 (0.949) **	-3.194 (0.804) ***	-4.847 (1.271) ***
N	145	169	169	168
Log-likelihood	-27.22	-53.50	-82.02	-47.37
Correctly classified (%)	94.48	89.94	75.74	89.88

Table 7.9 Estimates of a logit model of the expectation of seeking external business advice, by Government Business Support Schemes in England (*** $p > 0.01$; ** $p > 0.05$; * $p > 0.1$).

government support schemes. This result is important and suggests that policy makers need to be aware of the size population distribution of SMEs in order to better provide the most appropriate services in the appropriate amounts. Thereafter there were no variables which were appearing as statistically significant in several models. Skill was positively related to the use of LINK, manufacturing sector firms were less likely than service sector firms to use regional supply network, novel process innovators were more likely to use regional selective assistance and regional enterprise grants, and novel product innovators were more likely to use SMART or SPUR.

Table 7.10 reports the ordered logit regression models for two services IiP and regional selective assistance and regional enterprise grants. These were the only two models where there were sufficient number of observations to run the models. In both of the models there were no statistically significant relationships. Whilst the results need to be treated with caution because the sample size was under 40, the results do tend to suggest that there are very few, if any, of the characteristics of firms which are related to the quality of users' assessments with their support from central government support schemes.

7.7 Comparisons between Scotland and England and the levels of use and the impact of BS/SBG and BL/SBS with the central government support schemes

Having looked at the results for England we lastly complete this chapter with a comparison of the levels of use and impact of the central government support schemes in England and Scotland with the BL/SBS and BS/SBG, respectively. It must be borne in mind that respondents may not fully differentiate in their replies

between local schemes and central schemes, and between BS/SBG and BL/SBS and other local suppliers. This is because a scheme such as IiP is delivered locally but it is a centrally developed scheme. Similarly the 'branding' of BS/SBG and BL/SBS is confused because other local partners are also involved, particularly TECs/SLC/LECs, chambers of commerce, enterprise agencies and local authorities. This will tend to undermine the perception of any one particular local supplier.

We recall from chapter 5 that 40.7% of English firms used BL/SBS and that 27.4% of Scottish firms used BS/SBG. The above complexities should also undermine the perception of BL/SBS in England and BS/SBG in Scotland so that the finding that BL/SBS has the highest use level of all governmental initiatives is a strong tribute to the awareness it has raised and the take-up it has achieved. The higher levels of use of BL/SBS than its counterparts in Scotland also evidences the benefits in terms of take-up of a more active marketing, and more strongly identified branding that has been developed for BL/SBS.

	IiP	Regional Selective Assistance/ Regional Enterprise Grants
Log Age	-0.127 (0.963)	-1.374 (0.966)
Log no. of employees	1.315 (1.003)	0.135 (1.346)
Pre Tax Profitability	0.00006 (0.0002)	0.0003 (0.0002)
Rate of growth	-0.005 (0.004)	0.002 (0.003)
Manufacturing/services	0.365 (0.986)	0.907 (1.003)
Export	-1.338 (0.900)	-0.018 (1.100)
Skill	-0.009 (0.026)	0.022 (0.300)
Novel Product Innovator	0.787 (0.825)	0.533 (1.079)
Incremental Product Innovator	2.006 (1.722)	1.981 (1.191)
Novel Process Innovator	-3.235 (1.342)	-0.936 (1.138)
Incremental Process Innovator	-2.597 (1.007)	-0.048 (0.885)
Log likelihood	-29.73	-32.31
N	39	38
Cut 1	-2.895	-2.889
Cut 2	-2.589	-1.995
Cut 3	1.633	1.688

Table 7.10 Multivariate estimates of an ordered logit model of the client assessments of satisfaction of advice, by Government Business Support Schemes in England (*** $p > 0.01$; ** $p > 0.05$; * $p > 0.1$).

Indeed we recall from chapter 5 that that LECs and Scottish Enterprises (33.3%) and Local Enterprise Agencies and Trusts (33.5%), both recorded higher levels of use than BS/SBG.

Comparisons of BL/SBS satisfaction with central government schemes, however, produce a very different result, overall. Satisfaction with central government schemes in England, overall was 85.2% and this was higher than the 81.8% overall satisfaction with BL/SBS. Satisfaction with the central government support schemes in Scotland was 81.4%, overall, which compared with satisfaction of 75.4%, overall for BS/SBG.

We recall that for central government support schemes in England the following satisfaction totals were obtained in rank order, export credit guarantees and export information services (92.9%), small firms loan guarantee scheme (91.7%), teaching company scheme (90.9%), regional selective assistance and regional enterprise grants (87.9%), LINK (87.5%), IiP (83.0%), regional supply network (80.0%), SMART or SPUR (73.9%) and Skills for Small Business (50.0%).

For the BL/SBS the services with the highest satisfaction scores were as follows in rank order product and service design advice (92.3%), diagnostic assessment (89.4%), training and IiP (88.0%), education and university links (85.0%), PBA (85.3%), innovation and technology advice (84.6%), export advice (83.9%), sales and marketing advice (80.0%), finance and accounting advice (79.2%), grants (78.4%) and general business information (75.2%).

The main reasons why BL/SBS does not do as well as the central government schemes in England, overall, is that general business information was the most used service but also the one with the lowest users' satisfaction with the service; grants

was also a very heavily used service and that also recorded the second worst assessments for BL/SBS services; but whilst skills for small businesses recorded very poor users' satisfaction of 50% there were only 4 users, so the overall impact is reduced.

When we compare IiP and training and also grants with the source in England – either central government scheme or BS/SBS we have mixed results. BL/SBS has 88.0% satisfaction which is greater than the 83.0% recorded by the central government provider. In contrast for grants we find 78.4% satisfaction for BL/SBS and 87.9% for central government support.

We conclude, therefore, that a centralized system has much to commend it in terms of quality, although its use and take-up may be lower. Lower take-up, of course, may be preferable if achieving high take-up means that government support schemes are marketed to firms where they have less chance of being appropriate and therefore achieve lower satisfaction levels. Analyses of consumer satisfaction generally conclude that dissatisfaction is higher where services are marketed which fail to meet expectations (see, for example, Woodruff and Gardial, 1996). There is much in our analysis to suggest that high awareness and use levels of BL/SBS have led to false expectations being raised. This is confirmed in more detailed analysis of customer satisfaction, dissatisfaction and complaining behaviour of BL clients by Priest (1998), who demonstrates an even higher level of services failing to meet expectations than the dissatisfaction levels reported in this chapter.

When we rank the satisfaction with the central government schemes in Scotland we find the following results, LINK (100.0%), teaching company scheme (87.7%), export credit guarantees and export information services (86.7%), regional

selective assistance (86.0%), IiP (83.9%), regional supply network (81.8%), SMART or SPUR (71.9%), small firms loan guarantee scheme (70.8%) and skills for small businesses (25.0%).

Whilst for the individual BS/SBG services in rank order we have, PBAs (82.8%), Export advice (82.7%), Innovation and technology advice (82.5%),Product and service design advice (81.1%), Diagnostic assessment (78.6%), Training and IiP (78.6%), Grants (78.1%), General business information (71.2%) Sales and marketing advice (65.6%), education and university links (64.9%), finance and accounting advice (62.0%).

The overall percentage of users in Scotland who gave satisfied or very satisfied responses was 75.4% which was less than the 81.4% who used the central government support schemes and were satisfied or very satisfied. As was found in England the central government support schemes are overall out performing the BS/SBG. But the providers of central government support schemes cannot afford to be complacent. As was found in chapter 6 when we analysed the use and the satisfaction of individual BS/SBG schemes there is a worryingly high degree of quality variation in the central government support schemes. Skills for small business was not an extensively used service but the levels of satisfaction are low with only 25% satisfied or very satisfied, and the SMART or SPUR scheme and the small loan guarantees scheme both have around 70% satisfied or very satisfied users. The inference is that there are around 30% of the users who are either dissatisfied or very dissatisfied.

7.8 Conclusion

This chapter has presented some important policy challenges for the design of government policy. It is believed that the findings are accurate since similar results for smaller samples and individual services are found, after adjusting for different sampling proportions, by the Confederation of British Industry (1994), Lawrie (1994), Curran and Blackburn (1994), MORI (1994), and Craggs and Jones (1998).

The chapter has demonstrated that the central government support schemes for SMEs are generally of significantly higher quality in terms of satisfaction than locally supplied supports. But the key conclusion of this chapter is that the SBS needs to place more emphasis upon a stronger central structure in order to achieve a higher level of quality. The BL/SBS offers a range of services which are delivered on a local basis. In contrast the central government support schemes by definition are available at a national level. Given that the satisfaction and therefore the quality of schemes is higher for central government support schemes than for the local services this result indicates that the central support schemes are achieving better outcomes.

Quality variation, or more precisely poor quality and good quality in the provision of a scheme or service can also be better identified and rectified more readily in the central government schemes than in the local schemes and again provides a justification for the SBS to move more and more towards a centralised structure of delivery.

The results in this chapter are also important because econometric techniques have been used to control for all those characteristics of firms which, ex ante, may have believed to have had a possible relationship with the level of use and client

assessments of the central government support schemes. In particular, a key finding is that there are very important contrasts in the role played by differences between firms for use and for satisfaction. The logit regression models show that in Scotland and in England that the levels of use of schemes strongly varies between different types of firm, particularly for the influence of firm size and, exporting. Thus, the tendency to take-up government support is strongly influenced by the type of business an SME is. But the quality of the service received had no differences between types of firms in England, and there were very few statistically significant differences for Scotland. This is an important finding. It suggests that differences in satisfaction are generally not systematically related to the type of firm and therefore must arise from variations in the quality of the advisor delivering the service.

Chapter 8

The role of distance between advisor and client

8.1 Introduction

The previous chapters have served to chronicle the levels of use and the satisfaction of the users of private and public sector sources of advice in Scotland and northern England. Respondents were asked to provide the location of advisors - the main town, or city which they had used for business advice. The use of geographical information systems allows us to plot the location of advisor and client and calculate the distance in kilometres between them. Bennett and Robson (2000) report the distance in kilometres between advisors in clients for Britain using the CBR data set of 1999. Their results are for Britain, and include England, Scotland and Wales. But, again the reader is reminded that the sample sizes for Scotland was small, and indeed for comparative purposes the author has broken out the CBR data on distance which he calculated, by nation. Given the geographical composition of Scotland it will be interesting to see the extent to which the distance between client and advisors does differ within Scotland and also between England and Scotland.

An important debate has emerged about the significance of localised networks of suppliers and advisors (Fuller et al., 2003). The debate focuses upon the benefits of local connections between businesses and the benefits of embeddedness deriving from institutional structures.

The role of transaction costs, specialization and locality have all been suggested as important influences on the choice of advisor which would lead to distance from the potential sources of supply being significant (Bennett et al. 1999). Ceteris paribus, it might be expected that closer suppliers of external advice would

be chosen rather than more distant ones because they have lower transaction costs as a consequence of being less expensive or easier to access, and are more visible and identifiable. Closer advisors should also have the characteristic of having lower search costs, having greater ease of obtaining information, and that applies both in order to find the advisor and assess their quality. This also applies for the clients.

Moreover, closer located advisors should also have the potential to be more highly trusted either because they are more local, and hence it may be easier to interact with them, or because they are part of local networks of relationships that encourage interaction, or because they have better local knowledge. Also closer located advisors are more embedded in social capital networks. Despite these expectations there has been relatively little previous attempt to investigate the possible role of distance in influencing choice of business advisor and this chapter endeavours to fill that gap using the evidence of the SoE.

8.2 Empirical Assessment

Table 8.1 and Figure 8.1 shows for Scottish firms the mean distance in kilometres between the advisors and the geographical source of their advice provider, by the type of provider. The highest average distance between advisor and client is 280.41 km for trade and professional associations. Indeed approximately a third of the users of trade and professional associations travelled more than 100 km. Trade and professional associations are a distinct type of provider of business advice, and tend to be based in London. That in large part explains the high mean distance score.

Advice Source	All Mean	All N	Mean	Manufacturing	Mean	Services	Mean	Micro	Mean	Small	Mean	Medium/ Larger
Accountant	38.00	318	41.14***	186	33.58***	132	34.00***	147	40.00***	150	51.71***	21
Solicitor	45.00	257	47.00***	150	42.20***	107	40.75***	119	48.33***	121	51.05***	17
Bank	22.43	281	25.66***	165	17.84***	116	17.45***	130	25.99***	132	31.77***	19
Customers	85.14	183	90.00***	107	76.00***	76	76.08***	85	90.08***	86	113.91***	12
Business Associates	35.77	185	41.14***	108	28.24***	77	35.06	85	36.01	87	38.81	13
Friends/Relatives	24.44	127	29.77***	74	17.00***	53	25.34	58	24.05	60	21.24	9
Suppliers	46.89	190	53.33***	111	37.84***	79	46.59	88	45.87	89	55.90	13
Consultants	146.87	157	154.75***	92	135.72***	65	121.56***	72	156.77***	74	245.94***	11
Local Chamber of Commerce	22.33	77	23.66	45	20.46	32	17.44***	36	26.00***	36	31.11***	5
Trade/Professional association	280.41	14	280	8	280.96	6	251.44***	6	289.83***	7	388.29***	1
Local Enterprise Agency/Trust	32.55	13	37.11***	8	25.25***	5	32.90	6	32.25	7	NA	NA
Local LEC or Scottish Enterprise	29.88	13	35.66***	8	20.63***	5	25.55***	6	33.59***	7	NA	NA
Highlands & Islands Enterprise	78.00	3	80.74	2	72.52	1	76.99	1	78.51	2	NA	NA
Business Shop/ Small Business Gateway	43.49	11	41.98	6	45.30	2	43.06	5	43.85	6	NA	NA
Other	33.64	1	33.64	1	0.00	0	33.64	1	NA	NA	NA	NA
All	51.60	1830	55.80***	1071	45.34***	759	45.80***	845	54.55***	864	71.04***	121

Table 8.1: Assessment of the distance in kilometres between clients and advisors in Scotland by sector and firm size (*** $p > 0.01$; ** $p > 0.05$; * $p > 0.1$). Using Mann Whitney test for two group comparisons, or the Kruskal-Wallis test for multi-group comparisons, between column entries. Types of business: micro-less than 10 employees, small business between 10 and 99 employees, medium/larger businesses between 100 and 499 employees. Employment growth of business during last three years: declining businesses with negative growth below 5%; stable growth from -5% to +5%; medium-growth greater than 5% and less than 50%; and fast - growth 51% or greater.

Advice Source	**Mean**	**Declining**	**Mean**	**Stable**	**Mean**	**Medium Growth**	**Mean**	**Fast Growth**
Accountant	39.12***	79	42.54***	67	41***	41	29.41***	60
Solicitor	42.62	64	45.32	54	42.55	33	49.41	49
Bank	19.91***	70	18.99***	59	24.12***	37	28.41***	53
Customers	84	46	85.85	39	83.93	24	86.72	34
Business Associates	37.06	46	36.77	39	35.79	24	32.86	34
Friends/Relatives	23.22	32	24.53	27	22.83	17	27.22	23
Suppliers	39.06***	47	42.49***	40	45.53***	25	62.95***	36
Consultants	145.66	39	142.22	33	146.55	20	153.77	30
Local Chamber of Commerce	23.44	18	20.94	16	22.77	10	22.20	16
Trade/Professional association	290.96	3	284	2	280.12	2	270.85	4
Local Enterprise Agency/Trust	31.17	3	32.55	2	32.01	2	34.29	3
Local LEC or Scottish Enterprise	25.87	3	29.8	2	31.53	2	32.84	3
Highlands & Islands Enterprise	86.97	1	69.03	1		NA	NA	NA
Business Shop/ Small Business Gateway	39.99	3	42.44	2	37.77	1	49.60	3
Other	NA	NA	NA	NA	NA	NA	NA	NA
All	50.03	454	50.75	383	51.52	238	54.75	348

Table 8.1: Assessment of the distance in kilometres between clients and advisors in Scotland by employment growth (*** $p > 0.01$; ** $p > 0.05$; * $p > 0.1$). Using Mann Whitney test for two group comparisons, or the Kruskal-Wallis test for multi-group comparisons, between column entries. Types of business: micro-less than 10 employees, small business between 10 and 99 employees, medium/larger businesses between 100 and 499 employees. Employment growth of business during last three years: declining businesses with negative growth below 5%; stable growth from -5% to +5%; medium-growth greater than 5% and less than 50%; and fast - growth 51% or greater.

Advice Source	Mean	Non-Exporter	Mean	Exporter	Mean	Young	Mean	Old	Mean	Not IncProc	Mean	IncProc Innov
Accountant	34.67***	200	45.84***	85	37.78	153	30.60	165	39.44	192	35.34	104
Solicitor	42.33***	162	51.27***	69	44.43	123	36.79	134	44.39	155	46.13	84
Bank	17.94***	177	32.89***	76	23.67	135	16.98	146	21.95	170	23.33	91
Customers	84.05	115	87.70	49	85.88	88	67.43	95	89.99	110	76.25	60
Business Associates	35.44	116	36.54	50	42.54***	89	22.41***	96	39.76	112	26.83	50
Friends/Relatives	25.83	80	21.17	34	23.56	61	20.44	66	24	77	25.27	41
Suppliers	41.11***	119	60.38***	51	44.05	91	40.03	99	45.7	115	49.10	62
Consultants	132.77	99	180.11	42	145.95	75	119.05	82	148.54	95	143.76	51
Local Chamber of Commerce	22.98	48	20.84	21	21.87	37	18.29	40	21.78	47	23.36	25
Trade/Professional association	275.56	8	290.11	4	267.81	7	212.89	7	282	8	277.87	5
Local Enterprise Agency/Trust	26.54***	8	44.57***	4	29.75	6	30.30	7	34.04	8	29.57	4
Local LEC or Scottish Enterprise	23.99***	8	41.66***	4	32.43***	6	23.43***	7	30.01	8	29.62	4
HIE	77.55	2	78.90	1	75.92	1	158.08	1	76.77	2	80.46	1
Business Shop/ Small Business Gateway	42.9	7	44.87	3	42.22	5	37.30	6	43.33	7	43.86	3
Other	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
N	88.88***	619	111.20***	266	96.44	472	75.42	518	97.50	595	91.66	321

Table 8.1: Assessment of the distance in kilometres between clients and advisors in Scotland by exporter, age, and incremental process innovator (% of respondents reporting use, multiple responses allowed). (*** $p > 0.01$; ** $p > 0.05$; * $p > 0.1$) Using Mann Whitney test for two group comparisons, between column entries. Types of business: older firms established in 1986 or earlier, and younger firms established after 1987. Novel innovators introduced innovations which were new to both the firm and to the industry and are denoted by Nov. Incremental innovators introduced innovations new to the firm but not to the industry and are denoted by Inc. Process and Product Innovations are reported and are denoted by Proc and Prod, respectively.

Advice Source	Mean	Not NovProc	Mean	NovProc Innov	Mean	Not IncProd	Mean	IncProd	Mean	Not NovProd	Mean	NovProd
Accountant	37.77	255	39.43	41	38.08	213	37.80	83	39.75	203	34.18	93
Solicitor	45.56	205	41.62	34	46.77	172	40.46	67	45.64	164	43.60	75
Bank	23.45	224	16.25	37	23.7	188	19.16	73	22.95	179	21.29	82
Customers	87.77***	146	69.14***	24	85.44	122	84.38	48	87.78	117	79.31	53
Business Associates	35.98	148	34.48	24	35.54	124	36.36	48	34.42	118	38.72	54
Friends/Relatives	26.66***	101	11.25***	17	23.94	85	25.73	33	22.85	81	27.92	37
Suppliers	46.66	152	48.29	25	45.87	127	49.48	50	47.77	121	44.99	56
Consultants	139.09***	126	195.88***	20	148.07	105	143.80	41	134.98	100	172.72	46
Local Chamber of Commerce	23.62***	62	14.33	10	22.83	52	21.03	20	20.95	49	25.27	23
Trade/Professional association	266.63	11	356.20	2	283.87	9	272.63	4	286.84	9	265.94	4
Local Enterprise Agency/Trust	34.43	10	23.15	2	30.88	9	37.56	3	33.68	8	30.29	4
Local LEC or Scottish Enterprise	30.06	10	28.98	2	30.08	9	29.28	3	30.95	8	27.74	4
HIE	76.82	2	80.36	1	76.64	2	80.72	1	77.64	2	78.72	1
BS/SBG	43.55	9	42.95	1	44.5	7	41.13	3	47.07	7	35.14	3
Other	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
N	95.15	791	91.49	125	95.50	666	92.98	260	94.97	629	94.44	297

Table 8.1: Assessment of the distance in kilometres between clients and advisors in Scotland by novel process innovator, incremental product innovator and novel product innovator (% of respondents reporting use, multiple responses allowed). (*** $p > 0.01$; ** $p > 0.05$; * $p > 0.1$) Using Mann Whitney test for two group comparisons, between column entries. Types of business: older firms established in 1986 or earlier, and younger firms established after 1987. Novel innovators introduced innovations which were new to both the firm and to the industry and are denoted by Nov. Incremental innovators introduced innovations new to the firm but not to the industry and are denoted by Inc. Process and Product Innovations are reported and are denoted by Proc and Prod, respectively.

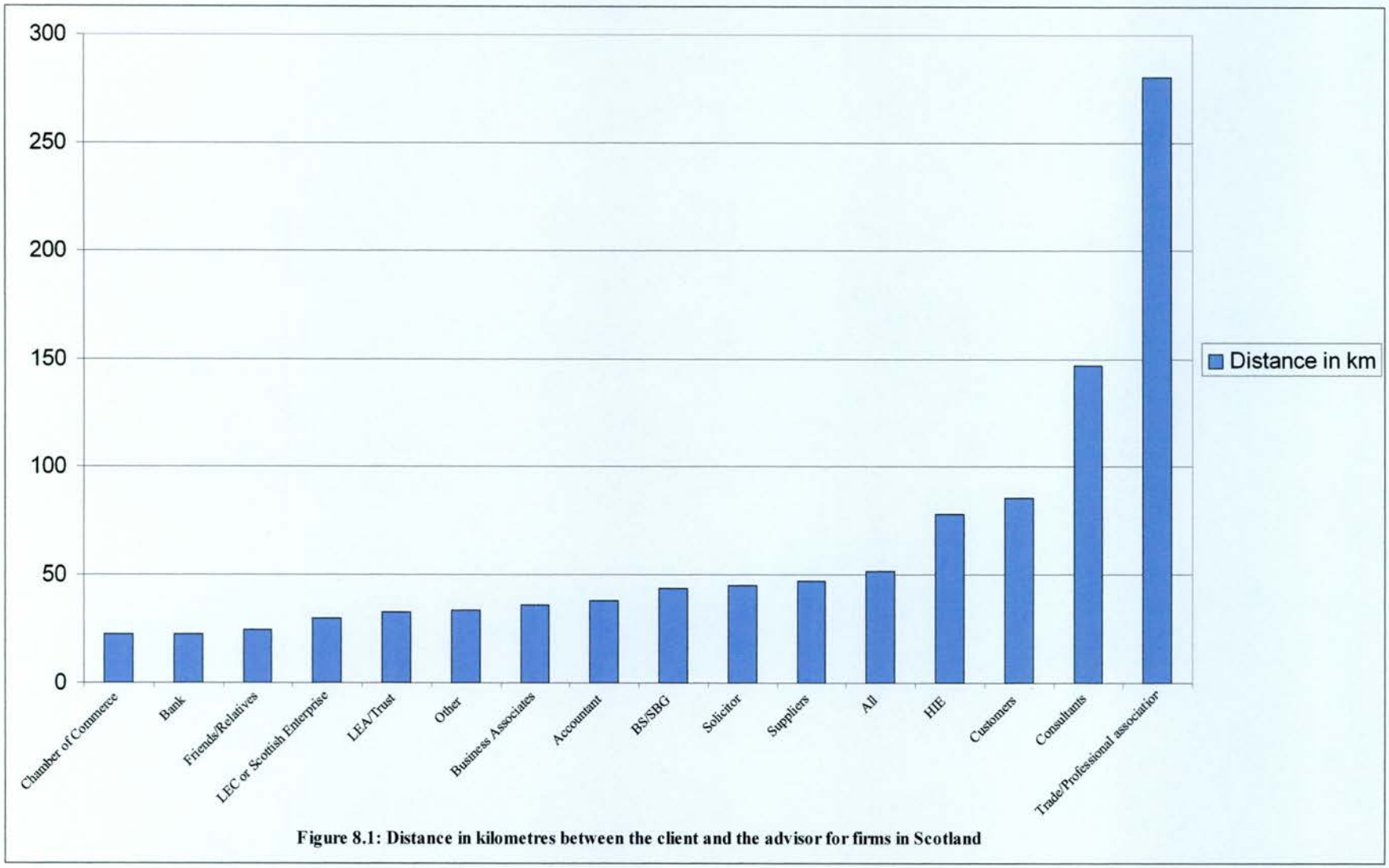


Figure 8.1: Distance in kilometres between the client and the advisor for firms in Scotland

Consultants are ranked second and have a mean distance of 146.87 km between advisor and client. Supply chain contacts of customers and suppliers are ranked third and fifth with mean distances of 85.14 km and 46.89 km, respectively. In the calculation of the mean distances for all sources of advice we have excluded locations which are not in mainland Britain. Highlands and Islands Enterprise (HIE) is ranked fourth and has a mean distance of 78.00 km between the geographical locations of the advisors and the clients. This of course may simply relate to the nature of the HIE area.

The professional specialists of solicitors, accountants and banks are ranked sixth, eighth, and fourteenth, respectively with mean distance between advisor and client of 45.00 km, 38.00 km, and 22.43 km, respectively. Given that accountants and banks, and to a lesser extent solicitors are sources which are likely to be seen on a regular basis for the provision of financial services, and legal assistance it would be expected that firms choose to use accountants and banks and solicitors which are located within easy travelling distance.

With regard to the government backed sources of advice we have seen that HIE has the fourth highest mean distance in kilometres between advisor and client. BS/SBG is ranked seventh with a mean of 43.49 km. Given that BS/SBG was originally developed as a nationwide series of hubs with BSs available in most towns the low average distance is to be expected. Indeed approximately a half of BL users travelled less than 20 km. LEAs and trusts and LECs or Scottish Enterprise (SE) are ranked eleventh and twelfth, respectively, with mean distances of 32.55 km and 29.88 km, respectively. As with BS/SBG it would be expected that users use their

local LEC. The lowest average distances are found for chambers of commerce with 13.78 km.

Table 8.1 shows that there are several strongly significant relationships between the characteristics of firms and the distance between customer and client of external advice. The mean distance in kilometres between clients and advisors is greater for most manufacturing firms compared to service sector firms and this was found to be statistically significant at the 1% level for the professional specialists, supply chain contacts, consultants, LEA/Trusts and LECs or SE.

The size of firm was highly statistically significant at the 1% level for seven of our measures of distance, the professional specialists, customers, consultants and LECs or SE. In each of these cases the distance from the advisor increased with the size of the firm. Arguably this relationship is explained by larger sized firms having more resources to spend on external advice and a willingness to have advisors from larger geographical distances to fulfil their needs.

Employment growth was statistically significant at the 1% level for the distance from accountants, banks, and suppliers. Age was also not an important variable, and was only significant for two models, business associates and LECs or SE. In both cases the mean distance was greater for younger firms compared to older firms.

Virtually no statistically significant relationships are shown between the innovation variables and the mean distance in km between clients and advisors. The only instances of statistically significant relationships at the 1% level between distance between clients and advisors, for customers, friends and relatives, consultants, and chambers of commerce and the novel process innovation variable.

In each of these cases the mean distance in kilometres was larger for non novel process innovators.

Table 8.2 and Figure 8.2 shows an assessment of the distance in kilometres between clients and advisors of Scottish firms in the Survey of Entrepreneurship (SoE) against the Centre for Business Research (CBR). It is clear that overall the CBR data set under-reports the mean distance between advisor and client. When we exclude solicitors, business associates, and friends and relatives from the overall mean score we see that the mean distance in the Survey of Entrepreneurship is 58.00 km, compared to 50.88 km in the Centre for Business Research data set for 1999.

The distance between advisor and clients for accountants was 38.00 km in the SoE which was more than double the distance of 16.40 km in the CBR data. The mean distance between advisor and client for the other professional specialists of banks was also higher at 22.43 km in the SoE compared to the 16.47 km in the CBR data.

The distance between the advisor and client was 46.89 km for suppliers in the SoE compared to 24.38 km in the CBR data. This is a substantial difference and approximately a factor of two. However, the other supply chain contact of customers showed less marked differences. But again the CBR data gave a distance of 85.14 km for customers compared to a corresponding value of 76.69 km in the SoE. The distance in the CBR data for trade and professional associations was 236.79 km which was again substantially less than the 280.41 km found in the SoE. However, for the public backed sources the other differences are less marked.

This section has analysed the relationship between differences in distance to advisors covering a comprehensive range of private and public sector sources. The

results and the patterns which emerged can be taken as being nationally representative for Scotland.

Overall the results demonstrate a very strong variation between distance and advisor type. One of the longest distances relates to accessing trade and professional associations, which are predominantly located in London. Hence these are rather special cases. For the other advisors, the longest distances are for customers, and HIE. But with regard to the public sector sources the reader is reminded that they are of course, largely constrained to operate only within a defined geographic area. This is a constraint that also operates for Chambers of Commerce through a convention of low internal competition between areas. The longer private sector distances are thus more indicative of the free market of supply. It might also be argued that, in the private sector, distance increases with the relative degree of specialisation of the advisor, suggesting that a wider search process may be required the greater the degree of specialisation of the advice that is required. Thus the large distances for consultants may reflect a search for specialists. Unfortunately, we have no strong evidence to confirm this.

8.3 Distance between advisors and clients in England

Table 8.3 shows the assessment of the distance in kilometres between clients and advisors in England. Trade and professional associations have a mean distance of 203.39km with their customers and this is the largest mean. Suppliers and customers are ranked second and third with means of 103.91 and 81.43 km, respectively. There is then a large drop in the mean distance as we move towards the fourth ranked advisor of consultants, with a mean of 52.77 km.

Advice Source	**SoE Mean**	**All N**	**CBR 1999 Mean**	**N**
Accountant	38.00	318	16.40	44
Solicitor	45.00	257	-----	--
Bank	22.43	281	16.47	30
Customers	85.14	183	76.69	10
Business Associates	35.77	185	----	--
Friends/Relatives	24.44	127	----	--
Suppliers	46.89	190	24.38	10
Consultants	146.87	157	94.23	19
Local Chamber of Commerce	22.33	77	15.84	8
Trade/Professional association	280.41	14	236.79	14
Local Enterprise Agency/Trust	32.55	13	25.07	15
Local LEC or Scottish Enterprise	29.88	13	26.54	14
Highlands & Islands Enterprise	78.00	3	----	--
Business Shop/ Small Business Gateway	43.49	11	52.78	5
Other/RDC or RDA	33.64	1	76.56	5
All	51.60	1830	50.88	174
All (excluding solicitors, business associates, and friends and relatives	58.00	1261	50.88	174

Table 8.2: Assessment of the distance in kilometres between clients and advisors of Scottish firms in the Survey of Entrepreneurship against the Centre for Business Research (CBR) data for 1999.

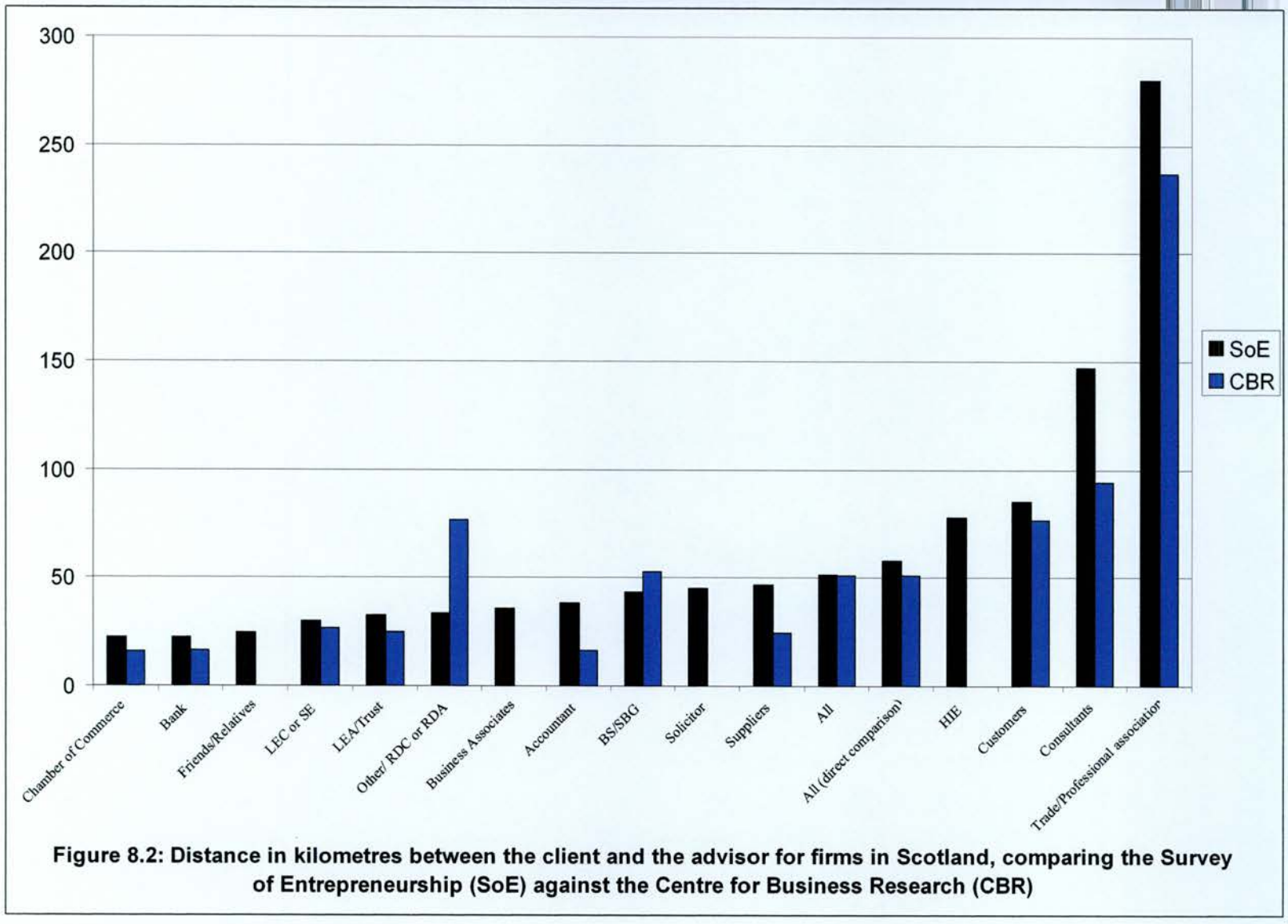


Figure 8.2: Distance in kilometres between the client and the advisor for firms in Scotland, comparing the Survey of Entrepreneurship (SoE) against the Centre for Business Research (CBR)

Business associates are ranked fifth with a mean of 28.18 km which is approximately one half of the mean distance of consultants. Solicitors, accountants and banks, the professional specialists are ranked sixth, eighth and ninth, respectively with mean distances of 27.11 km, 23.39 km and 23.17 km, respectively. Thus for each of these sources the users are within short distances from their advisors.

BL/SBS is ranked seventh with a mean 0f 23.71 km. The short distance is explained by the network of providers of the service in most towns and cities. LEAs are ranked tenth with a mean of 18.11 km. Friends and relatives, TECs or SLCs and chambers of commerce also had mean distances below 20km and in the case of chambers of commerce the, shortest average distance of all sources, was 15.98 km.

When the tests of statistical differences were performed between distance and the characteristics of the firms the results were clearly defined. Sectoral differences emerged for all sources except banks, and TECs or SLCs. In each of these statistically significant differences it was found that the mean distance between advisor and client was higher for manufacturing firms than service sector firms.

Size of firm was also a very strong explanatory variable and was statistically significant for all sources, with the exception of the other sources where the sample size was not large enough to perform the Kruskal-Wallis test. The results showed that the distance in kilometres between client and customer increased with the size of the firm. Exporting was also found to be an important variable and was statistically significant at the 1% level for all sources, with the exception of accountants, chambers of commerce and BL/SBS. In all cases the distance in kilometres between advisor and client was higher for exporting firms than exporting firms.

In marked contrast the employment growth and the age variables showed no statistically significant relationships at the 10% level or better. The four innovation variables showed no statistically significant differences at the 10% level for any of the sources of advice, with the single exception of the novel process innovation variable which was statistically significant at the 1% level for the distance between solicitors and clients.

Figure 8.2 and Table 8.4 show comparisons of the distances using the SoE against the CBR data when the results are broken out for England. The main difference between the results of both surveys is that for trade and professional associations and also consultants the mean distance is substantially higher in the SoE. For most sources the SoE distance is higher than the CBR data. Indeed when a direct comparison is made of sources in both surveys (and excluding solicitors, business associates and friends and relatives, which were not included in the CBR survey of 1999 because of space constraints) we see that the mean is 54.40 km the SoE survey compared to 35.11 km in the CBR survey.

When the results of the distance between advisor and client are compared between England and Scotland, there are some substantial differences. The distance between client and trade and professional associations was larger in Scotland than in England, and was largely explained by associations being more likely to be in London. The distance for consultants was approaching 150 km in Scotland which was nearly three times the corresponding distance in England. This in part could be explained by the greater number of rural firms in Scotland than in England. The distance for suppliers was nearly 50 km in Scotland but was over 100 km in England. This result is the reverse of what would have been expected. The result indicates that

firms in England are more likely to have used firms where there is greater geographical distance. The use of solicitors was approaching 50 km in Scotland but was approximately one half of that distance in England.

8.4 Regression Results

In order to better understand the relationship between the distance between the clients and the sources of advice, OLS regression techniques were used to see whether in a multivariate context the statistical relationships which were found in the crosstabulations would still exist when all the characteristics of the firm which were developed in chapter 5 were included as explanatory variables.

In several instances there were insufficient observations to perform regression analysis and unfortunately these models could not be estimated. This was beyond the control of the researcher. Performing regression analysis using a smaller number of explanatory variables was not possible for trade and professional associations, local enterprise agencies or trusts, LECs or Scottish Enterprise, HIE, or BS/SBG.

The results of the regression analysis were clear and showed that the size of the firm was the single most explanatory variable. The size of the firm variable was statistically significant at the 1% level for 8 out of the 9 models which were run in Scotland. The model of the distance between clients and consultants was the only model in Scotland where size of firm was not statistically significant.

In the model of the distance between client and accountant exporting also appeared as a statistically significant variable. Exporting was also statistically significant in the model of the distance between clients and banks. Employment growth was also statistically significant in the distance between clients and banks

model. Thus, for Scotland it is the size of firm predominantly, and also exporting in the case accountants, solicitors and banks which are characteristics of the firm which are positively related to the distance between advisor and client. None of the other characteristics such as innovation, profitability, age, or the level of skill of the firms were statistically significant.

8.5 Comparison between England and Scotland

In the English models the size of firm is statistically significant at the 1% level for all models with the exception of suppliers. In the models of the distance between advisor and client in England the sectoral variable is also statistically significant in all of the regression models with the exception of banks. Thus, for England the multivariate analysis confirms that in England the size of the firm and sector are important explanatory variables which are systematically related to the distance between advisor and client. None of the other variables are statistically significant at the 10% level or better. The model was re-estimated using the log of distance as the Y variable and similar results were found.

Comparing the distance between the clients and the advisors in England and Scotland it is clear that firstly, sector is important in England but is not important in Scotland; secondly, the size of the firm is positively related to distance in firms in both England and Scotland; and thirdly, there are only a handful of other instances of statistically significant relationships between the characteristics of the firm and the distance variable.

Advice Source	All Mean	All N	Mean	Man-ufact uring	Mean	Serv-ices	Mean	Micro	Mean	Small	Mean	Medium/ Larger
Accountant	23.39	134	25.99***	72	20.37***	62	14.55***	42	26***	79	36.09***	13
Solicitor	27.11	108	31.52***	58	21.99***	50	21.04***	33	28.83***	64	35.31***	11
Bank	23.17	120	23	64	23.36	56	19.07***	37	22.93***	71	37.23***	12
Customers	81.43	81	98.94***	43	61.62***	38	64.01***	25	84.92***	48	114.93***	8
Business Associates	28.18	80	35.85***	43	19.27***	37	25.55***	25	28.64***	48	34.42***	7
Friends/Relatives	17.10	53	22.88***	28	10.63***	25	14.09***	16	17.96***	31	20.68***	6
Suppliers	103.91	88	118***	47	87.76***	41	86.77***	27	106.97***	52	137.65***	9
Consultants	52.77	72	67.93***	39	34.85***	33	47.95***	22	50.74***	42	76.68***	8
Local Chamber of Commerce	15.14	39	17.88***	21	11.94***	18	13.06***	12	15.17***	23	21.21***	4
Trade/Professional association	203.39	57	234.5***	30	168.82***	27	188.94***	18	199.77***	34	280.03***	5
Local Enterprise Agency/Trust	18.11	52	22.64***	28	12.83***	24	15.92***	16	18.08***	31	25.30***	5
Local TEC or SLC	15.98	52	17.99	28	13.64	24	11.44***	16	16.07***	27	18.79***	25
BL/SBS	23.71	51	26.96***	27	20.05***	24	20.03***	16	23.23***	30	38.37***	5
Other	49.97	7	50.55	4	49.20	3	50	2	49.86	4	50.35	1
All	47.34	994	55.04	532	38.48	462	38.99	307	48.g39	584	56.85	119

Table 8.3: Assessment of the distance in kilometres between clients and advisors in England by sector and firm size (*** $p > 0.01$; ** $p > 0.05$; * $p > 0.1$). Using Mann Whitney test for two group comparisons, or the Kruskal-Wallis test for multi-group comparisons, between column entries. Types of business: micro-less than 10 employees, small business between 10 and 99 employees, medium/larger businesses between 100 and 499 employees. Employment growth of business during last three years: declining businesses with negative growth below 5%; stable growth from -5% to +5%; medium-growth greater than 5% and less than 50%; and fast - growth 51% or greater.

Advice Source	Mean	Declining	Mean	Stable	Mean	Medium Growth	Mean	Fast Growth
Accountant	23.39	36	23.39	18	23.39	15	23.39	34
Solicitor	25.67	29	27.00	15	28.53	12	28.09	27
Bank	23.98	32	23.76	16	25.73	14	20.80	30
Customers	75.07	22	77.99	11	82.86	9	89.67	20
Business Associates	27.66	21	28.86	11	26.97	9	28.90	20
Friends/Relatives	17.07	14	16.99	7	17.31	6	17.10	14
Suppliers	99.71	24	102.33	7	106.66	6	110.72	14
Consultants	53.22	19	52.11	10	51.44	8	53.25	18
Local Chamber of Commerce	14.97	11	15.96	5	15.03	4	14.96	10
Trade/Professional association	190.06	15	196.78	8	202.22	7	222.03	14
Local Enterprise Agency/Trust	17.77	14	18.44	7	16.97	6	18.82	13
Local TEC or SLC	15.44	14	16.43	7	16.66	6	16.01	13
Business Link/ Small Business Service	22.25	14	22.45	7	24.56	6	25.57	13
Other	NA	NA	NA	NA	NA	NA	NA	NA
All	45.39	265	44.91	129	46.50	108	47.25	240

Table 8.3: Assessment of the distance in kilometres between clients and advisors in England by employment growth (*** $p > 0.01$; ** $p > 0.05$; * $p > 0.1$). Using Mann Whitney test for two group comparisons, or the Kruskal-Wallis test for multi-group comparisons, between column entries. Types of business: micro-less than 10 employees, small business between 10 and 99 employees, medium/larger businesses between 100 and 499 employees. Employment growth of business during last three years: declining businesses with negative growth below 5%; stable growth from -5% to +5%; medium-growth greater than 5% and less than 50%; and fast - growth 51% or greater.

Advice Source	Mean	Non-Exporter	Mean	Exporter	Mean	Young	Mean	Old	Mean	Not IncProc	Mean	IncProc Innov
Accountant	20	35	24.75	87	23.88	60	22.99	74	25.54	74	20.08	48
Solicitor	20.11***	28	29.91***	70	26.55	49	27.58	59	26.66	59	27.79	39
Bank	18.97***	31	24.84***	78	19.44	54	26.22	66	22.25	70	24.82	39
Customers	67.44***	21	86.97***	53	81.11	36	81.69	45	80.55	45	82.80	29
Business Associates	23.33***	20	30.01***	53	27.66	36	28.61	44	26.66	44	30.49	29
Friends/Relatives	12.11***	14	19.15***	34	16.22	24	17.83	29	15.66	29	19.30	19
Suppliers	93.76***	23	108.01***	57	102.22	40	105.32	48	108.88	48	96.46	32
Consultants	34.55***	19	60.14***	47	48.88	32	55.88	40	54.44	40	50.20	26
Local Chamber of Commerce	14.98	10	15.20	25	13.55	18	16.50	21	16.65	21	12.88	14
Trade/Professional association	175.69***	15	214.62***	37	197.77	26	208.10	31	210.33	31	193.15	21
Local Enterprise Agency/Trust	14.33***	13	19.56***	34	17.77	23	18.38	29	16.65	28	20.26	19
Local TEC or SLC	11.11***	13	17.84***	34	16.66	23	15.44	29	16.67	27	15.00	19
Business Link/ Small Business Service	23.33	13	23.86	34	25.07	23	22.59	28	23	27	24.72	19
Other	50.88	2	49.52	4	52.22	3	47.72	3	52.22	4	45.47	2
N	39.83***	257	50.42***	647	46.20	447	48.27	546	48.07	547	46.55	355

Table 8.3: Assessment of the distance in kilometres between clients and advisors in England by exporter, age, and incremental process innovator (% of respondents reporting use, multiple responses allowed). (*** $p > 0.01$; ** $p > 0.05$; * $p > 0.1$) Using Mann Whitney test for two group comparisons, between column entries. Types of business: older firms established in 1986 or earlier, and younger firms established after 1987. Novel innovators introduced innovations which were new to both the firm and to the industry and are denoted by Nov. Incremental innovators introduced innovations new to the firm but not to the industry and are denoted by Inc. Process and Product Innovations are reported and are denoted by Proc and Prod, respectively.

Advice Source	Mean	Not NovProc	Mean	NovProc Innov	Mean	Not IncProd	Mean	IncProd	Mean	Not NovProd	Mean	NovProd
Accountant	23.53	118	22.36	16	24	99	21.66	35	24.69	78	21.58	56
Solicitor	28.44***	95	17.39***	13	26.69	80	28.31	28	26.67	63	27.90	35
Bank	23.37	105	21.77	15	23.69	89	21.68	31	22.25	70	24.46	50
Customers	82.22	71	75.82	10	82.55	60	78.23	21	84.46	47	77.24	34
Business Associates	28.66	70	24.82	10	29.44	59	24.64	21	30.33	46	25.27	34
Friends/Relatives	17.88	46	11.97	7	16.54	39	18.66	14	17.4	31	16.68	22
Suppliers	104.34	77	100.90	11	104.46	65	102.83	33	104.44	51	103.18	37
Consultants	53.44	63	48.08	9	53.33	53	51.21	19	53.33	42	51.99	30
Chamber of Commerce	16.32	34	7.12	5	14.44	29	17.17	10	13.87	23	16.97	16
Trade/Prof. association	203	50	206.18	7	208.88	42	188.02	15	203.44	33	203.32	24
LEA/Trust	17.55	46	22.40	6	17.66	39	19.46	13	16.66	30	20.09	22
TEC or SE	16.06	46	15.37	6	16.66	39	13.94	13	16.65	30	15.07	22
BL/ SBS	24.43	45	18.31	6	25.55	38	18.33	13	24.44	30	22.67	21
Other	52.26	6	36.23	1	52	5	44.90	2	53.32	4	45.50	3
N	47.78	872	44.22	122	48.00	736	47.63	268	47.77	578	47.23	406

Table 8.3: Assessment of the distance in kilometres between clients and advisors in England by novel process innovator, incremental product innovator and novel product innovator (% of respondents reporting use, multiple responses allowed). (*** $p > 0.01$; ** $p > 0.05$; * $p > 0.1$) Using Mann Whitney test for two group comparisons, between column entries. Types of business: older firms established in 1986 or earlier, and younger firms established after 1987. Novel innovators introduced innovations which were new to both the firm and to the industry and are denoted by Nov. Incremental innovators introduced innovations new to the firm but not to the industry and are denoted by Inc. Process and Product Innovations are reported and are denoted by Proc and Prod, respectively.

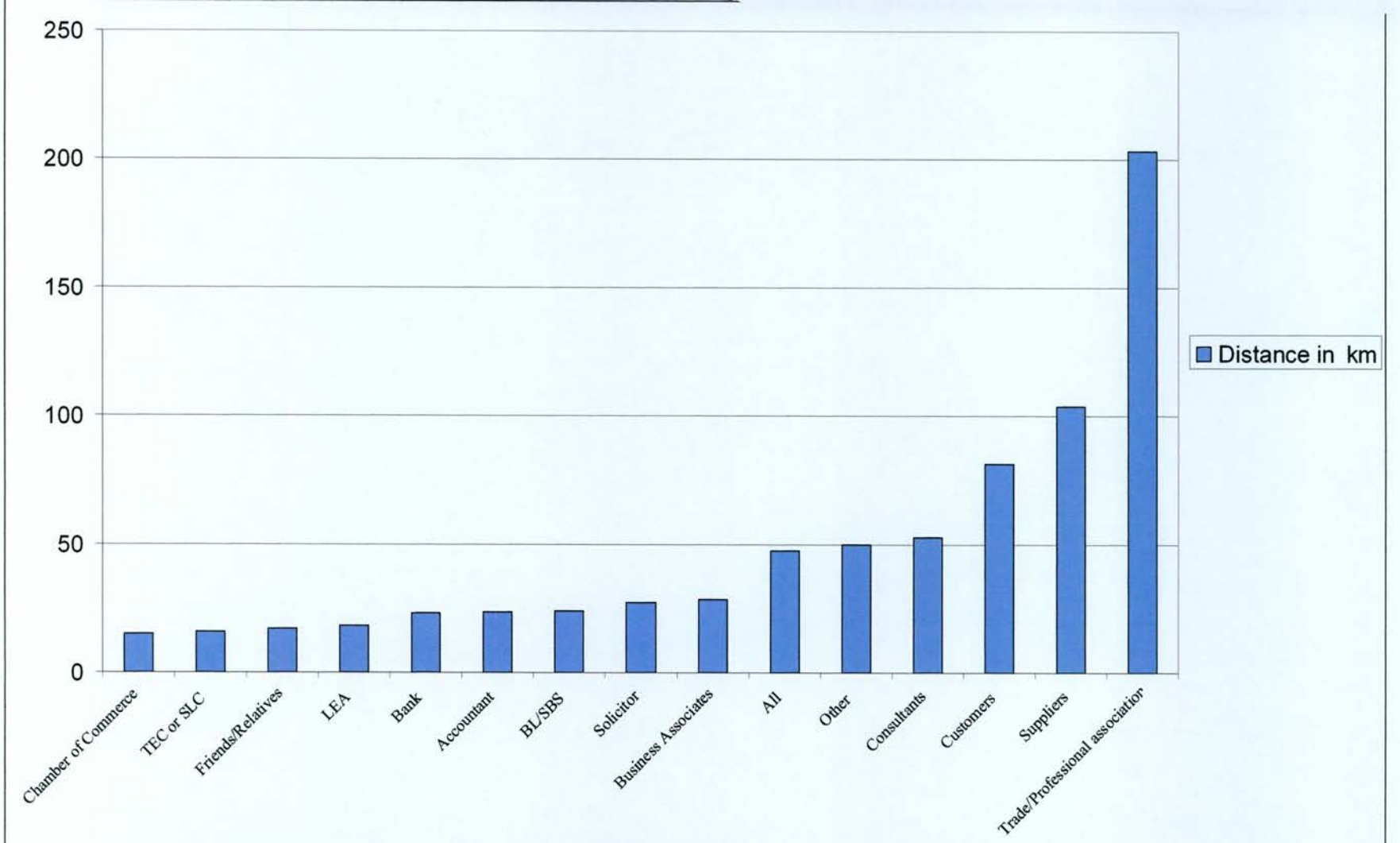


Figure 8.3: Distance in kilometres between the client and the advisor for firms in England

Advice Source	**SoE Mean**	**All N**	**CBR 1999 Mean**	**N**
Accountant	23.39	134	24.43	748
Solicitor	27.11	108	-----	--
Bank	23.17	120	20.48	490
Customers	81.43	81	77.41	148
Business Associates	28.18	80	----	--
Friends/Relatives	17.10	53	----	--
Suppliers	103.91	88	84.98	146
Consultants	52.77	72	47.23	267
Local Chamber of Commerce	15.14	39	13.17	250
Trade/Professional association	203.39	57	84.92	242
Local Enterprise Agency/Trust	18.11	52	19.49	68
Local TEC or SLC	15.98	52	16.11	152
Business Link/ Small Business Service	23.71	51	19.64	327
Other/RDC or RDA	49.97	7	71.86	22
All	47.34	994	35.11	2860
All (excluding solicitors, business associates, and friends and relatives	54.40	753	35.11	2860

Table 8.4: Assessment of the distance in kilometres between clients and advisors of firms in England in the Survey of Entrepreneurship against the Centre for Business Research (CBR) data for 1999.

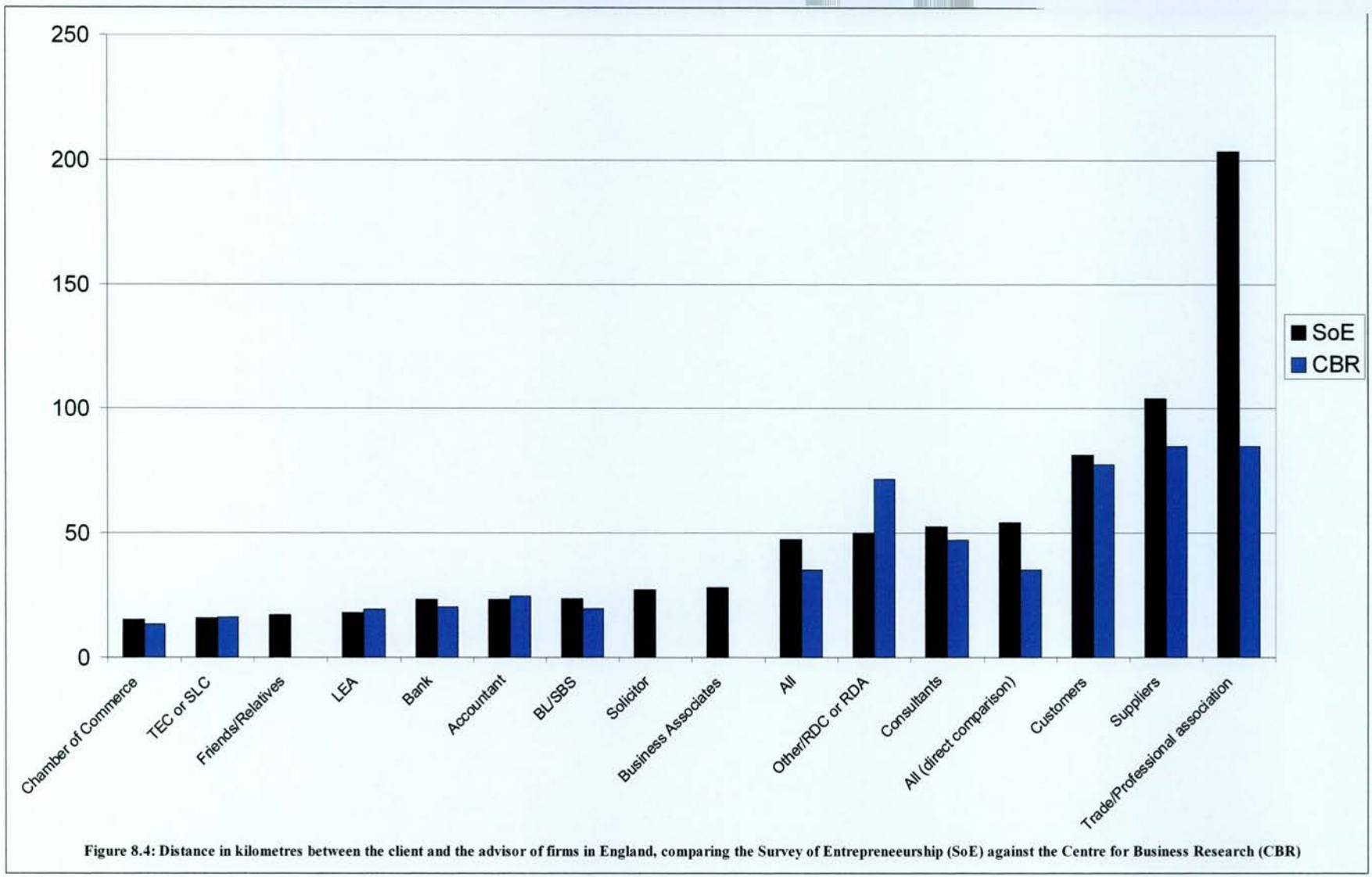


Figure 8.4: Distance in kilometres between the client and the advisor of firms in England, comparing the Survey of Entrepreneeurship (SoE) against the Centre for Business Research (CBR)

	Accountant	Solicitor	Bank	Customers	Business Associates
Log Age	-1.757 (5.671)	-1.130 (2.291)	-0.650 (5.983)	-2.509 (4.098)	2.785 (3.622)
Log no. of employees	0.038 (0.003)***	0.399 (0.004) ***	0.055 (0.004) ***	0.115 (0.003) ***	0.097 (0.003) ***
Pre Tax Profitability	0.014 (0.074)	0.362 (0.829)	-0.004 (0.067)	-2.227 (3.458)	0.738 (0.999)
Rate of growth	0.028 (0.015)	-0.056 (0.049)	-0.003 (0.001) ***	-0.002 (0.049)	0.246 (0.332)
Manufacturing/services	-1.512 (5.080)	-2.611 (3.153)	-1.707 (5.686)	6.313 (8.876)	3.855 (4.385)
Export	0.034 (0.002) ***	1.522 (2.166)	6.046 (0.520) ***	-5.274 (7.889)	-6.526 (7.388)
Skill	0.016 (0.077)	-0.306 (0.397)	-0.073 (0.093)	0.774 (0.500)	0.198 (0.358)
Novel Product Innovator	0.875 (5.873)	1.093 (2.394)	6.221 (6.548)	2.800 (3.654)	1.772 (1.980)
Incremental Product Innovator	1.735 (5.720)	2.886 (3.515)	-2.055 (6.371)	1.690 (2.112)	-2.715 (3.180)
Novel Process Innovator	5.343 (6.550)	1.255 (2.018)	-2.391 (6.982)	3.164 (4.051)	2.413 (3.856)
Incremental Process Innovator	-4.872 (5.489)	-1.821 (2.884)	2.373 (6.098)	1.782 (3.678)	1.165 (2.751)
Constant	24.315 (8.51)	17.985 (1.112) ***	17.250 (1.777) ***	13.667 (1.344) ***	8.800 (0.004) ***
N	288	222	234	154	148
F Test	21.320 ***	32.332 ***	29.589	30.556	33.685
R-squared	0.324	0.331	0.366	0.372	0.388

Table 8.5 OLS Estimates of the distance in kilometres between the advisor and the client, by type of advisor in Scotland (*** p > 0.01; ** p > 0.05; * p > 0.1).

	Friends/ Relatives	Suppliers	Consultants	Chambers
Log Age	-1.145 (4.346)	-6.623 (7.735)	1.717 (2.846)	1.772 (2.534)
Log no. of employees	0.016 (0.001) ***	0.170 (0.002) ***	0.213 (0.301)	0.235 (0.003) ***
Pre Tax Profitability	0.275 (0.432)	-0.803 (1.491)	0.756 (0.521)	-0.079 (0.154)
Rate of growth	0.019 (0.026)	0.096 (1.098)	-0.006 (0.030)	0.031 (0.444)
Manufacturing/services	1.777 (2.051)	1.511 (2.069)	2.805 (3.578)	-0.547 (3.950)
Export	1.323 (2.563)	1.467 (2.682)	5.655 (11.862)	-0.624 (2.793)
Skill	-0.008 (0.070)	-0.639 (0.555)	0.258 (0.261)	0.011 (0.062)
Novel Product Innovator	2.866 (4.126)	2.899 (3.843)	-2.310 (3.062)	5.640 (6.332)
Incremental Product Innovator	2.319 (3.194)	2.302 (3.760)	2.535 (3.423)	-4.244 (3.338)
Novel Process Innovator	7.139 (4.806)	3.785 (3.985)	6.509 (7.467)	-1.055 (4.035)
Incremental Process Innovator	0.815 (4.066)	-1.227 (1.464)	-2.269 (3.845)	5.282 (3.065)
Constant	16.645 (0.005) ***	15.389 (0.112) ***	13.431 (0.005) ***	4.071 (0.006) ***
N	98	153	126	52
F Test	34.432	31.112 ***	29.092 ***	28.008
R Squared	0.344	0.307	0.303	0.287

Table 8.5 OLS Estimates of the distance in kilometres between the advisor and the client, by type of advisor in Scotland (*** $p > 0.01$; ** $p > 0.05$; * $p > 0.1$).

	Accountant	Solicitor	Bank	Customers	Business Associates
Log Age	10.591 (14.415)	2.450 (3.555)	3.464 (3.634)	-2.150 (3.207)	0.483 (0.548)
Log no. of employees	0.232 (0.004) ***	0.443 (0.003) ***	0.045 (0.002)***	0.221 (0.004) ***	0.115 (0.003) ***
Pre Tax Profitability	0.017 (0.522)	0.347 (0.369)	-1.431 (2.760)	-2.372 (3.152)	0.016 (0.221)
Rate of growth	-0.041 (0.029)	-0.0445 (0.665)	0.027 (0.169)	0.003 (0.047)	0.107 (0.111)
Manufacturing/services	2.342 (0.005) ***	1.506 (0.112) ***	1.153 (2.172)	2.970 (0.013) ***	2.223 (0.056) ***
Export	-1.432 (2.146)	2.536 (3.827)	2.854 (3.268)	3.686 (4.893)	0.986 (1.117)
Skill	0.134 (0.178)	-0.454 (1.034)	-0.106 (1.170)	0.758 (0.497)	0.886 (1.003)
Novel Product Innovator	1.991 (2.273)	1.647 (2.332)	-3.479 (4.355)	4.359 (4.270)	2.332 (3.075)
Incremental Product Innovator	1.122 (1.362)	1.940 (2.823)	4.991 (5.446)	1.573 (1.874)	1.556 (1.776)
Novel Process Innovator	-1.029 (1.268)	-1.361 (1.766)	4.697 (5.967)	6.556 (7.298)	3.554 (4.002)
Incremental Process Innovator	-4.698 (8.464)	2.601 (3.005)	1.165 (2.523)	1.044 (2.321)	1.113 (1.221)
Constant	17.976 (0.054) ***	22.667 (0.045) ***	23.780 (0.005) ***	13.252 (0.090) ***	19.998 (0.033) ***
N	103	69	75	60	59
F Test	29.067 ***	33.665 ***	34.443 ***	30.556 ***	30.777 ***
R Squared	0.266	0.299	0.305	0.288	0.297

Table 8.6 OLS Estimates of the distance in kilometres between the advisor and the client, by type of advisor in England (*** p > 0.01; ** p > 0.05; * p > 0.1).

	Friends/ Relatives	Suppliers	Consultants	Chambers
Log Age	2.507 (3.555)	-2.292 (3.563)	2.730 (3.549)	1.482 (3.426)
Log no. of employees	0.234 (0.005) ***	0.326 (0.445)	0.222 (0.007) ***	0.286 (0.011) ***
Pre Tax Profitability	0.288 (0.453)	-0.573 (1.433)	0.565 (0.523)	-0.079 (0.152)
Rate of growth	-0.034 (0.048)	0.099 (0.048)	0.001 (0.030)	0.032 (0.101)
Manufacturing/services	1.605 (0.032) ***	1.859 (0.004)***	1.452 (0.027) ***	0.355 (0.004) ***
Export	2.465 (3.827)	1.976 (2.206)	1.782 (0.004)	-0.844 (2.710)
Skill	0.412 (0.399)	-0.633 (0.553)	0.154 (0.260)	0.015 (0.061)
Novel Product Innovator	2.827 (3.743)	2.174 (3.632)	-2.783 (3.262)	2.633 (3.320)
Incremental Product Innovator	1.940 (2.829)	2.073 (3.530)	2.938 (3.668)	2.372 (3.301)
Novel Process Innovator	2.503 (3.167)	3.872 (3.342)	1.976 (2.599)	-1.213 (2.998)
Incremental Process Innovator	2.686 (3.097)	1.325 (2.108)	0.943 (1.076)	2.326 (3.051)
Constant	16.386 (1.112) ***	16.529 (1.089) ***	16.973 (1.098) ***	13.919 (0.056) ***
N	37	62	51	31
F Test	39.876 ***	45.666 ***	44.987 ***	27.668 ***
R Squared	0.303	0.288	0.332	0.277

Table 8.6 OLS Estimates of the distance in kilometres between the advisor and the client, by type of advisor in England (*** $p > 0.01$; ** $p > 0.05$; * $p > 0.1$).

Conclusion

This chapter has provided crosstabulations and also multivariate analysis of the distance between clients and a very broad range of providers of external advice in Scotland and in northern England. The results provide a very clear set of main findings.

Firstly, there is a very marked relationship between distance from client and the location of the supplier of external advice. In Scotland the size of the firm was an important explanatory variable across the range of providers which were examined. In England the size of the firm and also sectoral differences were found consistently across the types of advisors in both the crosstabulations and the regression models. The distance between advisors and clients in England differs systematically depending upon whether the firm is in manufacturing or services. The distance between clients and advisors was higher for manufacturing firms than service sector firms. These results are consistent with the work of Wood et al. (1993) who demonstrated that inner London management consultancies were highly localised. The results do differ from the work of Curran and Blackburn (1994), who found that business services firms in advertising, marketing and design derived over 60% of total sales from outside the locality. The difference is probably explained by the greater sectoral coverage and the very larger sample size in the Survey of Entrepreneurship. But it also needs to be noted that the Curran and Blackburn (1994) and Wood et al. (1993) studies look at the service and not the client side, and this may also explain the difference in results with earlier studies.

Research by Priest (1998) of demand for Business Link services showed that more businesses view local delivery as important in the provision of the higher order

personal business advisors than for lower order business information, for example, 58% for PBAs compared to 48% for business information services. The results in this chapter show that the distance between client and BS/SBG and BL/SBS are small, and in large part reflects the number of distribution outlets for the schemes in Scotland and in northern England.

The analysis also explains earlier findings of differences in level of choice of local suppliers derived from the extent of the local market. As found by Daniels (1984) a much lower level of localisation occurs in smaller centres such as Carlisle, Preston or Plymouth, for example, than in large centres such as Bristol, Edinburgh and London. Thus the interaction of supply with local demand explains the contrast between the higher degree of localisation found in studies of large cities (see Marshall, 1983) compared to Mid-Wales (see Hitchens et al., 1994) or Ireland (see Hitchens et al., 1996). Despite this finding, our analysis has not been able to confirm or refute a specific hierarchical pattern of demand and supply. However, the results of the analysis of supply centres by Bennett and Graham (1998) suggests that some effect of a hierarchy may be present, whilst Bennett et al., (1999), confirm that business service suppliers are more concentrated the larger the business centre considered.

The analysis thus demonstrates the importance of differences between the location of SMEs in influencing interactions with alternative concentrations of suppliers

Clearly the analysis and the results from this chapter are companions to the next chapter which looks at location and the characteristics of the locality where the clients are based. The policy implications from this chapter and also the next chapter

on location are presented in chapter 10. This allows the reader to have a more complete picture of taken together what the results convey and how government policy needs to be adapted.

Chapter 9

The influence of location on the use by SMEs of external advice

9.1 Introduction

This chapter assesses the extent, form and location of external advice and collaboration of small medium and sized enterprises (SMEs) in Britain. The chapter focuses upon assessing whether urbanisation and agglomeration economies influence the role of advice and collaboration and the extent to which peripherality is an important influence. The scale of external business services has grown very rapidly in all western economies in the last 20 or 30 years, both in terms of the number of firms involved and their employment (Bennett and Robson, 1999a). A significant part of this growth has arisen for increased demand for the supply of services external to the firm and development of horizontal relationships between firms. But the causes of this trend are complex. In part it is the result of innovation in services that have created new markets for external provision. In part it is the result of the increased technical complexity or specialisation of existing services that is difficult or expensive to source internally. In part it is the result of replacing activities previously supplied internally within firms by external suppliers (out-sourcing or 'unbundling'). And in part it is also the result of seeking competitive advantage through developing close working relationships with external advisors, with suppliers and with customers.

The underlying factors behind these trends may be reduction in transaction costs between suppliers and those using business services (as argued by Coase, 1937; Williamson, 1975). Scott (1983,1986), for example, argues that that use of external advice and collaboration has been a means to reduce costs by allowing a greater role

for market competition between service suppliers, which can be more efficient in controlling costs than internal bureaucracy. Additionally, greater economies of scale and scope in development of expertise may be available to an external supplier that allows it to reduce costs, or increase its rate of R & D and innovation, as argued by Stigler (1951). Furthermore external relationships may be developed as a means to reduce the power and restrictive practices of internal labour unions, thus reducing costs and increasing flexibility for the firm (argued by Storper and Scott, 1992).

This pattern of decreased vertical integration of activities within firms may be leading to increased horizontal integration and collaboration between firms. This in turn may be encouraging locations which are already particularly strong in business services, or have specialist access to the businesses which are experiencing the greatest demand for services. This would tend to work in favour of locations with agglomerations of existing technical expertise, or located in proximity to the areas of greatest demand. This has led to recognition of areas within which high concentrations of business services are emerging (see e.g. Marshall, 1988; Daniels and Moulaert, 1991; Wood et al., 1993; Bennett and Graham, 1998). Such areas may possess advantages for the general development of their economies not only for the clients they service, but also may become a rich area for exchange of information or development of innovation between business service firms themselves. Thus, increasing concentration of service suppliers may encourage further and intensifying concentration in existing centres. This process may be reinforced by institutional and social relations within localities and regions between firms, developing joint collaboration and networks of both strong and weak ties (Vatne, 1995) or embeddedness and trust relationships (Granovetter, 1985; Zucker, 1986). Thus,

some of the benefits of the economies of scale and scope of external inter-business relations may result from intense networking between business service firms themselves which allow so-called "home-region externalities" to stimulate strong client-customer networks of trust (e.g. O'Farrell and Wood, 1998).

Despite recognising the potential importance of such processes, there has been a relatively dispersed approach in previous research that seeks to assess the influence of location on the extent and form of external business relations. Those studies that have been undertaken also tend to control inadequately for the extent to which locational differences of external links arise from the effect of factors such as firm structure, industry structure, and the role of government schemes and agencies (where the role of grants based on spatial eligibility criteria may have major influence on of the extent of external network development). Thus, although Storey (1994) has argued that location is one of the key influences on the development of SMEs (together with a firm's age, sector, size and ownership structure), it is unclear in applying this conclusion to external relations whether locational effects arise from some specific intrinsic reason of place, or from the variable geographical pattern of internal firm dynamics, industry structure and/or government intervention.

A further drawback of many previous studies investigating the influence of location has been that the sample size or the methodological design of the analysis have constrained the dimensions of location that can be assessed or have limited the range of other geographical variables investigated. In other words, previous studies have not used post-code level data to identify the location of firms. This information can then be used to examine location influences by incorporating publicly available factors such as density of business within various proximities to the firms. Thus, for

example, regional differences, peripherality, or rurality, which have often been found to lead to a higher use of external government-related schemes may be less due to location than to structural characteristics of the firms in these areas, or to the structure of their local economies, or to the eligibility criteria for government supports. Similarly, although carefully matched pairs studies have been undertaken, particularly of the manufacturing sector, the influence of region that has been found may arise as much from internal locational (intra-regional) structures within each region influencing each sample firm as from inter-regional differences. Moreover, it has been difficult to measure and assess in quantitative studies the influence of local structures of institutional environments, embeddedness and inter-firm networks on the propensity to develop external relationships with specialist business service suppliers, or through the supply chain, or to public agencies. Differential structures of local environments therefore need further investigation and integration with investigations of other influences before a final conclusion on the role of location per se can be drawn.

In chapter 3 above we reviewed the main contributions to the debate about the influence of geographical location on external business relationships, arguing that a multi-faceted view of role of location needs to be developed. In this chapter we apply a wide range of locational and other measures to analysis of the external advice and collaboration developed by SMEs in Scotland and in northern England. A key part of the analysis is the inclusion in the Survey of Entrepreneurship in Scotland and northern England of a wide range of alternative locational codings which are then evaluated. The main contribution of this chapter is therefore to provide a large scale

and more definitive view on the influence of location on external advice and collaboration, whilst controlling for the influence of other factors.

9.2 Controlling for sources of variation

The growth of external advice has grown rapidly in the last 20-30 years. This growth may be encouraging locations which are already particularly strong in business services, or have specialist access to businesses which are experiencing the greatest demand for services. In other words, it may be working in favour of locations with agglomerationations of existing technical expertise, or located in proximity to the areas of greatest demand. This has led to recognition of areas within high concentration of business services are emerging (Bennett and Graham, 1998). Such areas may possess advantages for the general development of their economies, not only for the clients they service, but may also become rich areas for exchange of information or development of innovation between business service firms themselves. Thus, the increasing concentration of service suppliers may encourage further and intensifying concentrations in existing centres.

In this chapter we are concerned with testing whether there are relationships between agglomeration and the use of external advice. From a theoretical perspective Porter (1998, 1990) argues that there are benefits from the comparative advantage of local 'clusters' of business concentration that help firms to compete.

The agglomeration process may also be reinforced by institutional and social relations, developing joint collaboration and networks of both strong and weak ties (Vatne, 1995) or embeddedness and trust relationships (Granovetter, 1985). Thus, benefits of economies of scale and scope may result from networking between

business service firms themselves which stimulates strong client-customer networks of trust. Conversely, businesses in more rural or peripheral regions may have more limited potential to develop collaborative arrangements or to call on external inputs (Keeble, 1998).

The previous chapters have used a common set of characteristics of firms to look at the use and satisfaction of users with various sources and schemes of external advice. For consistency the same characteristics of firms are used in this chapter and they are supplemented with locational variables. A key element of this analysis is to control for the influence of a wide range of other features in order to isolate the influence of locational differences. The main features we include here are: (i) the size of the firm, since this has been shown in many analyses to be a major influence on the extent of external advice and collaboration (e.g. Bennett and Robson, 1999a); (ii) exporting, measured by a (0,1) dummy variable; (iii) rate of employment growth over the previous three years; (iv) pre tax profitability, as a measure of business success and/or ability to pay for external advice; (v) skill levels within the firm, measured by the proportion of managerial, technologist, scientist, higher professional, technician and lower professional; (vi) novel product innovator/non-innovator, defined by the adoption by the SME of a novel product innovation over the previous three years that is not only new to the firm but also new to the industry, (vii) novel process innovator/non-innovator, which was defined as the adoption of a firm by a process innovation which was new to the firm and to the industry, over a three year period (viii) incremental product innovator which was if a firm had introduced a product innovation which was new to the firm but not new to the industry, (ix) incremental process innovation which was defined as those firms which

had introduced a process innovation which was not new to the industry but it was new to their firm (x) the age of the firm, and (xi) sector and whether the firm was in a the manufacturing or the service sector of the economy. These are the same explanatory variables which were developed in chapter 5.

9.3 Defining locational characteristics

A wide range of different locational characteristics have been used in earlier studies. Our aim here is to assess the role of each main type of locational classification whilst controlling for the influence of other variables. In other words, the objective is to see whether there is or is not a statistically significant relationship between each of the thirteen measures of the location and the use of external business advice. As summarized in the earlier discussion in the introduction of this chapter, and also in chapter 3, these relate to both the demand characteristics of a location (such as the number and type of other businesses in the area), its location relative to other businesses, supply characteristics of where service firms are located, more specific geographical features such as peripherality and rurality, and the eligibility for government assistance. We test thirteen main geographical structures:

(i) Location in an EU assisted area, defined as objective 1, 2 and 5b.

(ii) Location relative to the nearest local business centre, measured by distance to the 126 local business centres taken from the classification given in Bennett et al. (1999, Table 3).

(iii) Location relative to the nearest regional business centre, measured by distance to the 10 largest centres given in Bennett et al. (1999, Table 3): London, Birmingham, Manchester, Glasgow, Leeds, Liverpool, Newcastle, Bristol, Nottingham and Sheffield.

(iv) Location relative to general market demand, external economies of scale or scope, measured by the number of businesses within given distances of 1km, 15km and 50km from the survey respondent.

(v) Local density/agglomeration of businesses, measured by density of businesses within distances of 1km, 15km and 50km of the SME.

(vi) Location relative to general market supply of business service firms, measured by the proportion of business service firms within 1km, 15km and 50km.

(vii) Location relative to micro business demand/supply, measured by the proportion of micro business firms (1-9 employees) within 1km, 15km and 50km of the SME.

(viii) Location relative to SME business demand/supply, measured by the proportion of SMEs (10-200 employees) within 1km, 15km and 50km.

(ix)Location relative to large firm demand/supply, measured by the proportion of firms over 200 employees within 1km, 15km and 50km.

(x) High technology clustering effects, measured by the proportion of high technology firms within 1km, 15km and 50km. The figures used are high technology firms as a percentage of the total firms within the specific geographical measure.

(xi) The effect of public employment spill over of demand/supply, measured by the proportion of employers in Broad Industrial Group 8 (public administration, education, and health) (BIG8) within 1km, 15km and 50km.

(xii) Sector effects, measured by the proportion of manufacturing within 1km, 15km and 50km.

(xiii) Urban/rural distinctions, using Keeble's (1992, 1998) classification of rural/peripheral, small towns, large towns and conurbations.

The information for measuring location relative to other businesses in the same area at various distances away from the survey respondent was developed by recoding, to a postcode district basis, the Survey of Entrepreneurship in Scotland and in northern England. This is then combined with information from the Census of Employment for 1993, at the postcode district level. The 1993 Census for the first time included *all* businesses of one employee and above and reallocated all multi-site businesses to their actual location of operations. It thus excludes only the self employed and is for the first time fully geographically accurate (see Thomas and Smith, 1997; and Appendix to Bennett et al., 1999).

9.4. Assessment of Locational Influences on the levels of use

The assessment of the role of locational influences on external business advice and collaboration is undertaken below in three sections: (i) for sources of advice, and (ii) their impact; and (iii) for sources and impact in England and their comparison with the results for Scotland. The results are given in Tables 9.1 to 9.4. In each of these tables a uniform set of other controls is given using the variables discussed earlier. To save space the estimates of these variables are not reported or included in the appendices because the volume of output was extremely large.

The reader is referred back to the conclusion of chapter 5 for an articulation of the firm characteristics which influence the use and impact of external advice. In the impact of external advice there were comparatively few statistically significant relationships, although for the levels of use, firm size, exporter and sector were found to be important characteristics. The statistically significant relationships from

chapter 5 were found to continue to be statistically significant when the various geographical variables were added to our regression models, one at a time.

Table 9.1 reports the results of assessing the probability of using private and public sector advisors in Scotland. The results vary considerably by type of source, and there is evidence of general pattern of geographical influence for some private and public backed sources of advice. Firstly, we examine private sector sources.

The first eight columns of Table 9.1 report the results of assessing the probability of using private sector advisors. The results show that there are patterns of use for geographical factors. The use of accountants, lawyers, banks, customers, suppliers, consultants and trade and professional associations are all influenced by the locational factors which relate to demand side conditions. In particular the number of businesses within 1km and 15km and the density of businesses within 1km and 15km are consistently significant across the private sector sources. Other geographical factors are statistically significant, but lack generality and there are comparatively few instances. EU assisted area status only influences the use of suppliers, possibly because of government subsidies for supply networks.

These results are explained by demand-side characteristics, and show that the prevalence of large numbers of businesses and higher densities of businesses create environments where more private sector sources are used for external advice. The lack of statistically significant relationships between the private sector sources and EU assisted area status shows that those firms within EU assisted areas are not more or less likely to seek advice than firms not within those areas. By definition the firms within EU assisted areas are in localities which are economically and socially deprived compared to non-EU assisted areas. Whether or not firms in such areas

should be seeking more advice is debatable. But it appears that there is more homogeneity between the firms which are in business in EU and non-EU assisted areas.

The geographical factors which are related to the use of banks are however time specific, and continued consolidation in the British banking industry, together with restructuring in branch networks will have an impact upon the impact of locational factors.

The use of customers is positively related to the distance in km to the nearest business centre, and the distance in km to the nearest regional centre. The inference is that customers' location is represented in surrogate by those other indicators but that is not necessarily the case. Additionally, the economic potential of the location is also something which also needs to be taken into account. The greater the level of economic potential of a business centre then the more likely that a firm will choose to locate near it.

Interestingly, of the private sector sources of advice, customers were the only model where the conurbation, large town and small town dummy variables in the Keeble (1992) set of variables were statistically significant. Compared with rural area firms we find that those firms which are in conurbations, large towns and small towns were more likely to seek advice from customers. Unfortunately we do not know the distance between customers and firms but it could be the case that the firms in rural areas are less likely to see customers face to face, and instead use postal or road delivery systems to transfer goods from the firm to the customer.

Next, attention focuses upon the public backed sources of advice and their relationship with geographical factors. We include the local chambers of commerce

within this section of the analysis, although they are private-sector bodies, they are local. Locational influences are generally less important than in the first part of table 9.1. This notwithstanding, EU assisted-area status now significantly increases use of TECs and Enterprise Agencies, but not for the use of SBG.

Lastly, at least one of the Keeble (1992) urban and rural categorisation variables were statistically significant in the models of LECs or Scottish Enterprise, HIE, and BS or SBG, but not in the model of LEAs and trusts. Firms in conurbations were less likely than rural firms to use LECs or Scottish Enterprise, HIE, and BS or SBG. In the case of the use of LECs or Scottish Enterprise and Bs or SBG firms within small towns were less likely to use these sources of advice. Firms within large towns were less likely than rural firms to use BS or SBG. The results suggest that firms within the rural areas are more likely to seek advice from the main public-backed sources of advice. It may be the case that such rural firms place a higher degree of brand value on the public backed sources, whilst firms in more populous areas place lower values. This explanation is speculative as space constraints on the questionnaire precluded a question to ascertain why respondents chose particular sources of advice.

Comparing the percentage of cases of use of each source which was correctly classified in the logit models, with those already correctly classified using the control variables alone, showed that the increased explanatory power of the geographical variables is not great. In large part this is explained by the fact that the size of the firms, the employment growth rate of the firms, and the innovation activity variables of the firms account for a large proportion of the models' predictive capabilities. But, if these variables were dropped from the models then the inclusion of the

geographical variables did in large measure boost the percentage of cases that were correctly classified by the models. These additional regression model results are not reported because their volume was very substantial. But the main point to be garnered from the analysis of use of external advice and geographical location is that the relationships are very complex.

This section has explored the relationships between geographical location and the use of external advice. The models used in this chapter all included the firm characteristics which were used in chapter 5. Table 9.1 provides a comprehensive summary of the geographical locational variables when each was included separately (along with the firm characteristics) in the model which was developed in chapter 5. The results of assessing the probability of using private sector sources do not generally vary considerably by type of source of advice, and there is some evidence of systematic patterns but not all geographical factors are important.

9.5 Assessment of Locational Influences on the impact of use

Next we turn our attention to the relationships between geographical location and the respondents' assessments of the impact of external business advice. The impact of business advice is measured in the Survey of Entrepreneurship on a 5 point scale ranging from 1 (no impact), to 5 (crucial impact). As an ordinal measure, the influence of location on its value by respondents is estimated here using an ordered logit model.

External business advice, even as defined in our survey, is a fairly broad area of external inputs to a business which can range from fairly modest to crucial impacts. Indeed, the assessments in the Survey of Entrepreneurship in Scotland had

an average of 2.92, just below moderate. We recall from chapter 5 that the highest impacts were recorded by customers, suppliers, business associates, consultants, friends and relatives, and accountants, who all recorded assessments which were above the average, between 'moderate' and 'important' impact. The lowest impacts were recorded for all public-sector suppliers and chambers of commerce.

Table 9.2 reports the estimates of impact for the private and the public sectors of external advice. The main advisor sources where increasing impact is influenced by geography are for accountants, solicitors, banks and friends and family. In these cases, location in areas with many businesses, many service firms, large or small firms, and at high density all increase impact.

The converse is to some extent true for trade and professional associations, where distance from a centre is associated with higher impact whilst location in a concentration of other businesses and higher densities is associated with lower impact. Since trade and professional associations are almost all national bodies chiefly located in London, this indicates that their benefits are chiefly felt by those businesses more distant from centres and concentrations of other businesses: thus they seem to play an important gap-filling role.

As with use levels, European union assisted area status, the Keeble urban-rural classification offer virtually no explanatory power.

The assessment of impact for public-sector advisors is shown in Table 9.2. Here, the sample sizes are limited because of the levels of use but estimation was possible. Despite this constraint, it is clear that, as for use of external business advice, adviser impact is significantly influenced by geographical factors in not a substantial number of instances. Focusing attention upon the individual coefficients,

it is the impact of chambers of commerce that is chiefly influenced by location across a broad range of criteria: distance to a regional centre (negatively), the local concentration of firms, business service firms, business density, the Keeble urban-rural classification types.

A few locational variables influence the impact of LECs advice: chiefly local business concentration and density. A few locational variables also influence the impact of enterprise agencies, negatively with concentration and density. A few locational variables also influence the impact of enterprise agencies and HIE, negatively with concentration and density. The HIE is also associated negatively with the Keeble classification of large towns (compared to the rural category base), again.

Overall, however, there is only a small degree of significant influence of location on the impact of public sources of advice, rather less than for the influences of location on the use of external public-sector advice.

9.6. Assessment of Locational Influences on the levels of use in England and comparison with Scotland

Table 9.3 shows the summary of the locational measures for the use of business advice in England. The same procedure which was adopted in section 9.4 is also followed in this section, of adding each of the geographical variables to the standard model which was estimated and reported in chapter 5.

The results for Scottish firms showed that location was related to the use of accountants, banks and solicitors, but the geographical variables generally differ between Scotland and England. In Scotland it was the number of businesses and the

density of businesses which were strong explanatory variables, but this is not the case for England.

There were only two statistically significant geographical variables in the use of suppliers in England models and these were distance to the nearest regional business centre and the percentage of SMEs within 50 km. In contrast in Scotland the geographical variables in the model of suppliers were found to be much more important for several variables including, the number of businesses within 1km and 15km, and the density of businesses within 1km and 50km. Thus, for Scotland the results are explained by demand factors being more important than for England. In England the results show that demand and supply factors which are captured by locational variables do not statistically and systematically influence levels of use of external advice for the private sector specialists.

In England there were no statistically significant relationships at the 1% level between geographical factors and the use of friends and relatives and consultants. We recall that in Table 9.1 there were more statistically significant relationships between geographical factors and the use of consultants in Scotland.

There were three geographical factors in England which were statistically significant at the 1% level in explaining the use of TECs. These were firms which were in EU assisted areas, the density of businesses within 50 km, and the percentage of micro firms within 1 km. The first two geographical variables were positively related and the third factor was negatively related to the use of TECs. Thus, in England firms in EU assisted areas were more likely to use TECs than their Scottish counterparts. This perhaps could be explained by TECs in EU assisted areas in England being more pro-active in encouraging firms to use their services.

	Accountant	Solicitor	Bank	Customers	Business Associates
EU Assisted Area Assisted Area	-0.103 (0.238)	-0.055 (0.211)	-0.241 (0.205)	-0.180 (0.185)	0.009 (0.189)
Distance to nearest business centre	-0.008 (0.006)	-0.004 (0.005)	-0.002 (0.005)	0.008 (0.001) ***	0.004 (0.005)
Distance to nearest regional business centre	-0.0003 (0.0024)	-0.002 (0.002)	-0.0001 (0.002)	0.004 (0.001) ***	0.0008 (0.002)
Number of businesses within:					
1km	0.0002 (0.00001)	0.003 (0.0001)***	0.0002 (0.0001)*	-0.0002 (0.0001) **	0.00002 (0.00009)
15km	0.00001 (0.00001)	0.00001 (0.0001)	5.01e07 (0.00001)	-0.00001 (9.47e07) ***	1.54e07 (9.28e06)
50km	4.19e-06 (5.14e-0.6)	2.42e06 (4.63e06)	-1.28e08 (4.46e06)	-5.10e06 (4.11e07)	2.72e06 (4.06e06)
Density of businesses within:					
1km	0.0007 (0.0001)***	0.0001 (0.0004)**	0.0006 (0.0002)***	-0.0007 (0.0003) **	0.00005 (0.0003)
15km	0.009 (0.009)	0.0089 (0.0076)	0.0004 (0.0072)	-0.010 (0.0001) ***	0.0001 (0.007)
50km	0.033 (0.040)	0.019 (0.0363)	-0.00008 (0.035)	-0.040 (0.032)	0.021 (0.031)
% of business service firms within:					
1km	0.0005 (0.013)	0.022 (0.012)	0.011 (0.001)***	-0.002 (0.010)	0.004 (0.010)
15km	-0.003 (0.022)	0.019 (0.020)	0.007 (0.020)	-0.026 (0.002) ***	-0.016 (0.003) ***
50km	-0.037 (0.006)***	-0.0004 (0.024)	-0.005 (0.024)	-0.029 (0.022)	-0.022 (0.002) ***
% of micro firms within:					
1km	-0.005 (0.016)	-0.009 (0.014)	-0.020 (0.001)***	-0.008 (0.012)	0.004 (0.013)
15km	-0.017 (0.033)	-0.025 (0.030)	-0.011 (0.030)	0.006 (0.027)	0.005 (0.027)
50km	-0.017 (0.068)	-0.016 (0.061)	0.029 (0.026)	0.027 (0.055)	0.022 (0.055)

Table 9.1: Summary of the significant locational measures for the use of business advice in Scotland (*** $p > 0.01$; ** $p > 0.05$; * $p > 0.1$).

	Accountant	Solicitor	Bank	Customers	Business Associates
% of SMEs within:					
1km	0.004 (0.014)	0.010 (0.015)	0.022 (0.004) ***	0.008 (0.013)	-0.0005 (0.013)
15km	0.022 (0.037)	0.027 (0.033)	0.015 (0.032)	-0.003 (0.030)	-0.004 (0.031)
50km	0.024 (0.079)	0.018 (0.071)	-0.037 (0.074)	-0.013 (0.064)	-0.018 (0.64)
% of large firms within:					
1km	0.094 (0.177)	0.098 (0.161)	0.045 (0.155)	-0.011 (0.144)	0.003 (0.142)
15km	-0.021 (0.256)	0.184 (0.229)	-0.087 (0.227)	-0.190 (0.007) ***	-0.091 (0.206)
50km	-0.035 (0.352)	0.072 (0.324)	-0.062 (0.317)	-0.468 (0.029) ***	-0.269 (0.287)
% of hi technology firms within:					
1km	0.013 (0.077)	-0.024 (0.071)	0.014 (0.067)	-0.095 (0.006) ***	0.142 (0.064) **
15km	-0.049 (0.157)	0.151 (0.011) ***	0.064 (0.141)	-0.177 (0.088) **	-0.031 (0.129)
50km	0.013 (0.228)	0.022 (0.206)	0.109 (0.200)	-0.370 (0.186) **	-0.089 (0.183)
% of Manufacturing Firms within:					
1km	0.006 (0.023)	-0.042 (0.020) **	-0.004 (0.019)	0.022 (0.010) **	0.012 (0.018)
15km	-0.062 (0.070)	-0.067 (0.062)	-0.085 (0.006) ***	0.018 (0.057)	-0.127 (0.060) **
50km	-0.202 (0.212)	-0.017 (0.185)	-0.311 (0.091) ***	-0.072 (0.163)	-0.126 (0.164)
% of BIG8 Firms within:					
1km	-0.041 (0.011)***	-0.008 (0.020)	-0.015 (0.020)	0.0005 (0.018)	-0.002 (0.018)
15km	-0.040 (0.034)	-0.018 (0.032)	-0.032 (0.003) ***	-0.008 (0.029)	0.051 (0.007) ***
50km	0.026 (0.069)	0.032 (0.063)	0.056 (0.062)	0.101 (0.050) **	0.121 (0.056) **
Urban & Rural Categorisation:					
Conurbation	0.071 (0.300)	0.363 (0.274)	0.106 (0.261)	-0.360 (0.180) **	-0.255 (0.236)
Large Town	-0.143 (0.332)	0.330 (0.317)	-0.228 (0.294)	-0.412 (0.196) **	-0.221 (0.276)
Small Town	-0.013 (0.271)	0.104 (0.246)	0.052 (0.242)	-0.079 (0.039) **	0.008 (0.221)

Table 9.1: Summary of the significant locational measures for the use of business advice in Scotland (*** $p > 0.01$; ** $p > 0.05$; * $p > 0.1$).

Advice Source	Friends/ Relatives	Suppliers	Consultants	Chambers	Trade/Prof Assoc
EU Assisted Area	0.050 (0.193)	-0.073 (0.186)	-0.299 (0.030) ***	0.369 (0.020) ***	0.123 (0.199)
Distance to nearest business centre	-0.003 (0.005)	0.002 (0.005)	-0.001 (0.005)	-0.003 (0.006)	0.014 (0.001) ***
Distance to nearest regional business centre	0.002 (0.002)	0.002 (0.002)	-0.004 (0.002) **	0.001 (0.002)	0.004 (0.002) *
No. of businesses within:					
1km	0.00004 (0	8.72e05 (0.001)	0.0004 (0.0001) ***	0.00007 (0.0001)	0.00003 (0.0001)
15km	-8.11eo6 (9.88e06)	7.2e06 (9.33e06)	0.00003 (9.61e06) ***	1.65e06 (0.00001)	-0.00002 (0.00001) **
50km	-4.16e06 (4.29e06)	-2.74e06 (4.09e06)	3.78e06 (4.21e06)	-2.29e06 (5.25e06)	-5.92e06 (4.37e06)
Density of businesses within:					
1km	0.0001 (0.0003)	0.00002 (0.00003)	0.001 (0.0003) ***	0.0002 (0.0004)	0.00009 (0.0003)
15km	-0.006 (0.007)	0.005 (0.007)	0.019 (0.007) ***	0.001 (0.008)	-0.015 (0.007) **
50km	-0.033 (0.009) ***	-0.021 (0.032)	0.030 (0.033)	-0.0181 (0.041)	-0.046 (0.034)
% of business service firms within:					
1km	0.010 (0.011)	0.021 (0.001) ***	0.022 (0.011) **	0.009 (0.013)	-0.014 (0.011)
15km	-0.016 (0.019)	0.005 (0.018)	0.040 (0.019) **	0.006 (0.022)	-0.033 (0.019) *
50km	-0.024 (0.022)	-0.030 (0.022)	0.009 (0.023)	0.007 (0.028)	-0.003 (0.023)
% of micro firms within:					
1km	0.004 (0.013)	-0.020 (0.013)	0.012 (0.013)	-0.003 (0.016)	0.012 (0.014)
15km	0.0005 (0.029	-0.044 (0.011) ***	-0.002 (0.029)	0.004 (0.035)	0.077 (0.029) ***
50km	-0.009 (0.059)	0.047 (0.056)	0.068 (0.056)	-0.005 (0.073)	0.080 (0.057)

Table 9.1: Summary of the significant locational measures for the use of business advice in Scotland (*** $p > 0.01$; ** $p > 0.05$; * $p > 0.1$).

	Friends/ Relatives	Suppliers	Consultants	Chamber	Trade/ Prof Assoc
% of SMEs within:					
1km	-0.005 (0.014)	0.021 (0.003) ***	-0.014 (0.014)	0.006 (0.017)	-0.009 (0.014)
15km	0.001 (0.032)	0.053 (0.003) ***	-0.001 (0.032)	-0.003 (0.040)	-0.079 (0.032) **
50km	0.023 (0.069)	-0.042 (0.065)	-0.100 (0.005) ***	0.015 (0.087)	-0.086 (0.067)
% of large firms within:					
1km	0.085 (0.148)	0.168 (0.144)	0.104 (0.149)	-0.184 (0.014) ***	-0.476 (0.157) ***
15km	-0.081 (0.215)	0.086 (0.207)	0.187 (0.216)	-0.073 (0.267)	-0.728 (0.222) ***
50km	-0.192 (0.299)	-0.477 (0.097) ***	0.147 (0.304)	-0.180 (0.364)	-0.478 (0.303)
% of hi technology firms within:					
1km	0.039 (0.062)	-0.117 (0.064) *	-0.083 (0.063)	-0.013 (0.079)	-0.129 (0.007) ***
15km	-0.087 (0.136)	-0.032 (0.131)	0.243 (0.013) ***	0.041 (0.169)	-0.266 (0.141) *
50km	-0.210 (0.193)	-0.444 (0.187) **	0.192 (0.192)	-0.058 (0.238)	-0.118 (0.197)
% of Manufacturing Firms within:					
1km	0.027 (0.008) ***	0.0008 (0.018)	-0.037 (0.019) **	-0.024 (0.002) ***	-0.025 (0.199)
15km	0.096 (0.050) ***	-0.038 (0.058)	-0.029 (0.061)	-0.051 (0.077)	-0.032 (0.063)
50km	0.297 (0.008) ***	0.057 (0.163)	0.293 (0.176) *	0.097 (0.215)	-0.171 (0.176)
% of BIG8 Firms within:					
1km	-0.018 (0.019)	0.0009 (0.018)	-0.057 (0.020) ***	-0.008 (0.024)	-0.003 (0.020)
15km	0.028 (0.030)	0.004 (0.029)	-0.038 (0.032)	0.026 (0.037)	0.010 (0.031)
50km	0.066 (0.005) ***	0.110 (0.057) *	-0.019 (0.050)	-0.061 (0.071)	0.006 (0.057)
Urban & Rural Categorisation:					
Conurbation	-0.230 (0.250)	-0.104 (0.236)	0.391 (0.024) ***	-0.351 (0.305)	-0.640 (0.258) **
Large Town	-0.153 (0.287)	-0.183 (0.277)	0.253 (0.287)	-0.049 (0.345)	-0.652 (0.300) **
Small Town	-0.028 (0.230)	-0.063 (0.237)	-0.234 (0.235)	-0.373 (0.090) ***	-0.409 (0.239) *

Table 9.1: Summary of the significant locational measures for the use of business advice in Scotland (*** $p > 0.01$; ** $p > 0.05$; * $p > 0.1$).

	LEA/ Trust	LEC or Scottish Ent	HIE	Business Shop/ SBG
EU Assisted Area Assisted Area	0.123 (0.198)	0.156 (0.200)	0.140 (0.222)	0.132 (0.344)
Distance to nearest business centre	-0.0005 (0.002)	0.010 (0.004) **	0.014 (0.007) *	0.007 (0.005)
Distance to nearest regional business centre	-0.0002 (0.005)	0.003 (0.001) **	0.008 (0.003) **	0.006 (0.002) **
Number of businesses within:				
1km	0.0001 (0.0001)	-0.00003 (0.0001)	-0.0005 (0.0001) ***	-0.0002 (0.0001)
15km	2.10e07 (9.87e06)	-7.02e06 (0.00001)	-0.00005 (0.00002) **	-0.00001 (0.00001)
50km	-3.25e06 (4.35e06)	-4.53e06 (4.51e06)	-0.00002 (8.40e06) ***	-5.47e06 (4.67e06)
Density of businesses within:				
1km	0.0003 (0.0003)	-0.0001 (0.0003)	-0.001 (0.0009)	-0.0006 (0.0002) **
15km	0.0001 (0.007)	-0.005 (0.007)	-0.033 (0.015) **	-0.010 (0.007)
50km	-0.025 (0.034)	-0.036 (0.035)	-0.188 (0.066) ***	-0.045 (0.037)
% of business service firms within:				
1km	0.006 (0.011)	-0.018 (0.001) ***	0.0003 (0.020)	-0.025 (0.013) **
15km	-0.006 (0.019)	-0.008 (0.019)	-0.019 (0.036)	-0.046 (0.022) **
50km	0.003 (0.023)	0.004 (0.024)	-0.033 (0.045)	-0.047 (0.027) *
% of micro firms within:				
1km	0.003 (0.013)	0.007 (0.014)	0.001 (0.024)	-0.0009 (0.015)
15km	0.013 (0.029)	0.049 (0.009) ***	0.009 (0.052)	0.034 (0.031)
50km	0.032 (0.059)	0.039 (0.062)	0.245 (0.083) ***	0.096 (0.045) **

Table 9.1: Summary of the significant locational measures for the use of business advice in Scotland (*** $p > 0.01$; ** $p > 0.05$; * $p > 0.1$).

	LEA/ Trust	LEC or Scottish Ent	HIE	Business Shop/ SBG
% of SMEs within:				
1km	-0.002 (0.014)	-0.006 (0.015)	0.002 (0.026)	0.004 (0.015)
15km	-0.014 (0.035)	-0.052 (0.003) ***	0.004 (0.060)	-0.027 (0.034)
50km	-0.040 (0.068)	-0.037 (0.073)	-0.267 (0.097) ***	-0.089 (0.007) ***
% of large firms within:				
1km	-0.067 (0.153)	-0.191 (0.015) ***	-0.411 (0.007) ***	-0.297 (0.164) *
15km	-0.096 (0.222)	-0.431 (0.229) *	-0.699 (0.009) ***	-0.706 (0.239) ***
50km	-0.063 (0.310)	-0.328 (0.317)	-1.426 (0.466) ***	-0.836 (0.320) ***
% of hi technology firms within:				
1km	-0.028 (0.065)	-0.073 (0.067)	0.029 (0.106)	-0.081 (0.072)
15km	-0.089 (0.140)	-0.158 (0.141)	-0.123 (0.251)	-0.504 (0.158) ***
50km	-0.088 (0.197)	-0.107 (0.202)	-0.320 (0.356)	-0.555 (0.002) ***
% of Manufacturing Firms within:				
1km	-0.007 (0.019)	-0.022 (0.019)	0.019 (0.032)	0.026 (0.020)
15km	0.066 (0.061)	-0.052 (0.066)	-0.096 (0.121)	-0.030 (0.068)
50km	0.370 (0.186) **	0.160 (0.182)	0.112 (0.315)	0.034 (0.184)
% of BIG8 Firms within:				
1km	-0.030 (0.011) ***	-0.006 (0.020)	-0.049 (0.041)	-0.018 (0.022)
15km	-0.034 (0.033)	0.009 (0.032)	0.055 (0.054)	-0.009 (0.034)
50km	-0.050 (0.058)	0.011 (0.060)	0.139 (0.009) ***	0.064 (0.061)
Urban & Rural Categorisation:				
Conurbation	-0.053 (0.248)	-0.432 (0.255) *	-1.476 (0.579) **	-0.488 (0.264) *
Large Town	-0.360 (0.304)	-0.458 (0.304)	-0.331 (0.401)	-1.064 (0.356) ***
Small Town	-0.098 (0.240)	-0.598 (0.248) **	-0.193 (0.492)	-0.431 (0.251) *

Table 9.1: Summary of the significant locational measures for the use of business advice in Scotland (*** $p > 0.01$; ** $p > 0.05$; * $p > 0.1$).

	Accountant	Solicitor	Bank	Customers	Business Associates
EU Assisted Area Assisted Area	-0.055 (0.183)	-0.249 (0.209)	-0.353 (0.201) *	0.200 (0.241)	0.174 (0.259)
Distance to nearest business centre	0.004 (0.005)	-0.006 (0.005)	0.005 (0.005)	-0.0009 (0.006)	-0.011 (0.005) **
Distance to nearest regional business centre	-0.001 (0.182)	-0.002 (0.002)	0.002 (0.002)	8.97e-06 (0.003)	-0.004 (0.002)
Number of businesses within:					
1km	-5.03e-06 (0.0001)	0.00007 (0.0001)	-0.00004 (0.0001)	-0.00006 (0.0001)	0.0002 (0.0001)
15km	-3.84e-06 (9.23e-06)	0.00002 (0.00001) ***	-0.00001 (0.00001)	2.96e-07 (0.00001)	0.00002 (0.00001)
50km	-9.69e-06 (4.15e-06)**	-2.80e-06 (4.68e-06)	3.59e-06 (4.57e-06)	-1.60e-06 (5.50e-06)	2.96e-05 (5.62e-06)
Density of businesses within:					
1km	-0.00002 (0.0003)	0.0002 (0.0003)	-0.0001 (0.0003)	-0.0002 (0.0005)	0.0006 (0.0004)
15km	-0.003 (0.007)	0.016 (0.007) **	-0.009 (0.007)	0.0002 (0.009)	0.012 (0.009)
50km	-0.076 (0.033) **	-0.022 (0.037)	-0.028 (0.036)	-0.012 (0.043)	0.023 (0.044)
% of business service firms within:					
1km	0.008 (0.011)	0.014 (0.011)	0.011 (0.011)	0.013 (0.013)	0.036 (0.014) **
15km	0.024 (0.019)	0.065 (0.019) ***	0.009 (0.019)	0.020 (0.024)	0.019 (0.030)
50km	0.022 (0.015)	0.046 (0.024) *	-0.0009 (0.024)	0.027 (0.029)	0.012 (0.033)
% of micro firms within:					
1km	-0.0006 (0.013)	-0.008 (0.014)	0.005 (0.013)	-0.004 (0.017)	-0.031 (0.019) *
15km	-0.032 (0.027)	-0.026 (0.031)	0.024 (0.030)	-0.009 (0.037)	-0.065 (0.038) *
50km	0.100 (0.058) *	0.115 (0.067) *	0.082 (0.060)	-0.035 (0.082)	-0.123 (0.070) *

Table 9.2: Summary of the significant locational measures for the impact of business advice in Scotland (*** $p > 0.01$; ** $p > 0.05$; * $p > 0.1$).

	Accountant	Solicitor	Bank	Customers	Business Associates
% of SMEs within:					
1km	-0.0003 (0.014)	0.006 (0.015)	-0.005 (0.014)	0.005 (0.017)	0.031 (0.020)
15km	0.036 (0.030)	0.026 (0.034)	-0.029 (0.033)	0.010 (0.042)	0.074 (0.042) *
50km	-0.121 (0.068) *	-0.164 (0.079) *	-0.101 (0.070)	0.043 (0.099)	0.150 (0.082) *
% of large firms within:					
1km	0.118 (0.142)	0.322 (0.167) *	0.046 (0158)	-0.055 (0.188)	0.406 (0.199) **
15km	0.187 (0.210)	0.326 (0.237)	-0.032 (0.229)	0.045 (0.275)	0.328 (0.281)
50km	-0.319 (0.294)	0.096 (0.339)	-0.212 (0.315)	0.123 (0.389)	0.456 (0.378)
% of hi technology firms within:					
1km	-0.026 (0.060)	0.055 (0.072)	0.061 (0.061)	-0.017 (0.070)	0.050 (0.086)
15km	0.065 (0.134)	0.222 (0.144)	0.009 (0.139)	0.118 (0.168)	-0.046 (0.184)
50km	-0.159 (0.182)	0.198 (0.211)	-0.054 (0.202)	0.028 (0.256)	-0.044 (0.266)
% of Manufacturing Firms within:					
1km	-0.020 (0.017)	0.010 (0.021)	-0.003 (0.019)	-0.009 (0.023)	0.015 (0.023)
15km	-0.032 (0.057)	0.048 (0.065)	-0.124 (0.069) *	0.068 (0.071)	0.104 (0.078)
50km	0.040 (0.168)	0.337 (0.171) **	-0.361 (0.171) **	0.031 (0.178)	0.152 (0.236)
% of BIG8 Firms within:					
1km	-0.0004 (0.020)	-0.046 (0.020) **	0.040 (0.020)	0.013 (0.024)	0.004 (0.024)
15km	-0.063 (0.032) **	-0.147 (0.034) ***	0.040 (0.033)	0.014 (0.038)	-0.026 (0.038)
50km	-0.018 (0.057)	-0.161 (0.058) ***	0.044 (0.059)	-0.045 (0.063)	-0.082 (0.076)
Urban & Rural Categorisation:					
Conurbation	-0.027 (0.238)	0.483 (0.268) *	-0.052 (0.261)	0.098 (0.317)	0.634 (0.323)
Large Town	0.636 (0.284) **	0.710 (0.310) **	0.538 (0.312) *	-0.330 (0.380)	0.378 (0.397)
Small Town	-0.352 (0.245)	-0.348 (0.260)	0.016 (0.240)	0.109 (0.288)	0.381 (0.299)

Table 9.2: Summary of the significant locational measures for the impact of business advice in Scotland (*** $p > 0.01$; ** $p > 0.05$; * $p > 0.1$).

Advice Source	Friends/ Relatives	Suppliers	Consultants	Chambers	Trade/Prof Assoc
EU Assisted Area	-0.256 (0.301)	0.092 (0.228)	0.241 (0.247)	0.0243 (0.436)	-0.164 (0.302)
Distance to nearest business centre	0.003 (0.008)	0.004 (0.006)	0.0002 (0.006)	0.018 (0.012)	0.006 (0.007)
Distance to nearest regional business centre	0.001 (0.003)	-0.0001 (0.002)	0.004 (0.002)	0.006 (0.004)	0.0005 (0.003)
No. of businesses within:					
1km	-0.0005 (0.0001) ***	-0.000008 (0.0001)	0.00002 (0.00001)	-0.0002 (0.0002)	-0.0002 (0.0001)
15km	-0.00002 (0.00001)	-0.00001 (0.00001)	5.85e-06 (0.00002)	-0.00005 (0.00002) **	-0.00001 (0.00001)
50km	-7.27e-06 (7.18e-6)	-9.36e-08 (5.19e-06)	8.08e-08 (5.32e-06)	-0.00001 (8.83e-06)	6.48e-07 (6.20e-06)
Density of businesses within:					
1km	-0.002 (0.0001) ***	-0.003 (0.0004)	0.00007 (0.0004)	-0.0007 (0.0006)	-0.0006 (0.0004)
15km	-0.016 (0.011)	-0.009 (0.008)	0.004 (0.008)	-0.033 (0.015) **	-0.010 (0.010)
50km	-0.057 (0.056)	-0.0007 (0.041)	0.0006 (0.042)	-0.112 (0.069)	0.005 (0.049)
% of business service firms within:					
1km	-0.020 (0.016)	-0.003 (0.013)	0.018 (0.013)	-0.045 (0.026) *	-0.013 (0.017)
15km	0.010 (0.031)	-0.015 (0.024)	-0.011 (0.024)	-0.095 (0.046) **	-0.043 (0.030)
50km	0.023 (0.039)	0.012 (0.029)	-0.038 (0.030)	-0.060 (0.053)	-0.027 (0.036)
% of micro firms within:					
1km	0.007 (0.020)	0.054 (0.016) **	-0.005 (0.017)	0.038 (0.029)	-0.007 (0.019)
15km	0.002 (0.046)	0.087 (0.037) **	0.014 (0.037)	0.096 (0.061)	-0.015 (0.042)
50km	-0.037 (0.090)	-0.016 (0.062)	0.136 (0.070) **	0.154 (0.119)	0.0009 (0.079)

Table 9.2: Summary of the significant locational measures for the impact of business advice in Scotland (*** $p > 0.01$; ** $p > 0.05$; * $p > 0.1$).

	Friends/ Relatives	Suppliers	Consultants	Chamber	Trade/ Prof Assoc
% of SMEs within:					
1km	-0.014 (0.020)	-0.037 (0.017) **	0.005 (0.018)	-0.046 (0.031)	0.009 (0.021)
15km	-0.011 (0.048)	-0.103 (0.041) **	-0.010 (0.041)	-0.100 (0.070)	0.018 (0.047)
50km	0.041 (0.100)	0.015 (0.072)	-0.159 (0.081) **	-0.159 (0.137)	-0.0002 (0.093)
% of large firms within:					
1km	-0.113 (0.219)	-0.160 (0.187)	-0.013 (0.192)	-0.378 (0.331)	-0.174 (0.228)
15km	-0.083 (0.321)	-0.234 (0.264)	-0.323 (0.278)	-0.951 (0.513) *	0.029 (0.313)
50km	0.074 (0.465)	0.139 (0.345)	-0.650 (0.400)	-1.053 (0.662)	-0.018 (0.431)
% of hi technology firms within:					
1km	0.152 (0.090) *	-0.063 (0.071)	-0.026 (0.096)	-0.323 (0.144) **	0.101 (0.124)
15km	0.064 (0.210)	-0.040 (0.166)	-0.202 (0.190)	-0.600 (0.325) *	0.003 (0.228)
50km	0.172 (0.310)	0.239 (0.235)	-0.170 (0.257)	-0.403 (0.434)	-0.143 (0.300)
% of Manufacturing Firms within:					
1km	0.046 (0.027) *	-0.002 (0.022)	0.034 (0.025)	0.021 (0.046)	0.052 (0.029) *
15km	0.030 (0.070)	0.009 (0.062)	-0.035 (0.077)	-0.051 (0.182)	0.044 (0.086)
50km	-0.335 (0.249)	-0.078 (0.168)	-0.104 (0.185)	-0.800 (0.403) **	-0.350 (0.239)
% of BIG8 Firms within:					
1km	-0.012 (0.025)	0.018 (0.023)	-0.001 (0.026)	0.061 (0.053)	0.032 (0.030)
15km	-0.048 (0.041)	0.045 (0.036)	0.036 (0.043)	0.160 (0.093) *	0.064 (0.047)
50km	-0.120 (0.100)	0.009 (0.064)	0.074 (0.063)	0.214 (0.144)	0.148 (0.079) *
Urban & Rural Categorisation:					
Conurbation	-0.582 (0.380)	-0.239 (0.283)	0.103 (0.306)	-0.858 (0.520) *	0.021 (0.372)
Large Town	0.213 (0.449)	-0.029 (0.376)	0.169 (0.363)	-0.731 (0.669)	-0.328 (0.478)
Small Town	0.089 (0.346)	0.160 (0.284)	0.237 (0.331)	-0.242 (0.555)	0.883 (0.373) **

Table 9.2: Summary of the significant locational measures for the impact of business advice in Scotland (*** $p > 0.01$; ** $p > 0.05$; * $p > 0.1$).

	LEA/ Trust	LEC or Scottish Ent	HIE	Business Shop/ SBG
EU Assisted Area Assisted Area	0.290 (0.284)	0.110 (0.238)	0.926 (0.832)	0.242 (0.294)
Distance to nearest business centre	0.028 (0.008) ***	0.013 (0.008)	0.031 (0.016) *	-0.016 (0.009) *
Distance to nearest regional business centre	0.006 (0.003) *	0.003 (0.003)	0.015 (0.007) *	-0.001 (0.003)
Number of businesses within:				
1km	0.00002 (0.0001)	-0.0001 (0.0002)	-0.056 (0.025) **	0.0002 (0.0002)
15km	-0.00002 (0.00001)	-7.61e-06 (0.00001)	-0.0003 (0.0001) **	0.00002 (0.00002)
50km	-7.91e-06 (6.41e-06)	5.82e-06 (6.56e-06)	-0.00006 (0.00003) **	8.74e-06 (7.15e-06)
Density of businesses within:				
1km	0.00006 (0.0005)	-0.0004 (0.0005)	-0.174 (0.079) **	0.0008 (0.0006)
15km	-0.013 (0.010)	-0.005 (0.010)	-0.230 (0.113) **	0.011 (0.011)
50km	-0.062 (0.050)	0.046 (0.051)	-0.500 (0.241) **	0.069 (0.056)
% of business service firms within:				
1km	-0.048 (0.017) ***	-0.031 (0.017) *	-0.050 (0.052)	-0.0009 (0.019)
15km	-0.094 (0.029) ***	-0.088 (0.030) ***	-0.150 (0.097)	-0.0006 (0.035)
50km	-0.070 (0.034) *	-0.070 (0.035) *	-0.108 (0.101)	-0.018 (0.042)
% of micro firms within:				
1km	0.039 (0.020) *	0.021 (0.020)	0.208 (0.075) ***	0.006 (0.022)
15km	0.144 (0.045) ***	0.071 (0.042) *	0.367 (0.140) ***	0.011 (0.045)
50km	0.146 (0.080) *	0.062 (0.094)	0.282 (0.143) *	-0.113 (0.100)

Table 9.2: Summary of the significant locational measures for the impact of business advice in Scotland (*** $p > 0.01$; ** $p > 0.05$; * $p > 0.1$).

	LEA/ Trust	LEC or Scottish Ent	HIE	Business Shop/ SBG
% of SMEs within:				
1km	-0.038 (0.021) *	-0.022 (0.021)	-0.207 (0.076) ***	-0.008 (0.023)
15km	-0.151 (0.050) ***	-0.074 (0.047)	-0.423 (0.162) ***	-0.012 (0.050)
50km	-0.161 (0.093) *	-0.077 (0.109)	-0.306 (0.162) *	0.144 (0.106)
% of large firms within:				
1km	-0.658 (0.226) ***	-0.228 (0.222)	-2.712 (0.972) ***	0.074 (0.240)
15km	-1.264 (0.341) ***	-0.742 (0.339) **	-2.433 (0.994) **	-0.067 (0.369)
50km	-0.782 (0.446) *	-0.131 (0.493)	-2.133 (1.084) **	0.233 (0.466)
% of hi technology firms within:				
1km	-0.258 (0.087) ***	-0.030 (0.088)	-0.760 (0.379) **	-0.153 (0.107)
15km	-0.867 (0.217) ***	-0.685 (0.218) ***	-2.489 (1.220) **	-0.382 (0.266)
50km	-0.705 (0.291) **	-0.483 (0.292) *	-1.040 (1.134)	0.003 (0.322)
% of Manufacturing Firms within:				
1km	0.012 (0.028)	0.040 (0.029)	-0.008 (0.100)	-0.005 (0.027)
15km	0.232 (0.103) **	0.180 (0.100) *	-0.962 (0.571) *	-0.161 (0.126)
50km	0.619 (0.278) **	0.504 (0.289) *	-0.734 (0.818)	-0.635 (0.340) *
% of BIG8 Firms within:				
1km	-0.010 (0.033)	0.029 (0.038)	-0.094 (0.100)	0.066 (0.034) *
15km	0.075 (0.058)	0.038 (0.058)	0.085 (0.115)	0.055 (0.057)
50km	0.027 (0.096)	0.054 (0.110)	0.308 (0.194)	0.106 (0.111)
Urban & Rural Categorisation:				
Conurbation	-0.210 (0.355)	-0.094 (0.364)	35 Iterations	0.843 (0.385) **
Large Town	-1.589 (0.475) ***	-1.114 (0.453)	Too Small	-0.736 (0.603)
Small Town	-0.382 (0.352)	0.415 (0.370)		1.190 (0.320)

Table 9.2: Summary of the significant locational measures for the impact of business advice in Scotland (*** $p > 0.01$; ** $p > 0.05$; * $p > 0.1$).

In contrast in Scotland the use of LECs and Scottish Enterprise models the distance to the nearest business centre and the distance to the nearest regional business centre, and the percentage of micro firms within 15km were all positively, statistically significant at the 5% level, or better. The Keeble urban and rural variable was significant in Scotland but it is not in England. Thus, in Scotland but not in England the more rural firms are also more likely to use LECs. This may be explained by rural firms placing a higher level of trust upon the LECs and a higher value upon the brand name of LECs. Alternatively, the more rural firms may also perceive that they should use LECs because of a lack of perceived alternative sources of advice. Both of these explanations are speculative as we did not ask respondents why they used particular sources.

The BL/SBS model has many statistically significant relationships, but these are weakly statistically significant with several of them being statistically significant at the 10% level. Looking at the 1% level it is the percentage of micro firms within 1km and 15km which were statistically significant in the models of BL/SBS. In contrast in Scotland the percentage of high technology firms within 15km and 50km were all statistically significant. Thus, in England the use of BL/SBS is positively related to the number of micro firms, but this is not the case in Scotland. This may be explained by the targeting strategy of BL/SBS with an emphasis upon smaller sized firms. In the case of Scotland instead it is the percentage of high technology firms which explains the use of SBG. Again this can be explained by the actual targeting of firms, with areas of high technology firms actively courted for business by SBG.

9.7. Assessment of Locational Influences on the impact of use in England and comparison with Scotland

We recall that the impact of business advice is measured in the Survey of Entrepreneurship on a 5 point scale ranging from 1 (no impact), to 5 (crucial impact). As an ordinal measure, the influence of location on its value by respondents is estimated here using an ordered logit model. Table 9.4 presents the summary of the locational measures for the impact of business advice in England. The main finding is that, overall, there are comparatively few statistically significant relationships at the 1% or the 5% level between geographical factors and the impact of external advice. Thus, whilst the geographical factors have an influence of the likelihood of firms using external advice, the geographical factors do not influence the impact of external advice.

In Scotland the main advisor sources where increasing impact is influenced by geography were for accountants, solicitors, banks and friends and family. In these cases, location in areas with many businesses, many service firms, large or small firms, and at high density all increased impact. In England areas with many businesses are also statistically significant, but density was not statistically significant.

In Scotland we found that trade and professional associations, distance from a centre was associated with higher impact, and location in a concentration of other businesses and higher densities was associated with lower impact. This was chiefly explained by the large number of associations located in London. However, in England there were no statistically significant relationships at the 1% level for the

locational variables and the impact of advice from consultants, chambers and trade and professional associations.

Looking at the supply chain contacts of customers and suppliers we see that there were only two geographical factors in each model which was statistically significant at the 5% level or better in England. The percentage of micro firms within 1km had a positive relationship with advice from customers and also suppliers. The percentage of SMEs within 1km had a negative relationship with advice from customers, and the percentage of SMEs within 1km had a negative relationship with advice from suppliers, in England.

In Scotland a few locational variables influenced the impact of LECs advice, and these were chiefly local business concentration and density. In England for the models of the impact of advice from LEA/trusts there were two locational factors which were statistically significant, the number of businesses within 50km and the density of businesses within 50km.

Lastly, there is the impact of advice from BL/SBS which had only two statistically significant relationship at the 1% level or the 5% level with the locational variables. These statistically significant relationships were the percentage of manufacturing firms within 15km, and the impact of large towns compared to rural firms. In Scotland the urban and rural Keeble variable was the only locational factor which was statistically significant at the 5% or the 1% level. In Scotland conurbations were more likely than rural firms to have positive impact of advice from BS/SBG.

As was found to be the case in Scotland we also find that location has only a small number of statistically significant relationships with location in England.

9.8 Conclusion

This chapter has developed a broadly based view of the relevance of location to the extent of use and impact of external business advice. The significance of this chapter is to assess if locations are significantly advantaged or disadvantaged or disadvantaged and thus whether the development of external relations between firms and their advisors is likely to contribute to increased or decreased unevenness of development. Additionally, conclusions on the significance of location have importance to the form and extent of government support polices for SMEs.

This chapter in looking at 14 sources in Scotland and 13 sources in England, and 13 different locational variables, many of which were repeated for different radiuses, has tested a very large number of relationships using logit and ordered logit regression techniques, which have also controlled for the characteristics of the firm. Thus, we have been able to examine a wide range of locational attributes, whilst controlling for the influence of business size and sector and a variety of other variables which were developed and explored in chapter 5. The locational attributes examined include both demand aspects related to the firm and the market it is located, and supply aspects deriving from location including government policy eligibility.

The results are complex but they do show that locational variables are related to the use and the impact of business advice in both England and Scotland. The detailed implications of the results, and their relationship to government policy are developed in the next chapter. But, despite this complexity, the conclusion which is reached is that in almost all cases location has only relatively minor marginal

explanatory power once the character of the firm and its sector structure have been taken into account.

These findings generally confirm the results reported in the studies by O'Farrell et al. (1992, 1993), Curran and Blackburn (1994) and others that have found that industry structure and differences in the character of firms by size, sector, skills, account for the main differences in the use of external advice. The results of this dissertation are from a larger and a more robust data set than the aforementioned studies, and also examined a far larger range of sources of advice, in the public and in the private sector, using a combination of crosstabulations and other advanced econometric techniques.

In comparison to studies of the use of external advice there are fewer studies which have looked at the impact levels of external advice, although Storey (1994) and Keeble's various studies\are suggestive of agglomeration effects: of higher impacts received in more urbanised locations. The results in this dissertation suggest that peripherality does introduce limitations on advice that reduces impact. Because the measures of peripherality chiefly associated with lower impacts are distance from a local business centre, or areas with low densities and small absolute numbers of businesses, we interpret 'peripherality' as a phenomenon leading to fewer opportunities to gain market access, and lower probabilities of finding clients and suppliers. This has been perhaps best expressed by Casson (1997, p. 45): as a result of negative externalities of information and reduced opportunities for interbusiness exchanges in smaller markets, individual buyers and sellers have less chance to make useful matches for themselves, but there is also less chance that their opposite

numbers can also make a useful match. This reduces the scope for co-ordination and increases the potential effects and risks resulting from external shocks.

In general, then, our findings support the view that it is scale and diversity of local market conditions that are important to the level of use, and particularly the impact, of private-sector and also public-sector external advice. This is less the result of intensive specific external networks than more general effects of external agglomeration economies.

	Accountant	Solicitor	Bank	Customers	Business Associates
EU Assisted Area Assisted Area	-0.261 (0.444)	-0.712 (0.309) **	-0.703 (0.043) ***	-0.155 (0.358)	0.029 (0.343)
Distance to nearest business centre	-0.007 (0.013)	0.009 (0.011)	-0.011 (0.011)	0.005 (0.010)	0.014 (0.0097)
Distance to nearest regional business centre	-0.001 (0.005)	0.0002 (0.005)	-0.003 (0.005)	0.003 (0.004)	(0.008 (0.003) **
Number of businesses within:					
1km	-0.0006 (0.00001) ***	-0.0005 (0.0004)	-0.0004 (0.0004)	-0.0003 (0.0004)	-0.0009 (0.0003) **
15km	-0.00001 (0.00002)	-0.00003 (0.00002)	1.28e06 (0.00002)	-0.00003 (0.00002)	-0.00003 (0.00001) *
50km	-1.78e06 (0.00001)	6.77e06 (0.00001)	4.38e06 (0.00001)	-0.00002 (0.00001)	-0.00002 (0.00001) **
Density of businesses within:					
1km	-0.002 (0.0001) ***	-0.002 (0.001)	-0.001 (0.001)	-0.0009 (0.0012)	-0.003 (0.001) **
15km	-0.009 (0.017)	-0.019 (0.0153)	0.0009 (0.016)	-0.016 (0.004) ***	-0.026 (0.014) *
50km	-0.014 (0.106)	0.053 (0.096)	0.034`(0.096)	-0.118 (0.008) ***	-0.170 (0.083) **
% of business service firms within:					
1km	-0.014 (0.032)	-0.031 (0.029)	-0.024 (0.030)	-0.049 (0.008) ***	-0.072 (0.027) ***
15km	-0.010 (0.057)	-0.039 (0.052)	0.021 (0.053)	-0.045 (0.049)	-0.068 (0.046)
50km	-0.109 (0.160)	0.054 (0.142)	0.011 (0.142)	-0.219 (0.125) *	-0.267 (0.117) **
% of micro firms within:					
1km	-0.022 (0.039)	0.005 (0.035)	-0.004 (0.036)	-0.091 (0.035) ***	-0.084 (0.032) **
15km	0.035 (0.073)	0.024 (0.064)	-0.017 (0.064)	-0.027 (0.058)	0.059 (0.056)
50km	0.004 (0.089)	-0.030 (0.080)	-0.051 (0.079)	0.033 (0.073)	0.072 (0.069)

Table 9.3: Summary of the significant locational measures for the use of business advice in England (*** p > 0.01; ** p > 0.05; * p > 0.1).

	Accountant	Solicitor	Bank	Customers	Business Associates
% of SMEs within:					
1km	0.029 (0.042	-0.007 90.038)	0.002 (0.040)	0.106 (0.038) ***	0.088 (0.035) **
15km	-0.037 (0.081)	-0.021 (0.071)	0.016 (0.070)	0.037 (0.064)	-0.062 (0.062)
50km	-0.004 (0.098)	0.034 (0.088)	0.058 (0.087)	-0.036 (0.080)	-0.076 (0.076)
% of large firms within:					
1km	-0.222 (0.328)	0.0451 (0.289)	0.114 (0.297)	0.185 (0.271)	0.616 (0.266) **
15km	-0.270 (0.591)	-0.403 (0.540)	0.287 (0.535)	-0.207 (0.491)	-0.526 (0.464)
50km	-0.096 (0.985)	0.186 (0.877)	0.327 (0.871)	-0.356 (0.798)	-1.072 (0.760)
% of hi technology firms within:					
1km	0.293 (0.019) ***	0.009 (0.003) ***	-0.066 (0.154)	-0.003 (0.153)	0.086 (0.136)
15km	-0.364 (0.479)	-0.201 (0.418)	-0.145 (0.431)	-0.278 (0.377)	-0.443 (0.363)
50km	-0.080 (0.630)	0.454 (0.562)	0.311 (0.551)	-0.376 (0.518)	-1.061 (0.496) **
% of Manufacturing Firms within:					
1km	0.101 (0.046) **	0.045 (0.004)	0.053 (0.004) ***	0.030 (0.038)	0.051 (0.036)
15km	0.061 (0.114)	0.226 (0.115) **	0.124 (0.060) **	-0.062 (0.096)	-0.011 (0.085)
50km	0.037 (0.296)	0.135 (0.266)	0.185 (0.261)	-0.214 (0.243)	-0.283 (0.232)
% of BIG8 Firms within:					
1km	-0.052 (0.007) ***	0.007 (0.033)	-0.008 (0.035)	0.036 (0.032)	-0.0009 (0.029)
15km	0.081 (0.124)	-0.202 (0.013) ***	-0.117 (0.115)	0.126 (0.061) **	-0.016 (0.097)
50km	0.097 (0.196)	-0.042 (0.177)	0.050 (0.180)	0.049 (0.164)	-0.207 (0.151)
Urban & Rural Categorisation:					
Conurbation	0.155 (0.553)	0.226 (0.488)	0.628 (0.493)	0.037 (0.463)	-0.541 (0.426)
Large Town	0.199 (0.687)	0.504 (0.616)	0.704 (0.617)	-0.269 (0.575)	-0.259 (0.538)
Small Town	0.069 (0.511)	0.445 (0.466)	0.724 (0.456)	-0.138 (0.430)	-0.466 (0.401)

Table 9.3: Summary of the significant locational measures for the use of business advice in England (*** $p > 0.01$; ** $p > 0.05$; * $p > 0.1$).

Advice Source	Friends/ Relatives	Suppliers	Consultants	Chambers	Trade/Prof Assoc
EU Assisted Area	0.079 (0.382)	0.171 (0.348)	-0.530 (0.348)	0.313 (0.500)	0.252 (0.386)
Distance to nearest business centre	-0.018 (0.110)	-0.001 (0.010)	-0.004 (0.010)	0.002 (0.012)	0.012 (0.011)
Distance to nearest regional business centre	-0.003 (0.004)	0.007 (0.004) *	0.001 (0.004)	0.0001 (0.005)	0.0003 (0.004)
No. of businesses within:					
1km	0.0001 (0.0004)	0.00006 (0.00004)	0.0003 (0.0004)	-0.0002 (0.0005)	-0.0006 (0.0005)
15km	0.00001 (0.00002)	-0.00001 (0.00001)	-4.91e06 (0.00002)	0.00001 (0.00002)	3.95e07 (0.00002)
50km	8.28e-06 (0.00001)	-9.83e06 (0.00001)	1.59e06 (0.00001)	0.00001 (0.00001)	4.66e06 (0.00001)
Density of businesses within:					
1km	0.0004 (0.001)	0.001 (0.001)	0.001 (0.001)	-0.0007 (0.002)	-0.002 (0.001)
15km	0.013 (0.015)	-0.008 (0.014)	-0.003 (0.014)	0.009 (0.018)	0.0003 (0.015)
50km	0.065 (0.091)	-0.077 (0.083)	0.013 (0.082)	0.096 (0.106)	0.037 (0.093)
% of business service firms within:					
1km	-0.019 (0.027)	-0.012 (0.025)	0.025 (0.026)	0.024 (0.033)	-0.034 (0.030)
15km	0.078 (0.051)	0.058 (0.046)	0.00006 (0.046)	0.103 (0.006) ***	0.029 (0.051)
50km	0.040 (0.118)	0.008 (0.107)	0.081 (0.107)	0.181 (0.043) ***	0.040 (0.124)
% of micro firms within:					
1km	-0.081 (0.037)	-0.034 (0.031)	-0.034 (0.032)	-0.129 (0.048) ***	-0.013 (0.034)
15km	-0.105 (0.070)	-0.074 (0.056)	-0.057 (0.060)	-0.198 (0.096) **	-0.054 (0.065)
50km	-0.076 (0.079)	0.053 (0.070)	-0.009 (0.690)	-0.119 (0.092)	-0.051 (0.079)

Table 9.3: Summary of the significant locational measures for the use of business advice in England (*** $p > 0.01$; ** $p > 0.05$; * $p > 0.1$).

	Friends/ Relatives	Suppliers	Consultants	Chamber	Trade/ Prof Assoc
% of SMEs within:					
1km	0.096 (0.041) **	0.074 (0.041) *	0.010 (0.035)	0.145 (0.053) ***	0.021 (0.038)
15km	0.109 (0.078)	0.055 (0.078)	0.040 (0.065)	0.221 (0.105) **	0.067 (0.072)
50km	0.083 (0.087)	0.005 (0.091)	-0.111 (0.082)	0.130 (0.096)	0.057 (0.087)
% of large firms within:					
1km	0.180 (0.280)	0.129 (0.300)	0.246 (0.275)	0.412 (0.344)	-0.324 (0.292)
15km	0.944 (0.544) *	0.767 (0.574)	0.499 (0.493)	0.989 (0.661)	-0.009 (0.514)
50km	0.775 (0.867)	0.081 (0.916)	-0.793 (0.816)	1.458 (1.014)	0.491 (0.867)
% of hi technology firms within:					
1km	-0.164 (0.160)	-0.187 (0.167)	-0.028 (0.140)	0.239 (0.068) ***	-0.021 (0.152)
15km	0.339 (0.409)	0.052 (0.432)	-0.124 (0.387)	0.919 (0.109) ***	0.275 (0.411)
50km	0.166 (0.533)	-0.341 (0.572)	-0.694 (0.530)	1.006 (0.656)	0.430 (0.559)
% of Manufacturing Firms within:					
1km	-0.008 (0.039)	-0.010 (0.041)	0.0006 (0.038)	0.054 (0.045)	0.057 (0.003) ***
15km	-0.015 (0.096)	-0.043 (0.108)	-0.065 (0.095)	0.064 (0.110)	0.160 (0.009) ***
50km	0.379 (0.276)	0.277 (0.286)	-0.479 (0.350) *	0.175 (0.291)	0.201 (0.264)
% of BIG8 Firms within:					
1km	-0.003 (0.032)	0.005 (0.034)	-0.012 (0.032)	-0.116 (0.040) ***	-0.009 (0.033)
15km	-0.079 (0.106)	-0.083 (0.115)	-0.075 (0.107)	-0.176 (0.128)	-0.109 (0.112)
50km	-0.005 (0.105)	-0.048 (0.183)	-0.241 (0.167)	0.0004 (0.197)	0.018 (0.175)
Urban & Rural Categorisation:					
Conurbation	0.631 (0.500)	-0.017 (0.430)	-0.413 (0.472)	0.691 (0.660)	0.229 (0.511)
Large Town	1.065 (0.589)	0.382 (0.555)	-0.038 (0.590)	1.762 (0.722)	0.741 (0.606)
Small Town	0.416 (0.486)	0.028 (0.403)	-0.205 (0.433)	1.006 (0.398)	0.271 (0.476)

Table 9.3: Summary of the significant locational measures for the use of business advice in England (*** $p > 0.01$; ** $p > 0.05$; * $p > 0.1$).

	LEA/ Trust	TEC	Business Link/SBS
EU Assisted Area Assisted Area	-0.122 (0.372)	0.640 (0.039) ***	-0.617 (0.203) ***
Distance to nearest business centre	0.007 (0.011)	-0.005 (0.011)	-0.005 (0.011)
Distance to nearest regional business centre	-0.003 (0.004)	-0.003 (0.003)	-0.0002 (0.0042)
Number of businesses within:			
1km	-0.0001 (0.0004)	-0.0003 (0.0004)	0.0005 (0.0004)
15km	4.51e06 (0.00002)	0.00002 (0.00002)	-0.00002 (0.00002)
50km	0.0002 (0.00001) ***	0.00002 (0.00001)	-6.28e06 (0.00001)
Density of businesses within:			
1km	-0.0003 (0.001)	-0.0009 (0.0010)	0.002 (0.001)
15km	-0.003 (0.015)	0.013 (0.015)	-0.011 (0.015)
50km	0.158 (0.009) ***	0.125 (0.009) ***	-0.049 (0.089)
% of business service firms within:			
1km	-0.011 (0.030)	0.025 (0.029)	-0.031 (0.028)
15km	0.002 (0.051)	-0.006 (0.051)	-0.104 (0.051) **
50km	0.277 (0.134) **	0.100 (0.124)	-0.228 (0.127) *
% of micro firms within:			
1km	-0.048 (0.036)	-0.044 (0.004) ***	-0.050 (0.003) ***
15km	-0.084 (0.016) ***	-0.063 (0.064)	0.110 (0.006) ***
50km	0.053 (0.079)	-0.058 (0.071)	0.016 (0.075)

Table 9.3: Summary of the significant locational measures for the use of business advice in England (*** $p > 0.01$; ** $p > 0.05$; * $p > 0.1$).

	LEA/ Trust	TEC	Business Link/SBS
% of SMEs within:			
1km	0.056 (0.039)	0.043 (0.040)	0.051 (0.037)
15km	0.102 (0.005) ***	0.071 (0.071)	-0.114 (0.069) *
50km	0.059 (0.086)	0.060 (0.086)	-0.017 (0.082)
% of large firms within:			
1km	0.006 (0.289)	0.476 (0.287) *	0.477 (0.277) *
15km	0.008 (0.524)	0.325 (0.524)	-1.127 (0.514) **
50km	0.513 (0.863)	0.981 (0.870)	-0.187 (0.815)
% of hi technology firms within:			
1km	-0.087 (0.151)	0.071 (0.146)	-0.090 (0.145)
15km	0.174 (0.413)	0.278 (0.404)	-0.786 (0.400) **
50km	0.891 (0.204) ***	0.598 (0.556)	-0.167 (0.527)
% of Manufacturing Firms within:			
1km	0.031 (0.039)	-0.024 (0.040)	0.090 (0.400) **
15km	0.091 (0.098)	-0.007 (0.098)	0.186 (0.098) *
50km	0.040 (0.254)	0.094 (0.255)	0.171 (0.252)
% of BIG8 Firms within:			
1km	-0.069 (0.035) **	0.011 (0.034)	0.027 (0.032)
15km	0.037 (0.112)	0.120 (0.111)	0.061 (0.106)
50km	0.037 (0.175)	0.143 (0.174)	0.077 (0.168)
Urban & Rural Categorisation:			
Conurbation	0.809 (0.542)	-0.075 (0.626)	-0.605 (0.484)
Large Town	0.480 (0.370)	-0.071 (0.627)	-0.219 (0.577)
Small Town	0.981 (0.105) ***	0.470 (0.452)	-0.277 (0.439)

Table 9.3: Summary of the significant locational measures for the use of business advice in England (*** $p > 0.01$; ** $p > 0.05$; * $p > 0.1$).

	Accountant	Solicitor	Bank	Customers	Business Associates
EU Assisted Area Assisted Area	-0.095 (0.153)	0.125 (0.390)	-0.017 (0.384)	-0.187 (0.481)	-0.259 (0.450)
Distance to nearest business centre	-0.012 (0.010)	-0.016 (0.011)	-0.009 (0.010)	0.002 (0.013)	0.025 (0.012) **
Distance to nearest regional business centre	-0.002 (0.004)	0.003 (0.005)	0.002 (0.005)	0.002 (0.005)	0.003 (0.005)
Number of businesses within:					
1km	0.0006 (0.0004)	0.0009 (0.0004) **	-0.00009 (0.00004)	-0.0003 (0.0005)	-0.001 (0.0006) **
15km	-0.00001 (0.00002	3.30e-06 (0.00002)	-0.00003 (0.00002)	-0.00002 (0.00002)	-0.00002 (0.00002)
50km	6.54e-06 (0.00002)	-2.14e-06 (0.00001)	-1.73e-07 (0.00001)	2.06e-06 (0.00001)	-5.09e-07 (0.00001)
Density of businesses within:					
1km	0.002 (0.001)	0.003 (0.001) **	-0.00003 (0.001)	-0.001 (0.001)	-0.005 (0.002) **
15km	-0.007 (0.014)	0.002 (0.016)	-0.018 (0.015)	-0.012 (0.018)	-0.016 (0.018)
50km	0.051 (0.092)	-0.017 (0.100)	-0.001 (0.094)	0.016 (0.107)	-0.004 (0.105)
% of business service firms within:					
1km	0.006 (0.028)	0.051 (0.032)	0.007 (0.029)	0.200 (0.038)	-0.017 (0.041)
15km	-0.017 (0.047)	0.055 (0.052)	0.032 (0.048)	-0.002 (0.061)	-0.051 (0.064)
50km	0.155 (0.135)	0.098 (0.155)	0.026 (0.123)	0.141 (0.160)	-0.006 (0.151)
% of micro firms within:					
1km	-0.048 (0.030)	-0.018 (0.033)	0.018 (0.034)	0.131 (0.050) ***	0.056 (0.042)
15km	-0.058 (0.058)	-0.065 (0.068)	-0.009 (0.058)	-0.017 (0.086)	0.031 (0.079)
50km	-0.053 (0.076)	0.001 (0.082)	-0.043 (0.077)	-0.017 (0.090)	0.025 (0.090)

Table 9.4: Summary of the significant locational measures for the impact of business advice in England (*** $p > 0.01$; ** $p > 0.05$; * $p > 0.1$).

	Accountant	Solicitor	Bank	Customers	Business Associates
% of SMEs within:					
1km	0.053 (0.053)	0.019 (0.037)	-0.023 (0.037)	-0.147 (0.055) ***	-0.050 (0.045)
15km	0.067 (0.064)	0.064 (0.075)	0.004 (0.064)	0.022 (0.100)	-0.014 (0.086)
50km	0.059 (0.084)	-0.005 (0.091)	0.047 (0.084)	0.019 (0.098)	-0.025 (0.100)
% of large firms within:					
1km	0.278 (0.265)	0.146 (0.289)	0.084 (0.286)	-0.362 (0.372)	-0.993 (0.368) ***
15km	0.184 (0.468)	0.748 (0.547)	0.391 (0.488)	-0.050 (0.648)	-1.407 (0.663) ***
50km	0.482 (0.820)	0.431 (0.902)	0.511 (0.814)	0.131(1.021)	-0.525 (1.007)
% of hi technology firms within:					
1km	-0.080 (0.139)	-0.018 (0.161)	-0.320 (0.150) **	-0.321 (0.201)	0.207 (0.183)
15km	0.0787 (0.380) **	0.646 (0.438)	-0.230 (0.360)	-0.061 (0.507)	-0.038 (0.480)
50km	0.260 (0.533)	-0.323 (0.604)	0.363 (0.543)	0.419 (0.607)	-0.411 (0.602)
% of Manufacturing Firms within:					
1km	-0.040 (0.040)	-0.040 (0.040)	0.016 (0.039)	-0.049 (0.048)	-0.011 (0.051)
15km	0.065 (0.094)	-0.044 (0.100)	0.133 (0.095)	0.176 (0.115)	-0.077 (0.116)
50km	0.070 (0.241)	-0.085 (0.269)	0.400 (0.277)	0.075 (0.297)	-0.415 (0.292)
% of BIG8 Firms within:					
1km	-0.012 (0.030)	-0.098 (0.034) ***	-0.022 (0.032)	-0.005 (0.035)	0.034 (0.034)
15km	0.080 (0.101)	-0.143 (0.116)	-0.191 (0.108) *	-0.244 (0.139) *	0.175 (0.133)
50km	-0.056 (0.156)	-0.167 (0.177)	-0.109 (0.169)	-0.190 (0.211)	0.015 (0.205)
Urban & Rural Categorisation:					
Conurbation	0.726 (0.456)	0.131 (0.529)	-0.445 (0.484)	0.316 (0.541)	-0.072 (0.545)
Large Town	0.255 (0.561)	0.247 (0.632)	0.836 (0.600)	1.277 (0.769) *	-0.934 (0.740)
Small Town	0.544 (0.448)	0.007 (0.491)	-0.910 (0.492) *	0.789 (0.520)	0.313 (0.516)

Table 9.4: Summary of the significant locational measures for the impact of business advice in England (*** $p > 0.01$; ** $p > 0.05$; * $p > 0.1$).

Advice Source	Friends/ Relatives	Suppliers	Consultants	Chambers	Trade/Prof Assoc
EU Assisted Area	-0.496 (0.608)	0.067 (0.207)	0.338 (0.220)	-0.344 (0.381)	-0.051 90.279)
Distance to nearest business centre	0.00008 (0.019)	0.003 (0.006)	0.005 (0.006)	0.010 (0.010)	-0.00002 (0.006)
Distance to nearest regional business centre	-0.006 (0.007)	0.00007 (0.002)	0.006 (0.003) **	0.001 (0.004)	-0.001 (0.003)
No. of businesses within:					
1km	-0.0008 (0.0006)	-0.0001 (0.0001)	0.0005 (0.0001)	-0.0004 (0.0002) *	-0.0002 (0.0001)
15km	8.98e-06 (0.00004)	-0.00001 (0.00001)	3.76e-06 (0.00001)	-0.00003 (0.00002) *	-3.54e-06 (0.00001)
50km	5.57e-06 (0.00002)	-5.67e-07 (4.93e-06)	-2.43e-06 (5.11e-06)	-8.67e-06 (8.11e-06)	2.21e-06 (5.90e-06)
Density of businesses within:					
1km	-0.002 (0.002)	-0.0006 (0.0004)	0.0001 (0.0004)	-0.001 (0.007) *	-0.0004 (0.0004)
15km	0.006 (0.027)	-0.010 (0.008)	0.003 (0.008)	-0.021 (0.127) *	-0.003 (0.010)
50km	0.044 (0.150)	-0.005 (0.039)	-0.019 (0.040)	-0.068 (0.064)	0.017 (0.046)
% of business service firms within:					
1km	-0.026 (0.045)	-0.012 (0.013)	0.020 (0.012) *	-0.051 (0.023) **	-0.008 (0.016)
15km	-0.109 (0.084)	-0.026 (0.022)	-0.015 (0.022)	-0.095 (0.037) **	-0.026 (0.028)
50km	-0.058 (0.214)	-0.001 (0.026)	-0.046 (0.028) *	-0.091 (0.048) *	-0.025 (0.034)
% of micro firms within:					
1km	0.058 (0.066)	0.036 (0.015) **	0.001 (0.016)	0.038 (0.027)	0.011 (0.019)
15km	0.206 (0.130)	0.052 (0.034)	0.016 (0.034)	0.045 (0.053)	-0.0002 (0.038)
50km	-0.010 90.135)	-0.015 (0.050)	0.111 (0.054) **	-0.055 (0.094)	-0.016 (0.062)

Table 9.4: Summary of the significant locational measures for the impact of business advice in England (*** $p > 0.01$; ** $p > 0.05$; * $p > 0.1$).

	Friends/ Relatives	Suppliers	Consultants	Chamber	Trade/ Prof Assoc
% of SMEs within:					
1km	-0.045 (0.071)	-0.038 (0.016) **	-0.0007 (0.017)	-0.043 (0.029)	-0.011 (0.019)
15km	-0.215 (0.145)	-0.059 (0.038)	-0.012 (0.037)	-0.045 (0.055)	-0.001 (0.042)
50km	0.013 (0.148)	0.018 (0.057)	-0.121 (0.061) **	0.076 (0.106)	0.016 (0.071
% of large firms within:					
1km	-0.824 (0.446) *	-0.234 (0.170)	-0.083 (0.173)	-0.130 (0.288)	-0.124 (0.210)
15km	-1.921 (0.981) **	-0.226 (0.246)	-0.357 (0.258)	-0.533 (0.430)	0.058 (0.294)
50km	-0.050 (1.500)	0.063 (0.328)	-0.842 (0.387) **	-0.207 (0.604)	0.176 (0.406)
% of hi technology firms within:					
1km	0.058 (0.289)	-0.126 (0.068) *	-0.044 (0.091)	-0.213 (0.133)	0.058 (0.113)
15km	-0.077 (0.718)	-0.019 (0.155)	-0.205 (0.177)	-0.458 (0.291)	0.051 90.213)
50km	-0.586 (0.910)	0.078 (0.211)	-0.326 (0.237)	-0.311 (0.385)	-0.130 (0.278)
% of Manufacturing Firms within:					
1km	0.080 (0.069)	-0.005 (0.021)	0.011 (0.023)	0.064 (0.038) *	0.023 (0.026)
15km	0.157 (0.168)	0.067 (0.057)	-0.055 (0.066)	0.190 (0.114) *	0.017 (0.067)
50km	0.187 (0.440)	0.075 (0.138)	-0.108 (0.148)	0.257 (0.246)	0.094 (0.162)
% of BIG8 Firms within:					
1km	-0.026 (0.051)	0.025 (0.023)	0.006 (0.024)	0.065 (0.041)	0.031 (0.027)
15km	0.270 (0.181)	0.044 (0.037)	0.058 (0.044)	0.116 (0.078)	0.049 (0.045)
50km	0.349 (0.304)	-0.015 (0.066)	0.069 (0.065)	0.249 (0.127) **	0.028 (0.073)
Urban & Rural Categorisation:					
Conurbation	-0.272 (0.857)	-0.028 (0.267)	-0.013 (0.288)	-0.351 (0.447)	-0.085 (0.331)
Large Town	-1.035 (0.986)	-0.130 (0.318)	0.173 (0.329)	-0.233 (0.528)	-0.144 (0.418)
Small Town	-0.112 (0.835)	0.267 (0.250)	0.276 (0.282)	0.248 (0.464)	0.533 (0.312) *

Table 9.4: Summary of the significant locational measures for the impact of business advice in England (*** $p > 0.01$; ** $p > 0.05$; * $p > 0.1$).

	LEA/ Trust	TEC	Business Link/SBS
EU Assisted Area Assisted Area	-0.336 (0.063) ***	-0.756 (0.723)	-0.247 (0.561)
Distance to nearest business centre	-0.034 (0.018) *	0.016 (0.025)	0.009 (0.022)
Distance to nearest regional business centre	-0.017 (0.008) **	0.005 90.009)	0.001 (0.007)
Number of businesses within:			
1km	0.0005 (0.0006)	-0.0009 (0.001)	-0.0007 (0.0005)
15km	0.00002 (0.00024)	9.71e-06 (0.00004)	-0.00004 (0.00003)
50km	0.00006 (0.00002) ***	0.00002 (0.00002)	0.00002 (0.00002)
Density of businesses within:			
1km	0.002 (0.002)	-0.004 (0.005)	-0.002 (0.002)
15km	0.017 (0.025)	0.007 (0.030)	-0.031 (0.023)
50km	-0.491 (0.179) ***	0.120 (0.171)	0.169 (0.146)
% of business service firms within:			
1km	0.001 (0.061)	0.022 (0.067)	-0.038 (0.050)
15km	-0.102 (0.090)	0.067 (0.095)	0.021 (0.074)
50km	0.527 (0.206) **	0.348 (0.270)	0.359 (0.214) *
% of micro firms within:			
1km	0.015 (0.063)	0.015 (0.069)	-0.051 (0.069)
15km	-0.177 (0.119)	-0.065 (0.141)	-0.075 (0.095)
50km	-0.280 (0.137) **	0.013 (0.151)	-0.171 (0.128)

Table 9.4: Summary of the significant locational measures for the impact of business advice in England (*** $p > 0.01$; ** $p > 0.05$; * $p > 0.1$).

	LEA/ Trust	TEC	Business Link/SBS
% of SMEs within:			
1km	-0.020 (0.069)	-0.035 (0.075)	0.052 (0.074)
15km	0.211 (0.132)	0.066 (0.157)	0.093 (0.105)
50km	0.309 (0.150) **	-0.017 (0.166)	0.188 (0.140)
% of large firms within:			
1km	0.123 (0.504)	1.023 (0.605) *	0.284 (0.509)
15km	0.307 (0.923)	0.622 (1.045)	-0.023 (0.738)
50km	2.870 (1.450) **	0.091 (1.761)	1.827 (1.464)
% of hi technology firms within:			
1km	0.080 (0.269)	-0.065 (0.230)	-0.150 (0.218)
15km	0.787 (0.698)	0.218 (0.904)	-0.241 (0.670)
50km	2.578 (1.187)	0.552 (1.099)	1.371 (0.866)
% of Manufacturing Firms within:			
1km	0.015 (0.066)	0.013 (0.067)	0.083 (0.061)
15km	0.338 (0.184) *	0.194 (0.178)	0.306 (0.147) **
50km	0.476 (0.410)	-0.362 (0.502)	0.523 (0.441)
% of BIG8 Firms within:			
1km	-0.041 (0.059)	-0.081 (0.068)	-0.104 (0.059)
15km	0.282 (0.189)	-0.537 (0.202) ***	-0.248 (0.166)
50km	0.758 (0.322) **	-0.382 (0.320)	-0.140 (0.272)
Urban & Rural Categorisation:			
Conurbation	1.965 (1.169) *	0.905 (1.024)	0.489 (0.788)
Large Town	0.381 (1.411)	1.443 (1.115)	2.849 (0.987) ***
Small Town	2.227 (1.103) **	1.110 (0.898)	0.904 (0.732)

Table 9.4: Summary of the significant locational measures for the impact of business advice in England (*** $p > 0.01$; ** $p > 0.05$; * $p > 0.1$).

Chapter 10

Research conclusions, policy implications and future research

10.1 Introduction

The objective of this thesis is to achieve an increased understanding of the patterns of use and impact of external advice by SMEs in Scotland and northern England and how this varies by characteristics of the firms, and in relation to the geographic location of the SMEs. The thesis uses a new survey of evidence of SMEs of up to 500 employees. It is the first large scale survey in Scotland which has coverage of all main sources of supply of SME advice, ranging from the private sector, through social networks, to business associations and government-backed agents. The results though specific to Scotland and northern England, also have a more general relevance.

The purpose of this chapter is to present the main conclusions and policy implications which follow from the empirical research presented in the thesis. The thesis has provided a comprehensive assessment of the use and impact of private and the public sector sources of advice and the role of geography in Scotland and in northern England and presented a substantial corpus of new crosstabulations and regression results. The contribution to knowledge and the main conclusions and policy implications are made more accessible by drawing from the results, chapter by chapter.

10.2 Overall Use and Impact of External Business Advice

Government gives substantial support to SMEs and the policies followed impact upon the survival/failure of SMEs or the performance of the community. It is

not surprising, therefore, that a chief finding of this research is confirmation of the large scale of external advice, 99.9% of all surveyed firms use at least one source of advice, an increase from 85.8% in the SBRC (1992) survey of 1991, and also above the 90% found by Bennett and Robson (2000). Second, a very marked differentiation of the scale of the market exists for different sources, ranging from 80.9% use of accounts to 19.7% of chambers of commerce and 7.7% of HIE in Scotland. Overall the private sector dominates, accounting for 76.9% of all responses.

Another key finding is that the results of the SoE survey were very different to the MORI (1994) survey (see tables 3.1 and 3.2), which was to a large extent a baseline survey for Business Link. The MORI survey is confirmed as significantly out of line with the analysis presented in this survey and the general pattern found in most other surveys. Since this survey was a key foundation and benchmark for Business Link evaluation it is suggested that its findings should be used by government only with great caution. It appears particularly inconsistent in its findings of low levels of use of the professional specialists of accountants, solicitors and banks, and also its low level of use of TECs and enterprise agencies.

Whilst policy makers place great emphasis upon innovative firms and also growing firms, the results of chapter 5 suggest that innovation is not an important factor in determining the use of external advice by SMEs. These results also suggest that growth is of only some importance in explaining the use of external advice. Both of these factors are of lesser importance than sector, exporting and size. Thus the policy implication is that attempts to use innovation as a variable to capture more use of external advice in either the private or the public sector would be to misplace

resources. Instead policy makers would be better placed to use size of firm as a targeting measure. Also exporting firms are clearly very different to non-exporting firms and have a greater use of external advice. This suggests that exporting firms will require greater amounts of public and private sector resources. Given the impact that exporting has upon the Balance of Trade this suggests that exporting firms should be targeted more by public sector agencies.

In terms of the use of external advice it was apparent that the private sector predominates as a provider. There is also a substantial public sector provision of advice, but it was found to play a more of a niche role.

The impact levels of different sources also appear to be strongly interrelated with the level of specialization, and the levels of trust. Specialist professionals, customers and business friends all have high levels of either personal or institutional trust. They are not only the main sources of supply but also those with the largest impact. They are thus the largest and most crucial part of the market for SME advice. In contrast, intermediary collective associations and government-backed suppliers appear chiefly to fill niche gaps with advice of a less significant kind in terms of perceived impact. Consultants fall between these two groups with a high impact chiefly for service industries and younger firms. In general, impact ratings vary much less by SME type than does the level of use, but differences were found amongst firm characteristics, such as firm size. This suggests a fairly marked segmentation of the market between suppliers for different purposes, with impact varying more by choice of supply than by firm type. The implication for policy makers is that who provides the advice is more important in determining impact. A further research issue is to look at impact in terms of business performance.

10.3 The use and the impact of BS/SBG and BL/SBS and central government support services

This thesis has reported one of the largest scale surveys of BS/SBG and BL/SBS use and satisfaction available to date. It has also been able to compare different types of BS/SBG/BL/SBS services, to compare BS/SBG with BL/SBS, and to compare users and non-users of these services, three dimensions of comparison which have been relatively neglected in other studies. The results have some important policy implications.

First, for SBS and SBG, the use levels of different parts of the service portfolio focus heavily on information, grants and training and IiP. In contrast, secondary importance is given to a range of specialist advisors. This pattern of use raises many concerns about the design of the SBS. All of these services were in existence before the advent of BL and its successor SBS. Although there were major problems of quality and accessibility to services before BL, it is not clear that the SBS has overcome the quality problems. Second, because these services were provided by a range of local agents prior to BL/SBS (chiefly by chambers of commerce, TECs and enterprise agencies), it is not clear how far BL/SBS has integrated theses services since most BL/SBS users still use other agencies, as well as many other suppliers.

Third, the specific core services developed by DTI as the main new services to the system of local supports, the PBA and diagnostics, now have relatively good levels of use with 32.3% and 35.0%, respectively in Scotland, and 50.8% and 35.6%, respectively in England. The interpretation of the role of PBAs as chiefly

performing a function as gate keepers and generalist advisors is now at one level being sustained by the good levels of use found here.

Fourth, the main type or category of advice used, which in total is a major aspect of the BL/SBS system, is of specialist not generalist advisors. Among these, the development of specialist advisors decentralized from the DTI and Design Council for exports, innovation and technology and product and service design appear to be relatively successful, as judged by use and satisfaction levels. But it does need to be noted that simply increasing the supply of advice will not necessarily make a beneficial difference to SMEs.

Fifth, the comparison of BL/SBS and BS/SBG users and non-users shows little or no differences in firm type between them, but their behaviour differs markedly. BL/SBS and BS/SBG users are using SBS/SBG as one of very many sources of advice. They are particularly higher users of all public-supported advice services, and are lower users of private sector advisors, except consultants. This confirms the difficulties of justifying BL/SBS as satisfying criteria of additionality, meeting the design objective of being a 'one stop shop', or avoiding competition with the private sector. In each of these areas the evidence, on balance, suggests that BL/SBS is mainly another service that serves chiefly high users of public sector sources. This may suggest that it is failing to simplify supply or act as a one stop shop, and is holding on to business through low levels of referral. There is some evidence of this in other analysis of PBA behaviour (e.g. Agar and Witzel, 1994; Sear and Agar, 1996; Tann and Lafaret, 1998) but further, more detailed analysis is required than has been possible here.

Sixth, the analysis of the crosstabulations found very few statistically significant relationships between the users' satisfaction scores and the characteristics of the firms. This suggests that the quality of BL/SBS services is a generic issue rather than varying between specific types of clients.

The comparison of BS/SBG users and non-users, is similar to that of BL/SBS. It raises the same concerns about additionality, encouraging integration (albeit via referral rather than as a 'one stop shop'), and competition with the private sector. Statistical tests between users and non-users of BS/SBG show again no significant explanatory features relating to firm types, indicating that the case-by-case targeting of supports is occurring even if additionality and other issues may be in question.

An important set of findings were the relatively higher satisfaction levels achieved by BL/SBS in England compared to BS/SBG in Scotland. Overall 81.8% of the users of BL/SBS were satisfied or very satisfied, compared to 75.3% in the BS/SBG. But, the BL/SBS has in common with BS/SBG that they cannot become complacent. 6.8% very dissatisfied customers represents a quality variation in the provision of services.

Interestingly the results show that in Scotland there are more statistically significant relationships between the characteristics of firms and the users' impact scores than was found in England for the BL/SBS.

In England this throws the focus of evaluation back on service management systems and the quality of advisors as the chief factors likely to explain differences in satisfaction levels. This conjecture is the subject of further analysis. Whilst in the

case of Scotland the BS/SBG managers need to look at the type of clients that they have attracted, as well as tightening up the quality variation.

Our overall conclusion is that both BL/SBS and BS/SBG are achieving good use and satisfaction levels which are as high or higher than almost all previous public sector initiatives. Of greater concern are: (i) the tension between the actual use patterns of BL/SBS services, which concentrate on information, grants and specialist advice, and their design focus on PBAs and diagnostic assessment and differing types of users of external advice – heavy, medium or very specific, (ii) the wide variation in satisfaction levels assessed by clients of both BL/SBS and BS/SBG which must largely reflect quality variation of management and advisors in each system, (although this seems more of a problem in England than in Scotland), (iii) questions about the additionality of both initiatives and their potential competition with other private and public sector suppliers of business advice.

The general conclusion from the analysis of BL/SBS and BS/SBG and the central government support services is that programmes with specialized objectives and tight frameworks work better as government support schemes to SMEs. This differentiates the generally more specific central government schemes from those of local SBS and SBG objectives in Scotland. It also distinguishes the central government schemes achieving the highest satisfaction (TCS, IiP, Export Credit Guarantees and Export Information Services) which are all highly specific, from the rather more nebulous schemes of Skills for Small Businesses. This suggests that the SBS, rather than developing a flexible system, should be highly focused on filling gaps in market provision, which are very clearly defined, and which both the clients and the managers of SBS administration can clearly recognise from the results in

chapters 5 to 7. Where flexibility can usefully be added to the support system is through marketing and awareness at a local level. But the analysis in this thesis suggests that this should be an add-on through referral and not part of core SBS services or marketing. Nor does the analysis suggest that local structures deserve significant SBS or central government resources to support it. Resisting the pressures for resources from local partner organization will be a considerable challenge for the SBS development.

10.4 Location and Distance

In chapter 8 and 9 we sought to develop a broadly based view of the relevance of location to the extent of use and impact of external business advice between SMEs of 1-500 employees. Whilst other studies also include the self-employed and sole traders, the results in this thesis do cover businesses in Scotland which are responsible for a high proportion of Scottish GDP and employment.

Chapter 9 was able to draw upon the SoE in Scotland of SMEs to develop an examination of a wide range of locational attributes, whilst controlling for the influence of business size and sector and a variety of other variables which were developed and explored in chapter 5. A particularly important aspect of the methods followed has been assessment of the marginal increase in explanation offered by locational factors, once other aspects of the firm and its industry structure have been controlled for. The locational attributes examined include both demand aspects related to the firm and the market it is located, and supply aspects deriving from location including government policy eligibility. The results are complex because of the wide range of sources of external advice examined. In effect, chapter 9 combines

a separate analysis of 13 external sources of advice, each element of which has been subject to considerable debate. Despite this complexity, the general conclusion that can be drawn is of wide applicability: that in almost all cases location has only relatively minor marginal explanatory power once the character of the firm and its sector structure have been fully taken into account.

This notwithstanding the study has found that for the use of sources are significantly influenced by a wide range of locational variables.

EU assisted area status influences the take-up of external advice from consultants, chambers of commerce in Scotland, and banks in England. Location relative to regional business centres, Keeble's urban and rural classification appear largely irrelevant as influences on use levels

There is a considerable contrast between the effect of location on the impact, compared to use, of private-sector and public-sector advice sources. This suggests that, whilst location does have substantial influence on market penetration, distance from clusters of similar businesses, and specific types of local economy, do have less influence on the effectiveness of advice. Perhaps this is the result of reduced transaction costs which allow lower costs for intensive advice in larger centres compared to rural areas. As with use, the Keeble urban-rural classification has little explanatory power for private-sector and public-sector sources

These findings generally confirm the results reported in the studies by O'Farrell et al. (1992, 1993), Curran and Blackburn (1994) and others that have found that industry structure and differences in the character of firms by size, sector, skills, etc, account for the main differences in the use of external advice. The results in this thesis are from a larger and more robust data set than the aforementioned

studies, and also tested a far larger range of sources of advice, and influences of a much larger range of locational factors, using crosstabulations and more advanced econometric regression techniques. Fewer studies have been made of impact levels of external advice, although Storey (1994) and Keeble's various studies are suggestive of agglomeration effects: of higher impacts received in more urbanised locations. The results in this thesis suggest that peripherality does introduce limitations on advice that reduces impact. Because the measures of peripherality chiefly associated with lower impacts are distance from a local business centre, or areas with low densities and small absolute numbers of businesses, we interpret 'peripherality' as a phenomenon leading to less opportunities to gain market access, and lower probabilities of finding clients and suppliers. This has been perhaps best expressed by Casson (1997, p. 45): as a result of negative externalities of information flows and reduced opportunities for interbusiness exchanges in smaller markets, individual buyers and sellers have less chance to make useful matches for themselves, but there is also less chance that their opposite numbers can also make a useful match. This reduces the scope for co-ordination and increases the potential effects and risks resulting from external shocks.

In general, then, our findings support the view that it is the scale and diversity of local market conditions that are important to the level of use, and particularly the impact, of private-sector and also public-sector external advice. This is less the result of intensive specific external networks than more general effects of external agglomeration economies.

10.5 Firm Size and Future Research

The common characteristic of the firm which has been found to have a systematic relationship with the use of external advice is the size of the firms. Taken together the results suggest that the size of the firm is the main factor on the demand side which will influence the take-up and the level of usage of external advice. But, there is the possibility that the size of firm is a function of growth in previous time periods. If this is the case then the level of use of advice is a function in effect of previous growth. This would then suggest that advice use is a consequence of growth and is not driven by growth.

With regard to the impact of advice the results often found a lack of statistically significant relationships between characteristics of firms and satisfaction or impact. This suggests that there are fundamental problems on the delivery side and in particular the level of quality of advisor is uneven. Thus the quality of advisor needs to be improved.

The observation upon the demand and the supply side has clear implications for the development of the Scottish birth rate strategy. There is clearly a need for more firms to set up in Scotland and survive and grow. But simplify by offering more business advice will not necessarily improve the number of firms starting and surviving in business in Scotland. It is essential that business advice is tackled from both the demand and the supply side in order to improve the economic prosperity of Scotland. The exact nature of the improvements can only be discovered from undertaking case studies. That is an area which should be discovered from undertaking case studies. That is an area which should be pursued in further research.

Within the case studies clearly there are a large range of other potential variables which can be explored against the levels of use and impact of private- and public-sector sources of advice, including the SBS and SBG and the central government support schemes. This could include training of employees, and also the level of provision and use of non-executive directors. Also innovation can be explored in more detail to see if the use of novel and incremental product and process innovation is the best method to capture possible linkages with external business advice. Clearly the strength of a large postal questionnaire is that there are a large number of variables which can be used to econometrically test the use and impact of external advice.

Further research should also be undertaken in the service sector firms within Scotland. This will allow the results to be broken-out by standard industrial classification and then used to see what differences in the types of external advice and the impact of the advice exists within and between different industries. This could also be linked to face-to-face interviews and the use of qualitative research to allow greater detail to be attached to the understanding of the process of external advice.

It is also hoped that sufficient funds will become available to allow the surviving firms to be tracked, and also a top-up of the sample made to allow re-surveying in two years time. The use of a longitudinal study would then allow time comparisons of the levels of use and impact of external advice in Scotland and northern England.

Bibliography

Abler, R. (1975) Effects of Space-Adjusting Technologies on the human Geography of the Future, in Abler, R., Janelle, D. and Philbrick, A. (eds), Human Geography in a Shrinking World, Duxbury Press, Scituate, Mass.

Abramovitz, M. (1989) *Thinking about Growth and Other Essays on Economic Growth and Welfare,* Cambridge University Press, New York.

Adam-Smith, D. and McGeever, M. (1995) Training and Enterprise Councils and Small- and Medium-Sized Enterprises: Not Meeting the Needs or Just Not Meeting the Customer? *Small Business and Enterprise Development*. 2(3), 149-157.

Agar, J. and Witzel, M. (1994) *A Study into the Role of Personal Businesss Advisors*, Durham University Business School for the DTI, Durham.

Amin, A. and Thrift, N. (1992) Neo-Marshallian nodes in global networks, *International Journal of Urban and Regional Research* 16, 571-587.

Ashcroft, B., Love, J.H. and Malloy, E. (1991) New Firm Formation in the British Counties with Special Reference to Scotland, *Regional Studies*, 25(5), 395-409.

Audretsch, D.B. and Acs, Z.J. (1994) New Firm Start-ups, Technology and Macroeconomic Fluctuations, *Small Business Economics*, 6, 439-449.

Acs, Z.J. and Audretsch, D.B. (1990) *The Economics of Small Firms: A European Challenge*, Kluwer, Dordrecht.

Alpander, G.G., Carter, K.D., and Forsgren, R.A. (1990) Managerial Issues and Problem-Solving in the Formative Years, *Journal of Small Business Management*, 28 (2), 9-19.

Aydalot, P. and Keeble, D. (1988) High technology industry and innovative environments in Europe: an overview; pp 1-21 in Aydalot, P and Keeble, D. (eds) 1988; High Technology Industry and Innovative Environments: the European Experience, Routledge, London.

Bagchi-Sen, J.S. (1997) *The current state of knowledge in international business in producer services*, Environment and Planning A, 29, 1153-1174.

Bannock, G. (1987) *Britain in the 1980s: Enterprise Reborn?* A report commissioned by 3i, Investors in Industry; 3i, London.

Bannock, G. (1986) *The Economic Role of the Small Firm in Contemporary Industrial Society*; Chapter 1 in Curran J., Stanworth, J. and Watkins, D. (1986) The Survival of the Small Firm, Vol. 1: The Economics of Survival and Entrepreneurship, Gower, Aldershot, Hants.

Bannock, G. and Albach, H (1991) *Small business policy in Europe: Britain, Germany and the European Commission,* Anglo-German Foundation, London and Bonn.

Bannock, G. and Doran, A. (1991) *Business banking in the 1990s: a new era of competition* Lafferty Group, Dublin.

Barber, J., Metcalfe, S. and Porteous, M. (1989) *Barriers to Growth in Small Firms,* Routledge, London.

Barkham, R., Gudgin, G., Hart, M. and Hanvy, E. (1996) *The Determinants of Small Firm Growth: an inter-regional study in the UK 1986-90,* Jessica Kingsky Publishers Ltd, London.

Bateson, J.E.G. and Wirtz, J. (1991) Modelling consumer satisfaction: A review, *London Business School Working Paper*, No. 99.

BCC (1998) *Accreditation Rules and Standards*, Unpublished.

BCC (1994) *Government Services to business: Small Firms Survey No. 8*, British Chambers of Commerce and Alex Lawrie, London.

BCC (1993) *Task Force into the Role and Structure of the BCC*, Unpublished documentation.

Bennett, R.J. (1998) Business associations and their potential contribution to SMEs competitiveness, *Entrepreneurship and Regional Development* 10, 243-260.

Bennett, R.J. (1996b) *SMEs and Public Policy: present dilemmas, future priorities and the case of Business Links*; Prepared for key note address to 19th ISBA National Small Firms and Research Conference: Enterprising Futures.

Bennett, R.J. (1996a) The logic of local business associations: an analysis of the UK Chambers of Commerce, Journal of Public Policy, 15(3), 251-279.

Bennett, R.J. (1996) Can transaction cost economics explain voluntary Chambers of Commerce? *Journal of Institutional and Theoretical Economics* 152,654-680.

Bennett, R.J. (1995) The re-focusing of small business services in enterprise agencies: the influence TECs and LECs, *International Small Business Journal*, 13(4), 35-55.

Bennett, R.J. (1993) *Britain's Chambers of Commerce: a national network development study,* Research Papers; Department of Geography, London School of Economics, London.

Bennett, R.J. and Graham, D.J. (1988) Explaining size differentiation of business service centres, *Urban Studies*, 9, 1457-1480.

Bennett, R.J., Graham, D.J. and Bratton, W.J.A. (1999) The location and concentration of businesses in Britain: business clusters, business services, market coverage and local economic development, *Transactions of the Institute of British Geographers*, 25, 393-420.

Bennett and Robson (2000) chapter 5 in Cosh, A. and Hughes, A. (eds.) (1998) *Enterprise Britain: Growth, innovation and public policy in the small and medium-sized enterprise sector 1994-1997*, University of Cambridge, ESRC Centre for Business Research.

Bennett, R.J. and Robson, P.J.A. (1999a) The Use of External Business Advice by SMEs in Britain, *Entrepreneurship and Regional Development*, 11, 155-180.

Bennett, R. and Robson, P. (1999b) Business Link: Use, Satisfaction and Comparison with Business Shop and Business Connect, *Policy Studies,* 20 (2), 107-131.

Bennett, R.J., Bratton, W.J.A. and Robson, P.J.A. (2000) Business Advice: The Influence of Distance, *Regional Studies*, 34 (9), 813-828.

Bennett, R.J. and Wicks, P. (1993) Potential Development of Chamber of Commerce Business Services: A survey, Research Papers, Department of Geography, London School of Economics, London.

Bennett, R.J., Wicks, P. and McCoshan, A. (1994) *Local Empowerment and Business Services: Britain's Experiment with Training and Enterprise Councils*, UCL Press, London.

Berry-Lound, D. and Parsons, D. (1994) *Human resource information and advisory services to SMEs,* HOST consultancy, Horsham, Sussex.

Beyers, W.B. and Lindahl, D.P. (1996) Explaining the Demand for Producer Services: is Cost-Driven Externalisation the Major Factor, *The Journal of the Regional Science Association*, 75(3), 351-374.

Binks, M. and Jennings, A. (1986) *Small Firms as a source of Economic Rejuvenation*, Chapter 2 in Curran, J., Stanworth, J. and Watkins, D. The Survival of the Small Firm, Volume 1: The Economics of Survival and Entrepreneurship, Gower, Aldershot, Hants.

Binks, M.R., Ennew, C.T., and Reed, G.V, (1992) Informational Asymmetries and the Provision of Finance to Small Firms, *International Small Business Journal*, 11(1), 35-46.

Birch, D. (1979) *The Job Generation Process,* MIT Programme on Neighbourhood and Regional Change, Cambridge, Mass.

Birley, S. (1998) (ed.) *Entrepreneurship,* Ashgate, Brookfield, VT.

Birley, S. and Westhead, P. (1992) A comparison of new firms in 'assisted' and 'non-assisted' areas in Great Britain, *Entrepreneurship and Regional Development*, 4, 299-338.

Boeri, T. (1994) Why are Establishments so Heterogeneous? Small Business Economics, Vol. 6, 409-420.

Bolton, J.E. (1971) Small Firms: Report of the Committee of Inquiry on Small Firms, Cm 4811, HMSO, London.

BPRI (1995/96) *DTI Business Link Enquiry Services, Mystery Enquirer Research, 1995/96*, Department of Trade and Industry, London.

BPRI (1997) *DTI Business Link Enquiry Services, Mystery Enquirer Research, 1997*, Department of Trade and Industry, London.

Bratton, W.A. (1998) *Business needs and their geography: an analysis of Business Link bids*, Department of Geography, University of Cambridge, Cambridge.

Bratton, W.J.A. 1997 *Business 'needs' and their geography: an analysis of the Business Links bids*, Paper presented at the 20th ISBA National Conference, Belfast, November 1997.

Brentani, U. de and E. Ragot (1996) Developing new business-to-business professional services: what factors impact performance, *Industrial Marketing Management*, 25, 517-530.

Brown, G. (1999) *Economic and Fiscal Strategy Report* HMSO: London.

Browne, J. (1995) *Business Link Best Practice,* Department of Trade and Industry, London.

Brusco, S. (1982) The Emilian model: productive decentralization and social integration, *Cambridge Journal of Economics*, 6, 167-184.

Bryson, J.R. (1997) *Business service firms, service space and the management of change,* University of Cambridge: ESRC Centre for Business Research, WP62, Cambridge.

Bryson, J.R. and Daniels, P.W. (1998) Business Link, strong ties and the walls of silence, *Environment and Planning C, Government and Policy, 16.*

Bryson, J.R. Keeble, D. and Wood, P. (1997) The creation and growth of small business service firms in post-industrial Britain, *Small Business Economics*, 9, 345-360.

Bryson, J., Wood, P. and Keeble, D.E. (1993) Business networks, small firm flexibility and regional development in UK business services, *Entrepreneurship and Regional Development*, 5, 265-277.

Buckley, P.J., Pass, C.L. and Prescott, K. (1990) Measures of international competitiveness: empirical findings for British manufacturing companies, *Journal of Marketing and Management*, 6(1) 1-13.

Bushell, M. (1995) Developing Personal Business Advisors: an insider's view, *Small Business and Enterprise Development*, 2(3), 165-173.

Business Connect (1999) *Notes for the Management Board*, Unpublished.

Business Link National Council (1998) *The Use of Business Links, A Review*, Unpublished.

Cairncross, F. (1998) *The Death of Distance: How the Communications Revolution will Change our lives*, Orion Business Books, London.

Camagni, R. (ed.) (1991) *Innovation networks: spatial perspective*, Belhaven, London.

Camagni, R. and Capello, R. (1997) *Innovation and performance of SMEs in Italy: the relevance of spatial aspects,* Cambridge ESRC CBR, WP60.

Carma (1995) *BL Monitoritoring Report*, Department of Trade and Industry, London.

Caulkin, S. (1997) Bosses' bodies face chambers of horrors, 5th January 1997, The Observer.

Casson, M. (1997) *Information and organization: A new perspective on the theory of the firm,* Oxford University Press, Oxford.

CBI (1995) *Managing to Grow: Developing management competence in small and medium sized enterprises* (Confederation of British Industry: London).

CBI (1994) *Management Development: A survey of small and medium sized businesses*, Confederation of British Industry with Touche Ross, London.

CBI (1993) *Finance for growth: meeting the financial needs of small and medium enterprises*, London: Confederation of British Industry, London.

CEC, 1993 *Growth, Competitiveness, Employment: The Challenges and Ways Forward into the 21st Century*, White Paper, Office for the Official Publication of the European Communities, Luxembourg.

CEC, 1989 *Evaluation of Policy Measures for the Creation and Development of SMEs,* Office for the Official Publication of the European Communities, Luxembourg.

Champion, T., Wong, C., Rooke, A., Dorling, D., Coombes, M., and Brunsdon C. (1996) The Population of Britain in the 1990s: a social and economic atlas, Clarendon Press, Oxford.

Chaston, I. (1994) Rebuilding Small Business Confidence by Identifying and Closing Service Gaps in the Bank/SME Relationship, *International Small Business Journal*, 13(1), 54-61.

Clark, T. (1995) *Managing consultants: Consultancy as the management of impressions*, Open University Press, Buckingham.

Clark, T. (1993) The market provision of management services, information, asymmetries and service quality - some market solutions: An empirical example, *British Journal of Management*, 4, 235-251.

Clark, C. (1951) 2nd edition, *The Conditions of Economic Prog*ress, MacMillan and Company, London.

Cm 534 (1988) *Scottish Enterprise*, DTI, London.

Cm 4176 (1988) *Our Competitive Future: building the knowledge driven economy*, DTI, London.

Cm 4392 (1999) *Learning to Succeed; a new framework for post-16 learning*; Presented to Parliament by the Secretary of State for Education and Employment by Command of Her Majesty, DfEE, London.

Coase, R. (1937) The nature of the firm, *Economica*, 4, 386-405.

Coe, N.M. (1998) Exploring uneven development in producer service sectors: detailed evidence from the computer service industry in Britain, *Environment and Planning A,* 30, 2041-2068.

Coffey, W.J. and Bailly, A.S. (1992) Producer Services and Systems of Flexible Production, *Urban Studies*, 29(6), 857-868.

Coffey, W.J. and Polese, M. (1987) Trade and Location of Producer Services: A Canadian perspective, *Environment and Planning A*, 19, 597-611.

Coopers and Lybrand (1990) *Local Support to Growing Businesses*; A survey by Coopers and Lybrand on behalf of Business in the Community and with the support of the Confederation of British Industry.

Cornish, S.L. (1996) Marketing software products: The importance of 'being there' and the implications for business service exports, *Environment and Planning, A*, 28, 1661-1682.

Cosh, A. and Hughes, A. (eds.) (1998) *Enterprise Britain: Growth, innovation and public policy in the small and medium-sized enterprise sector 1994-1997*, University of Cambridge, ESRC Centre for Business Research.

Cosh, A.D. and Hughes, A. (eds, 2000) British Enterprise in Transition, University of Cambridge, ESRC Centre for Business Research, Cambridge.

Coulson, A. (1990) *Evaluating Local Economic Policy,* Chapter 9 in Campbell M. (ed.) 1990 Local Economic Policy, Cassell Educational Limited, London.

Cowell, D. (1984) *The marketing services*, Heinemann, London.

Cowling, M. Samuels, J. and Sugden, R. (1991) *Small Firms and clearing banks*, Association of British Chambers of Commerce, London.

Curran, J. (1986) *The width and the depth of small enterprise research in Britain, 1971-1986,* Chapter 1 in Rosa, P. (ed.) (1986), The Role and Contribution of Small Business Research, Avebury, Aldershot, Hants.

Curran, J. and Blackburn, R.A. (1994) *Small firms and local networks: the death of the local economy?* Paul Chapman, London.

Curran, J. and Blackburn, R. (1991a) *Changes in the context of enterprise: Some socio-economic and environmental factors facing small firms in the 1990s,* Chapter 9 in

Curran, J. and Blackburn, R. (1991b) Paths of enterprise: The future of the small business, Routledge, London.

Curran, J. Jarvis, R. Blackburn, R.A. and Black, S. (1993) Networks and small firms: constructs, methodological strategies and some finding, *International Small Business Journal* 11(2), 13-25.

Daniels, P.W. (1993) Service Industries in the World Economy, Blackwell Publishers, Oxford.

Daniels, P.W. (1985) Service Industries: a geographical appraisal, Methuen, London.

Daniels, P. and Moulaert, F. (eds.) (1991) *The changing geography of advanced producer services*, Belhaven, London.

Davies, H., Campbell, J. and Barnes, I (1986) An evaluation of local authority assistance to small firms: the case of Humberside, *Local Government Studies*, 12(3), 37-50.

Dawes, P.A., G.R. Dowling, and P.G. Patterson (1992) Criteria used to select management consultants, *Industrial Marketing Management*, 21, 187-193.

Dawson, J.A. (1991) Market Services in the United Kingdom, chapter 9 in Johnston R.J. (ed.), 1991, The Changing Geography of the United Kingdom, Routledge, London.

Day, E. and H.C. Barksdale (1992) How firms select professional services, *Industrial Marketing Management*, 21, 85-91.

DE (1991a) *Keys to Growth for owner-managers seeking to expand*, Price Waterhouse and Employment Department, London.

DE (1991b) *A survey of owner-managed businesses,* Employment Department, London.

DE (1991) *A survey of owner-managed businesses*, Employment Department, London.

Deakins, D. and Hussain, G. (1991) Risk assessments with asymetric information, *International Journal of Bank Marketing*, 11(1), 24-31.

DETR (1999) *DETR Annual Report and 1999/2000 Budget Allocation*, HMSO, London.

Devlin, P. (1972) *Report on the Commission of Inquiry into Industrial and Commercial Representation*; Commission of Inquiry into Industrial and Commercial Representation; Association of British Chambers of Commerce and Confederation of British Industry, London.

DfEE (1999) *The Learning and Skills Council Prospectus: Learning to succeed*, Department for Education and Employment, London.

Dicken, P. (1992) *Global Shift: the internationalisation of economic activity*, Paul Chapman Publishing Ltd, London.

DoEm (1988) *The Role of the Training and Enterprise Councils,* Unpublished, Department for Employment, London.

Doggett, P. and Hepple, L.W. (1995) *Corporate banking survey 1995 - England, Wales, Scotland and Northern Ireland,* Mees Pierson NV, London.

Donckels, R. and Lambrecht, J. (1996) A holistic approach to the expansion decision of small and medium-sized enterprises in a metropolitan area: the case of Brussels; *Entrepreneurship and Regional Development*, 8, 19-36.

DTI (2000) *Small Business Service: Corporate Plan 2000/1 to 2002/3*, DTI, London.

DTI (1999) *The Small Business Service: consultation paper*, Department of Trade and Industry, London.

DTI (1999a) *The Small Business Service: A public consultation,* URN 99/815, Department of Trade and Industry, London.

DTI (1999b) *Guidance for proposals to deliver local services on behalf of the Small Business Service,* Department of Trade and Industry, London.

DTI (1998) Competitiveness White Paper: Benchmarking the Digital Economy, HMSO, London.

DTI (1998a) *Building the Knowledge Driver Economy, Competitiveness White Paper*, Department of Trade and Industry, London.

DTI (1998b) *Building the Knowledge Driver Economy, Competitiveness White Paper, Analytical Report,* Department of Trade and Industry, London.

DTI (1998c) *A guide to help for small firms*, Department of Trade and Industry, London.

DTI (1997a) *Business Link Statistics, July-September 1987*, Business Link Directorate, Department of Trade and Industry, London.

DTI (1997b) *Business Link Service Guide*, Department of Trade and Industry, London, URN 97/100.

DTI (1997c) *Measuring the impact of Business Link,* Department of Trade and Industry, London.

DTI (1996) *Business Link Accreditation Booklet*, Department of Trade and Industry, London.

DTI (1995a) *Consultancy Brokerage Service: Listing with CBS: Guidance conditions,* Department of Trade and Industry, London.

DTI (1995b) UK Management Training and Advisory Services for SMEs, pp. 143-149 in *Best Practice Policies Small and Medium Sized Enterprises* (Paris: Organisation for Economic Cooperation and Development).

DTI (1992) *A prospectus for One-Stop Shops for business*, Department of Trade and Industry, London.

DTI (1990) *The Enterprise Initiative: An introduction,* Department of Trade and Industry, London.

Dunning, J.H. (1993) *Multinational enterprises and the global economy*, Addison Wesley, Wokingham.

Dunning, J.H. (1996) *The geographical sources of the competitiveness of firms: some results of a new survey*, University of Reading, Dept. of Economics, DP 218.

Dunning, J.H. (1998) Location and the multinational enterprise: a neglected factor? *Journal of International Business Studies*, 29(1), 45-66.

Dwyer, F.R., P.H. Schurr and O. Sejo (1987) Developing buyer-seller relationships, *Journal of Marketing*, 51, pp. 11-27.

Ennew, C.T. and Binks, M.R. (1996) The impact of service quality and service characteristics on customer retention: small businesses and their banks in the UK, *British Journal of Management*, 7, 219-230.

Ernst and Young (1995) *Business Link*, Department of Trade and Industry, London.

Ernst and Young (1996) *Evaluation of Business Link*, Department of Trade and Industry, London.

Fisher (1939) Production: Primary, Secondary and Tertiary, *Economic Record*, June.

Fothergill, S. and Gudgin, G. (1979) The Job Generation Process in Britain. Research Series No. 32, Centre for Environmental Studies, London.

Freel, M. (2000) Strategy and Structure in Innovative Manufacturing SMEs: The case of an English Region, *Small Business Economics*, 15(1), 27-45.

Freel, M. (2003) Sectoral patterns of small firm innovation, networking and proximity, *Research Policy*, 32(5) 1-20.

FT (1996) The voice trainer: the new president of the Chartered Accountants talks about his strategies for unity in diversity, *Financial Times:* 20 February, 1998.

FT (1998) Minister to ponder proposals for firms' regulation, *Financial Times*, 20 February, 1998.

Gallouj, C. (1997) Asymmetry of information and the service relationship: selection and evaluation of the service provider, *International Journal of Service Industry Management*, 8(1), 42-64.

Garner, R.J. (1967) *Models of Urban Geography and Settlement Location*, Chapter 9 in Chorley, R.J. and Haggett, P. 1967, Models in Geography, Metheun and Co, London.

Gates, B. (1995) The Road Ahead, Viking, London.

Gates, B. (1999) Business@The Speed of Thought, Penguin Group, London.

Gershuny, J.I. and Miles, I.D. (1983) *The New Service Economy: The transformation of employment in industrial societies*, Frances Pinter, London.

Gibb, A. (1993) Key factors in the design of policy support for the small and medium enterprise (SME) development process: an overview, *Entrepreneurship and Regional Development*, (55), 1-24.

Gibb, A. and Davies, L. (1991) In Pursuit of Frameworks for the Development of Growth Models of the Small Business, *International Small Business Journal*, 9(1),15-31.

Goss, D. and Jones, R. (1992) Organisational Structure and SME Training Provision, *International Small Business Journal*, 10(4), 13-25.

Gottman, J. (1975) *Megalopolis and Antipolis: The Telephone and the Structure of the city*, in de Sola, I. (1975), The Social Impact of the Telephone, The MIT Press, Cambridge, Mass.

Grabher, G. (ed) (1993) *The embedded firm – on the socio-economics of industrial networks*, Routledge, London.

Grayson, D. (1996) *Making Business Links World Class*, Occasional Paper 6, Business in the Community, London.

Granovetter, M. (1985) Economic action and social structure: the problem of embeddedness, *American Journal of Sociology,* 91(3), pp. 481-510.

Hall, G. (1992) Reasons for Insolvency Amongst Small Firms – a Review and Fresh Evidence, *Small Business Economics*, Vol 4, 237-250.

Hall, G. and Young, B. (1991) Factors Associated with Insolvency Amongst Small Firms, *International Small Business Journal*, 9(2), 54-63.

Harrington, J.W., MacPherson, A.D. and Lombard, J.R. (1991) Interregional trade in producer services: review and synthesis, *Growth and Change*, 22, 75-94.

Harrison, B., Kelley, M.R. and Grant, J. (1996) Innovative firm behaviour and local mileau: explaining the intersection of agglomeration, firm effects, and technological change, *Economic Geography*, 72, 233-258.

Harrison, R.T. and Mason, C. (1991) Informal Investment Networks: a Case Study from the United Kingdom, *Entrepreneurship and Regional Development*, Vol. 3 (3), 269-279.

Harrison, R. and Mason, C. (1993) Finance for the growing business – the role of informal investment, *National Westminster Bank quarterly review*, May 1993, 17-29.

Hendry, C., Jones, A., Arthur, W. and Pettigrew, A. (1991) *Human resource development in the small and medium sized enterprise*, Employment Department Research Paper, No. 88, London.

Heseltine, M. (1992) Forging partnerships for World Class support, *TEC Director*, 15 (Sept/Oct), 8-9.

Hill, C.J. and S.E. Neeley (1988) Differences in the consumer decision process for professional vs. generic services, *Journal of Services Management,* 2(1), 17-23.

Hitchens, D. and O'Farrell, P. (1991) Comparative Performance of Small Manufacturing Firms Located in South Wales and Two English Regions, *International Small Business Journal*, 9(2), 64-70.

Hitchens, D.M.W.N. and O'Farrell, P.N. (1987) The comparative performance of small manufacturing firms in Northern Ireland and S.E. England, *Regional Studies*, 21, 543-553.

HoC (1996a) *Trade and Industry Committee, 5th Report, Business Links,* 3 Vols, HC302, HMSO, London.

HoC (1996b) *Trade and Industry Committee, Third Special Report, Government Observations on the Fifth Report from The Trade and Industry Committee (Session 1995-96) on Business Links,* HC712, HMSO, London.

HoC (1996) *Trade and Industry Committee, 5th Report, Business Links,* 3 Vols, HC302, HMSO, London.

Holmes, S., Kelly, G., and Cunningham, R. (1991) The Small Firm Information Cycle: a reappraisal, *International Small Business Journal*, 9(2), 41-53.

Holmstrom, B. (1985) The provision of services in a market economy, in R.P. Inman (ed.), *Managing the service economy: prospect and problems*, Cambridge University Press.

Houlder, V. (1996) Small business 'ignoring support', *The Financial Times*; 1st November 1996.

Howells, J. and Green, A. (1988) *Technological innovation, structural change and location in UK services*, Avebury, Aldershot.

Hull, C.J. and Hjern, B. (1987) *Helping Small Firms Grow: an implementation approach*, Croom Helm, London.

Hutchinson, J., (1994) The Practice of Partnership in Local Economic Development. *Local Government Studies*, 20(3), 335-344.

Illersis, S. (1994) Proximity between service producers and service users, *Tijschrift voor Economische en Sociale Geograpfie* 85(4), 294-302.

Illersis, S. (1989) Services and Regions in Europe, Avebury, Aldershot, Hants.

IoD (1996) *Your Business Matters: report from the regional conferences*, IoD, London.

IoD (2000) *The Small Business Service: An institutional King Canute*? Institute of Directors, London.

Jackson, R.W., L.A. Neidell and D.A. Lunsford (1995) An empirical investigation of the differences in goods and services as perceived by organisational buyers, *Industrial Marketing Management*, 24, 99-108.

Johnston, R.J. (1991) *The Changing Geography of the United Kingdom*, Routledge, London.

Jones, M. (1996) TEC Policy Failure: Evidence from the Baseline Follow-up Studies, *Regional Studies*, 30(5), 509-515.

Jones, A., Joyce, P., Woods, A., Black, S. and Shaw, S. (1996) TECs: an Appropriate Model for Supporting the Development of Small Businesses?, *Small Business and Enterprise Development*, 3(3), 119-127.

Keeble, D. (2000) chapter 7 in Cosh, A. and Hughes, A. (eds.) (1998) *Enterprise Britain: Growth, innovation and public policy in the small and medium-sized enterprise sector 1994-1997*, University of Cambridge, ESRC Centre for Business Research.

Keeble, D. (1998) North-South and Urban-Rural variations in SME Growth, innovation and networking in the 1990s, in A. Hughes and A. Cosh (eds.) *Enterprise Britain*, ESRC Centre for Business Research, pp. 99-113.

Keeble, D.E. (1994) *Regional influences and policy in new technology based firm creation and growth*, pp. 204-218 in Oakey, R. (ed.) *New Technology-based firms in the 1990s*, Paul Chapman, London.

Keeble, D. (1993) Small firm creation, innovation and growth and the urban-rural shift, Chapter 3, pp. 56-78, in J. Curran and D. Storey (eds.) *Small firms in urban and rural locations*, Routledge, London.

Keeble, D. (1990) Small firms, new firms and uneven regional development in the United Kingdom, *Area*, 20(3), 234-245.

Keeble, D. (1980) Industrial decline, regional policy and manufacturing shift in the UK, *Environment and Planning A*, 12, 944-962.

Keeble, D. and Bryson, J. (1996) Small-firm creation and growth, regional development and the North-South divide in Britain, *Environment and Planning A* 28, 909-934.

Keeble, D., Bryson, J. and Wood, P. (1991) Small firms, business service growth and regional development in the UK: some empirical findings, *Regional Studies* 25, 439-457.

Keeble, D., Tyler, P., Broom, G. and Lewis, J. (1992) *Business Success in the Countryside: the performance of rural enterprise*, HMSO, London.

Keeble, D.E. and Walker, S. (1994) New Firms, Small Firms and Dead Firms, *Regional Studies*, 28(4), 411-427.

Keeble, D.E., Walker, S., and Robson, M. (1993) *New firm formation and small business growth in the UK: spatial and temporal variation and determinants*, Research Series No. 15, Employment Department, Sheffield.

Killop, D.G. and Barton, L. (1995) An Analysis of the Financing Requirements of Small and Medium Sized Firms in Northern Ireland, *Regional Studies*, 29(3), 241-249.

Kirby, D.A. and Jones-Evans, D. (1997) Small technology-based professional consultancy services in the United Kingdom, *Service Industries Journal,* 17,155-172.

Kirby, D.A. and King, S.H. (1997) Accountants and small firm development: filling the expectation, *Service Industries Journal*, 17, 294-304.

KPMG (1994) *DTI Evaluation of Business Links,* Department of Trade and Industry, London.

Krugman, P. (1993) *Geography and Trade*, MIT Press, Massachusetts.

Krugman, P. (1991) *Geography and Trade,* The MIT Press, Cambridge, Mass.

Kutscher, R. E. (1988) *Growth of services employment in the US*, in B.R. Guile and J.B. Quinn (eds.) *Technology in Services: policies for growth, trade and employment*, National Academy Press, Washington D.C.

Lapierre, J. (1997) What does value mean in business-to-business professional services? *International Journal of Service Industry Management*, 8(5), 377-397.

Lawton-Smith, H. (1998) Barriers to technology transfer: local impediments in Oxfordshire, *Environment and Planning C: Government and Policy,* 16, 433-448.

Lentnek, B., MacPherson, A. and Phillips, D.(1992) Optimum producer-service location, *Environment and Planing A*, 24, 467-479.

Levitt, T. (1981) Marketing intangible products and product intangibles, *Harvard Business Review*, 59, 94-102.

Lingle, C. (1997) *The Rise and Decline of the Asian Century*, Ashgate, Virginia.

Lloyd, P.D. and Mason, C.M. (1984) Spatial variations in new firm formation: comparative evidence from Merseyside, Greater Manchester and South Hampshire, *Regional Studies*, 18, 207-220.

Lourie, J. (1997) *Training and Enterprise Councils,* Research Paper 97/48, House of Commons, London.

Malecki, E.J. (1991) Technology and Economic Development: The Dynamics of Local, Regional and National Change, Longman Scientific and Technical, Harlow.

Marshall, J.N. (1994) Business reorganization and the development of corporate services in metropolitan areas, *Geographical Journal*, 160, 41-49.

Marshall, J.N. (1988) *Services and uneven development*, Oxford University Press, Oxford.

Marshall, J.N., Alderman, F.N., Wong, C. and Thwaites, A. (1993) The impact of government-assisted management training and development on small and medium-sized enterprises in Britain, *Environment and Planning C: Government and Policy*, 11, 331-348.

Marshall, N. and Wood, P. (1995) *Services and Space: Key Aspects of Urban and Regional Development*, Longman Scientific and Technical, Harlow.

Marshall, J.N. and Wood, P.A. (1992) The role of services in urban and regional development: recent debates and new directions, *Environment and Planning A*, 24, 1255-1270.

Martin, R. and Sunley, P. (1996) Paul Krugman's geographical economics and its implications for regional development theory: a critical assessment, *Economic Geography*, 72, 259-292.

Martinelli, F. (1991) Producer services' location and regional development, chapter 7 in Daniels, P.W. and Moulaert, F. (1991), The Changing Geography of Advanced Producer Services: theoreticak and empirical perspectives, Belhaven Press, London.

Mason, C. (1991) Spatial variations in enterprise: the geography of new firm foundation in R. Burrows (ed.), *Deciphering the enterprise culture,* Routledge, London.

Mason, C. and Harrison, R. (1992) The Supply of Equity Finance in the UK: a Strategy for Closing the Equity Gap, *Entrepreneurship and Regional Development*, 4(4), 357-380.

Massey, D. (1995) 2nd edition, *Spatial Divisions of Labour: social structures and the geography of production*, MacMillan Press Ltd, Hants.

Middleton, N. (1991) *The Development Strategy*, Unpublished BCC document.

Milgrom, P. and J. Roberts (1992) *Economics, organization and management*, Prentice Hall, London.

Miller, D. (1990) *The Future of Local Economic Policy: a Public and Private Sector Function,* Chapter 10 in Campbell, M. (ed.) 1990 Local Economic Policy, Casell Educational Limited, London.

Mills, P.K. and N. Margulies (1980) Toward a pure typology of service organizations, *Academy of Management Review*, 5(2), 255-265.

Minns, R. and Tomaney, J. (1995) Regional Government and Local Economic Development: The Realities of Economic Power in the UK, *Regional Studies*, 29(2) 202-208.

Moore, B. (1993) *Financial Constraints to the Growth and Development of Small High Technology Firms*, Working Paper No. 31, Small Business Research Centre, University of Cambridge, Cambridge.

MORI (1996) *Business Links: Baseline Tracking Study. Business advice among small and medium-sized enterprises and the Business Link Campaign - wave 4,* MORI, London.

MORI (1994) *'Business Links': The business advice market among small and medium-sized enterprises,* Department of Trade and Industry, London.

Morris, M.H. and D.A. Fuller (1989) Pricing an industrial service, *Industrial Marketing Management*, 18, 139-146.

Moss, M. (1987) Telecommunications and International Financial Centres, chapter 6 in Brotchie, J.F., Hall, P. and Newton, P.W. (1987), The Spatial Impact of Technological Change, Routledge, London.

Moulaert, F. and Daniels, P.W. (1991) *The Changing Geography of Advanced Producer Services*, Belhaven Press, London.

Moulaert, F. and Tödtling, F. (eds.) (1995) The geography of advanced producers services in Europe. *Progress in Planning*, 43, 2-4, 274 p.

Moyes, A. and Westhead, P. (1990) Environments for new firm formation in Great Britain, *Regional Studies*, 24, 123-136.

MRS (1998) *Business Link Training and Devleopment Survey*, Mall Research Services, Department of Trade and Industry, London.

Nayyar, P.R. (1990) Information asymmetries: a source of competitive advantage for diversified firms, *Strategic Management Journal,* 11, 513-519.

NEMS (1996) *Customer Satisfaction Survey Tyneside*, North East Market Surveys, Stockton-on-Tees.

North, D. and Smallbone, D. (1995) The Employment Generation Potential of Mature SMEs in Different Geographical Environments, *Urban Studies*, 32(9), 1517-1536.

O'Farrel, P.N. and Crouchley, R. (1984) An Industrial and Spatial Analysis of New Firm Formation in Ireland, *Regional Studies*, 18(3), 221-236.

O'Farrell, P.N. and D.M. Hitchens (1990) Producer services and regional development: key conceptual issues of taxonomy and quality measurement, *Regional Studies*, 24, 163-171.

O'Farrell, P.N. and Hitchens, D.M.W.N. (1988) The relative competitiveness and performance of small manufacturing firms in Scotland and Mid-West Ireland: an analysis of matched pairs, *Regional Studies,* 22, 399-416.

O'Farrell, P.N., Hitchens, D.M.W.N. and Moffat, L.A.R. (1992) The competitiveness of business service firms in Scotland and South East England: a matched pairs analysis, *Regional Studies* 26, 519-533.

O'Farrell, P.N. and L.A.R. Moffat (1991) An interactive model of business service production and consumption, *British Journal of Management*, 2, 205-221.

O'Farrell, P.N. and L.A.R. Moffat (1990) Producer Services and Regional Development: Key Conceptual Issues of Taxonomy and Quality Management, *Regional Studies*, 24(2), 163-171.

O'Farrell, P.N. and Moffatt, L.A.R. (1995) Business Services and their impact upon client performance: an exploratory interregional analysis, *Regional Studies*, 29, 111-124.

O'Farrell, P.N., Moffat, L.A.R. and Hitchens, D.M.W.N. (1993) Manufacturing demand for business services in a core and peripheral region: does flexible production imply vertical disintegration of business services? *Regional Studies* 27, 385-400.

O'Farrell, P.N. and Wood, P.A. (1998) Internationalisation by business service firms: towards a new regionally-based conceptual framework, *Environment and Planning A,* 30, 109-128.

O'Neill, C. (1990) Modular Training in the Post Start-up Phase in the Small Business Sector in Northern Ireland, *International Small Business Journal*, 8(3), 58-63.

Oakey, R.P. and Cooper, S.Y. (1989) High technology industries, agglomeration and the potential for peripherally sited small firms, *Regional Studies*, 23, 347-360.

Papows, J. (1998) *Enterprise.com: Market leadership in the information age*, Nicholas Brealey Publishing Ltd, London.

Payne, D. and Bennett, R.J. (1998) *National Level Policy Making for Local Economic Development in Britain – an analysis of the national level negotiations for the Business Link policy initiative*, Paper presented as part of the panel 'New ways of

making policy for local and regional economic development: the public-private mix?' at the Political Studies Association Annual Conference, University of Keele, April 7th – 9th 1998.

Peel, M.J. and Wilson, N. (1996) Working Capital and Financial Management Practices in the Small Firm Sector, *International Small Business Journal*, 14(2), 52-68.

Perry, M. (1992) Flexible production, externalisation and the interpretation of business service growth, *Service Industries Journals*, 12, 1-16.

Peteraf, M. (1992) The cornerstores of competitive advantage: a resources based view, *Strategic Management Journal*, 14, 179-191.

Peters, I.J. (1989) *Small business growth: spatial and non-spatial aspects of development*, unpublished Ph.D, University of Southampton.

Petit, P. (1986) Slow Growth and the Service Economy, Frances Pinter, London.

Phelps, N. (1992) External economies, agglomeration and flexible accumulation, *Transactions, Institute of British Geographers,* N.S. 17(1), 35-46.

Pieda (1993) *Small businesses in Wales*, A report commissioned by the Welsh Office, Unpublished.

Piore, M. and Sabel, C. (1984) *The second industrial divide: possibilities for prosperity*, Basic Books, New York.

Porter, M.E. (1998) *On Competition,* Harvard Business Review Press, Boston, Massachusetts.

Porter, M.E. (1995) Competitive Advantage: Creating and Sustaining Superior Performance, The Free Press, New York.

Porter, M.E. (1990) *The competitive advantages of nations*, Free Press, New York.

Porteous, D.J. (1995) The Geography of Finance, Avebury, Hants.

Pred, A.R. (1980) *Urban growth and city-systems in the United States, 1840-1860*, Harvard University Press, Cambridge, Mass.

Priest, S.J. (1998) *Stimulating the performance of SMEs through Business Link: an assessment of customer satisfaction, dissatisfaction and complaining behaviour*, unpublished PhD, University of Cambridge.

Priest, S.J. (1998b) Business Link: A method for examining customer satisfaction, dissatisfaction and complaining behaviour, *Journal of Consumer Satisfaction, Dissatisfaction, and Complaining Behaviour*, 5(2):

Priest, S.P. (1999) Business Link SME Services: targeting, innovation and charging, *Environmental Policy C; Government and Policy,* 17,

Raper, J.F., Rhind, D.W. and Shepherd, J.W. (1992) 1992 Postcodes: The new geography, Longman Scientific and Technical, Harlow, Essex.

Reynolds, P., Storey, D.J. and Westhead, P. (1994) Cross-national comparisons of variation in new firm formation rates, *Regional Studies*, 28, 443-456.

Richardson, H.W. (1971) *Regional and Urban Economics*, Pitman, London.

Riddle, D.F. (1986) *Services and Growth: the role of the special service sector in world development*, Praeger, New York.

Ridyard, D., Jones, I. and Foster, R.(1989) Economic evaluation of the loan guarantee scheme, *Employment Gazette*, August, 417-421.

Robbins, K.D., Pantuosco, L.J., Parker, D.F. and Fuller, B.K. (2000) An Empirical Assessment of the Contribution of Small Business Employment to US State Economic Performance, *Small Business Economics*, 15(4).

Robson Rhodes, (1985) *A Study of Businesses Financed under the Small Firm Loan Guarantee Scheme*, Department of Trade and Industry, London.

Robson, G.B. and Gallagher, C.C. (1994) Change in the size distribution of UK firms, *Small Business Economics*, 6(4), 299-312.

Roche, B. (1997) *Enhanced Business Links: A vision for the 21st Century*, Department of Trade and Industry, London.

Romer, P.M. (1986) Increasing returns and long-run growth, *Journal of Political Economy*, 94, 1002-1036.

Rondinelli, D.A. and Kasarda, J.D. (1992) Foreign trade potential, small enterprise development and job creation in developing countries, *Small Business Economics*, 4(4), 253-265.

Rugman, A.M., van den Broeck, J. and Verbeke, A. (eds.) (1995) *Beyond the Diamond, Research in global management*, vol. 5, JAI Press, Greenwich, Conn.

Sabel, C.F. (1989) *Flexible specialization and the re-emergence of regional economies*, Chapter 1, in P. Hirst and J. Zeitlin (eds.) *Reversing industrial decline*, Berg, Leamington Spa.

Sabel, C., Kern, H., and Herrigel, G. (1987) Regional prosperities compared: Massachussetts and Baden-Württenberg, *Economy and Society*, 18, 374-404.

SBRC (1992) *The state of British Enterprise: growth, innovation and competitive advantage in small and medium-sized firms*, University of Cambridge: Small Business Research Centre, Cambridge.

Schumpeter, J.A. (1942) *Capitalism, Socialism and Democracy.* Harper and Brothers, New York.

Schneiberg, M. and Hollingsworth, J.R. (1991) *Can transaction cost economics explain trade associations?* pp. 199-256 in R.M. Czada and A. Windoff-Héritier (eds.), *Political Choice: Institutions, Rules, and the Limits of Rationality* Campus Verlag, Frankfurt am Main.

Scott, A.J. (1986) Industrial organisation and location: division of labour, the firm and spatial process, *Economic Geography*, 62, 215-231.

Scott, A.J. (1993) *Technologies: high technology industry and regional development in Southern California*, University of California Press, Berkeley.

Scott, P., Jones, B., Bramley, A. and Bolton (1996) Enhancing Technology and Skills in Small and Medium-sized Manufacturing Firms: Problems and Prospects, *International Small Business Journal*, 14(3), 85-99.

Scottish Enterprise (1997) *An introduction to the Scottish Business Shop Network*, Scottish Enterprise, Glasgow.

Sear, L. and Agar, J. (1996) *Business Links and Personal Business Advisers: selling services irrespective of client's needs? Proceedings* of 19th ISBA Conference, Birmingham.

Shapiro, C. (1983) Premiums for high quality products as returns to reputations, *Quarterly Journal of Economics* 43(4), 659-679.

Smallbone, D., North, D. and Leigh, R. (1993) The use of external assistance by mature SMEs in the UK: some policy implications, *Entrepreneurship and Regional Development* 5, 279-285.

Smith, A.M. (1989) Service quality: relationships between banks and their small business clients, *International Journal of Bank Marketing*,7(5), 28-35.

Spectrum Strategy Consultants (2000) *Introducing a business support structure for Internet start-ups*, Unpublished consultancy document for the Department of Trade and Industry, London.

Stanworth, J. and Gray, C. (eds.) (1991) *Bolton 20 years on: The small firm in the 1990s*, Paul Chapman Publishing, London.

Stigler, G.J. (1951) The division of labour is limited by the extent of the market, *Journal of Political Economy*, 59, 185-193.

Stigler (1956) Trends in Employment in the Service Industries, *John Hopkins University Press, Baltimore.*

Storey, D.J. (1994) *Understanding the small business sector*, Routlege, London.

Storey, D.J. and Johnson, S. (1987) *Job Generation and Labour Market Change*, MacMillan, Basingstoke.

Storey, D.J., Watson, R. and Wynarczyk, P. (1989) *Fast Growth Small Businesses: Case Studies of 40 Small Firms in Northern England*, Research Paper No. 67, Department of Employment, London.

Storper, M. and Scott, A.J. (eds.) (1992) *Pathways to industrialisation and regional development*, Routledge London.

Summon, P. (1998) Business Link impact and future challenges, *Journal of Small Business and Enterprise Development,* 5(1), 7-18.

Sweeney, G.P. (1987) *Innovation, Entrepreneurs and Regional Development*, Francis Pinter, London.

Tann, J. Lafaret, S. (1998) Assuring consultant quality for SMEs - the role of Business Links, *Journal of Small Business and Enterprise Development*, 5(1), 7-18.

Taylor, M. and Singleton, S. (1993) The Communal Resource: Transaction costs and the solution of collective action problems, *Politics and Society* 21 (2), 195-214.

Terpstra, D.E. and Olson, P.D. (1993) Entrepreneurial Start-up and Growth: A Classification of Problems, *Entrepreneurship: Theory and Practice*, 17(3), 5-20.

The Times (1996) 'Those who adapt will flourish: Frances Gibb talks in his last week as secretary-general of the Law Society' 28 May.

Thomas, P. (1995) 1993 Census of Employment: Progress report, Employment Gazette, 103, (1), 29-32.

Thomas, P. and Smith, K. (1995) Results of the 1993 Census of Employment, *Employment Gazette,* October, 369-377.

Thwaites, A. and Wynarczyk, P. (1996) The economic performance of innovative small firms in the SE Region and elsewhere in the UK, *Regional Studies*, 30, 135-149.

Tordoir, P.P. (1994) Transactions of professional business services and spatial systems, *Tijdschrift voor Economische en Sociale Geografie*, 85(4): 322-332.

Townroe, P. and Brenton, P. (1987) Local authority aid to small firms in neighbouring areas, *Local Economy*, 2(3), 169-180.

Turok, I. (1988) The limits of financial assistance: an evaluation of local authority aid to industry, *Local Economy*, 2(3), 286-297.

Turok, I. and Richardson, P. (1991) New firms and local economic development: evidence from West Lothian, *Regional Studies*, 25, 71-86.

Twomey, J., Tomkins, J.M., and Topham, N. (1994) Allocation and needs in the distribution of training budgets: The case of English Training and Enterprise Councils, *Regional Studies*, 28(5), 495-510.

Vaessen, P. and Keeble, D. (1995) Growth-oriented SMEs in Unfavourable Regional Environments, *Regional Studies*, 29 (6), 489-505.

Vatne, F. (1995) Local resource mobilisation and internationalisaton strategies in small and medium sized enterprises, *Environment and Planning A* 27, 63-80.

van Waarden, F. (1991) *Two logics of collective action? Business associations as distinct from trade unions: The problems of associations of organisations*, pp. 51-84 in: D. Sadowski and O. Jacobi (eds.) *Employers' Associations in Europe: Policy and Organisation*, Nomos, Baden-Baden.

Wales Enterprise Ltd, (1997) *Enterprise Agencies and Business Connect*, Unpublished.

Walker, R.A. (1985) Is there a service economy? The changing capitalist division of labour, *Science and Society*, 49, 42-83.

Watkins, D. (1982) *Management Development and the Owner Manager*; in Webb, T., Quince, R., and Watkins, D. (eds) Small Business Research, Gower, Hants.

Welsh Office (1998) *Pathway to Prosperity*, Welsh Office, London.

Welsh Office (1998a) Strengthening of *Business Connect – phase 2 of the five point plan*,Welsh Office, London.

Westhead, P. (1995) New owner-managed business in rural and urban areas in Great Britain: a matched pairs comparison, *Regional Studies*, 29, 367-380.

Westhead, P. and Moyes, A. (1991) Reflections on Thatcher's Britain: evidence from new production firm registrations 1980-88, *Entrepreneurship and Regional Developments*, 4, 21-56.

Westhead, P. and Storey, D.J. (1996) Management Training and Small Firm Performance: Why is the Link So Weak?, *International Small Business Journal*, 14(4), 13-24.

Wheiler, K. (1987) Referral between professional service providers, *Industrial Marketing Management*, 36, 191-200.

Wigley, J. and Lipman, C. (1992) *The Enterprise Economy*, MacMillan Press, Hants.

Williamson, O.E. (1975) *Markets and Hierarchies: Analysis and Antitrust Implications*, The Free Press, New York.

Williamson, O.E. (1985) *The Economic Institutions of Capitalism: Firms, Markets, Relational Contracting,* The Free Press, New York.

Wilson, A. (1972) *The marketing of professional services*, McGraw-Hill, London.

Wood, P.A., J. Bryson and D. Keeble (1993) Regional patterns of small firm development in the business services: evidence from the UK, *Environment and Planning A*, 25, 256-700.

Wood, P.A. (1995) *Business Services, the Management of Change and Regional Development in the UK: a corporate client perspective*, Working Paper Series, WP 23, ESRC Centre for Business Research, Cambridge.

Wood, P.A. (1991) Flexible accumulations and the rise of business services, *Transactions of the Institute of British Geographers*, 16, 160-172.

Woodcock, C. (1986) *The Financial and Capital Environment of the Small Firm*, Chapter 3 in Curran, J., Stanworth, J., and Watkins, D. 1986, The Survival of the Small Firm, Vol. 1: The Economics of Survival and Entrepreneurship, Gower, Aldershot, Hants.

Woodruff, R.B. and Gardial, S.F. (1996) *Know your customer: New approaches to customer value and satisfaction*, Blackwell, Oxford.

Wren, C. and Story, D.J. (1988) *Estimating the impact of publicly subsidized advisory services upon small firm performance: the case of the DTI marketing initiative,* University of Warwick: SME Centre, Coventry.

Zucker, L.G. (1986) *The production of trust: institutional sources of economic structure, 1840-1920,* In B.M. Straw and L.L. Cummings (eds.), *Research in Organizational Behaviour,* JAI Press, London.

3i/MORI (1997) *The 3i MORI Survey of key independent businesses in Britain,* 3i, London.

Appendix

UNIVERSITY OF ABERDEEN

Centre for Entrepreneurship

Survey of Enterprise in Scotland 2001

This Survey is designed to gain a better understanding of the state of enterprise in Scotland.

All the information which you provide will be kept confidential and anonymous, and will be used only for academic research.

Centre for Entrepreneurship Department of Management Studies University of Aberdeen Aberdeen AB24 3QY
Tel: 01224 272712 Fax: 01224 273843 Email: deptmgmt@abdn.ac.uk

SECTION A GENERAL CHARACTERISTICS OF YOUR BUSINESS

IN THIS SECTION WE WOULD LIKE YOU TO TELL US SOMETHING OF THE CHARACTER OF YOUR BUSINESS.

A1. In what year did your firm begin trading?..... ☐

A2. Has your firm been the subject of a take-over bid or merger proposal in the last 3 years from any of the following firms? *Please tick the box of the appropriate answers* in **each** row.

	UK Company				Overseas Company			
A larger firm?.....	Yes	☐	No	☐	Yes	☐	No	☐
A firm of similar size?.....	Yes	☐	No	☐	Yes	☐	No	☐
A smaller firm ?.....	Yes	☐	No	☐	Yes	☐	No	☐

A3. Was the take-over or merger proposal carried out?..... Yes ☐ No ☐

A4. Has your firm *taken* over any firms in the last 3 years?.... Yes ☐ No ☐

A5. What percentage of your turnover is accounted for by work carried out by you on a subcontract basis for other firms?

3 Years Ago ☐ % Now ☐ %

A6. What percentage of your sales last year was accounted for by: *Please tick the appropriate answer in* **each** *row*

Largest Customer	Under 10%	10-24	25-49	50-74	75-89	90-100
Top 5 Customers	Under 10%	10-24	25-49	50-74	75-89	90-100

A7. How many firms do you regard as serious competitors?... ☐

A8. Of your serious competitors:

How many are larger than your firm?..... ☐

How many are overseas firms?..... ☐

A9. What numbers of your workforce are currently employed in the occupation groups listed below? Could you please also indicate if you are currently finding it difficult to recruit suitable employees in a particular occupation group? *Please enter number of full-time and part-time employees and* tick *the box of the appropriate recruiting answer in each row.*

	Full-time	Part-time (including outworkers)	Current difficulty in recruiting			
Semi-skilled & unskilled manual			Yes	☐	No	☐
Skilled manual			Yes	☐	No	☐
Clerical & administrative			Yes	☐	No	☐
Technicians			Yes	☐	No	☐
Technologists and scientists			Yes	☐	No	☐
Managerial and Professional			Yes	☐	No	☐
Total			Yes	☐	No	☐

SECTION B USE OF BUSINESS ADVICE

B1. In which of the following areas, if any, have you used the services of other firms, agencies or external consultants during the last 3 years? Please also assess the impact of the advice you received on meeting your business objectives. Please also provide the geographic location of the advisor.

	Used advice source?		No Positive Impact	Slight Impact	Moderate Impact	Important Impact	Crucial Impact	Geographic Location (main town or city)
Accountant	Yes	No	1	2	3	4	5	
Solicitor	Yes	No	1	2	3	4	5	
Bank	Yes	No	1	2	3	4	5	
Customers	Yes	No	1	2	3	4	5	
Business Associates	Yes	No	1	2	3	4	5	
Friends/Relatives	Yes	No	1	2	3	4	5	
Suppliers	Yes	No	1	2	3	4	5	
Consultants	Yes	No	1	2	3	4	5	
Local Chamber of Commerce	Yes	No	1	2	3	4	5	
Trade/Professional association	Yes	No	1	2	3	4	5	
Local Enterprise Agency/Trust	Yes	No	1	2	3	4	5	
Local LEC or Scottish Enterprise	Yes	No	1	2	3	4	5	
Highlands & Islands Enterprise	Yes	No	1	2	3	4	5	
Business Shop/ Small Business Gateway Service	Yes	No	1	2	3	4	5	
Other Please Specify.....	Yes	No	1	2	3	4	5	

B2. If you did use Business Shop or the Small Business Gateway Service which of its services have you used? For those services used, please indicate your level of satisfaction. *Please tick the appropriate answer in each row.*

	Used Services		Very Dissatisfied	Dissatisfied	Satisfied	Very Satisfied
Diagnostic Assessment	Yes	No	1	2	3	4
Personal business advisor	Yes	No	1	2	3	4
Diagnostic Assessment	Yes	No	1	2	3	4
Sales and marketing advice	Yes	No	1	2	3	4
Export Advice	Yes	No	1	2	3	4
Finance and accounting advice	Yes	No	1	2	3	4
Training/Investors in People	Yes	No	1	2	3	4
Product/service design advice	Yes	No	1	2	3	4
Innovation and technology advice	Yes	No	1	2	3	4
Education and university links	Yes	No	1	2	3	4
Grants	Yes	No	1	2	3	4

B3. Are there any additional services which Business Shop (BS)/ the Small Business Gateway Service should offer?... .....

Yes		No	

B4. If **Yes**, Please list up to 3 services which you think that Business Shop (BS)/ the Small Business Gateway Service should be offering (most important first). Also, Please indicate what is the maximum fee which you would be prepared to pay for each service (*if zero fee please specify*).

Service	Maximum Fee Prepared to Pay
(1)	£
(2)	£
(3)	£

B5. Have you received financial assistance or advice from any of the government business support schemes listed below during the last 3 years? For those schemes used, please indicate your level of satisfaction. *Please tick the appropriate answer and where applicable the number for each row.*

	Used Services		Very Dissatisfied	Dissatisfied	Satisfied	Very Satisfied
Teaching Company Schemes	Yes	No	1	2	3	4
Investors in People	Yes	No	1	2	3	4
Skills for Small Businesses	Yes	No	1	2	3	4
LINK	Yes	No	1	2	3	4
Regional Supply Network	Yes	No	1	2	3	4
Export Credit Guarantees/ Export Information Services	Yes	No	1	2	3	4
Small Firms Loan Guarantee Scheme	Yes	No	1	2	3	4
Regional Selective Assistance/ Regional Enterprise Grants	Yes	No	1	2	3	4
SMART or SPUR	Yes	No	1	2	3	4
ISO 9000 Quality Award	Yes	No	1	2	3	4

B6. Have you used any of the following sources for ***informal advice*** in the management and development of your business during the last 3 years. For those sources used, please indicate the level of importance.

	Used informal source of advice?		Not Important	Slightly Important	Moderately Important	Important	Crucial
Friends	Yes	No	1	2	3	4	5
Family Members	Yes	No	1	2	3	4	5
Local Chamber of Commerce	Yes	No	1	2	3	4	5
Trade/Professional Associations	Yes	No	1	2	3	4	5
Local Enterprise Meetings	Yes	No	1	2	3	4	5
Social Groups e.g. Rotary Club	Yes	No	1	2	3	4	5
Business Associates	Yes	No	1	2	3	4	5
Other (Please Specify).....	Yes	No	1	2	3	4	5

B7. For those sources used, please indicate how often you use the informal sources. Please also indicate the geographical location of the source of advice. If you have used several sources of advice in any category please give the location of the most significant of these. *Please tick the appropriate answer and provide geographic location.*

	Daily	Two-Three Times a Week	Once a Week	Once a Month	Yearly	Geographic Location (Main Town)
Friends	1	2	3	4	5	
Family Members	1	2	3	4	5	
Local Chamber of Commerce	1	2	3	4	5	
Trade/Professional Associations	1	2	3	4	5	
Local Enterprise Meetings	1	2	3	4	5	
Social Groups e.g. Rotary Club	1	2	3	4	5	
Business Associates	1	2	3	4	5	
Other (Please Specify).....	1	2	3	4	5	

B8. In which of the following areas, if any, have you used the **informal** advice of other people during the past 3 years? Please also assess the impact of the informal advice you received on meeting your business objectives.

	Areas in which informal advice used in last 2 years		No Positive Impact	Slight Impact	Moderate Impact	Important Impact	Crucial Impact
Advice in solving problems	Yes	No	1	2	3	4	5
Introduction to customers	Yes	No	1	2	3	4	5
Introduction to suppliers	Yes	No	1	2	3	4	5
Providing information	Yes	No	1	2	3	4	5
Practical - hands-on help	Yes	No	1	2	3	4	5
Marketing advice or information	Yes	No	1	2	3	4	5
Development, production and operational issues	Yes	No	1	2	3	4	5
Recruitment issues	Yes	No	1	2	3	4	5
Managing staff	Yes	No	1	2	3	4	5
Personal or emotional support	Yes	No	1	2	3	4	5
Seeking finance	Yes	No	1	2	3	4	5
Help with cash flow problems	Yes	No	1	2	3	4	5
Export possibilities	Yes	No	1	2	3	4	5
Legal issues	Yes	No	1	2	3	4	5
Other (Please Specify).....	Yes	No	1	2	3	4	5

B9. Which **one** of the following is your most important source of informal advice? Please tick *one* box only.

	Most important source of informal advice
Friends	
Family members	
Local Chamber of Commerce	
Trade/Professional Associations	
Local Enterprise Meetings	
Social Groups e.g. Rotary Club	
Other (Please Specify).....	

B10. For your *most importance source* of informal advice how important are the following features of the informal relationship. *Please tick the appropriate number in **each** row.*

	No Importance	Slightly Important	Moderately Important	Important	Crucial
Trust	1	2	3	4	5
Respect	1	2	3	4	5
Reciprocity (i.e. Give and Take)	1	2	3	4	5
Business knowledge	1	2	3	4	5
Local knowledge	1	2	3	4	5
Commercial Acumen	1	2	3	4	5
Length of relationship	1	2	3	4	5
Personal or emotional support	1	2	3	4	5
Friendship	1	2	3	4	5
Other (Please Specify).....	1	2	3	4	5

SECTION C TRAINING

C1 Do you provide *formal* training for your workforce who are currently employed in the occupation groups listed below? Could you please also indicate the percentage of the employees in each occupation group who currently receive *formal* training?

	Training Provided		% of the employees by occupation group who currently receive training.						
Semi-skilled & unskilled manual	Yes	No	Under 10%	10%	20%	30%	40%	50%	60% plus
Skilled manual	Yes	No	Under 10%	10%	20%	30%	40%	50%	60% plus
Clerical & administrative	Yes	No	Under 10%	10%	20%	30%	40%	50%	60% plus
Technicians	Yes	No	Under 10%	10%	20%	30%	40%	50%	60% plus
Technologists and scientists	Yes	No	Under 10%	10%	20%	30%	40%	50%	60% plus
Managerial and Professional	Yes	No	Under 10%	10%	20%	30%	40%	50%	60% plus

C2 If you do provide formal training please can you indicate for the following occupation groups who provided the formal training?

	Training Provided by Own staff		Training Provided by Outside Trainers	
Semi-skilled & unskilled manual	Yes	No	Yes	No
Skilled manual	Yes	No	Yes	No
Clerical & administrative	Yes	No	Yes	No
Technicians	Yes	No	Yes	No
Technologists and scientists	Yes	No	Yes	No
Managerial and Professional	Yes	No	Yes	No

C3 Can you please provide an estimate of the cost of training as a percentage of your firms' turnover? *Please tick appropriate box.*

None	Under 1%	1%	2%	3%	4%	5%	6% or more

C4 If you did provide formal training have you used the following organisations? If you have, please can you indicate your level of satisfaction with the training provided?

	Used?		Very Dissatisfied	Dissatisfied	Satisfied	Very Satisfied
University/Institute of Higher Education	Yes	No	1	2	3	4
Colleges of Further Education/ Technical Colleges	Yes	No	1	2	3	4
Private Training Agencies/Consultants	Yes	No	1	2	3	4
Local Chambers of Commerce	Yes	No	1	2	3	4
Voluntary Organisations	Yes	No	1	2	3	4
Professional Associations	Yes	No	1	2	3	4
Trade Associations	Yes	No	1	2	3	4
Local Enterprise Trusts	Yes	No	1	2	3	4

C5 Do you have any non-executive directors?..... Yes ☐ No ☐

C6 If yes, how many non-executive directors are there?..... ☐

C7 If no, please can you briefly explain why your firm has no non-executive directors?

☐

C8 If you do have non-executive directors, please can you indicate their occupations and their areas of expertise or why they were recruited?

Occupation	Areas of Expertise / Reasons recruited
1.	
2.	
3.	
4.	
5.	

C9. Have you used the following methods to recruit non-executive directors? If you have, please can you indicate how effective was the method of recruitment?

	Used Method		Not at all Effective	Moderately Effective	Effective	Very Important Effect	Crucially Effective
Advertisement	Yes	No	1	2	3	4	5
Word of Mouth	Yes	No	1	2	3	4	5
Private Recruitment Agency	Yes	No	1	2	3	4	5
Known to you Personally	Yes	No	1	2	3	4	5
Appointed as a Condition of Receiving Finance	Yes	No	1	2	3	4	5
Other.....	Yes	No	1	2	3	4	5

SECTION D INNOVATION

D1. In the last 3 years, how many of the following did your firm introduce? (if none please indicate with a zero)

	To the industry	To the firm
New Products (goods or services)		
New Processes		
Improved products (goods or services		
Improved Processes		

D2. Approximately how many graduates did you employ in the last 3 years? (if none please indicate with a zero)

	Number of Graduates
Science and Engineering	
Other graduates	
Total	

D3. Approximately what percentage of your firm's annual turnover was spent on research and development (R&D) and innovation-related activities (e.g. training, marketing, patenting) during the last 3 years? *Please tick one box in each column.*

	% of turnover spent on R&D	% of turnover spent on innovation-related activities (e.g. training, marketing, patenting)
none		
1%-5%		
6%-10%		
11%-20%		
more than 20%		

D4. Approximately what percentage of your annual turnover and pre-tax profits was derived from new and significantly improved products (goods and services) and/or processes introduced during the last 3 years?

	Turnover	Profit
None		
1%-5%		
6%-10%		
11%-20%		
More than 20%		

D5. How important do you believe the following factors have been in hindering your innovative activities during the last 3 years? *Please tick the box of the appropriate answer in each row.*

	Not Important	Moderately Important	Important	Very Important	Crucial
Access to technological skills	1	2	3	4	5
Access to marketing skills	1	2	3	4	5
Access to management skills	1	2	3	4	5
Access to financial skills	1	2	3	4	5
Access to debt finance	1	2	3	4	5
Access to equity finance	1	2	3	4	5
Access to grants	1	2	3	4	5
Access to appropriate information/advice	1	2	3	4	5
Access to suitable partners	1	2	3	4	5
Access to specialist equipment/facilities	1	2	3	4	5
Other, Please Specify.....	1	2	3	4	5

D6. What were the main reasons for introducing new or improved products (goods and services) and/or processes in the last 3 years? *Please tick the box of the appropriate answer in each row.*

	Not Important	Moderately Important	Important	Very Important	Crucial
To comply with legislation/regulation	1	2	3	4	5
To respond to competition	1	2	3	4	5
To meet a specific customer request	1	2	3	4	5
To enter a new market	1	2	3	4	5
To diversify the business	1	2	3	4	5
To maintain sales revenue/market share	1	2	3	4	5
To increase sales revenue/market share	1	2	3	4	5
As a result of standardisation (e.g. BS, ISO)	1	2	3	4	5
Other, Please Specify.....	1	2	3	4	5

D7 With regards to the environment in which your firm operates, please indicate in the table to what extent the statements are applicable to your firm. *Please tick the box of the appropriate answer in each row.*

Statement	Not Changed	Slightly Changed	Greatly Changed
The composition of the group of key suppliers has, in the last 3 years.....			
The composition of our customers has, in the last 3 years.....			
The composition of our product/service line has, in the last 3 years.....			

D8. How have the following factors affecting your business changed over the last 3 years? *Please tick the box of the appropriate answer in each row.*

Statement	Greatly Decreased	Moderately Decreased	Stay the Same	Moderately Increased	Greatly Increased
Government regulation/legislation affecting our business, have	1	2	3	4	5
The firm's ability to access finance, have	1	2	3	4	5
The amount of information that the firm must be familiar with, have	1	2	3	4	5
The company's profit margins have	1	2	3	4	5

D9. To what extent are the statements mentioned below applicable to your firm?

Statement	Never	Sometimes	Frequently
How often do you consider to search for new key suppliers?			
How often do you make predictions about market developments?			

D10. To what extent were each of the following activities emphasised in your firm's policy in the last 3 years? *Please tick the box of the appropriate answer in each row.*

	Not Emphasised	Moderately Emphasised	Emphasised	Very Important Emphasis	Crucial Emphasis
Cost reduction in purchase activities	1	2	3	4	5
Changing the production process or organisation structure	1	2	3	4	5
Improving sales and marketing efforts	1	2	3	4	5
Changing product-market combinations	1	2	3	4	5
Expansion, integration, take-over of activities	1	2	3	4	5
Reduction of activities	1	2	3	4	5
Specialisation of products and/or processes	1	2	3	4	5
Intensify cooperation with buyers and/or suppliers	1	2	3	4	5
Other, Please Specify.....	1	2	3	4	5

D11. Did you firm co-operate with other firms or organisations for innovation related activity (including marketing, training, etc.) and/or technology transfer during the last 3 years? *(If yes, please indicate the type of firm/organisation and the location of your co-operation partner).*

	Local	Scotland	UK	Overseas
Customers				
Suppliers/Subcontractors				
Competitors/Other Firms				
Service Firms (e.g. marketing, design)				
Universities (specify.....)				
Further Education Colleges				
Enterprise Companies/Agencies				
Chambers of Commerce				
UK Government Offices (e.g. DTI, MAFF)				
European Union				
Other, Please Specify.....				

D12. How important were the following factors in contributing to successful co-operation over innovation related activities with other firms/organisations? *Please tick the box of the appropriate answer in each row.*

	Not Important	Moderatel y Important	Important	Very Important	Crucial Importance
Established long-term relationship	1	2	3	4	5
Frequency of contact	1	2	3	4	5
Close geographic proximity	1	2	3	4	5
Operating in the same industry (but not supply chain)	1	2	3	4	5
Operating in the same supply chain	1	2	3	4	5
Joint commitment of resources	1	2	3	4	5
Project management by a third party (e.g. LEC)	1	2	3	4	5
Public sector support	1	2	3	4	5
Complementary skills	1	2	3	4	5
Other, Please Specify.....	1	2	3	4	5

SECTION E TECHNOLOGY

E1 Please indicate whether your firm has any of the following technologies.

	Owned 3 years ago?		Currently Own	
Desk Top Computer (s)	Yes	No	Yes	No
Email	Yes	No	Yes	No
Internet Access (i.e. can search the Web)	Yes	No	Yes	No
ISDN	Yes	No	Yes	No
Own Website (Please specify address).....	Yes	No	Yes	No

E2 Are the following functions automated in your firm?

	3 years ago?		Today	
Inventory/Stock control	Yes	No	Yes	No
Customer account management	Yes	No	Yes	No
Order processing	Yes	No	Yes	No
Organisational Accounts	Yes	No	Yes	No
Personnel records management	Yes	No	Yes	No
Payroll	Yes	No	Yes	No
Product design	Yes	No	Yes	No
Project Management	Yes	No	Yes	No
Supply Chain Management (electronic data exchange)	Yes	No	Yes	No
Other please specify.....	Yes	No	Yes	No

E3 If your firm has a website when was it created?..... [ ]

E4 Approximately how much did it cost to create your website? £ .....

E5 How often is your website updated? Please circle one response. Daily | Weekly | Monthly | Less Often

E6 Can customers purchase goods and services 'on-line' at your website? Yes [ ] No [ ]

E7 Can suppliers purchase goods and services 'on-line' at your website? Yes [ ] No [ ]

E8 Approximately what percentage of your turnover is accounted for by on-line sales? Please tick appropriate box.

None	1%	5%	10%	15%	20%	25%	30%	35%	40%	45%	50% or more

E9 In 12 months time approximately what percentage of your turnover do you predict will be accounted for by on-line sales? Please tick appropriate box.

None	1%	5%	10%	15%	20%	25%	30%	35%	40%	45%	50% or more

E10 How important were the following reasons for creating your website? Please tick one box in each row.

	Not important	Slightly Important	Moderately Important	Important	Very Important
For generating on-line sales	1	2	3	4	5
To communicate with existing customers in domestic markets	1	2	3	4	5
To communicate with existing customers in export markets	1	2	3	4	5
To target new customers in domestic markets	1	2	3	4	5
To target new customers in export markets	1	2	3	4	5
Other, Please Specify	1	2	3	4	5

SECTION F FINANCE AND CAPITAL EXPENDITURE

F1. Please provide the following information for the latest financial year for which you have data available. Please specify the accounting year end and the number of months covered in that year.

Financial year to which data refers [ ] No. of Months covered e.g. 12 [ ]

Turnover.....	£ 000
What Percentage of your turnover was Exported.....	%
Pre-Tax Profits (losses) *before* deduction of interest, tax, and directors or partners' or proprietors' emoluments.....	£ 000
Post-Tax Profits (losses) *after* deduction of interest, tax, and directors, partners' or proprietors' emoluments.....	£ 000
Average number of employees (including part timers and working directors).....	Full Time / Part Time
Number of sites (including main office).....	

F2. Please provide the equivalent information for 3 years ago. Please specify the accounting year end and the number of months covered in that year.

Financial year to which data refers [ ] No. of Months covered e.g. 12 [ ]

Turnover.....	£ 000
What Percentage of your turnover was Exported.....	%
Pre-Tax Profits (losses) *before* deduction of interest, tax, and directors or partners' or proprietors' emoluments.....	£ 000
Post-Tax Profits (losses) *after* deduction of interest, tax, and directors, partners' or proprietors' emoluments.....	£ 000
Average number of employees (including part timers and working directors).....	Full Time / Part Time
Number of sites (including main office).....	

F3. Have you attempted to obtain additional finance (that is, in addition to internally generated cash flows) in the last 3 years?

Amount sought [£ ,000] Percentage obtained [%]

F4. If YES, how much additional finance did you seek and what proportion of this did you obtain?

Amount sought [£ ,000] Percentage obtained [%]

F5. For each of the following sources please indicate which you approached in the last 3 years and whether the approach resulted in an offer of additional finance. *Please tick one box in each row.*

	Not Approached	Approached but No Finance Offered	Approached but Offered Less than Full Amount	Approached and Offered the Full Amount	% of Finance Obtained From this Source
Banks					
Venture Capital Firms					
Business Angels/Private Investors					
Hire Purchase/Leasing Firms					
Factoring/Invoice Discounting Firms					
Trade Customers/Suppliers					
Partners/Working Shareholders					
Other Sources (Please Specify)...					
Total					

F6. Of the total additional finance which you obtained, please indicate the amount sought and successfully obtained in the last 3 years for each of the following types of finance. *Please tick one box in each row.*

	Amount Sought £ ,000	Amount Obtained £ ,000
Total Amount	£ ,000	£ ,000
Overdraft	£ ,000	£ ,000
Short Term Loan	£ ,000	£ ,000
Medium/Long Term Loan	£ ,000	£ ,000
Hire Purchase/Leasing	£ ,000	£ ,000
Factoring/Invoice Discounting	£ ,000	£ ,000
Equity Capital	£ ,000	£ ,000
Grants	£ ,000	£ ,000
Other Types (Please Specify).....	£ ,000	£ ,000

F7. For companies raising **equity finance** only: please provide the following information (approximations will suffice)

Amount of Management time to raise finance	(no. of days)	Days
Cost of Raising the Finance	(% of Amount Raised)	%
% of Equity Relinquished	(%)	%
Location of Equity Provider	(Main Town or City)	

F8. Please indicate the proportion of shares owned by each category of shareholder.

	At the Present Time	At Time of Incorporation/ Transfer to Present Management
Lead Entrepreneur/Manager	%	%
Other Members of Management Team	%	%
Relatives of Management Team	%	%
Other Employees	%	%
Outside Investors	%	%
Others (Please indicate).....	%	%
Total	100%	100%

F9. Please indicate how you expect to raise the capital required to finance your growth over the next 3 years. *Please tick one box in each row.*

	Very Unlikely	Unlikely	Likely	Very Likely
Through Retained Earnings	1	2	3	4
Loan Finance	1	2	3	4
Equity Capital	1	2	3	4
Grants	1	2	3	4

F10. If equity capital is required please indicate the sources that you are likely to consider using. *Please tick one box in each row.*

	Very Unlikely	Unlikely	Likely	Very Likely
Founders and Management	1	2	3	4
Family and Friends	1	2	3	4
Other Private Individuals (Business Angels)	1	2	3	4
VC Funds	1	2	3	4
Other Financial Institutions	1	2	3	4
Non-Financial Companies	1	2	3	4
Stock Market/Alternative Investment Market	1	2	3	4
Sale of Firm to Another Company	1	2	3	4
Other Sources (Please Specify..... ....)	1	2	3	4

Thank you for completing the questionnaire.
Please use the enclosed envelope to return the questionnaire.

THE CENTRE FOR ENTREPRENEURSHIP

The Centre for Entrepreneurship was established within the Department of Management Studies, University of Aberdeen, in 1995. The mission of the Centre is

To improve the entrepreneurial environment in Scotland:

- by undertaking high quality relevant research,
- through curriculum development, the teaching of entrepreneurship,
- and through the provision of business advice and consultancy services.

Fundamental to the Centre is the belief that entrepreneurship is important:

- As a leading edge management philosophy in turbulent environments;
- As the basis for new business formation;
- As a stimulus to local, regional and national economic development;
- As a source of innovation within organisations and sectors;
- As a mechanism for social inclusion.

The Centre currently has seven academic staff and a further 12 research associates, including international associates. As such, the Centre is one of the largest research and teaching centres for entrepreneurship in the UK.

Core research activity and expertise is based around six broad themes:

- Venture capital and business angel finance;
- Innovation and business development;
- Business advice and business support organisations;
- The dynamics of business growth and development;
- Networks and market development in rural small businesses;
- Strategy and leadership development in entrepreneurial businesses.

Centre staff publish widely in academic and other outlets, and their expertise has been applied in research and advisory assignments for government departments, national and international agencies, business support organisations and entrepreneurial businesses (including European Union, Department of Trade and Industry, Scottish Enterprise, Bank of England, LINC Scotland, National Business Angels Network, Design Council, British Venture Capital Association, Carnegie Foundation, Northern Ireland Software Industry Federation, Canadian High Commission, OECD and Grampian Enterprise).

UNIVERSITY OF ABERDEEN

Centre for Entrepreneurship
Department of Management Studies
University of Aberdeen
Aberdeen AB24 3QY
Tel: 01224 272712
Fax: 01224 273843
Email: deptmgmt@abdn.ac.uk