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Explaining recent trends in U.K. new firm formation rates: Evidence from two surveys in South Hampshire

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EXPLAINING RECENT TRENDS IN UK NEW FIRM FORMATION RATES: EVIDENCE FROM TWO SURVEYS IN SOUTH HAMPSHIRE

Abstract. The paper contributes to the debate on the reasons for the increase in business start-ups in the UK since the late 1970s. It compares the results of a survey of new manufacturing firms started since 1979 in South Hampshire with a previously conducted survey of firms started between 1976 and 1979. The study provides partial support for the recession-push explanation: the post-1979 cohort contained a higher proportion of firms started by founders who were unemployed/redundant, although there was no evidence to support other aspects of the recession-push explanation. The study fails to support structural change explanations. In addition, there was no evidence that government assistance to small businesses had been a significant factor in the formation of the post-1979 cohort of new businesses.

Key Words: New firms, Entrepreneurship, Recession, Redundancy, Hampshire, Comparative analysis

INTRODUCTION

The onset of recession in 1979/1980 has been associated with a major increase in new business start-ups in the UK. New company registrations (in Great Britain) have risen from 69,000 in 1980 to 115,000 in 1986 (British Business, 5th June 1987), the number of self-employed persons has increased from 1.9m in 1979 to 2.9m in 1987 (Employment Gazette, March 1988) and VAT registrations rose from 158,000 in 1980 to 193,000 in 1986 (British Business, 31st July, 1987). However, the explanation for this increase in new business start-ups is the subject of considerable debate. The central issue in this debate is whether the rise is largely a recession-induced feature or, alternatively, is a reflection of more fundamental structural changes in the composition of the economy and in corporate organization. Two implications follow if the former interpretation is confirmed: first, it implies that the businesses may be undynamic, and second, the upward trend in new firm formation may only be a short-term cyclical phenomenon. If the latter interpretation is confirmed, then the increase in new firm formation might be expected to continue for some time to come.

The objective of this paper is to address the debate by presenting evidence of temporal changes in the new firm formation process based on two surveys of new manufacturing firms in South Hampshire: the first survey is of businesses started before the onset of recession and the second survey is of businesses started since the onset of recession. In the next section alternative explanations for the recent rise in new firm formation in the UK are reviewed. This is followed by a consideration of the methodological issues involved in examining temporal changes in new firm formation. The empirical evidence for South Hampshire is presented in the third section of the paper.

RECENT TRENDS IN NEW FIRM FORMATION IN THE UK: ALTERNATIVE EXPLANATIONS.

Evidence on the links between unemployment, redundancy and new business formations are equivocal. At a macro scale Johnson and Darnell (1976), Harrison and Hart (1983), Foreman-Peck (1985) and Hamilton (1986) have all identified a statistical association between new company registrations and (lagged) unemployment rates. However, Binks and Jennings (1983, 1986a) have undertaken a rather more elaborate econometric analysis to adjust for autocorrelation which indicates that "higher levels of unemployment have tended to discourage new company registrations (Binks and Jennings, 1983, p.12). According to this analysis, the rise in new business formations reflects a secular trend rather being a function of the rise in unemployment since the early 1970s.

At the micro-scale Johnson (1981; 1986) concludes from a review of studies which have examined the subsequent job histories of redundant workers in the 1960s and 1970s that "it is quite clear that self-employment was not an important avenue for re-employment" (Johnson, 1981, p.7). Typically, only one or two per cent of workers became self-employed, although a study of steel workers at Port Talbot who were made redundant in the early 1980s noted that 6 per cent subsequently set up in business (Lee, 1985). However, the link between redundancy and self-employment may be greater than suggested by these studies. The focus of such studies is generally on manual workers, but there is evidence that non-manual workers have a greater propensity than manual workers to become self-employed (Johnson and Rodger, 1985; Lee, 1985). It is also possible that the more entrepreneurially-inclined employees may have left prior to the redundancies in order to become self-employed and consequently are not captured by these surveys. Other variables which may affect the link between redundancy and self-employment include the amount of pre-selection of employees made redundant, whether the redundancies are voluntary or compulsory, and whether the redundancies are a result of complete or partial plant closure.

The vast majority of studies of new firm formation have also found only limited evidence of a link with redundancy or unemployment: indeed, in most of these studies fewer than 10 per cent of founders had been unemployed immediately prior to setting up their business (Lloyd, 1980; Cross, 1981; Mason, 1982; O'Farrell, 1986; Keeble and Gould, 1985). However, Storey (1982) found that over one-quarter of new firms established in Cleveland during the 1970s were set up by founders who claimed to be unemployed. Uniquely, this study covered both services and manufacturing; nevertheless, even though most redundant workers who do become self-employed set up a business in the service sector (Johnson and Rodger, 1983; Payne, 1984; Lee, 1985), Storey found no evidence that unemployment was any more significant in the formation of service sector businesses than manufacturing firms. A study by Johnson and Cathcart (1979) which was also also conducted in Northern England noted that only 2 per cent of founders were unemployed, but over one-third had been employed in establishments which closed soon after they had left to set up their own businesses. A more recent study by Binks and Jennings (1986b) of new manufacturing firms in Nottingham started between 1978 and 1982, found that 30 per cent of founders had been unemployed. This is a much higher proportion than found in studies of new firm formation during the 1970s, and has been used as evidence that the increase in new business start-ups since the late 1970s is associated with the rapid increase in unemployment over the same period (Binks and Jennings, 1986b; Frank et al, 1984).

The recession may also have contributed to the increase in new firm formation in other ways. First, Binks and Jennings (1986a; 1986b) have suggested that the increased incidence of plant closures, liquidations and bankruptcies since the onset of recession has increased the availability of cheap secondhand plant and machinery, thereby reducing the financial requirements for business start-up. They further suggest that this has reinforced the tendency for new businesses to be formed in 'traditional' industrial sectors because these sectors have been most severely affected by the recession, hence offer the largest supply of cheap plant and machinery. Second, by depressing the growth in demand, recession has also led to the increased importance of price competition between firms, particularly in mature industries with high levels of concentration and characterised by market saturation and limited opportunities for further product development and product innovation. Increased competitiveness has typically been achieved by cost-reductions, often involving a rationalization of the firm's activities which may, in turn, have led to the creation of opportunities for new enterprises. For example, the withdrawal of large firms from less profitable activities, possibly peripheral to their 'core' businesses, or where the level of demand does not warrant large scale production, have opened up market niches which small firms can operate at a profit on account of their lower overheads and greater flexibility. Withdrawal from distant geographical market areas which incur high distribution and servicing costs similarly create openings for new businesses (eg Economists Advisory Group, 1981).

The recessionary conditions of the late 1970s and early 1980s have also prompted an increasing number of large firms to restructure their operations in such a way as to create opportunities for self-employment and small business initiation and growth. Shutt and Whittington (1987) argue that large firms have responded to the uncertaintities associated with fluctuations in aggregate demand, an accelleration in the rate of technological innovation and the need to reassert control over the labour process by adopting various fragmentation strategies. These include the decentralization of production to smaller plants which remain in the ownership of the large firm; the devolvement of production to independent small firms which have revenue links with the large firms (eg franchising, licencing); and disintegration of production and innovation into independently-owned firms, for example, by outsourcing, subcontracting, management and employee buyouts and corporate venturing. In similar vein, the Institute of Manpower Studies (1986) has suggested that in recent years large firms have sought changes in working practices to achieve greater workforce flexibility in response to market volatility and uncertainty and the increased pace of technological change, and in an effort to consolidate productivity gains. High unemployment and the weakened power of trade unions have been facilitating factors. There are different kinds of flexibility: practices which companies have adopted to achieve numerical flexibility - an attempt to enhance their ability to adjust the level of labour inputs to meet fluctuations in output - include increased outsourcing, subcontracting and greater use of self-employed workers.

Increases since the late 1970s in the numbers of franchised businesses (Stern and Stanworth, 1988), management buyouts (Wright and Coyne, 1985), corporate venturing (Sykes, 1986) and networking schemes, such as that pioneered by Rank Xerox (Judkins et al, 1985; Hornby, 1986), all support the view that fragmentation strategies have led to increased opportunities for small businesses, although many of these developments are still on a small scale. Evidence of increased sub-contracting by large firms in recent years, albeit largely based on anecdotal sources (Imrie, 1986), also supports the fragmentation model.

Many commentators would regard such recession-related theories as providing only a partial explanation for the increase in new firm formation since the late 1970s. For example, Keeble and Wever (1986) argue that long-run structural changes in advanced economies must also be taken into account in order to provide a comprehensive account of new firm formation trends in the UK. The most significant of these structural factors are technological change, the transformation from an industrial to a 'post-industrial' society, and rising real incomes.

Central to a technological interpretation of the increase in new business start-ups is the notion of long waves of economic development (Krondratiev cycles) based on major new technologies. According to the Schumpeterian model of innovation, entrepreneurs, drawing upon discoveries of scientists and inventors, create entirely new opportunities for investment, growth and employment. The profits made from these innovations attract large numbers of imitators. Over time, profits are gradually competed away until recession sets in, followed by depression. A new wave of technical innovation, creating a new technological paradigm, provides the basis for the next cycle of growth (Freeman, 1986). Many commentators suggest that a new technological paradigm has emerged in the 1970s and 1980s based on a combination of micro-electronics, computers, telecommunications and information technologies (Freeman, 1986). These new technologies have created new production, process and market opportunities particularly suited to exploitation by small businesses which are often able to perceive and adjust to new technologies and market opportunities more rapidly than large, organizationally and technologically more rigid enterprises (Rothwell, 1984; Keeble and Kelly, 1986). The recent rise in new business start-ups can therefore be interpreted, at least in part, as reflecting the exploitation by technical entrepreneurs of the commercial opportunities of the new generation of technology-based industries upon which the 5th Kondratiev cycle will be based. The significant increase in new firm formation in the UK computer industry since 1975 (Keeble and Kelly, 1986) provides one illustration of this feature.

New technologies also create opportunities for small firms in established industries by enabling the development of scaled-down flexible industrial equipment suited to small batch production. For example, in the printing industry the introduction of photocomposition as an alternative to the traditional mechanical form of composition has reduced start-up costs and the length of optimum production runs (Bollard, 1983a; 1983b). However, in many other industries the introduction of new process technologies has led to an <u>increase</u> in start-up costs. For example, in the early 1970s a prospective new firm founder could buy a standard milling machine and set up in business to undertake subcontract engineering for under £2,000; now, in order to be competitive a subcontract engineering firm would require to be equipped with computer-controlled (CNC) machines which in the early 1980s cost anywhere from £20,000 to £60,000 (Rodger, 1984).

It can also be argued that the recent increase in new firm formation reflects changes in the economic structure of industrialized countries such as the UK. As the economies of industrialized countries have become more complex, so the required occupational skills and knowledge - especially in information technology-related activities - have become highly specific. Consequently, firms may find it expensive to employ their own specialist staff to undertake such functions (eg computer software, market research, public relations) and instead decide to buy-in such expertise from specialist firms. Birch (1984) describes this shift as the emergence of the "thoughtware economy". Small businesses have been able to take advantage of the opportunities created by this trend because of the low capital barriers to entry and absence of significant economies of scale in such sectors. Moreover, many of these activities are people-centred: they involve the producer in direct contact with other people, on either a continuing or single transactional basis. The complexities involved make standardised impersonal procedures difficult to evolve, or if developed, they result in consumer apathy or resistance. Another reason for the lack of significant economies of scale in many service industries is that a large proportion of the main assets required are intangibles - human creativity, knowledge and person-to-person skills (Curran and Stanworth, 1986).

A third structural change associated with the rise in new business start-ups is the growth in real incomes which has been particularly rapid during the past two decades (Keeble and Wever, 1986). This rise in consumer affluence has led to a break-up of the mass market as a result of a shift in demand away from mass produced goods in favour of more varied, customized, better quality and more sophisticated products. The associated life-style changes stemming from rising real incomes have led to a demand for a wider range of services (eg restaurants, health and fitness centres, replacement window installation, video film production and rental) and increased emphasis on 'natural' products of various kinds (eg food, clothes, medication, cosmetics, ornaments). The result has been the appearance of numerous market niches requiring short production runs and more flexible production processes which small enterprises have been better able to exploit than large firms. Bollard (1983a; 1983b) illustrates this process in the food and drink industry where there has been growing consumer resistance to mass produced items, attributable in large measure to the widespread use of stabilisers, suppressants, colourings, flavourings and preservatives used to facilitate factory production which have inevitably changed the character of the product. Increasing concern about 'healthy eating' and a widening of cultural tastes (as a result of increased foreign travel and ethnic immigration) have also contributed to this trend. The resulting demand for wholesome and distinctive foods and drinks has provided market opportunities for new businesses offering natural, locally-produced and processed items which are often not suited to mass production techniques. For example, consumer dissatisfaction with the quality of beer produced by the large brewing firms, articulated and spearheaded by the CAMRA movement in the 1970s and 1980s, identified a market gap for locally-distinctive, cask-conditioned ales which is being filled by increasing numbers of small-scale breweries (Bollard, 1983a; 1983b) [1].

Finally, it is often argued - especially by politicians - that the increase in new business formation reflects the measures taken by the Conservative Government to encourage 'entrepreneurship' and create an 'enterprise economy'. Since its election in 1979 the Government has introduced over one hundred measures to assist small businesses. The availability of finance, consistently identified as one of the most important constraints on the start-up and growth of small businesses, has been tackled by the Loan Guarantee Scheme to encourage bank lending to small businesses that is outside their normal lending criteria, the Business Expansion Scheme to attract private equity investment in small independent companies, and by the Enterprise Allowance Scheme which provides a temporary payment in lieu of unemployment benefit to encourage unemployed individuals to set up their own businesses (Mason and Harrison, 1986). The provision of free or inexpensive business advice, counselling and information to small firms and potential new business founders has been enhanced by the expansion of the Small Firms Service and through the creation of a national network of nearly 300 local enterprise agencies (Mason, 1987; Business in the Community, 1988). In addition, enterprise training courses are offered by colleges of further education, polytechnics, business support organizations and government agencies, often with the financial support of the Training Agency (formerly the Manpower Services Commission) (Hyde, 1985). The provision of small factory units and workshops has been increased as a result of the activities of public sector agencies and local authorities (Fothergill et al, 1987) and also by tax incentives (the Small Business Workshops Scheme) to encourage private sector developers (Ambler and Kennett, 1985). Finally, but of less relevance to the start-up situation, the government has sought to reduce the burdens on small firm owner-managers that arise from its legislative and administrative demands (H M Government, 1985).

The effect of these measures in stimulating new firm formation remains a matter of dispute. On the one hand, evaluations of specific measures highlight many examples of new businesses which would not have been started in the absence of such schemes (eg Howdle, 1982; Robson Rhodes, 1984; Peat Marwick, 1986). However, many commentators (eg Keeble and Wever, 1986) would not regard such schemes as being a fundamental cause of the rise in new firm formation for at least three reasons. First, the beginning of the rise in new firm formation predated the introduction of most of the signficant government policy measures. Second, a number of the schemes have a significant deadweight component; in other words, many of the new businesses that have benefitted would have started even in the absence of such initiatives (eg Robson Rhodes, 1984; Allen and Hunn, 1985; Centre for Employment Initiatives, 1985; Peat Marwick, 1986; National Audit Office, 1988), although it is quite conceivable that their efficiency and survival prospects may have been enhanced. And third, many of the schemes have benefitted relatively few firms.

EXPLAINING THE RISE IN NEW FIRM FORMATION: METHODOLOGICAL CONSIDERATIONS.

Previous attempts to explain the rise in new firm formation since the onset of recession have adopted one of two alternative approaches. However, both approaches have been based on flawed methodologies, hence their conclusions are suspect.

The first approach is based on a 'snapshot' survey of a sample of small businesses, either in one area or in a number of different areas. The sample is divided into sub-samples according to when each business was started. These sub-samples are compared in order to identify whether there have been any temporal changes in founder characteristics and motivations and in firm characteristics. One example of this approach is a study undertaken in 1985 by Storey and Johnson on behalf of the Institute of Manpower Studies (Rajan and Pearson, 1986, ch. 14). They obtained from the owner-managers of a sample of 298 firms details of the background and history of the business, including their reasons for setting up in business. Subdividing this sample into three age groups (less than five years old, five to ten years old and over ten years old) revealed some differences in the reasons for setting up in business. In particular, the proportion of firms set up for market/profit reasons was highest in the sub-sample of businesses less than five years old whereas unemployment was less significant as a motive for founders of businesses less than five years old (started between 1980 and 1985) than for businesses formed in the previous five year period (1975 to 1980). However, this methodology is suspect because the older cohorts have been thinned out by firm closures and acquisitions and consequently comprise only long-term survivors which have remained independent. Our knowledge of factors associated with firm survival, closure and acquisition is extremely limited, but it seems legitimate to suggest that the motivations for start-up have a significant influence on the propensity of a business to survive. In view of this, comparing samples of older cohorts of firms with samples of recently established firms based on a 'snapshot' survey cannot be regared as providing a reliable indication of changes over time in factors associated with business start-up.

The second approach to explaining the recent rise in new firm formation is well illustrated by the work of Binks and Jennings (1986b). This involved a comparison of their survey of new manufacturing firms in Nottingham founded between 1978 and 1982 with those reported by Storey (1982) in his study of new firms in Cleveland which were formed between 1971 and 1977. They noted that in the Cleveland study "about 20 per cent of new owner-managers were 'forced' into starting their own business ... [compared with] ... a figure of around 50 per cent in the Nottingham area" (Binks and Jennings, 1986b, pp. 8-9). This comparison, they suggest, indicates "that the recession causes an increase in the proportion of new firms whose owner-managers have been pushed rather than attracted into starting a business" (Binks and Jennings, 1986b, p. 9).

However, this comparison is flawed on at least four counts. First, it involves a comparison across space as well as over time and it is impossible to establish the relative importance of each factor in contributing to the observed differences. Second, any comparison between independently conducted studies is often problematical because of differences in the data sources used to identify new businesses and in definitions over what constitutes a new business (Mason, 1983). Thirdly, the comparison is not comparing like with like: the Nottingham study was restricted to the manufacturing sector whereas four-fifths of the Cleveland sample of new businesses were engaged in non-manufacturing activities. Finally, definitions of 'push' encompass much more than just unemployment/redundancy and job insecurity. In the Nottingham study only 30 per cent of founders were 'pushed' into forming their own business as a result of unemployment or its threat, rising to 35 per cent if the closure of a founder's previous business is included (Binks and Jennings, 1986b), little different from the Cleveland study in which 26 per cent of founders (30 per cent if only new manufacturing firms are considered) had been unemployed immediately prior to starting their own business (Storey, 1982).

A comparison of the results of a post-recession study in one area with those from a pre-recession study in another area, particularly where the studies have been conducted by different researchers employing different questionnaires and definitions, cannot therefore adequately highlight temporal changes in the characteristics of new firm founders and in their motivations, or indeed to identify and isolate the effect of the recession, because too many variables differ across samples. Consequently, conclusions reached on the basis of such a methodological approach must be treated with considerable caution.

The only methodological approach which is capable of reliably identifying temporal changes in the new firm formation process involves a comparison of a post-onset of recession survey of new businesses with a previously conducted pre-recession study in the same area or areas which uses the same data source, definitions and survey techniques. This condition is satisfied in South Hampshire where information on new firm formation prior to the onset of the post-1979 recession was obtained in a study undertaken in 1981 of 52 independent manufacturing firms started between 1976 and 1979 (Mason, 1982; Lloyd and Mason, 1984; Mason and Lloyd, 1986). This constitutes the pre-recession panel. Comparable information was collected in 1986 on a post-onset of recession panel (herewith abbreviated to post-recession panel), comprising 73 independent manufacturing firms started since 1979 [2]. Both surveys were undertaken in South Hampshire [3], utilized the same data source and methodology [4] to identify new businesses and used the same definitions and decision rules to establish whether an enterprise satisfied the survey criteria, notably with respect to defining the date of start-up, independence and business activity (Mason, 1982; 1983). In addition, both surveys utilized essentially the same questionnaire to obtain information though face-to-face interviews with the founders. By undertaking surveys at two points in time and by keeping the geographical context and methodology constant between the two surveys this approach overcomes the shortcomings of the methodologies used by other studies. Consequently, any differences between the two panels in terms of firm and founder characteristics can confidently be ascribed to genuine temporal changes in the new firm formation process.

Although representing an improvement on previous methodologies this study nevertheless suffers from two important limitations. First, it has been undertaken in South Hampshire, and in view of the socio-economic structure, economic buoyancy and below average unemployment rate of the area it would be unwise to place too much confidence in the extrapolation of the results to other geographical contexts. Second, because of the nature of the data source used to identify new businesses the study is restricted to the manufacturing sector. As the majority of business start-ups are in the service sector (Ganguly, 1985), and it is not clear the extent to which the process of new firm formation differs across sectors, this study therefore offers only a partial insight into the reasons for the rise in new firm formation rates in the UK.

The remainder of this paper comprises an examination of these two panels of new businesses in order to assess the extent to which the onset of recession has been associated with changes in the new firm formation process. However, it should be noted at the outset that the intention is not to provide a comprehensive examination of each of the theories for the increase in new firm formation that were reviewed in the introduction to this paper. Some are not amenable to adequate testing via micro-scale surveys and require different, or complementary, approaches. In other cases the theories apply to the services sector rather than to manufacturing. The main purpose of the paper is to address three specific issues concerned with the increase in business start-ups since the late 1970s that were raised in a research agenda produced by the Department of Trade and Industry to highlight "areas connected with new and small firms where policy-makers would find it useful to have further research or analysis undertaken" (Frank et al, 1984, p. 257; also Rees et al, 1986). First, have "the characteristics and motivations of new firm founders ... changed in recent years?" (Frank et al, p. 260); specifically, has there been an increase in the proportion of founders 'pushed' into starting their own business because of unemployment or job insecurity? Second, has the Government's encouragement of 'entrepreneurship' through the various measures introduced since 1979 been a significant factor in the rise in new firm formation? Third, earlier research has tended to suggest that founders generally establish their business in the same industry in which they were previously employed (eg Gudgin, 1978; Johnson and Cathcart, 1979; Lloyd, 1980): "it will ... be interesting to see whether this tendency was still apparent during the ... recession or whether there .. [has been] .. more diversification of activity" (Frank et al, 1984, p. 260).

NEW FIRM FORMATION IN SOUTH HAMPSHIRE BEFORE AND SINCE THE ONSET OF RECESSION

Founder Motivations.

Comparison of the two surveys highlights considerable differences in the motivations of founders of new businesses in South Hampshire before and since the onset of recession (Table 1). Founders of businesses in the 1970s were largely motivated by 'pull' factors, notably the desire to exploit a market opportunity (cited by 60 per cent of founders), independence (40 per cent) and, to a lesser extent, financial ambition (21 per cent) [5]. A desire for independence was the single most frequently cited motive amongst founders of new businesses started since 1979 (38 per cent). Financial ambition was also mentioned by a significant minority of post-1979 founders. But in marked contrast to the pre-recession panel, post-1979 founders were considerably less motivated by market pull factors: just 14 per cent cited the desire to exploit a market

Table 1. Reasons given by founders for starting their own business*

reason	pre-1980 panel	post-1979 panel
	(percentages)	
market opportunity	60	14
independence	40	38
financial ambition	21	23
idea for new product/process	19	10
dissatisfaction with job	19	19
unemployment/redundancy	6	27
other reasons	33	42

* founders could give more than one reason, hence the percentages sum to over 100.

opportunity as a major reason for setting up their business. Furthermore, a smaller proportion of the post-1979 panel of businesses were based on a idea for a new product or process (10 per cent compared with 19 per cent).

Turning to 'push' factors, 19 per cent of founders in both panels started their businesses as a result of dissatisfaction with their previous employment. However, there was a significant difference in the proportion of founders in each panel who were either unemployed or had been made redundant. Just six per cent of the founders of businesses started in the 1970s had been unemployed: in marked contrast, 27 per cent of the founders of businesses formed since 1979 were motivated either in part or exclusively because they had been made redundant. Two-thirds of these founders cited redundancy as the only reason why they set up their own business; the remainder gave the desire for independence as a contributory factor. Indeed, this understates the significance of employment-related factors as a push factor in new business formations in South Hampshire in the early 1980s: a further five founders (7 per cent) gave insecure employment as the reason why they set up their own business, two founders (3 per cent) did not wish to be relocated by their employers to other parts of the country following the closure of their place of work in South Hampshire, and in another four cases (5 per cent) a previous business enterprise of the founder had closed. In total, 42 per cent of founders of post-1979 start-ups in South Hampshire therefore set up a new firm either solely or in part because of their actual or potential loss of employment (or economic livelihood), an even higher figure than that noted by Binks and

Jennings (1986b) in their Nottingham study (35 per cent).

The formation of new manufacturing firms in South Hampshire has therefore been motivated by different factors before and since the onset of recession. Positive considerations, notably market opportunities and technical innovation, have been much less prevalent amongst new firm founders in the 1980s, whereas redundancy, insecure employment and the failure of previous business ventures have been much more prevalent. The conclusion reached by Binks and Jennings (1986b), although based on flawed methodology, is therefore confirmed and reinforced by this study.

Founder Characteristics.

Fewer differences were apparent in the personal characteristics and employment backgrounds of founders of businesses started before and since the onset of the recession. Firms with two or more founders dominated both panels, comprising 56 per cent of post-1979 start-ups and 58 per cent of businesses started before 1980. A significant minority of the founders in both surveys had previous experience of starting a business, with 36 per cent of the founders of businesses started since the onset of recession having previously set up a business compared with 42 per cent of founders in the pre-recession panel. However, there is a contrast in the age profile of founders in the two surveys, with a smaller proportion of post-1979 founders in the over 45 years age category (19 per cent compared with 32 per cent) and a higher proportion in the 30-45 years age group (70 per cent compared with 53 per cent). Only a small proportion of founders in both panels were under 30 years old when they started their business. It seems plausible to suggest that this difference in the age profile is associated, at least in part, with the greater significance of employment-related push factors amongst businesses started since 1979.

Both surveys confirmed that the majority of new firm founders come from small business backgrounds: approximately 60 per cent of the founders in both panels had been working in firms with less than 200 employees immediately prior to setting up their new business, compared with approximately one-third who had been employed in firms with over 500 employees. Examined from the perspective of the size of establishment rather than the size of firm highlights the even greater significance of a small workplace as a source of new business founders: 81 per cent of founders of post-1979 start-ups had previously been working in establishments with fewer than 200 employees compared with only 13 per cent who had been employed in establishments with more than 500 employees.

There were no significant contrasts in the occupational backgrounds of both sets of founders (Table 2), with over 40 per cent in each panel employed in a managerial capacity in the job which they had immediately prior to setting up their own business. A further one-third of founders in each panel had been either self-employed or else running their own business. The vast majority of the founders of firms in both panels had been working locally (in Hampshire or neighbouring counties) immediately prior to setting up their business. Amongst firms which were started between 1976 and 1979, 81

Table 2. Last job of founders.

	pre-1980 panel	post-1979 panel
	(percentages)	
management	44	42
technical	1	8
sales	3	3
clerical	1	1
skilled manual	17	14
unskilled manual	1	1
self-employed/ own business	33	32

per cent of founders were local, compared with 85 per cent of founders of post-1979 start-ups. However, 51 per cent of post-1979 founders and 44 per cent of pre-1980 founders had moved to South Hampshire (or adjacent areas) at some stage during their working lives, mainly for employment-related reasons. Only 3 per cent of pre-1980 founders and 5 per cent of post-1979 founders moved to South Hampshire <u>specifically</u> to set up their business. This compares with the finding by Keeble and Gould (1985) that 16 per cent of new firm founders moved to East Anglia specifically to set up their new business.

Advice and Counselling

It is widely recognised that new firm founders are often ill-equipped to meet all of the varying demands of running a business. Whether they are aware of it or not, most founders have a weakness in at least one area, generally finance or marketing. It is for this reason that much of the public sector assistance to small firms is concerned with providing free or subsidized business information, advice and counselling. The founders of new manufacturing firms in South Hampshire broadly conform to this stereotype. Just under three-quarters of post-1979 founders claimed that they were confident in coping with the production aspects of running a business and over one-third were confident about technical issues. Indeed, the founders of only two firms (3 per cent) lacked confidence in their ability to handle production matters. In contrast, substantially fewer founders (25 per cent) claimed to be very confident about handling the general management demands of running a business, despite the managerial backgrounds of most founders. Even fewer founders were confident about accounting and financial matters (16 per cent) and sales and marketing (15 per cent): indeed, almost half of all post-1979 founders admitted to lacking in confidence about the accounting and financial aspects of running a business, while 19 per cent lacked confidence in their ability to undertake sales and marketing effectively. Somewhat surprisingly in view of the differences in the age profiles of the founders and the reasons for business formation in the two panels, these findings broadly correspond to the earlier survey of pre-1980 start-ups, where financial skills was the most frequently cited area in which founders considered themselves to lack expertise.

The founders of 63 per cent of post-1979 start-ups sought specialist advice before starting their business, only a slightly lower proportion than in the previous survey (71 per cent). Furthermore, the main sources of advice were similar amongst both groups of founders: greatest reliance was placed on professional advisors, notably banks and accountants, with only a minority of founders obtaining information and advice from family and friends, colleagues and other entrepreneurs. Moreover, new firm founders have made relatively limited use of the free business and advisory services provided by the Small Firms Service. The founders of just two post-1979 start-ups (3 per cent) made contact with the Service prior to establishing their firm, a slightly lower proportion than amongst pre-1980 start-ups. However, more post-1979 businesses have made use of the service <u>since</u> start-up. A total of six firms have made use of the Small Firms Information Service and three used the Small Firms

Counselling Service: however, this only comprises 14 per cent of firms in the post-recession panel, a similar proportion to that in the pre-recession panel (10 per cent).

The establishment of a national network of local enterprise agencies since the early 1980s has provided an alternative source of free business advice that was not available to the pre-recession panel. However, the post-1979 panel of firms has made only limited use of the local enterprise agencies in Southampton and Portsmouth. These enterprise agencies were set up in 1981 and 1982 respectively: the founders of just five firms (15 per cent of post-1981 start-ups) contacted them for advice prior to start-up. Contacts with the enterprise agencies have increased since start-up, and a total of 18 per cent of firms in the post-recession panel have used their services. Seven firms (10 per cent) in the less urbanized parts of South Hampshire (notably the New Forest) have used the services of CoSIRA for business advice, information and enterprise training either at start-up or subsequently.

Finance

Post-1979 start-ups had a median launch capital of around £7,500, only slightly higher than the average launch capital used by pre-1980 start-ups (£6,000). Of course, this average figure conceals considerable variations in the amount of start-up capital used (Table 3): 11 per cent of post-1979 start-ups had over £50,000 of launch capital, while at the other extreme, 15 per cent started with under £500. Moreover, the post-1979 panel contains a larger

Table 3. Amount of start-up finance.

£	pre-1980 panel	post-1979 panel
	(percentages)	
less than 500	12	15
501 - 1,000	13	4
1,001 - 5,000	25	23
5,001 - 15,000	25	19
15,001 - 50,000	19	27
50,001 - 100,000	0	8
over 100,000	6	3

proportion of more highly capitalized start-ups than the pre-recession panel (Table 3). There is little difference in the major sources of start-up funds used by both panels of firms (Table 4), although a previous business of the founder was more significant as a source of launch capital for pre-1980 start-ups than for post-1979 start-ups (17 per cent compared with 4 per cent). The most frequently used sources of start-up finance by post-1979 start-ups were personal savings (67 per cent), bank loan (32 per cent) and bank overdraft (29 per cent).

The sources of post-start-up finance used by firms in both panels (Table 5) confirms the well-established finding that as businesses develop they significantly reduce their reliance on the personal savings of the founder and his family and diversify their sources of external finance, notably to include finance houses. In addition, retained profits assume a significant financing role. In contrast to start-up financing, there are some differences in the sources of post-start-up capital used by firms in the two panels. Post-1979 start-ups rely rather less than pre-1980 start-ups on retained profits (nevertheless, 71 per cent of post-1979 start-ups mentioned this as a source) and are rather more oriented towards bank loans and finance houses. It can be speculated that differences in company profitability and changes in bank attitudes to small businesses over the two time periods may help to explain the greater reliance on external sources of financing by the post-1979 panel. It is also likely to be associated with the much higher level of post-start-up investment by the post-recession panel: their median investment in plant and equipment since start-up was £25,000 compared with only

Table 4. Sources of launch capital.

source	pre-1980 panel	post-1979 panel	
	mentions	mentions	single most important source *
	(percentage of firms)		
personal savings	65	67	41
family/friends	4	6	4
redundancy pay	4	5	3
house mortgage/second mortgage	6	3	3
bank loan	31	32	26
bank overdraft	13	29	8
private share issue	6	5	3
venture capital	0	3	1
previous business	17	4	1
other sources	6	11	7

			100

* This question was not asked in the survey of pre-1980 start-ups.

Table 5. Sources of post-start-up capital.

source	pre-1980 panel mentions	post-1979 panel mentions	post-1979 panel single most important source *
	(percentage of firms)		
personal savings	)	11	3
family/friends	) 17	4	0
retained profits	83	71	44
share issue	4	3	1
bank loan	29	42	23
bank overdraft	35	23	3
finance house	33	44	21
government sources	4	4	0
other external sources	8	12	5

			100

* This question was not asked in the survey of pre-1980 start-ups.

£8,000 by the pre-1980 panel while the median investment in premises was £5,000 and £700 respectively.

Post-1979 start-ups have made limited use of the various financial assistance schemes for small businesses that have been introduced during the 1980s. Indeed, the Loan Guarantee Scheme (LGS) is the only initiative which has attracted significant usage, with 15 firms (21 per cent) obtaining loan finance through this scheme. Some other firms were either deterred by the high cost of the scheme (which for a time carried a premium of 5 per cent above the prevailing rate of interest on the guaranteed portion of the loan) or were advised against it - presumably on cost grounds - by their bank. Four firms (5 per cent) received grants towards the purchase of new machinery under the Small Engineering Firms Investment Scheme (SEFIS). No firms raised equity capital through the Business Expansion Scheme and no founders participated in the Enterprise Allowance Scheme.

In the pre-recession panel, 21 per cent of firms reported difficulties in raising start-up finance; amongst post-1979 start-ups the proportion was 16 per cent, rising to 24 per cent if only firms which actually approached providers of external capital are considered. Problems in raising post-start-up capital were encountered by 20 per cent of firms in the pre-recession panel and by 21 per cent of firms in the post-recession panel. So, despite the improvement in the availability of external finance for small businesses in the 1980s, notably the introduction of various government schemes, the more positive attitude of the banks towards lending to small firms, and the increased availability of equity finance (NEDC, 1986; Burns, 1987) the problems encountered by new businesses in raising external capital for start-up and growth do not appear to have become any easier since 1979, although by the same token neither have they worsened.

However, financial difficulties stemming from of cash-flow problems have increased in severity over time. Amongst post-1979 start-ups 82 per cent of firms reported cash-flow problems compared with 60 per cent of firms in the pre-recession panel. By far the dominant cause of cash-flow problems in the post-1979 panel was slow payment by customers, cited by two-thirds of firms with cash-flow problems compared with one-third of pre-1980 start-ups with cash-flow problems.

The survey provided no clear or consistent support for the view that new firm formation during the recession has been faciliated by the availability of cheap secondhand plant and machinery as a result of plant closures and company liquidations. The use of secondhand plant and machinery was certainly fairly common amongst post-1979 start-ups, with 22 per cent of firms having upwards of 90 per cent of secondhand capital stock, compared with 13 per cent in the pre-1980 panel. On the other hand, 22 per cent of firms in the post-1979 panel had no second hand plant and equipment compared with only 15 per cent of firms in the pre-1979 panel (Table 6). Moreover, the average replacement cost of plant and equipment was higher amongst the post-1979 panel (Table 7). The South Hampshire Establishment Databank records all manufacturing establishments in

Table 6. Secondhand plant and equipment in new firms.

percentage of capital stock bought secondhand	pre-1980 panel	post-1979 panel
	(percentage of firms)	
nil	15	22
1 - 10	12	0
11 - 25	12	19
26 - 50	19	18
51 - 75	13	5
76 - 90	15	14
91 - 100	13	22

Table 7. Replacement cost of plant and equipment.

replacement cost	pre-1980 panel	post-1979 panel
	(percentage of firms)	
less than £5,000	12	3
£5,000 - £24,000	33	23
£25,000 - £74,000	23	36
£75,000 - £149,000	10	23
£150,000 - £299,000	15	10
£300,000 - £750,000	6	4
over £750,000	0	1

the area in 1979 and 1985 (enabling all openings and closures over this period to be identified) and also includes all post-1971 start-ups surviving to 1979. From this source the industries containing the largest numbers of new businesses formed between 1979 and 1985 were identified (see Table 9) along with the establishment closure rates of all industries. This evidence indicates that of the nine industries with the largest number of new businesses five of them had below average closure rates, and only one industry - furniture and upholstery - was in the top quartile of industries ranked by closure rate. Hence, the balance of evidence from this study tends to contradict the suggestion that business start-ups since the onset of the recession have been stimulated by the availability of secondhand plant and machinery and concentrated in industries with high closure rates.

Premises

In contrast to finance, post-1979 start-ups encountered fewer difficulties than pre-1980 start-ups in finding start-up premises. For firms which were founded between 1976 and 1979 in South Hampshire, problems in securing suitable start-up premises were commonplace, with 70 per cent of founders citing this problem [6] - a much higher proportion than reported by new manufacturing firms in a parallel study of North West England (Lloyd and Mason, 1984). In contrast, only 42 per cent of post-1979 start-ups encountered difficulties in obtaining initial premises (see note 6). Moreover, the proportion of firms citing such difficulties was lowest amongst firms which started in 1983 and 1984, suggesting that premises-related constraints on new firm formation in South Hampshire were being progressively alleviated during the early 1980s. Nevertheless, difficulties in finding suitable premises remained a much more serious constraint than in other areas: for example, only 8 per cent of new manufacturing firms started in Nottingham between 1978 and 1982 had problems in finding suitable start-up premises (Binks and Vale, 1984).

The reduction in the severity of the premises constraint for new manufacturing businesses in South Hampshire during the early 1980s is, in part, a function of the increase in vacancies in the existing stock of premises as a result of plant closures and company liquidations during the recession. It is also a result of an increase in the development of small factory units and the conversion of existing premises into small workshop complexes by private developers, in many cases stimulated by the tax incentives available under the Small Workshops Scheme, and by local authorities (Ambler and Kennett, 1985; Southampton City Council, 1986). This is reflected in the age of premises occupied by pre- and post-recession panels (Table 8): 30 per cent of post-1979 start-up occupied premises less than five years old compared with only 21 per cent of pre-1980 start-ups.

Post-1979 start-ups have also found it easier than their pre-recession counterparts to trade up to freehold premises. Just one of the 52 firms in the pre-recession panel owned their own premises at the time of the survey in 1981. This compares with 19 per cent of post-1979 start-ups which were in freehold premises at

Table 8. Age of premises currently occupied by new firms.

number of years old	pre-1980 panel	post-1979 panel
	(percentage of firms)	
less than 5	21	30
6 - 20	19	25
21 - 40	12	7
41 - 65	19	16
66 - 80	6	7
over 80	23	15

the time of the interview.

Local reviews of the commercial property market in Hampshire indicate that a shortage of "nursery units" has re-emerged as a significant problem for new businesses since the mid-1980s, partly on account of the escalating demand but largely as a result of the ending of the tax incentives available under the Small Workshops Scheme in April 1985 (Vail, 1986; Southern Evening Echo, 30 March 1987; 23 July 1987). According to one estate agent the ending of the Small Workshops Scheme had an immediate effect in curtailing the development of small factory units and led to a rapid erosion of the stock of vacant small factory units (Vail, 1986).

Products and Markets

The evidence from the two surveys indicates that the recession has increased the already strong tendency for new firm founders to establish their business in order to undertake activities in which they had direct experience as employees. Just over half of the founders of businesses started in the 1976-1979 period established their venture in the same or a similar line of activity to that of their immediately previous employment. In comparison, two-thirds of founders of post-1979 start-ups set up their business in the same or a similar line of activity to that of their founders' previous employment.

Nevertheless, there are some differences in the industrial composition of new businesses started before and since the onset of the recession. The South Hampshire Establishment Databank (see above) indicates that the industries with the most new firms are broadly similar in both the 1971-1979 and 1979-1985 periods, with nine of the eleven leading industries in each period common to the other period (Table 9). Nevertheless, there are some important differences: boatbuilding (mlh 370), and, to a lesser extent, metal goods and engineering industries (mlhs 399, 349 and 341) each accounted for a smaller proportion of new start-ups in the 1979-1985 period than in the 1970s whereas printing (mlh 489) and plastics (mlh 496) both accounted for a higher proportion of start-ups in the 1979-1985 period compared to the 1971-1979 period.

The industrial composition of the two panels reflects these contrasts. In the pre-1980 panel, the metals and engineering industries (orders 6,7 and 12) contained 42 per cent of new firms, with the electronics industry (order 9) accounting for a further 12 per cent, shipbuilding (order 10) comprising 10 per cent and printing (order 18) contributing 8 per cent. In the post-1979 panel 33 per cent of firms were in the metal goods and engineering industries, 21 per cent were in printing, 10 per cent in electronics and 8 per cent in the plastics industry. Yet despite these differences in industrial composition, both groups of new firms displayed similar characteristics in market-orientation. For example, 86 per cent of post-1979 start-ups undertake unit and small batch production, much of it on a sub-contract basis, compared with 75 per cent of firms in the pre-1980 panel. The customer profile is also similar, with 82 per cent of firms in the post-1979 panel trading with other manufacturing firms compared with 75 per cent of

Table 9. Industries in South Hampshire with the largest numbers of new manufacturing firms, 1971-79 and 1979-85.

industry (1968 S.I.C.)	1971 - 1979 no. of new firms (n=430)	%	rank	1979 - 1985 no. of new firms (n=136)	%	rank
399 metal goods	71	16.5	1	19	14.0	2
349 other mechanical engineering n.e.s.	57	13.3	2	13	9.6	3
370 shipbuilding	37	8.6	3=	3	2.2	10
489 other printing, publishing,etc	37	8.6	3=	20	14.7	1
471 timber	22	5.1	5	6	4.4	5=
364 radio and electronic components	17	4.0	6	5	3.7	7=
496 plastic products	16	3.7	7=	11	8.1	4
341 industrial plant and steelwork	16	3.7	7=	1	0.7	17=
472 furniture and upholstery	15	3.5	9	6	4.4	5=
367 radio, radar and electronic capital goods	11	2.6	10	1	0.7	17=
354 scientific and industrial instruments	9	2.1	11	4	2.9	9
422 made-up textiles	3	0.7	25	5	3.7	7=

source: South Hampshire Establishment Databank the pre-1980 panel. However, post-1979 start-ups are rather more oriented towards consumer markets, with 51 per cent of firms selling to the general public, either directly or via retailers and wholesalers, compared with only one-third of pre-1980 start-ups. Non-manufacturing firms and public sector organizations are also more significant customers for post-1979 start-ups (45 per cent compared with 12 per cent, and 33 per cent as against 12 per cent).

New firms started before and since the onset of recession exhibit little difference in their degree of local market orientation. Amongst post-1979 start-ups 58 per cent of firms derived over half of their sales within Hampshire, compared with 51 per cent of pre-1980 start-ups. At the other extreme, the proportions of firms deriving over half of their sales via direct exports was also similar, comprising 8 per cent of post-1979 start-ups and 10 per cent of pre-1980 start-ups. The degree of dependence on dominant customers is also similar in both panels. Amongst post-1979 start-ups 18 per cent of firms derived over three-quarters of their sales from up to six customers, compared with 24 per cent of firms founded prior to 1980.

The majority of new firms in both panels encountered competitive market environments. Approximately two-thirds of firms started between 1976 and 1979 had at least ten competitors, while over one-third had in excess of 100 competitors. Amongst post-1979 start-ups the proportion with at least ten competitors was even greater, comprising 70 per cent of the panel, while over 40 per cent considered that they had in excess of 100 competitors. At the other extreme, only 7 per cent of post-1979 start-ups claimed to have three or fewer competitors compared with almost one-quarter of pre-1980 start-ups. This significant difference is open to at least two interpretations. It is possible that the increase in business formations since the onset of recession, allied to a declining demand from the manufacturing sector, has resulted in increased competition in many market niches. Alternatively, it may reflect the greater significance of market opportunities as a motive for business formation amongst firms started between 1976 and 1979, as noted earlier. It is therefore probable that a greater proportion of pre-1980 start-ups were formed in order to exploit market niches that had been identified by the founders as having only limited competition. In contrast, post-1979 start-ups contain a higher proportion that were started by founders who had been 'pushed' into entrepreneurship as a result of redundancy or job insecurity: it is probable that these founders will not have previously considered in any detail the possibility of starting their own firm, hence they will have been less prepared and not had sufficient time to fine-tune their business ideas, identify market niches with little competition, or develop new skills or ideas to enable them to move into unrelated areas of business activity. They are likely instead to have set up their business in an activity in which they were familiar, even if it was in a sector with many competitors. However, there is no significant difference between the two panels either in terms of their perceived major competitive strengths, with both emphasising service/flexibility and design/quality considerations ahead of price, or in the amount of marketing effort.

There is only limited support from this study for the suggestion that the shift in demand away from the mass market in favour of customized and more sophisticated products and services as a result of rising consumer affluence has been a major influence on the rise in new firm formation. Amongst post-1979 start-ups just seven firms (10 per cent) were manufacturing what could be described as customized or sophisticated consumer goods [7], an almost identical proportion to that in the pre-1980 panel (six firms: 12 per cent). There was also little support for the view that new technologies are creating significant product, process and market opportunities for new enterprises to exploit. Indeed, as noted earlier, the proportion of post-1979 founders claiming to have been motivated by an idea for of a new product or process was just 10 per cent, a lower proportion than in the pre-recession panel. Moreover, only one of these firms was engaged in an industry that could be regarded as part of the 5th Kondratiev cycle (optical fibre technology). The opportunities for new firm formation in established industries arising from the development of new process technologies is much harder to assess; however, on the basis of qualitative evidence derived from the surveys this factor would appear to be of some significance. Over half of the firms in the post-1979 panel reported that they had invested in modern, up-to-date machinery in order to increase efficiency (eg by speeding up the production process, reducing down-time), improve the quality of their products or enhance their technical capabilities and thereby maintain or increase their competitiveness. Indeed, 10 per cent of firms in the post-recession panel considered that the use of sophisticated machinery represented one of their main competitive advantages compared with just one firm

(2 per cent) in the pre-1980 panel.

The survey of post-1979 start-ups also fails to find clear evidence that large firm restructuring has created opportunities for new firm formation. The number of firms undertaking production under licence is both modest and identical in both surveys (four firms) and in no case did it represent a major proportion of a firm's activities. There was also just one management buyout in each panel. The proportion of firms relying largely or exclusively on sub-contract work has also remained similar, with 56 per cent of post-1979 start-ups deriving three-quarters or more of their turnover from sub-contract work, only slightly lower than the proportion of pre-1980 start-ups (60 per cent). Moreover, despite the differences in the industrial structure of the two panels that was noted above, the types of firms that are dependent upon subcontract work are broadly similar. In the pre-1980 panel 71 per cent of firms undertaking subcontract work were in the mechanical engineering, metalwork and printing industries (orders 7, 12 and 18) compared with 61 per cent in the post-1979 panel. However, there is a difference between the two panels in both the number and the proportion of electronics companies (order 9) engaged in sub-contract work. The pre-1980 panel contained six electronics companies, only one of which derived over three-quarters of its turnover from sub-contract work, with the remainder having their own proprietory products. In contrast, the post-1979 panel contained seven electronics companies, five of which were largely or exclusively engaged in sub-contract work (all of them undertaking printed circuit board assembly). The electronics industry therefore accounted for 12 per cent of firms engaged in sub-contract work in the post-1979 panel but only 2 per cent in the pre-1980 panel. One possible interpretation of this feature is provided by Rothwell (1984) who argues that as the technology of an industry matures so there are fewer opportunities for small entrepreneurial firms to engage in product innovation.

CONCLUSION

The availability of information from a previously-conducted survey of new manufacturing firms in South Hampshire started between 1976 and 1979, and thus prior to the onset of recession, has provided a unique bench-mark against which evidence from an identical survey of a panel of firms started in the same area between 1980 and 1985 - since the onset of the recession - could be compared in order to examine changes in the new firm formation process over time. This comparison has indicated that most aspects of the new firm formation process have remained constant across the two surveys, with founder and firm characteristics in both panels similar in most respects. However, there is a major contrast in the reasons for new firm formation, with a much higher proportion of post-1979 start-ups motivated by redundancy/unemployment and other factors affecting the economic livelihood of the founders. Conversely, a substantially smaller proportion of post-1979 start-ups were formed for positive, or opportunistic reasons such as the identification of a market gap or an idea for a new product or process. Nevertheless, the study does not fully support the recession-push explanation for the rise in new firm formation since there was no evidence that significantly higher proportions of post-1979 start-ups were reliant on cheap secondhand plant and equipment or were dependent upon subcontract work. In addition, there was no association between industries with the largest numbers of new businesses and industries with the highest closure rates.

The study therefore also fails to fully support Storey and Johnson's (1987) 'Birmingham model' which interprets the increase in small businesses in the UK as a result of large firm restructuring, involving mass redundancies and increased contracting out of peripheral production and service functions. There was no evidence of a marked increase in the proportion of new firms reliant on subcontract work. This conclusion is reinforced by the findings of a survey of large companies in the Southampton city-region which failed to identify any evidence of a significant increase in the amount of production which was subcontracted, although an increase in the outsourcing of support services, notably cleaning, catering and transport, was noted: however, the major beneficiaries of the latter trend were generally large specialist service sector companies rather than small businesses (Mason et al, 1988).

There was also no evidence to support those explanations for the rise in new firm formation which emphasize structural changes in advanced economies - the most important of which are new technologies, the growth of the "thoughtware economy" and rising real incomes. Admittedly, the surveys were not specifically designed to undertake a rigorous testing of these theories: nevertheless, there was no evidence that the post-1979 panel contained higher proportions of firms that were based on new technologies or producing customized products for affluent consumer markets. The study also found no evidence that government measures to promote small businesses had been significant in the rise in new firm formation: the use of counselling and advice tended to occur after start-up, while problems in raising finance were no easier for the post-1979 panel than for the pre-1980 panel, even though approximately one in five firms had used the Loan Guarantee Scheme. The most positive aspect of government policy in assisting start-ups in the 1980s has been the Small Workshops Scheme which has stimulated the development of small factory units: businesses started since 1979 have encountered substantially fewer problems in securing start-up premises than those started in the 1970s. However, with the ending of the Small Workshops Scheme this has proved to be a temporary improvement.

The key question to arise from this study is whether the contribution of the post-1979 cohort of new manufacturing firms to local economic development will be reduced because of the large number of founders who have been 'pushed' into setting up their own business. There is evidence that businesses which are started by individuals who are pushed into new firm formation by redundancy, unemployment or job insecurity have a lower growth potential than those started by founders who become entrepreneurs for positive reasons (Storey, 1982; Storey and Johnson, 1987). It is therefore plausible to suggest that the post-1979 cohort will exhibit modest growth and a high failure rate. This scenario is reinforced by the evidence that in comparison with the pre-1980 panel substantially fewer post-1979 start-ups were in markets with few competitors. On the other hand, employment in the post-1979 cohort is larger than the pre-1980 cohort with medians of 10 and 8 employees respectively (means of 14 and 12 respectively). The annual turnover of the post-1979 cohort (£388,000 in 1986) is also substantially higher than that of the pre-1980 panel (£120,000 at 1981 prices; £164,000 at 1986 prices). Without longitudinal evidence it may therefore be premature to assume that the post-1979 cohort will inevitably make a less significant contribution to local economic development than the pre-1980 panel.

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1. 'Boutique' or 'designer' real ale breweries are now also being set up in the USA to produce beers to fill market niches left by the dominant breweries such as Miller and Budweiser (Financial Times, 21st June, 1986).

2. Neither survey was a sample. In both cases an attempt was made to obtain information from every new manufacturing firm identified which satisfied the survey criteria. The pre-recession survey achieved an 84 per cent response rate, while the post-recession survey had a 79 per cent response rate.

3. The South Hampshire Establishment Databank which contains information on all manufacturing establishments in the region in both 1979 and 1985, and also all new establishments in the period 1971 to 1979, was utilized to identify new businesses. Comparison of the lists for 1979 and 1985 revealed all establishments that were new to the region: reference to Who Owns Whom and Key British Enterprises enabled most branch plants and subsidiary companies to be eliminated. The remaining firms were then telephoned to verify that they were new, independent manufacturing firms. A similar procedure was used in the earlier survey to identify firms started between 1976 and 1979 (see Mason, 1982, pp. 10-12).

4. In both surveys founders could give more than one reason for starting their firm.

5. This excludes firms which for various reasons did not require to search for start-up premises.

6. These products are: UPVC replacement windows (two firms), pottery, wallcoverings, fitted bedroom furniture, solid wood kitchen units, and decorative ironwork.

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