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'NORTH-SOUTH' CONTRASTS IN THE CHARACTERISTICS AND PERFORMANCE OF SMALL FIRMS

PROFESSOR SUE BIRLEY and DR PAUL WESTHEAD
Cranfield Entrepreneurship Research Centre
Cranfield School of Management
Cranfield Institute of Technology
Cranfield
Bedford MK43 OAL

(Tel: 0234-751122)

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Professor Sue Birley and Dr. Paul Westhead
(Cranfield Entrepreneurship Research Centre, Cranfield School of Management, Cranfield Institute of Technology, Cranfield, Bedford, MK43 OAL TEL: 0234-751122)

ABSTRACT

In recent years there has been considerable interest in spatial differences and inequalities in the United Kingdom. Empirical evidence has indicated that there are 'north-south' contrasts with areas in the 'south' of England having recorded higher levels of economic prosperity, rates of new firm formation, levels of disposable income and 'wealth', and a greater tendency to retain and create jobs. These contrasts have led some commentators in the media and the popular press to suggest that these contrasts are leading to the development of a 'divided kingdom' rather than a United Kingdom. This study analyses the characteristics of small firms in the two locations and refutes a number of anecdotal tales and myths.

The study draws upon data from 242 small firms in the Cranfield Small Firms Data Base (CSFDB) almost equally split between the 'north' (51%) and the 'south' (49%). Firms in the sample range in size from 1 to 181 employees, and from less than £99,999 to over £10 million sales turnover.

Data was first subjected to univariate Chi-Squared Analysis and the results show both some clear differences and some surprising similarities. It is clear that some of the variations could be explained by industry differences. However, firms in all locations demonstrated similarities in the pattern for example of: employment size, dependence upon single products or services, customer and competitor base, use of computer technology, preference for owning rather than hiring or leasing assets, lack of training for either management or workforce, lack of formal market research, the use of solicitors and accountants as the major source of advice and information, and a lack of contact with small firms assistance agencies.

The univariate analyses provided basic information about the differences between the sample firms in the 'north' and those in the 'south'. In order to identify the combination of factors which best characterised the firms, a discriminant analysis was conducted using the thirteen variables found to show differences at the 0.01 level of significance. The results showed that firms in the 'north' are primarily firms with a large number of YTS trainees, have product liability insurance, run by the founders, have some contact with small firms agencies, relatively small sales revenue, 'non-local' suppliers, received Development Board finance, and are manufacturing firms. Firms in the 'south' are service firms with 'local' suppliers having no contact with Government schemes or assistance agencies but have received finance from employees.

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SMALL FIRMS 'NORTH-SOUTH DIVIDE'

INTRODUCTION

In recent years there has been considerable interest in spatial differences and inequalities in the United Kingdom. Research interest and empirical evidence has indicated that there are 'north-south' contrasts with areas in the 'south' of England (and in the South East of England in particular) having recorded higher levels of economic prosperity (Champion and Green, 1985; Green, 1988), standards of health (Whitehead, 1987; Townsend et al., 1988; Curtis and Mohan, 1989), disposable income and 'wealth' (Halsey, 1987; Veitch, 1987), home-ownership, shareholders (Mitchison, 1987; Martin, 1989) and private health insurance (Mohan, 1984) and private school education (Bradford and Burdett, 1989). Areas in the 'south' also have a greater tendency to retain and create jobs (Department of Employment, 1987; Champion et al., 1987), have lower levels of unemployment (Green, 1985; 1986; Green and Owen, 1987), low levels of expenditure on supplementary benefits (Martin, 1989), increases in total population (Champion and Green, 1985, 1986), exploding house prices (Fitzsimons, 1987; Champion and Brunsdon, 1988; Fleming and Nellis, 1988a, 1988b; Green, 1988; Champion and Green, 1989; Hamnet, 1989) a better educated pool of economically active individuals and a larger proportion of individuals from higher social economic groups associated with higher order, non-manual occupations and process functions (Massey, 1984; Crum and Gudgin, 1987; Green and Owen, 1984; Hepworth et al., 1987).

The 'south' is also associated with above average concentrations of high-technology employment (Keeble, 1987) and the South East of England has an above average concentration of employment in private as well as Government research and development establishments (Rothwell, 1982). In addition, the spatial distribution of financial and 'producer service' employment is dominated by the South East region (Martin, 1989; Leyshon and Thrift, 1989). One effect of this has been a tendency for innovative new ventures in the 'south' to be generally regarded as being of 'low risk', and they find it easier to raise finance than firms in the 'high-risk' depressed 'north' (Martin, 1989). For example, in their study of the Business Expansion Scheme (BES) Mason and Harrison (1989, p.52) claimed that "...the Scheme is contributing to a north-south flow in risk investment finance in the UK, reinforcing the difficulties experienced by

potential recipient companies in the north of the country in raising risk capital". Furthermore, it has been shown (Mason, 1987; Martin, 1988; British Venture Capital Association, 1989) that there is a marked over-representation of venture capital funds in the 'south' not only because this area has the highest level of demand generated by the greater economic buoyancy of the area but also because the venture capital industry central organisation is located in London.

The wide range of nationally available schemes to assist industry exhibits considerable variation between regions in both take-up rates and economic impact. For example, the South East of England's share of companies receiving grants under various innovation schemes (Department of Trade and Industry, 1983), consultancies licenced under the MAPCON scheme (Goddard, 1983; Vincent et al., 1987) and grants under the Microprocessor Applications Project (Policy Studies Institute, 1985) are all substantially in excess of its proportion of total business stock. In a detailed review of various schemes to assist small firms (namely, the Loan Guarantee Scheme (LGS), the Business Expansion Scheme (BES), Small Engineering Firms Investment Scheme (SEFIS) and the Enterprise Allowance Scheme (EAS)) Harrison and Mason (1988) concluded that take-up rates under various small business schemes were not uniform between regions, with the South East and East Anglia consistently containing more than their 'fair share' of recipient companies when compared with their proportion of the total stock of small business activity. Additionality, displacement and wastage rates also differ between regions (Mason and Harrison, 1986).

In 1982 Storey found that the 'southern' regions' of the South East, the South West and East Anglia of England recorded the highest scores on a 'Regional Entrepreneurship Index'. On the basis of this index Storey (1982) suggested that the 'southern' regions would be associated with higher regional business dynamism than their 'northern' counterparts and that "...policies to assist small and new firms are likely to bear the greatest fruit in this area" (p. 194). This view was confirmed in a recent study of the spatial distribution of four schemes to assist small firms (the LGS, the BES, SEFIS and the EAS). On the basis of a composite 'Take Up Index' Storey and Johnson (1987, p.170-171) found that the 'Entrepreneurship Index' performed remarkably well and that "...whilst there are clear local or regional factors influencing the take-up of individual schemes designed to assist small firms the overwhelming regional impact of the schemes taken as a package is regionally divisive in a way which was predicted in 1982 before any of these schemes were introduced".

In part, due to the well-developed small business sector, a favourable economic milieu, and its socio-economic composition 'southern' regions have been found conducive not only to new firm formation (Whittington, 1984; Gould and Keeble, 1984; Storey and Johnson, 1987; Moyes and Westhead, 1988) but also to 'successful' small firm growth and performance (Mason, 1985; Barkham, 1987; Hitchins and O'Farrell, 1987). This contrasts with 'northern' regions in which the small business sector offers fewer opportunities for small firms and the socio-economic composition and culture depress the level of entrepreneurship (Storey, 1982; Lloyd and Mason,

1984). Moreover, new technology-based enterprises are disproportionately concentrated in 'southern' England (Keeble and Kelly, 1986). Independent firms in the South East are more innovative than their counterparts in peripheral regions (Thwaites, 1982). In addition, the concentration of externally-owned production and assembly plants with truncated management functions in peripheral regions has resulted in fewer opportunities for management buyouts compared with Midlands and the South East (Storey, 1983; Wright et al., 1984). Overall, the levels and rates of 'exit route' activity are much higher in the south and east of England than in any other parts of the United Kingdom (Birley and Westhead, 1988a).

In a recent policy document published by the Department for Enterprise it is the stated objective of Government to promote"...the development of indigenous potential within the Assisted Areas with the long-term objective of self-generating growth in these areas" (HM Government, 1988, p.29). This will be achieved by ensuring that the Government's policies are "intensified in areas which have suffered the greatest industrial problems" and that "the main aims of the Governments enterprise policies are properly reflected in the regions" (ibid). It has, however, been argued by Harrison and Mason (1988, p.13), that "...this latest small firms initiative may have the outcome of further increasing regional economic inequalities, of rewarding success rather than stimulating change, and thereby reinforcing the retreat from regional policy in the United Kingdom".

Not surprisingly, the results of the June 1987 General Election also emphasised a stark political divide in voting behaviour and political allegiance with the generally deprived 'north' being a 'Labour North' and overwhelmingly prosperous 'south' being a 'Conservative South' (Johnston and Pattie, 1987). Moreover, Johnston and Pattie (1989, p.243) have presented data which indicates that there is a clear 'north-south' divide in people's perceptions of recent economic changes, with people in the South and Midlands much more satisfied and optimistic than people in the urban north of England, Scotland and Wales. The trends detailed above have led to some commentators in the media and the popular press to suggest this is a growing development of a 'divided kingdom' rather than a United Kingdom (Osmond, 1988). Even commentators from the United States have appreciated this divide when they state:

> "Roughly, with pockets of prosperity and blight on both sides, Britain is split by a north-south divide running from Bristol to the Wash. The victims of decaying smokestack industry live in the north; the beneficiaries of high-tech, finance, scientific and service industries, plus London's cultural and political elite are in the south. Cross the divide, going north, and visibly the cars get fewer, the clothes get shabbier, the people chattier" (Crichfield, 1987, p.4).

Consequently, the metaphor of the 'north-south' divide has gained the greatest currency in discussions of the United Kingdom's inequalities in the 1980s. "It has come to serve as a shorthand in which 'northern' is equivalent to backward, dependent, industrial, public sector, Labour and poor; while 'southern' means successful, enterprising, service, private sector, Conservative and rich - wherever these characteristics occur" (Lewis and Townsend, 1989, p.5).

THIS RESEARCH

The research outlined above shows the phenomenon of the "north-south divide" is now widely accepted, particularly in the study of new and small firms. However, there remains little research into the strategic profile of the indigenous small firms which form the base for these conclusions. This study poses one basic research question:

Are there any significant differences in the strategic profile of firms in the 'north' and the 'south' of the United Kingdom?

DATA COLLECTED

This paper draws upon data from 243 small firms in the Cranfield Small Firms Data Base (CSFDB) almost equally split between the 'north' (51%) and the 'south' (49%). Using a definition adopted by a variety of researchers (Harrison and Mason, 1988; Cambridge Econometrics and the Northern Ireland Economic Research Centre, 1987, p.6; Leyshon and Thrift, 1989; Watts, 1989). which focuses upon the pressurised 'heart' of the United Kingdom economy in the late 1980s in terms of the squeeze on the labour force, the importance of key industrial sectors and the demand for housing, the 'south' is defined as the standard regions of East Anglia, the South East and the South West.

The Cranfield Small Firms Data Base (CSFDB) was set up to monitor the changes in the strategic profiles of a sample of small firms. The data collected is wide ranging, and for each company includes performance measures, balance sheet structure, cost structure, employment profile, ownership structure, management structure, product width and depth, customer and supplier profiles, manufacturing, marketing and financial strategies, and sources of external advice and assistance. Firms in the sample are from a diverse range of industries, both service and manufacturing, employ approximately 8,000 people, account for approximately £318 million of sales revenue, range in size from 1 to 181 employees, and from less than £100,000 in sales to greater than £10 million. For a full description of the data collection methods see Birley and Westhead (1988b), and of the sample characteristics see Birley and Westhead (1988c).

RESULTS

Chi-Squared analyses were first conducted to identify individual differences between the 'north' and the 'south'. Of the 66 variables available, analysis was not possible in 15 cases due to the assumpt. ⁻ of the Chi-Squared test. For the rest significant differences were observed for 11 variables at the 0.01 level of significance and a further 6 at the 0.05 level of significance. In total, significant differences were observed in 33% of the analysed cases (see Table 1). The first part

(Insert Table 1 here)

of the results section below describes the individual analyses in more detail.

OWNERSHIP AND EMPLOYMENT PATTERNS

Industry: As was anticipated, a statistically significant difference was recorded between the industrial characteristics of the small firms surveyed in the two locations (Criteria 1 in Table 1). In the 'north' a larger proportion of surveyed firms were engaged in manufacturing activities than their counterparts in the 'south' (59.3% compared to 30.3%). Over 52% of surveyed firms in the 'south' were engaged in service activities compared to only 30.3% of firms in the 'north'. These differences are in part a reflection of the contrasting industrial legacies and traditions of the two locations with the 'north' being a traditional manufacturing area in contrast to the 'south' which has had a more service orientated economy.

Legal entity: In both locations over 77% of firms surveyed were incorporated (83.1% and 78.0% in the 'north' and 'south', respectively) with the second leading type of legal entity being a partnership (11.3% compared to 13.6%) (Criteria 2).

Ownership: Less than 4% of firms in the two locations were franchises (Criteria 3). In the 'north' over 65% of firms had first generation current majority owners compared to 50.0% in the 'south', whilst small firms in the 'south had a greater tendency to have either owners with no relationship to the founders (19.2% compared to 28.2%) or they were second generation owners (5.8% compared to 15.5%) (Criteria 4). Similarly, over 61% of small firms in the 'north' had current first generation senior executives, whilst senior executives in 44.7% of firms in the 'south' had no relationship to the founders family (Criteria 5). This point is reinforced when it is noted that over 43% of firms in the 'south' compared to only 17.4% of firms in the 'north' stated they had no original founders who were still partners or shareholders (Criteria 6). However, no significant difference was recorded between firms in the two locations in terms of the number of shareholders / partners (Criteria 7). In both locations over 37% of firms had only 2 shareholders / partners (44.2% and 37.9% in the 'north' and 'south', respectively).

Age: As was expected due to the greater push factors such as redundancy and establishment closure the age of the small firms in the 'north' was significantly less than that of firms in the 'south' (Criteria 8). In the 'north' over 37% of firms were less than six years old compared to only 12.8% in the 'south'. The relative stability of the economy of the 'south' is clearly reflected by the higher proportion of southern firms being over 45 years of age (16.4% compared to 23.9%).

Employment: In total, 7,835 people were employed in the 240 firms which supplied employment data with firms in the 'north' accounting for 3,707 total employees, and firms in the 'south' 4,128 total employees. Moreover, by far the largest number were full-time employees in both areas

(3,426 in the 'north' compared to 3,255 in the 'south'), with only a minority of employees in firms, particularly in the 'north' being part-time or casual.

There was no statistically significant difference in the total employment sizes of the surveyed firms in the two locations (Criteria 9). In both locations over 49% of firms were less than 25 employees in size (62.1% and 49.6% in the 'north' and 'south', respectively) although a slightly larger proportion of firms in the 'south had 50 or more employees (18.5% compared to 22.6%). Moreover, no significant difference was recorded between the number of part-time directors (i.e. non-executive directors) in the two locations (Criteria 10).

Table 2 shows total employment by industrial category. As anticipated the vast majority of

(Insert Table 2 here)

total employment (46.7%) in small firms in the 'north' is concentrated in two manufacturing sectors ('other manufacturing' and 'metal goods, engineering and vehicles', 914 and 812 employees, respectively); in the 'south' it is more evenly distributed amongst the surveyed firms with 40.3% being concentrated in 'distribution, hotels, catering, repairs' (999 employees) and 'construction' (679 employees). Whilst the two firms in the agriculture, forestry and fishing sector located in the 'south' would appear to be significantly larger than the rest, analysis of the data by employment status shows these jobs to be mainly casual. It is also interesting to note that the mean employment size of firms in the 'north' was greater than that of their counterparts in the 'south' in only two sectors - energy and water supply, and other services.

SALES

Small firms in the 'north' had lower levels of sales than their counterparts in the 'south' who are generally located in more affluent areas (Criteria 11). In the 'north' over 37% of firms had levels of turnover less than £250,000 compared to only 18.8% of firms in the 'south'; small firms in the 'south' had a greater tendency to record levels of sales of £1 million or more than firms in the 'north' (27.6% compared to 48.2%). This notable contrast is a reflection of the early stage of development of the majority of firms in the 'north' compared to the 'south' as well as the modest levels of local and regional demands for goods and services in northern markets compared to more buoyant southern ones. On a note of caution it was also found that in both locations small firms were found to be resting their fortunes on their major product or service group (Criteria 12). In the 'north' as well as the 'south' over 41% of firms stated they obtained over 80% of their sales revenue on the basis of their major product or service (41.2% and 49.0% in the 'north' and 'south' respectively).

PROFITABILITY

A significantly larger proportion of firms in the 'south' had recorded a profit (74.2% compared to 86.7%), whilst a higher proportion of firms in the 'north' stated they had made a loss in the last financial year (19.4% compared 7.1%) (Criteria 13). This again is in part a reflection of the early stage of development of the majority of firms surveyed in the 'north' as well as the relative affluence and buoyancy of the economy in the south of the United Kingdom which enables orders to be won and profits made. However, there was no statistically significant difference between the firms in the two locations with regard to their rating their businesses profit performance relative to competition (Criteria 14), although, a slightly larger percentage of firms in 'north' rated their businesses profit performance as being better than average (58.4% compared to 54.0%).

PRODUCT BASE

Product lines: No significant difference was recorded in terms of the total number of major product lines or service groups the small businesses hold (Criteria 15. In both locations over 65% of firms had less than five major product lines or service groups, although slightly more firms in the 'north' had added at least one new major product line or service group in the last twelve months than their counterparts in the 'south' (48.5% compared to 39.2%) (Criteria 16).

Customers: Approximately 51% of firms in both areas had over 100 customers with the majority of firms having a wide customer base (Criteria 17). Over the past twelve months small firms in both locations had acquired similar numbers of new customers (Criteria 18). For example, less than 4% of firms in both locations stated they had not acquired any new customers in the past twelve months whilst 38.3% in the 'north' and 33.9% in the 'south' had acquired between 11 and 50 new customers. Firms in the 'north' (43.0%) (compared to 21.7% in the 'south') had a significantly greater proportion of their customers in nationwide locations (Criteria 19) with firms in the 'south' showing a greater propensity to serve local markets within a radius of twenty miles of their operational premises (27.3% compared to 46.9%).

Suppliers: Firms in the 'north' had a greater tendency to be served by a small number of suppliers than their counterparts in the 'south' (Criteria 20). In the 'north' 63.3% of small firms had less than 51 suppliers which compares to only 52.2% of firms in the 'south' (Table 24) and firms in the 'south' had a greater tendency to have between 51 and 100 suppliers (12.5% compared to 27.8%) Small firms in both locations had generally contacted less than eleven new suppliers in the past twelve months (76.9% and 69.8% in the 'north' and 'south', respectively) (Criteria 21). Moreover, a statistically significant difference was recorded between the locations with regard to the geographic location of the majority of suppliers serving the small firms (Criteria 22). Over 40% of firms in the 'north' purchased from suppliers in nationwide locations in comparison with only

19.5% of firms in the 'south'. Firms in the 'south' had greater propensity to purchase locally from suppliers situated less than 20 miles from their operational premises (19.3% compared 38.1%).

COMPETITION

In both locations over 41% of firms stated they had less than eleven direct competitors (47.9% and 41.4% in the 'north' and 'south', respectively) (Criteria 23). It is, however, interesting to note that 6.1% of firms in the 'north' compared with only 2.7% of firms in the 'south' felt that they had no direct competitors. Also, over 45% of small firms in both locations had major competitors who were less than 51 employees in size (45.3% and 53.5% in the 'north' and 'south', respectively) (Criteria 24). A slightly larger percentage of firms in the 'south' (53.5%) than in the 'north' (45.3%) reported their direct competition to be other small firms, a result which may be due to the prominence of service businesses in the 'south'.

TECHNOLOGY BASE

Production systems: For those manufacturing firms in the sample, over 69% in both the 'north' as well as the 'south' used small batch or unit production processes (Criteria 25). A larger proportion of manufacturing firms in the 'north' had, however, adopted a large batch or mass production process (25.8% compared to 3.4%). Over 72% of firms in both locations used manual technology for the major manufacturing product lines (Criteria 26) and only 4.5% and 6.9% of firms used a computer numerically controlled technology in the 'north' and 'south', respectively.

The mean age of the oldest piece of production equipment owned by the businesses in the 'north' was 9.5 years (median 6 years) ranging from a minimum of 13 months old to a maximum of 50 years old. In contrast, the mean age of the oldest piece of production equipment in the 'south' was 17.7 years (median 15 years) ranging from a minimum of 5 months old to a maximum of 60 years old. Moreover, the mean age of the oldest piece of production equipment was significantly older in firms in the 'south' rather than in the 'north' ('t'= -6.17, significant difference at the 0.001 level of significance).

The newest piece of production equipment in the 'north' was on average 10 months old (median 6 months), ranging from a minimum of 1 month to 7.5 years; in the 'south' the age was on average 10 months (median 6 months), ranging from a minimum of 1 month to 5 years. No statistically significant difference was recorded ('t'= 0.03, no significant difference at the 0.05 level of significance).

The mean cost of the most important piece of equipment bought by firms in the 'north' in the last year was £33,000 (median cost £8,000) and this ranged from £1,000 to £800,000; in the 'south' the mean cost of the most important piece of production equipment was less at £27,000 (median cost £12,500) and this ranged from £1,000 to £220,000. No significant difference was recorded ('t'= 0.41, no significant difference at the 0.05 level of significance).

The leading technology used in control systems in both locations was manual and in only a few instances were personal computers, mini computers, computer mainframes and computer bureaus found to be appropriate control technologies. However, from Table 3 it is apparent that a

(Insert Table 3 here)

significantly larger proportion of firms in the 'north' rather than the 'south' had manual technology for the following control systems: sales ledger, payroll and production control (Table 3).

Administration base: Over 43% of firms in the 'north' as well as the 'south' had no word processing capability (Criteria 27), whilst slightly more small firms in the 'south' (21.8%) than in the 'north' (19.5%) had the use of four or more personal computers. Moreover, over a wide range of employees including secretarial / clerical, management, accounting and design / engineering employees there was no difference between the locations.

FINANCIAL DATA

Asset base: The majority of firms in the sample preferred to own rather than to hire or lease their assets, although there was a greater tendency for firms in the 'south' to own their own premises, and for firms in the 'north' to hire or lease them.

Cost base: The leading component of the cost base of small firms in both locations was salaries and wages but this mean percentage cost was slightly higher in the 'north' (41.4%) than in the 'south' (37.4%). A similar trend is apparent with regard to the second leading mean percentage cost of sales and marketing (7.5% and 5.8% in the 'north' and 'south', respectively). In contrast, mean percentage costs of rents, rates and insurance were slightly higher in the 'south'. When each of the above aspects of the cost base were subjected to a finer level of analysis (Criterion 28 to 35) only sales and marketing costs (Criteria 29) were significantly different between the two locations, firms in the 'north' recording higher levels than those in the 'south'. Moreover, in both locations over 52% of firms stated that interest costs were between £1,000 and £5,000 (58.6% and 52.0% in the 'north' and 'south', respectively), although it was interesting to note that a slightly larger percentage of firms in the 'south' had interest costs of more than £20,000 (14.7% compared to 21.0%) (Criteria 36 in Table 1).

Investment: Table 4 indicates that a significantly larger proportion of firms in the 'north' had received financial investment from a Development Board, whilst significantly more firms in the 'south' had obtained finance from their employees.

(Insert Table 4 here)

Insurance: Small firms in both locations had similar levels of insurance (Criterion 37 to 48 in Table 1). However, significantly more firms in the 'north' (65.0%) than in the 'south' (47.9%) insured the lives of their owners or partners (Criteria 39). Also, significantly more small firms in the 'north', which are generally manufacturing firms, had taken out product liability insurance (62.6%) than their essentially service orientated counterparts in the 'south' (36.8%) (Criteria 42).

MANAGEMENT OF THE FIRM

Managerial functions: Over 69% of firms in both locations operated the management functions of general management, finance, sales, purchasing, accounting and marketing. Table 5, however,

(Insert Table 5 here)

indicates that significantly more firms in the 'north' rather than in the 'south' operated production / operations functions. This significant contrast is in part due to the greater propensity in the 'north' for surveyed small firms to be engaged in manufacturing activities. In only the four functions of general management, finance, accounting and marketing did over 30% of firms in both the 'north' and 'south' state that these managerial functions were the sole responsibility of one person (Table 6).

(Insert Table 6 here)

Planning: The majority of firms in both locations held board meetings quarterly or even less frequently, though a larger proportion of firms in the 'north' suggested that they never held board meetings (Criteria 49 in Table 1). In marked contrast, the majority of firms in the 'north' as well as the 'south' hold management meetings either weekly or monthly (Criteria 50). Similarly, firms in both locations generally have meetings with the bank (Criteria 51) and an accountant (Criteria 52) either quarterly, six monthly or annually. Meetings with a solicitor in both areas are more irregular depending upon particular circumstances and needs (Criteria 53). In both the 'north' and the 'south' meetings with major customers (Criteria 54) are more frequent as are meetings with major suppliers (Criteria 55) which are generally at intervals of no less than three months in time.

Training: Training for management is a rarity in small firms in both the 'north' (10.8%) and in the 'south' (Criteria 56). Similarly, over 55% of firms in both locations stated that their workforce had never attended any training courses (Criteria 57). In both the 'north' and 'south' over 85% of firms had not applied for any local or central government training schemes in the last three months (85.2% compared to 87.9%) (Criteria 58). Also, over 56% of firms in both locations had employed no Youth Training Scheme (YTS) trainees (56.6% and 81.5% in the 'north' and 'south', respectively) with the low level of take-up in the 'south' being particularly acute (Criteria 59). In the

'north' a larger percentage of firms had, however, employed three or more YTS trainees (14.8% compared to 3.4%).

Market research: Over 60% of firms in both types of locations had never conducted a formal market research study (60.3% and 75.2% in the 'north' and 'south', respectively) (Criteria 60). Forty-seven percent of firms in both locations market research was conducted 'in-house' based on local resources and skills (Criteria 61). In terms of the cost there was no significant difference between the locations (Criteria 62). Moreover, over 72% of firms throughout the United Kingdom who had conducted a formal market research study had received no financial subsidy of any sort (Criteria 63).

SOURCES OF ASSISTANCE

Grants: Not surprisingly, due to the general economic conditions and the variety of schemes available to small firms in the 'north', a larger percentage of northern small firms had applied for Government grants (31.7% compared to 10.2%) (Criteria 64).

Agencies: Small firms in the 'north' had a greater propensity to contact small firms assistance agencies than their counterparts in the 'south' (Criteria 65). However, in both locations the majority of firms had never contacted a small firms assistance agency, and for those contacting an agency in the 'north' only 13.1% of the contacts were regular in frequency. Only a small percentage of owners in the 'north' as well as the 'south' had been satisfied by the advice and assistance provided (38.5% and 16.7% in the 'north' and 'south', respectively) (Criteria 66).

Sources of help:The leading sources of both advice and information in the two locations remain the traditional sources of the accountant, the solicitor and the bank but in the 'north' a larger proportion of firms than in the 'south' also had contact with a local Enterprise Agency. Accountants followed by solicitors were the leading providers of consultancy in both the 'north' and 'south'. The small amount of training in the two areas was mainly provided by a local educational institution. In terms of the usefulness of the sources of advice and assistance firms rated the advice given on a scale from 1 'not at all useful' to 5 'very useful'. Table 7 indicates that on average firms in the

(Insert Table 7 here)

'north' stated they found the advice and assistance provided by professional advisors (e.g accountant, bank, consultants and solicitor) as the most consistently useful closely followed by business contacts (e.g. business contacts, customer, supplier and trade association); firms in the 'south' regarded professional advisors and business contacts as the most consistently helpful.

DISCRIMINANT ANALYSIS

The results discussed above and summarised in Table 8 show prime facie evidence for

(Insert Table 8 here)

differences between firms in the 'north' and firms in the 'south' on a number of dimensions. From this, it is tempting to conclude that the results reflect sample differences rather than locational differences. However, construction of the sample was by means of independent organisations such as accounting firms or local economic development agencies. Each organisation choose a sample which reflected their own population of clients, and the group consisted of both 'national' organisations, and 'local' organisations from both the 'north' and the 'south'. There is no reason to assume that this independent method of sample selection should encompass any particular bias. Moreover, the data was tested for sample organisation bias, and none was detected (see Birley and Westhead, 1989).

The descriptive statistics and univariate tests of significance presented above have provided basic information about the distributions of the variables and helped to identify some differences. In order to identify the combination of factors which best characterised firms in the sample from the 'north' and those from the 'south', the data was further subjected to a stepwise discriminant analysis minimising the Wilks' lambda using the SPSSX statistical package. Discriminant analysis is the appropriate statistical technique when the dependent variable is categorical (nominal or nonmetric) and involves deriving the linear combination of the variables which will discriminate best between the a priori defined groups (Hair et al., 1979; Klecka, 1980).

Thirteen variables found to be significantly different at the 0.01 level of significance between the 'north' and 'south' detailed above were used in an exploratory discriminant analysis which was based upon data from 210 cases. The results were deemed to be acceptable since the discriminating function correctly classified 80.25% of 243 cases (see Table 9). The analysis has

(Insert Table 9 here)

further reduced the twenty strategic variables which were identified in the previous section to a combination of eight variables which best discriminate between the 'north' and the 'south'. Consequently, it is these variables which are most appropriate in describing the 'north-south divide' for the small firm sector.

The 'north' is characterised by relatively small manufacturing firms run by their founders; the 'south' is characterised by large service firms run by managers with no relationship to the original founders. Beyond this, two curious results emerged. First, product liability insurance also distinguishes between the two groups. Whilst it is to be expected that manufacturing firms are more likely to be concerned with product liability, firms were asked about all other types of insurance (owners or directors personal liability, employers liability, life insurance, professional

indemnity, Export Credit Guarantee, credit, vehicle, theft, buildings, plant and equipment) and whilst results for these were variable, there is no compensating factor shown for service firms. Second, whilst it may not be surprising that employees in service firms are more likely to invest in their firm, it is curious that this particular result emerges as a significant discriminating factor.

Whilst firms in the 'north' were smaller than those in the 'south' and so could be assumed to be more locally-based, this proved not to be the case on one dimension, that of suppliers. Clearly the 'northern' firms have found the need to develop a supplier base outside their own area, whilst the 'southern' service firms are operating much more from a local base. 'Northern' firms are, however, more in touch with the Government YTS scheme, the Development Boards, and the various small firms agencies, all of which are run locally.

CONCLUSIONS

The greatest criticism which can be leveled at this paper is that it does not go far enough. The sample is too small, and the divisions too crude. It is a criticism which the authors accept. Nevertheless, the spatial analysis tends to support the popular view of the unprofitable, 'northern' manufacturing firm, investing little in the management of the firm, and supported by grants and free assistance; by contrast, the 'southern' firm is seen as dynamic independent, adopting sophisticated management techniques, and mainly in the service sector. Clearly, there are profitable 'northern' service firms and unprofitable 'southern' manufacturing firms. Moreover, casual observation demonstrates that there are inner-city pockets of deprivation in the 'south', and areas of high economic activity in the 'north'. Therefore, perhaps, the most important conclusion from this paper is that there is an urgent need for a replication of the study at a more detailed level.

The emergence and growth of a divide between the 'north' and the 'south' is not a recent phenomenon. Indeed, Martin (1989) concludes that processes leading to its development can be traced back to at least the 1870s. A continuation of this overall pattern has significant implications for national efficiency and problems of increased social inequality with locations in the 'north' remaining to be associated with a spiral of relative decline and deprivation. If the objectives of public policy are to increase national efficiency and to remove social inequality there is a need to continue take into account the 'local' perspective towards entrepreneurial development as well as regional development (Manning et al., 1989). At present it is the belief of Government that these inequalities and regional variations in small firm formation and growth will be overcome by stimulating local economic efficiency, indigenous innovative enterprise and greater labour market flexibility. Governments view is that the best way to help the 'north' is to 'help the region to help itself' through a combination of macro-economic policies and selective policies that create the conditions under which competition and enterprise can flourish (Martin, 1989, p.54). Indeed, Manning et al. (1989) suggest that "...the aim of any initiative should be to encourage and enhance the self-sustaining process of venture creation at the local level. Policy-makers should

not interfere in the process, but rather facilitate it". Therefore, there is a need to develop a networking culture, to create active linkages between the entrepreneur and the resource base in order to create the right environment for new ventures to flourish. Manning et al. (1989, p.18) recognise the random process of new venture creation and recognise that growth firms often emerge in 'un-planned' industries but they suggest that, "The focus is upon the facilitation and partnership with the existing business community, upon catalytic investment to close gaps in the commercial environment, and upon the development of strong formal and informal networks. The aim is to increase the critical mass of new firms, and to allow natural market forces to pick the winners". Finally, it is the belief of the present authors that if public policy does not take a more regional dimension there will be continued strengthening of the 'north-south' divide (Cambridge Econometrics and the Northern Ireland Economic Research Centre, 1987, p.6) and problems of relative social inequality in the 'north'.

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Table 1 **Statistically Significant Differences Between Small Firms Located in the 'North' and 'South'**

Criteria		Chi-square (X^2)	Degrees of freedom (d.f)	Significant difference at the 0.01 level significance	Significant difference at 0.05 level of significance
1.	Industry	20.69	2	YES	
2.	Legal entity	n.a.			
3.	Is the small business a franchise?	n.a.			
4.	Family relationship of current majority owners	9.60	4		YES
5.	Family relationship of current senior executives	13.73	2		YES
6.	Number of original founders who are still partners or shareholders	24.78	4	YES	
7.	Number of shareholders / partners, if other than a sole proprietorship	7.99	5		NO
8.	Age of the business	32.15	3	YES	
9.	Total employment size	4.00	3		NO
10.	If the company is incorporated the number of the directors who do not work full-time in the firm	1.67	3		NO
11.	Level of sales for the last financial year	13.84	2	YES	
12.	Percentage of sales revenue accounted for by the major product line or service group	5.24	3		NO
13.	Level of profitability for the last financial year	7.76	2	YES	
14.	Rating the business profit performance relative to competition	4.91	4		NO
15.	Total number of major product lines or major service groups	7.25	5		NO
16.	Total number of new major product lines or major service groups added in the last 12 months	n.a.			
17.	Total number of customers	n.a.			
18.	Number of new customers in the past 12 months	5.88	4		NO
19.	Geographic location of majority of customers	15.06	5		YES
20.	Total number of suppliers	9.23	3		YES
21.	Number of new suppliers in the past 12 months	n.a.			
22.	Geographic location of majority of suppliers	18.39	5	YES	
23.	Number of direct competitors	5.43	5		NO
24.	Employment size of major competitor	5.45	3		NO
25.	Technology of production systems	n.a.			
26.	Control technology used for the major product lines	n.a.			
27.	Total number of personal computers	2.93	4		NO
28.	Percentage of total costs by salaries & wages costs	5.68	4		NO
29.	Percentage of total costs by sales & marketing costs	10.09	4		YES
30.	Percentage of total costs by training costs	3.69	3		NO
31.	Percentage of total costs by rents costs	6.05	4		NO
32.	Percentage of total costs by rates costs	3.38	4		NO
33.	Percentage of total costs by insurance costs	4.66	4		NO
34.	Percentage of total costs by research & development costs	5.20	3		NO
35.	Percentage of total costs by interest payments costs	3.99	4		NO
36.	Interest cost for the last financial year (£'000s)	4.48	4		NO
37.	Owners or directors personal liability insurance	0.47	1		NO
38.	Employers liability insurance	n.a.			
39.	Life of the owners / partners insurance	6.52	1		YES
40.	Professional indemnity insurance	0.92	1		NO
41.	Export credit guarantee insurance	0.35	1		NO
42.	Product liability insurance	15.01	1	YES	
43.	Credit insurance	1.43	1		NO

Criteria		Chi-square (X^2)	Degrees of freedom (d.f)	Significant difference at the 0.01 level significance	Significant difference at 0.05 level of significance
44.	Vehicle insurance	1.83	1		NO
45.	Theft, flood insurance	0.00	1		NO
46.	Buildings insurance	1.74	1		NO
47.	Plant / equipment insurance	0.92	1		NO
48.	Other insurance	3.50	1		NO
49.	Frequency of board meetings	12.15	6		NO
50.	Frequency of management meetings	n.a.			
51.	Frequency of meetings with the bank	10.00	6		NO
52.	Frequency of meetings with accountants	6.20	6		NO
53.	Frequency of meetings with solicitors	n.a.			
54.	Frequency of meetings with major customers	n.a.			
55.	Frequency of meetings with major suppliers	17.70	6	YES	
56.	Frequency of majority training for management	2.69	2		NO
57.	Frequency of majority training for the workforce	n.a.			
58.	Has the business applied for any local or central government training schemes?	0.17	1		NO
59.	Number of Youth Training Scheme (YTS) trainees currently employed	20.55	3	YES	
60.	When the last formal market research study was conducted	n.a.			
61.	Who conducted the last formal market research study?	n.a.			
62.	Cost of the last formal market research study (£'s)	4.69	2		NO
63.	Was the last formal market research study subsidised?	0.96	1		NO
64.	Has the small business applied for any government grants?	15.48	1	YES	
65.	Frequency of contact with small firms assistance agencies	33.76	2	YES	
66.	Satisfied with the advice / assistance given by the small firms assistance agencies	n.a.			

Note: n.a. Due to the assumptions of the Chi-Square test it was not possible to calculate a coefficient.

Table 2 Location by Total Employment in Industrial Categories

Industry (1980 SIC)		Location					
		North			South		
		Number of small firms	Total employment	Mean	Number of small firms	Total employment	Mean
0	Agriculture, forestry & fishing	0	0	0.00	2	188	94.00
1 & 2	Energy & water supply; Manufacture of metals & chemicals	12	499	41.58	4	98	24.50
3	Metal goods, engineering and vehicles	30	812	27.07	18	596	33.11
4	Other manufacturing	32	914	28.56	13	571	43.92
5	Construction	11	301	27.36	18	670	37.22
6	Distribution, hotels, catering, repairs	18	609	33.83	26	999	38.42
7	Transport & communication	3	39	13.00	7	169	24.14
8	Banking & finance	13	352	27.08	17	604	35.53
9	Other services	4	172	43.00	12	233	19.42
Total		123	3,698	30.07	117	4,128	35.28

Table 3 Location by a Manual Technology used in Control Systems

Manual control systems	Location				Total		
	North		South				
	No	%	No	%	No	%	
Sales ledger	70	57.4	42	35.6	112	46.7	**
Personnel record	96	78.7	84	71.2	180	75.0	
Creditors	70	57.4	53	44.9	123	51.3	
Invoices	72	59.0	64	54.2	136	56.7	
Payroll	63	51.6	43	36.4	106	44.2	*
Cash flow control	70	57.4	61	51.7	131	54.6	
Management accounts	65	53.3	57	48.3	122	50.8	
Quality control	79	64.8	64	54.2	143	59.6	
Stores	79	64.8	67	56.8	146	60.8	
Production control	69	56.6	49	41.5	118	49.2	*
Plant register	71	58.2	61	51.7	132	55.0	

Notes: * Significant difference at the 0.05 level of significance; and
** Significant difference at the 0.01 level of significance.

Table 4 Received Financial Investment from the Following Sources by Location of the Small Business

Sources of received financial investment	Location of small business				Total		
	North		South				
	No	%	No	%	No	%	
Venture Capital Company	5	50.0	5	50.0	10	100.0	
Merchant Bank	8	66.7	4	33.3	12	100.0	
Enterprise Board	6	85.7	1	14.3	7	100.0	
Development Board	13	100.0	0	0.0	13	100.0	***
Another Company	6	54.5	5	45.5	11	100.0	
Government Loan Guarantee	10	76.9	3	23.1	13	100.0	
Business Expansion Scheme							
Individual investment	7	77.8	2	22.2	9	100.0	
Fund	6	100.0	0	0.0	6	100.0	
Stock Exchange	2	66.7	1	33.3	3	100.0	
Unlisted Securities Market	0	0.0	0	0.0	0	0.0	
Third Market	0	0.0	0	0.0	0	0.0	
Family	23	67.6	11	32.4	34	100.0	
Friends	5	50.0	5	50.0	10	100.0	
Employees	22	34.4	42	65.6	64	100.0	**

Notes: ** Significant difference at the 0.01 level of significance; and
*** Significant difference at the 0.001 level of significance.

Table 5 Location by Managerial Functions which Currently Operate Within the Firm

Managerial functions currently operated within the firm	Location				Total		
	North		South				
	No	%	No	%	No	%	
General management	116	94.3	109	93.2	225	93.8	
Area / regional management	29	23.6	22	18.8	51	21.3	
Personnel	85	69.1	79	67.5	164	68.3	
Finance	105	85.4	92	78.6	197	82.1	
Accounting	92	74.8	95	81.2	187	77.9	
Marketing	88	71.5	81	69.2	169	70.4	
Sales	100	81.3	88	75.2	188	78.3	
Distribution	54	43.9	37	31.6	91	37.9	
Transport	52	42.3	49	41.9	101	42.1	
Research and development	47	38.2	31	26.5	78	32.5	
Production / operations	83	67.5	54	46.2	137	57.1	**
Engineering	46	37.4	39	33.3	85	35.4	
Quality control	67	54.5	63	53.8	130	54.2	
Computer / systems	53	43.1	65	55.6	118	49.2	
Purchasing	92	74.8	98	83.8	190	79.2	
Stores	66	53.7	70	59.8	136	56.7	
Others	7	5.7	8	6.8	15	6.3	

Notes: ** Significant difference at the C level of significance.

Table 6 Location by Managerial Functions which are the Sole Responsibility of One Person

Managerial functions which are the sole responsibility of one person	Location				Total	
	North		South			
	No	%	No	%	No	%
General management	60	49.2	45	38.8	105	44.1
Area / regional management	11	9.0	4	3.4	15	6.3
Personnel	34	27.9	32	27.6	66	27.7
Finance	55	45.1	51	44.0	106	44.5
Accounting	45	36.9	51	44.0	96	40.3
Marketing	45	36.9	29	25.0	74	31.1
Sales	36	29.5	29	25.0	65	27.3
Distribution	16	13.1	17	14.7	33	13.9
Transport	22	18.0	22	19.0	44	18.5
Research and development	17	13.9	13	11.2	30	12.6
Production / operations	34	27.9	18	15.5	52	21.8
Engineering	17	13.9	18	15.5	35	14.7
Quality control	22	18.0	19	16.4	41	17.2
Computer / systems	17	13.9	27	23.3	44	18.5
Purchasing	39	32.0	35	30.2	74	31.1
Stores	18	14.8	20	17.2	38	16.0
Others	5	4.1	4	3.4	9	3.8

Table 7 Location by Usefulness of the Following Advice and Assistance Agencies (Mean Scores)

Sources of advice and assistance	Location			
	North		South	
	Mean (a)	Standard deviation	Mean (a)	Standard deviation
Professional advisers (b)	3.50	1.05	3.81	0.85
Business contacts (c)	3.45	0.77	3.79	1.07
Advice agencies (d)	2.09	1.01	1.62	0.88
Social (e)	3.07	1.42	3.33	1.49

Note: (a) On a scale 1 'not at all useful' to 5 'to very useful'.
(b) Accountant, Bank, Consultants and Solicitor.
(c) Business contacts, Customer, Supplier and Trade association.
(d) Chamber of Commerce, Educational institution, Enterprise agency and Local authority.
(e) Family and Friend.

Table 8 Summarised Characteristics and Performance of Small Firms Located in the 'North' and 'South'

	Small firms in the 'north'	Small firms in the 'south'
1.	Manufacturing	Service / non-manufacturing
2.	First generation current majority owners	Family or 'no relationship' to the original founders current majority owners
3.	First generation current senior executives	'No relationship' to the original senior executives
4.	Majority of firms with one or more original founders who are still partners or shareholders	Small majority of firms with one or more original founders who are still partners or shareholders
5.	'Young' firms	'Mature' firms
6.	Modest levels of sales	High levels of sales
7.	A sizeable proportion of firms which made a loss	Generally profitable
8.	Customers in 'nationwide' locations	'Local' customers
9.	Between 11 and 50 suppliers	Generally more than 50 suppliers
10.	Suppliers in 'nationwide' locations	Suppliers in 'local' locations
11.	Relatively 'young' oldest piece of production equipment	'Mature' oldest piece of production equipment
12.	A larger proportion of firms have manual control systems for sales ledgers, payroll and production control	
13.	High proportion of total costs accounted by sales and marketing costs	Relatively low proportion of total costs accounted for by sales and marketing costs
14.	More firms had obtained finance from the 'official' source of a Development Board	More firms had obtained finance from the 'local source of employees
15.	Greater tendency for firms to operate production / operations managerial functions	
16.	Greater propensity to hold life of the owners / partners and product liability insurance	
17.	Meetings with major suppliers are quarterly or even more frequent	Irregular meetings with major suppliers
18.	Greater propensity to employ YTS trainees	
19.	A larger proportion of firms had applied for Government grants	
20.	A larger proportion of firms had some form of contact with small firms assistance agencies	

Table 9 Discriminant Groups

Variable	Unstandardised canonical discriminant function coefficients	Standardised canonical discriminant function coefficients	Pooled within-groups correlations (structure matrix)	Wilks lambda	Significance level
Contact with small firms assistance agencies	-0.64	-0.36	-0.55	0.835	0.000
Industry of the business	-0.31	-0.21	-0.41	0.770	0.000
Number of original founders still partners or shareholders	0.25	0.30	0.41	0.734	0.000
Distribution of major suppliers from premises	0.18	0.26	0.34	0.617	0.000
Product liability insurance	0.80	0.39	0.33	0.680	0.000
Level of sales for the last financial year	-0.45	-0.35	-0.33	0.653	0.000
Number of YTS trainees	0.42	0.40	0.31	0.706	0.000
Development Board: source of received finance	1.19	0.26	0.29	0.603	0.000
Employees: source of received finance	-0.60	-0.26	-0.25	0.632	0.000
(constant)	1.58				

Notes: Eigenvalue for function= 0.6592 Canonical correlation= 0.63 Wilks' Lambda= 0.60,
Chi-Squared= 103.03 d.f.= 9 Significance= 0.0000 .