Understanding the relationship between regulation and entrepreneurs: Different methods, different understandings

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Abstract There has been a great deal of attention focused on attempting to link regulation, its accompanying administrative burden and cost of compliance with entrepreneurship and SME development. A common argument is that regulation stifles entrepreneurship because it draws resources away from more productive activities within the business. The paper will examine a series of propositions seeking to examine the potential effects of regulation on small firms. It will draw on empirical results from three projects to illustrate the ways in which regulations can affect business. This includes: an investigation of the response of business owner managers to environmental regulations; an examination of the effects of employment rights on the small firm; and an investigation of the influences on attitudes and behaviour with respect to health and safety in small businesses. The key argument is that owner-managers can respond in a variety of ways to regulation. One possibility may be for owner-managers to meet the desired policy outcome. However, other outcomes may also be possible. It may be that regulation may encourage a more efficient configuration of factors of production (e.g. labour) or indeed lead to innovations. On the other hand, regulation may lead to nil or non-response from owner-managers, such as merely passing on the cost of compliance to clients and consumers rather than changing their behaviour to comply with regulations. It is clear that the effects of regulation on smaller enterprises are potentially more complex than it may appear at first sight. The results show that small firms' responses are typically a result of a combination of external factors, internal resource and knowledge constraints and the frames of reference of owner-managers. However, the paper will demonstrate the limitations and methodological inadequacies of dominant approaches in understanding the effects of regulation.

Introduction and Thematic Context

The effects of regulation on small firms have attracted a vast amount of interest from academics, policy evaluators and lobby groups. Even lawyers have recently shown interest in understanding the effects of regulation on business and the difficulties of seeking changes in behaviour (Gunningham and Kagan, 2005). Regulation in this paper is meant to refer to '…any government measure or intervention that seeks to change the behaviour of individuals or groups. It can both give people rights (e.g. equal opportunities), and restrict their behaviour (e.g. compulsory use of seat belts)' (BRTF 2003:1). The SBRC (2005) and Kitching (2006) provide a three-fold classification of studies of the effects of regulation on business: business-burden studies; compliance-cost studies; and business decision making and competitiveness studies. Many studies have elements of all three types whilst some fit neatly within one. It is important for this paper that the types of study are appraised because they provide a useful context for this paper.

Business burden studies focus on the effects, but mainly the perceived effects, of regulation as a barrier to business activities drawing on survey data. Such studies have a long pedigree (e.g. Chilton and Weidenbaum, 1982). Often these studies rank or rate the effects of regulation on business and in some cases cite specific forms of regulation, such as employment rights. Studies are often performed by lobby groups but also by government agencies at a national or international level. For example the SBS (2006) reported that 31% of respondents cited 'regulation' as an obstacle to business success and 13% said that it was the main obstacle. The Federation of Small Business biennial survey found that 55% of respondents were dissatisfied with the complexity; 53% the volume, 51% the rate of change, 51% the cost of compliance, 49% the interpretation, 31% the enforcement regime and 29% the inspection (Carter et al., 2006). In contrast, only 2-4% reported being satisfied with each of these seven aspects of legislation. The studies also often provide a size of business break in the analysis (e.g. NatWest/SERT, 2004) and these tend to suggest that regulation is reported as having the biggest burden by small and medium rather than micro enterprises.

Compliance-cost studies include overview papers (see SBRC, 2005), evaluations of policy interventions (Better Regulation Task Force, 1999, 2000, 2005; Hampton Review, 2005; Keter, 2004), surveys from a variety of interested parties (e.g. Institute of Directors, 2004a, 2004b; ICAEW, 2004; Ambler et al., 2004) and comparisons between economies (World Bank, 2006). It is estimated that regulation costs around £100bn per annum in the UK, of which 30% accounts for administration (Better Regulation Task Force, 2005). Against this background, there is however, a consensus that smaller firms experience disproportionately higher compliance costs than larger organisations. Compliance involves a) *administrative effects* including i) understanding the regulation ii) implementing the regulation and iii) recording where necessary the fact that compliance has been satisfied. Allied to this is the actual b) *implementation cost to the business* as a result of expenditure resulting from complying with the regulation. For example, this may be the result of a rise in the wage bill as a result of the introduction of the minimum wage or the cost of new equipment to meet an environmental regulation. Given the relative lack of resources, time, finance and expertise to cope with regulation it is argued that small firms are affected disproportionately (Chittenden et al., 2003). In the UK, Regulatory Impact Assessments (RIAs) are undertaken more widely to 'identify the costs, benefits and the wider impact of new regulation' (NAO, 2006, 10). Related to this is the expansion of the process to include the Small Firms Impact Test, which focuses the attention of policy analysts on the effects of legislation on small firms. In practice, measuring compliance costs is not easy because of issues of defining compliance, varying effects of regulation over time and defining costs and benefits. Nevertheless, compliance costs studies have the advantage over business burden studies in that they are based on financial estimates, can provide a break down of the costs of compliance in terms of administrative and implementation costs and can be used for cost-benefit analysis when assessing the effects of a piece of legislation or initiative.

Business decision making and competitiveness studies attempt to make linkages between regulations, the actions of those running businesses and the effects on the enterprise. It is to these studies that this paper attempts to make the strongest contributions since it is shown that, whilst there have been efforts to unpack the issues central to the processes involved, much more research is needed. Again the bulk of research undertaken has been quantitative and there has tended to be a focus on how regulation has constrained business formation and development. To some extent this is understandable: regulations are often designed for purposes other than raising profitability and may result in private costs for the enterprise, such as social policy, environmental behaviour and health and safety regulations.

Strategically, it has been argued that regulations can affect the business entry decision but the picture is complex. Caparellas et al (2005) undertook statistical comparisons between so called lightly regulated economies, (United Kingdom=18th) and a more regulated economy (such as Spain=47th) and found no significant differences in the average age of the firm, the initial start-up size and patterns of employment growth. More recently, Stel et al (2006), using Global Entrepreneurship Monitor data found little evidence of *'entry regulations'* (indicated by the time, cost and number of days required to start a business) as barriers to the conversion of nascent to actual entrepreneurship but did find a relationship with *'labour market regulations'* (i.e. the difficulty of hiring a new worker, rigidity of rules on expanding or contracting working hours, the non-salary costs of hiring a worker and the difficulties and costs of dismissing a worker). However, they reported little evidence '…that "heavily regulated" countries (in terms of entry regulations) need only to reduce such "burdens" (in terms of *entry* regulations) to become more enterprising and by implication more wealthy' (Stel et al., 2006: 26, emphases in original).

Other studies of attempts at making links between regulations, owner manager behaviour and so called 'outcomes' have revealed the complexities in this process. Edwards et al. (2004) used a mixed methods approach in their study and found that the introduction of the minimum wage, for example, had only a limited effect because of the variety of contingent factors. It appears that when a firm is in a vulnerable position, such as undergoing severe cost competition, the effect of the minimum wage would take a greater effect (see Ram et al., 2001).

In addition to this threefold 'classification' of study, a central issue in relation to understanding the effects of regulation is the suitability of the methodological approach. There appears to be two issues here: first, in relation to identifying 'effects'; and second in relation to identifying 'causality'. The bulk of studies have adopted a quantitative if not positivist approach (SBRC, 2005). These often rely on the perceptions and 'hunches' of respondents rather than relating performance directly to a particular regulation. This presents us with the problem of the internal validity of some of the approaches undertaken. By relying on the perceptions of owner-managers and respondents of cause and effect, we are indeed dependent on their world views and understandings. Given the 'world views' of owner-managers to regulation, it is also unlikely that owner-managers will report positive effects. Quantitative reports of the effects of regulation lead to measurements of these effects in terms of time or financial costs. How reliable or factually correct these are is questionable, particularly given that they are based on estimates by respondents who are averse to regulations. Identifying causality is a perennial problem in social science research and identifying the links between regulation and its effects on business highlights this problem. Hence, even where quantitative approaches have been adopted, these can suffer from problems of two-way causality and isolating the particular effects of regulation.

In a perfect world, experimentation would allow for controlled samples but the laboratory of the small business is less easy to control. Thus, the search for appropriate methodologies to understand the effects of regulation continues. This search must involve a deeper engagement with the processes of the small business to understand how a regulation is adopted in the enterprise, how it affects what the business does and finally, how this affects the performance of the business. Inevitably, this methodology will involve engaging, observing and analysing changes in behaviour and strategy. The approach also recognises that the processed and impacts of a given regulation, or package of regulations, are difficult to unpack and their outcomes difficult to measure. These effects are likely to differ depending on the particular regulation and differential effects are likely to be felt by different firms, according to a variety of internal and contextual factors

Business Strategy in Small Firms: emergent strategies and implications for the effects of regulation

One of the distinguishing features of small firms is the use of what has been termed *emergent* rather than a planned strategy (Beaver and Prince, 2004; Mintzberg et al., 1995; Whittington, 1993). This may provide a key to understanding owner-managers' responses to regulation. Within an emergent strategy, management in the firm is typified as embodying incrementalism, informality and intuition. Owner-managers' responses and decisions to changes in the environment in which they operate are likely to be based on rules of thumb and prior experiences rather than on detailed, codified information and scientific management. Of course, decisions about 'what business we are in' and 'how do we compete in this business' are also driven by personal objectives, resource constraints and opportunities. A disruption to the allocation of resources within the business by, for example, owner-managers having to deploy them to understand, implement and monitor regulation may affect the ability of the business to compete effectively. Yet, even where effects are taking place these may be difficult to assess. First, owner-managers may not be able to offer accounts of the impact of regulation with precision because of the absence of relevant data in the firm. Second, if the style of management in small firms is based on emergent strategy principles rather than planned and based on detailed resource allocation models, the effects of changes in regulation may not necessarily lead to 'objective', logical strategic responses such as a reduction in product development, or switches in the deployment of staff, or the type of staff employed. As has been demonstrated, the motivations of business owners are varied and within these the 'bounded rationality' of business owners may lead to outcomes that are very different from anticipated patterns. Finally, it takes time for the effects of regulation to take effect on the small firm and within this time frame, the process of adjustment by the firm is likely to be mediated by other factors. In time, it is likely that the effects of regulation become bound up with other intervening factors. Thus, attempts at measuring the effects of regulation in small firms may be subject to little more than guesswork on behalf of owner-managers responding to surveys.

In assessing the effects of regulation on small firms, it is also important to appreciate the value system and modus operandi of small firms. Gibb (2000) highlighted the 'culture clash' between corporate business values, beliefs and ways of seeing and doing things compared with small businesses. This is also of relevance since it also helps us understand the cultural background to the likely responses of owner-managers to regulations. Within this perspective, interactions from seemingly external agents are unlikely to be met with enthusiasm, irrespective of the 'objective' benefits or otherwise to the enterprise. Attitudes to government intervention tend to be particularly adversarial because they often interfere with the status quo of the running of the business. Given the direct and personal ways of management in the business, for example, over their staff and/or in terms of product and service delivery, regulation may be perceived as a disturbance of the ability to control what goes on in the enterprise as well as undermining one of the reasons for running the business: namely, independence. Combined, this overall evidence suggests that many business owners have a 'fortress enterprise' mentality regarding external interventions.

Regulation as a 'shock' to the enterprise: a trigger for learning?

A further key strand in the literature when assessing the effects of regulation on small firms, relates to growing evidence on the processes of 'management learning'. The application of management learning and organisational learning theories to small firms is relatively new, but what evidence we have suggests that changes in the firm's environment and the search for information to help adjust to these changing conditions can lead to process and product changes within the firm (Cope, 2003; Zhang et al., 2006). The literature shows that learning, and subsequent changes in activities and performance, can begin with events or 'jolts' from environmental changes, for example in terms of competition. In the management learning literature there is little explicit connection made between regulation, organisation response and management learning. However, a new regulation may be regarded as a 'shock' to the status quo of the business and as such may lead to changes within the business, or indeed to a search for information outside the business.

The relationship between regulation and innovation is addressed in Porter's (1998) concept of how competitive advantage can grow out of disadvantage. Porter argued that whereas deregulation may encourage a less efficient deployment of factors of production (e.g. labour); increasing regulatory pressures may lead to firms innovating in order to remain competitive. In addition, increasing regulatory requirements may also create a demand for new products and services e.g. in recycling and waste disposal. This is illustrated in particular by environmental regulation:

> Properly designed environmental standards can trigger innovations that lower the cost of product or improve its value. Such innovations allow companies to use a range of inputs more productively – from raw materials to energy to labor – thus offsetting the costs of improving environmental impact and enduring the stalemate. Ultimately, this enhanced resource productivity makes companies more competitive, not less (Porter and van de Linde, 1995: 120)

In the small business and entrepreneurship field, 'shocks' to the system have not been studied extensively. However, research by Edwards et al. (2003) using a qualitative interview approach examined the effects of employment regulations on small firm practices. The case study approach focused on the effects of the national minimum wage (NMW), the formalisation of disciplinary practices after an Employment Tribunal case and other legal developments specific to businesses. They found that the effects of regulation were mediated by the overall attitudes of owner-managers; the nature of individual laws; the market context in which the firm operates; and the internal dynamics of each firm. In a few instances, the cases were able to identify positive effects including the 'modernisation' of employment relations procedures and a 'moving up market'. Interestingly, the respondents found it hard to produce concrete estimates of the cost of regulation.

An external 'shock' to the business, it is argued, can then lead to a questioning of the status quo within the organisation and a search for sources of new information from networks which can lead to a change in the firm. Certainly, networking can lead to innovations but much depends on the rationale for networking and the underlying motivations of business owners to network. Networking and the exchange of tacit information can lead to changes in the culture of organisations. Pittaway et al. (2004) for example, show how networking can lead to improved competitiveness although this is contingent of a range of factors. To date, evidence on the relationship between regulation and external searches for information and learning is however scarce.

Objectives of the Paper

The review of extant literature has provided the context for the specific objectives of this paper. Clearly, there is a growing body of conceptual thinking which shows that the effects of regulation are mediated by a series of processes which are shaped by external and internal firm factors. In seeking to contribute to this literature, this paper aims to consider how methods affect understandings of the effects of regulation. The paper examines the following propositions:

(i) the effects of the same regulations on small firms will vary between firms
(ii) Whilst the immediate response of owner-managers to regulation tends to be negative (because of their predisposition and additional work burden), positive effects may occur subsequently and in the longer term
(iii) In searching for solutions to meet new regulation, owner-managers are likely to engage with outside agencies and networks
(iv) Regulation can stimulate a process of learning and innovation by businesses

(v) In order to understand the effects of regulation on businesses processes and products, qualitative methodologies have to be employed

Set in this context, this paper will draw on empirical results from three recent projects in which the authors have been engaged:

(i) An investigation of the response of business owner-managers to increased environmental regulations (Revell and Blackburn, 2004)

(ii) An examination of the effects of individual employment rights on the small firm (Blackburn and Hart, 2002)

(iii) An investigation of the influences on attitudes and behaviour with respect to health and safety in small businesses (Vickers et al., 2003)

The advantages of drawing upon three different empirical sources include the ability to explore the effects of different types of regulation, the opportunity to explore any common themes in relation to business responses and identify the relative merits of different methodologies in examining the effects on owner-manager strategies. The central argument is that identifying and understanding the effects of regulation is problematic. Reliance on accounts from owner-managers has to be balanced with alternative methods of data collection.

Case One: The Effects of Individual Employment Right on Small Firms

Employment regulation has consistently been one of the key areas that employers and their representative groups have raised as causing them concern. There has indeed been a raft of enhancements in employment rights ranging from the minimum wage to working time and rights to time off for 'family friendly' reasons as consolidated in the Employment Act 2002. This example draws upon data derived from a DTI study on individual employment rights (IERs) of over 1000 owner-managers plus face-to-face interviews (Blackburn and Hart, 2002) and subsequently built upon by Edwards et al (2003). It provides an example of the advantages of large scale surveys but also illustrates the drawbacks of quantitative studies when seeking to investigate the broader effects of regulations. Overall, just over a third reported a significant effect of IERs on their business operations.

The results from this study show that the biggest single effect of IERs *on those reporting an effect* was 'administrative workload' followed by the 'amount of legal advice' and then 'overall business performance' (Table 1). The effects of employment rights on the amount of administration workload and legal advice sought were also found to be higher in firms employing 20-49 people.

Table 1

Influence of IERs Legislation on Business Operations by Size of Enterprise

	Sizeband	Per Cent		
	1 – 9	10 – 19	20 – 49	All
Administration Workload	52.1	70.6	76.5	56.5
Amount of Legal Advice	37.4	50.0	64.7	41.2
Numbers Employed Over Last Two Years	40.6	24.2	31.3	37.7
Overall Business Performance	34.2	38.3	41.2	35.3
Way Employees are Managed	33.2	35.3	41.2	34.0
Changes in Employment Contracts	27.3	38.2	43.8	30.0
Changes in Employees Attitudes or Performance	20.4	24.2	31.3	21.7
Balance Between Full and Part Time	20.9	14.7	12.5	19.4
Use of Agency or Self-employed Workers	15.6	14.7	17.6	15.6
Balance Between Males and Females	8.6	0.0	5.9	7.1
N=	187	33	17	237
Unweighted N=	(83)	(133)	(163)	(379)

Note: Only includes those respondents who stated that employee rights have had a significant impact on their business. Base = 1071

Source: Blackburn and Hart (2002)

However, there is also a reported ‘change in employees’ attitudes and/or performance’, which may be linked to the improvements in terms and conditions of employment. Other effects, including ‘changes in the way employees are managed’, ‘contracts of employment’ and shifts in the composition of the labour force are not as easy to interpret given the nature of the data. For example, a shift to use more agency or self-employed staff may be beneficial to the business in terms of enhancing flexibility or securing expertise, although from the employees’ perspective this can be threatening to job security.

Table 2

Negative and positive impact of IERs on Business Performance (n=1071)

	Effect		Count
	Negative	Positive	
NMW	6.4	1.4	87
Basic Terms and Conditions	4.4	3.0	79
Maternity Rights	4.7	1.7	68
Unfair Dismissal	4.1	0.2	45
Extension of Rights to Part-Timers	2.6	0.6	34
Limits on Working Week	1.8	0.2	22
Regular Time Off	1.3	0.5	19
Parental Leave	1.1	0.5	18
Minimum Work Breaks	0.2	0.6	10
Disability Rights	0.3	0	4
Anti-Discrimination	0.1	0	2
Total	1071	1071	

Source Blackburn and Hart (2002)

If we are to examine the type of IER, the regulation having the greatest reported effect is the National Minimum Wage (NMW), followed by basic terms and conditions and then maternity rights (Table 2). The bulk of employers tended to have negative views on the effects across the range of IERs although a minority perceived that they have positive effects (Table 2). The most common IER having the highest perceived positive affect on business performance was ‘basic terms and conditions of employment’ (3 per cent of the sample) followed by ‘maternity rights’ and the NMW (1.7 per cent). With any data set it is also important to note that although a high proportion of business owners had complained about the impact of IERs, they were unable to provide responses in relation to these rights. Hence, the numbers in Table 2 are low and this suggests that the ‘shock’ is limited to specific types of businesses. Further analyses demonstrate that these results vary according to the composition of the labour force and the sector in which the business operates. The data confirmed expectations of an uneven effect as shown by the number of negative responses by employers are classified by business sector. Employers in Distribution were especially negative about the effects of employment rights. Those in Hotels and Catering were the most negative about the extension of rights to part-timers, most probably reflecting their high use of a part-time labour force, and minimum work breaks. Employers in Business and Professional Services recorded the highest number of employers being negative about maternity rights. Although the precise reasons for these patterns in the data can only be covered through further qualitative research, these findings do take us away from making blanket statements regarding the effects of employment rights in small firms.

Table 3

Main Benefits of IERs for Business (Unprompted)	
	Per Cent
None	64.8
Provides guidelines and clarification	19.9
Increases staff morale and security	9.3
Business regarded as good employer	1.4
Prevents discrimination	1.3
Allows flexible hours	0.1
N=	1070
Note: Based on unprompted responses from employers.	

Source: Blackburn and Hart (2002)

When asked directly what they see as the benefits of IERs for their business, almost two-thirds of employers answering stated 'none'; one in five employers stated that legislation provided them with guidelines and clarification in setting the conditions for their workers; and almost 10 per cent stated that IERs raised staff morale and engendered a feeling of security (Table 3).

Overall, these findings provide partial support for proposition i) that the effects of regulation on small firms will vary between firms according to a combination of internal characteristics and contextual factors. They also provide partial support for proposition ii) that the immediate response of owner-managers to regulation tends to be negative. They also provide partial support for proposition iii) that IERs stimulate external networking in order to help owner-managers deal with these rights. This confirms the finds of Harris (2000). However, in relation to proposition iv) there was little evidence of 'learning or innovation' in the quantitative research. This may be a result of the difficulty of examining such phenomena in a telephone survey or it merely confirms a widely held view that entrepreneurs prefer to buy-in personnel related activities. Finally, though an absence of being able to offer significant evidence, the study lends support to proposition v) that in order to understand the effects of regulation on business processes and products, qualitative methodologies have to be employed.

In interpreting these data we have to be mindful of their limitations: first they only include owner managers that reported a significant effect in the sample (indeed 754 did not report a significant effect); second, the results do not report the *meaning* of these effects in terms of scale, how fundamental they were for the business and changes over time; and third they are based on the perceptions of owner-managers. The analysis also illustrates the limitations of a purely quantitative approach and the bounded validity of the results. On the other hand, this research paves the way for more in-depth approaches seeking to unpack the reasons for the reported effects.

Subsequent research building directly on this survey by Edwards et al. (2003), demonstrate the advantages of qualitative to the above quantitative approaches in relation to three aspects: '…a fuller picture of a firm's response to legislation'; '…the process of responding to legislation is addressed' ; and '..the processes within a firm can be placed in context in order to offer an explanation for observed behaviour' (Edwards et al., 2003: 14). This subsequent research is significant since the results by Edwards et al. (2003) verified and built upon the research by Blackburn and Hart. Combined, these studies supported each other rather than exposed any inconsistencies. The contribution of the evidence presented in relation to the impact of IERs is significant in terms of showing a range of outcomes, illustrating the weakness of a purely quantitative methodology and the strengths of having subsequent complimentary approaches.

Case Two: The Effects of Health and Safety Regulation

Health and safety regulations often appear as one of the most common areas of control over business operations. This case examines three of the key propositions considered in the paper, in relation to evidence drawn from a study of the attitudes and behaviour of small businesses in the UK with respect to health and safety (Vickers et al, 2003; 2005). This study aimed to identify the cultural influences that make employers and workers receptive/unreceptive to health and safety messages, recognise authoritative and credible channels of communication by which health and safety messages can be more widely disseminated, and the impact of cultural influences on employer/employee expectations of the Health and Safety Executive. 'Culture' in this context is defined as "... the shared practices, mental habits and norms which shape peoples' identities and influence their attitudes and behaviours" (Vickers et al., 2003:3). The study also included an ethnic component and had split sample between ethnic minority businesses (EMBs) and white owned businesses. The empirical data on which this project comprised a mixed method approach, including: a telephone survey of more than 1000 small firms (i.e. with less than 50 employees); 73 face-to-face interviews with owner-managers and 21 employees; and key informant interviews with selected intermediary organisations, health and safety inspectors and trade union representatives. This represents a shift from Case One in that it involves a mixed methods approach and emphasises the 'cultural influences' on attitudes.

In terms of the effects of regulation on small firms (proposition i), it was concluded that health and safety attitudes and behaviour in small firms (including responsiveness to regulation) are influenced by a combination of external and internal factors. External influences identified included: characteristics of the market, particularly the degree and forms of competition, and sectoral context of the business; regulatory pressures, particularly the nature of enforcement; supply chain influences, particularly the requirements of large customers/contractors; and other government policies, including other regulatory and enterprise support policy. 'Internal' influences on management attitudes and behaviour result from their interrelationship with external influences, as well as with each other. Three main groups of internal influences included those identified: firstly, influences relating to the nature of the technology, processes and premises utilised, and associated hazards. These are often strongly sector-related, but can also be size-related, because of scale economies and/or cost factors; secondly, organisational characteristics, including the degree of formality in the approach to management, separation of roles, degree of consultation and workforce representation, and business performance/growth orientation. This group of influences is strongly size-related; and thirdly, so-called 'cultural' characteristics of the business and the people within it. These include the nature of employer/employee relations, such as the propensity and ability of employees to demand improvements (in the absence of more formal representation); individual values and behavioural traits of managers and employees (as shaped by factors, such as prior experience, education, training, gender characteristics, ethnic background) particularly as they impact on perceptions of risk. These, together with organisational characteristics, also influence the receptiveness of the business towards, and ability to take advantage of, external advice and support.

It appears that the major influences to emerge included the culture of small firms, their resource constraints and competitive pressures. At the same time, how this influence is manifested can vary greatly between different types of firm. The evidence of the health and safety study shows that on many of the indicators, adoption of health and safety management and improvement measures is strongly size related, with larger firms (within the 1-50 employee size band) tending to perform better on most of the measures. These results chime quite clearly with the analysis by Edwards et al. (2003) when analysing the effects of employment regulations.

In relation to proposition ii) whilst the majority of firms either sought to avoid compliance with regulation and/or viewed it as an unnecessary burden, a minority of firms were characterised as 'positive responders' or 'learners', by the researchers (Vickers et al, 2003, p110). These were firms where awareness of relevant regulations was relatively high and there was greater awareness of the legitimacy of regulation. This leads to proposition iii) which is concerned with the role of external agencies and networks, when small business owners and managers are looking to deal with regulatory pressures. Less than a third of businesses had sought external information and advice in the past five years, although this did vary by size and sector (Table 3). However, in the so-called 'learner' group, firms often accepted the business case for regulation, viewing it as a means of seeking possible competitive advantage. Although the researchers did not quantify the number of firms in the various categories, it was clear that although significant, positive learners were a minority of firms. Significantly, they were typically well managed, profitable and growing firms, often operating in niche markets where product/service quality innovation and responsiveness to customer needs were key elements in the way they sought to compete. This contrasted with 'avoiders' and 'minimalist reactors', whose competitiveness appeared to depend more narrowly on price. At the same time, it was also noted that 'positive responders' and 'learners' were typically also higher visibility enterprises, involved in higher risk activities, thus tending to attract more regulatory attention and inspections.

Table 3			
Use of External Sources of Information and Advice on Health and Safety Issues 1997-2002 (by sector and employment size)			
Sector			
	Count	%	Base
Manufacturing	43	24	179
Construction	41	36	114
Health	56	29	192
Retail	61	24	250
Hospitality	113	32	352
Total	314	29	1087
1-9 employees	219	26	833
10-19 employees	59	39	152
20+ employees	32	38	85
Note: 17 missing cases by employment size			

Source: Vickers et al. (2003:33)

The suggestion that small firms responding positively to regulation are more likely to be proactively managed and profitable is supported by results of other studies. For example, in a study of the implications of the completion of the EU Internal Market on SMEs in the food processing sector, Smallbone et al (1996) identified a small number of firms that viewed changes in the regulatory regime as an opportunity to be 'one step ahead of the pack' by making the necessary investment to comply with regulations that were about to be introduced two or three years later. This contrasts with the bulk of enterprises that are reactive and slow to adapt. In the case of one firm, this involved investment of more than £0.5m, which managers justified in terms of moving more quickly than their main competitors. The survey found that less than a third of businesses had sought external advice on health and safety issues 1997-2002. These varied by size and sector (Table 3).

In the telephone survey, respondents were asked if they had ever been visited by a health and safety inspector and, if so, what the outcome of the visit had been. Nearly three-quarters of surveyed businesses had been visited by an inspector at some point, particularly the firms employing five or more staff. There were also variations in the frequency of inspection between sectors, with firms involved in the hospitality (mainly catering) sector exhibiting by far the highest proportion of respondents recalling inspection visits (93%). In terms of outcomes, less than one third of inspected firms were required to take actions as a result of visits by inspectors, and the vast majority of those that were reported being able to undertake the required easily. Surprisingly, perhaps, the reported experience by surveyed firms with regard to visits by inspectors was generally positive. Where health and safety inspectors adopt a predominantly persuasive and educative approach, using enforcement action, particularly prosecution, only as a last resort, owner-managers were positive. Inspectors themselves identified external pressures as the key influence on awareness and compliance with health and safety regulations in small firms. Two main external influences stressed. First, whether or not an establishment had previously been subject to regulatory pressure by experiencing an inspection visit; and second, in some sectors, whether influence was exerted by large customers, where health and safety requirements were integrated with quality assurance systems. In some sense the results seemed to focus on the role of inspectors rather than them acting as a stimulant for external advice.

In sum, the Health and Safety case study lends support to the first three propositions. However, the study provided only partial support for proposition (iv) because of the limited time period in which the research was conducted. The study provided partial support for proposition iv) in that the case studies were able to build upon the telephone survey and provide significant insights into the broader effects of regulation and how businesses made adjustments to regulation.

Case Three: The Effects of Environmental Regulation on the Construction Industry

The third case focuses on the impact of regulation on architects and small firms in the construction industry (see Revell and Blackburn, 2004; 2006). The study was qualitative, involving audio-recorded, face-to-face interviews with key informants and 20 owner-managers. The analysis comprised interpreting transcripts and theme building. All the businesses employed less than 50 people. Respondents included architects and builders because of the influence of supply chain dynamics on builders' practices.

The construction industry is relatively heavily regulated and in relation to environmental issues covers a range of factors including energy use in the building process and end 'built' product, materials used, recycling and waste issues. These include the land fill tax, the aggregates level, Building regulations Part L and Standard Assessments Procedures (SAPS) (see Revell and Blackburn, 2004 for details). The results of the study are very revealing, for a number of reasons. They show both resistance to change and an emphasis on how regulation can affect change. By way of background, both architects and builders were initially resistant to the idea of more legislation:

> "Architects are just worried all the time about legislation. So much legislation… This is a double edged sword. The trouble is bureaucracy. Bureaucracy stifles creativity. We've just had a huge draft of legislation from the HSE [health and safety executive] and if we're going to have an environmental raft of legislation, someone's got to think it through - so it's not more paper work" (Architect 3, London, 40 staff)

This was verified broadly with the responses from builders:

R: "And then there's all the paperwork, all the health and safety issues. We're drowned with it. The red tape…"

I: "Tell me a bit more about that?"

R: "Well, you know, we all have to now have a health and safety policy which we're supposed to read. Ours is about half an inch thick which we're supposed to read and adhere to and keep up to date. I've had to take on a specialist company that does this. Now, every time we get a job we pay them about £700 / £800 to formulate a health and safety policy generic to that job."

Interviews with builders revealed that they had to manage a variety of external interfaces: with architects, clients, planning authorities, health and safety and other agencies. At the same time they revealed that the barriers to entry into the construction industry can be very low and the vast numbers of small firms are in stiff competition where profit margins are often very low. This context meant that concern for environmental issues was of less of a priority for builders than architects.

However, what did this actually mean for change amongst architects? Many architects claimed that whilst 'lip service' was paid to sustainability issues within the industry, there was currently little innovation in the way of environmental design occurring in the UK. Sustainability was very much a minor issue in terms of their own work.

> "In my sector of architecture[refurbishment] I think there is very little importance attached to [sustainability]…I think there are some members of the profession who are sort of [sustainability] pioneers, who are trying to push

forward new pastures, but I think they're a very small part of the whole"(Architect 5, London, 2 staff, London, 2 staff)

Overall, the picture was one of conservatism: conservatism amongst clients and customers, builders and architects themselves. Shifting this *alliance of conservatism* by relying on market pressures would prove too much. This was recognised by our interviewees. Many architects advocated that more regulation was needed to push the sustainability agenda forward:

> "One has to take the construction industry on and possibly force them into [reducing environmental impacts] by some other building regulation conditions, just as Part L of the building regulations requires energy conservation. I think there is a very wide lack of knowledge and absence of education in this whole field… [so] you've got to be forced into it" (Architect 5, London, 2 staff)

> "[What will drive change] will be more regulation. I think regulation will force the hand on [sustainable design]" (Architect 10, Leeds, 100 staff)

> "It's got to be both taxes and regulation" (Architect 3, London, 40 staff)

However, there was a minority of architects who were prepared to embrace a more sustainable agenda in their designs. Two architects emphasised that many aspects of sustainable design in new builds were cost efficient, for instance because they reduced the need for expensive air conditioning and heating systems. Sustainable designs were also promoted on the basis that long-term savings could be made from energy efficient measures that reduced running costs, and that financial returns could be made from differentiating the building by adding 'green credentials' which would attract a top-end market looking to demonstrate their environmental responsibility. However, one of the key problems in convincing clients to invest in sustainable building was lack of precedents. Architects reported that clients wanted 'tried and tested' designs or nothing too out of the ordinary. Being environmentally friendly and innovative often could put a job at risk because of the conservatism of their clients, and only occasionally would architects seek to persuade their customers to adopt a more environmentally conscious build.

An examination of the builders, however, found a general lack of a perception for the business case for sustainable construction. There was reportedly little financial incentive to pursue energy efficiency measures on site, as mains electricity and water that was used, was paid for by the client. Materials were rarely recycled due to the view that it was prohibitively time-consuming and would therefore add unnecessary labour costs to the job. Even reusing old material was considered more expensive than buying it new, once the labour and storage costs were factored in.

> "You're doing a six-floor building and you're leaving the lights on. Things like that. Because you're not paying for it. It's not your money" (Builder, London. 85 staff)

> "[On] Most jobs 'it's cost is king' and you cut on the cost and you get what you pay for and people don't want to pay that extra ounce. But if a building is being designed by an architect and he specifies those materials, we fit those materials" (Builder 10, Leeds, sole proprietor)

Those builders that dealt directly with customers confessed that the environmental impacts of materials were rarely considered in consultations: other issues were more paramount. When put into perspective, sustainable building was relative less important

One respondent felt that it was not really his role to promote environmentally-friendly options:

> "You ask me about environmental issues, yet people want me to fit hardwood doors for them that have come from tropical rainforests, so what can you do? …It's not really my remit to sort of tell people what they want. They tell me what they want really" (Builder 10, Leeds, sole proprietor)

Finding information about environmental impacts was thought to be difficult and time-consuming. Respondents did not attempt to guide customers towards more environmentally sound options. Many felt that manufacturers and suppliers could do much more to encourage the use of sustainable materials in construction, such as eco-labelling schemes to differentiate products with lower environmental impacts.

> "There's no rating (of products). There's no environmental rating for you to make a decision. So you don't know…The building manufacturers and suppliers are really the ones that government should be targeting. We only use what's available" (Builder 1, London, self-employed)

Changes in the supply-side were emphasised so that they became automatic for business owners in their choice of materials.

> "The manufacturers have got to start supplying the stuff and what it'll be is it'll become second nature for us. I'll start using stuff that is greener without even knowing it" (Builder 5, London, 28 staff)

Discussions of attempts to change the practices of builders resulted in exposing the problem of introducing changes in working practices. The following exchange illuminates this problem:

R: "Could I ask you on waste again, the .../… on landfill tax. Now, do you think that that's affected your behaviour at all?"

R: "No. What happens with any tax? What happens with any tax at all whether it's cigarettes, beer, petrol …? You just pass it on down the line. If they charged £5 for a cigarette, people would still be buying cigarettes."

I: "You don't think it's affected the amount of rubbish you're chucking out? Because wasn't it designed to make people think hard about what you're throwing in the skip?"

R: "You haven't time. There isn't time to think about it. The gang comes back at the end of the day with a van load of whatever. He's got another job to start in the morning. Get rid, get rid, get rid. Fill the skip up. Right, you think, "The van's nice and empty." Off he goes the next day to another job. Who's going to pay us for taking off the wood gently, stacking it, de-nailing it, straightening it, shortening it, cutting it, inspecting it for woodworm? Who's going to pay for that? Nobody. You can slap another tax on and I'm just going to have to pass it on. Overheads went up this year. Landfill tax went up. So we charge more. Give the guys a rise, we charge more." (Builder 6, Leeds, 12 staff)

The above case demonstrates a response form a builder under particularly strong financial and competitive pressures.

In addition to exposing these cost pressures the interviews unearthed business-owners' value judgements regarding regulation. Notions of a working within a 'level playing field' were raised by business owners. If becoming more environmental conscious was to cost the business, then that would be more acceptable if everybody followed the same rules. In addition to these difficulties was the added problem of 'cowboy builders': those who regularly flouted regulations, avoided paying VAT and 'fiddled' the system. Thus, it was difficult for the builders we interviewed to readily accept another raft of regulations when competition was primarily based on price.

> "There's so many fiddles going on in our game and people seem to be getting away with it. And when they [the authority] catch them they don't seem to do an awful lot with them. So if you're trying to be honest and hardworking, you find it difficult when you hear these stories" (Builder, Leeds, 12 staff)

Many builders felt that *more* stringent environmental legislation was the only way to ensure that the industry reduced its environmental impact. This was based on the absence of any significant market-based signals to become more environmentally conscious. One builder, who initially may be considered a prime candidate for embracing the spirit of *laissez faire,* explained the need for more regulation:

> "I think the building trade in particular wants [needs] regulating. I know people say, 'We don't need regulating.' You do. If people aren't working in a way that's going to be friendly to the environment, then we need to make sure that they do. We need to have licensed builders with identification somewhere that people can go back and lift up that image of the building trade. Nothing happens voluntarily now. The government can't even regulate themselves voluntarily. Newspapers can't regulate themselves voluntarily. Nobody will do it unless there's a chance they'll lose something. It's only fear that makes people do things. Fear of embarrassment. Fear of losing money. Fear of being shown up. Fear of something. If you say to someone, 'Well, I'll come back in three months and see how you've gone on.' You'd find the same thing going on" (Builder 6, Leeds, 12 staff)

This view of a need for compulsion and close policing to affect change was repeated amongst a number of respondents. However, of key concern to both owner-managers and key informants was the low level of compliance and inadequate enforcement that were felt to be undermining the effectiveness of regulatory drivers. 'Cowboy builders' were considered to be a serious problem in the UK, the numbers of which were reportedly burgeoning at a disturbing rate due to the paucity of enforcement aimed at smaller firms.

> "At the end of the day, unless it's black and white and law, I think that the building industry are going to get away with as much as we can to save time. And it doesn't matter how much impact it's going to have on the environment. We're going to do it" (Builder, London, 85 staff)

Overall, the study found little evidence for a 'business case' for sustainability in the minds of owner-managers, although architects were more receptive to changes. It is evident that changes in the industry would be heavily influenced by regulations rather than by market forces or voluntarism.

The evidence presented may now be set against the propositions. Proposition i) is partially supported. It is shown that the same regulatory regime in which architects and builders operate generates a differential response. Despite the overall conservatism amongst the key agents in the construction industry (architects, builders and clients), architects were more prepared to change their designs and specifications to allow for more sustainable construction. On the other hand, builders were more universal in their resistance to change. It appears that this is related to the emphasis on low costs and speed of build expected of builders. In relation to proposition ii) both architects and builders complained of the growth in regulation supporting this proposition. However, there was some indication that some new regulations – such as the land fill tax - would take time to affect changes in working practices. However, becoming more sustainable entailed costs and currently there were insufficient incentives to do so. This position was reinforced on the grounds of not having a 'level playing field'. In relation to proposition iii) builders tended to be reactive rather than proactive in terms of networking. They were subject to occasional inspections but these appeared to be inconsistent. Architects were more proactive in terms of their engagement with external agencies and were members of a professional body which kept members in touch with dveleopments inb the industry. Turning to proposition iv) learning and innovation was evident amongst a minority of architects although the general view was one of conservatism in the industry. Finally, the evidence lends support for proposition v) to the extent that the effects of environmental regulations on the construction industry have been examined using face-to-face interviews. The interviews have enabled an explanation of the apparent resistance to change amongst builders and reluctance amongst architects. However, the data collected is uneven in terms of the depth and clearly more work needs to be done in this area. What we have been able to show, however, is how a combination of factors militate against change in the industry. The results do show however, that both architects and builders believe that change in practices can occur through regulation and appropriate policing.

Discussion and conclusions

The three studies on which this paper draws were undertaken for different reasons. However, a secondary analysis of the evidence has revealed a number of important issues in relation to the objectives of the paper. Evidence to support all the propositions can be found in across the three studies but no single study here is able to test all the propositions (Table 4). The most common themes to emerge were resistance, reluctant compliance but a diversity of response. Business owners are initially resistant to change but in time the evidence suggested this could alter. This was contingent on the resources of the business and market context. Owner-managers did use external agents for advice and support but this varied across the three studies.

Table 4

Summary of Results Propositions

	Survey 1 Telephone Survey	Survey 2 Mixed method	Survey 3 Face-to Face interviews
Proposition (i)	*Supported* Contingent on interaction of external and internal factors (e.g. business sector composition of labour force	*Supported* Contingent on culture of firm, nature of technology used and organisational characteristic	*Partially supported* Builders almost 'universal' resistance. Architects show reluctance but willingness to engage subject to client agreement
Proposition (ii)	*Partially supported* This is a snap-shot survey and owner-managers were neutral or negative about the effects	*Supported* Evidence showed that interactions with inspectors led to positive outcomes	*Partially supported* Immediate response includes resistance and reluctance. Longer term effects not covered
Proposition (iii)	*Partially supported* Employment regulations stimulated search and engagement with outside agencies	Supported Health and safety regulations led to external engagement with inspectorate	*Partially supported* Division between builders and architects evident. Builders subject to cost pressures, inward looking
Proposition (iv)	*Not supported* Little evidence of learning and innovation found	*Partially supported* Minority of firms classified as 'learners'	*Partially supported* Architects show some learning and limited innovations
Proposition (v)	*Supported* Telephone survey not able to contribute to understanding the process of change resulting from regulation.	*Supported* Case study evidence helps contribute to developing understanding of effects of regulation.	*Supported* Face-to-face interviews with owner-managers and key informants provided useful case material.

Many entrepreneurs have a cultural predisposition of objecting to regulation but as demonstrated, a minority are also prepared to change albeit within their resource constraints and perceptions of what is 'fair' and legitimate. Owner-managers were shown to hold strong views regarding the need for a 'level playing field' – be it in relation to employment rights, health and safety or environmental practices. However, if this playing field was not adequately policed then this would lead to some disaffection and lack of faith in the 'system'.

The results were less definitive in relation to the effects of regulation as a stimulant for management learning and the increased role of external advisers. Whilst this was demonstrated in relation to health and safety issues to different depths, this was less so in relation to employment rights and environmental practices. In the latter case this was most probably a result of the relatively low priority given to the need for changes in relation to environmental practices compared with other more compulsory legislation related to health and safety and building planning issues. Thus, although the evidence showed cases of learning by architects, the links between management learning in small firms and regulation require more investigation.

More significantly, the paper also shows that the generation of knowledge can be strongly influenced by the methodological approach adopted. Whilst quantitative based evidence can map out the general effects of regulation, these approaches have been shown to be inadequate for understanding these effects, particularly when they take time to permeate the business. Hence, this supports the view '….that business behaviour vis-à-vis regulatory law and enforcement is complex and multi-faceted, and not adequately captured by traditional economic models which assume that firms respond only to short-term economic incentives, including predicted costs of detection and punishment' (Gunningham and Kagan, 2005: 217).

This paper has implications for further research. Although it illustrates a variation in the ability to test a series of propositions according to the research method used, a more systematic attempt to compare different methodological approaches on the same topic would provide an important way forward in understanding the effects of regulation. Further, a key deficiency in all these three cases appears to be in relation to understanding the effects of regulation over time. Hence, the paper does help pave the way for other analytical approaches that may subsequently be used to attempt to model the impact of government regulation on small business behaviour and the variety of outcomes this may stimulate. It is suggested that a longitudinal, qualitative methodology would yield significant returns on understanding and modelling these processes and effects. This may involve the employment of an ethnographic approach to tease out the day-to-day effects of regulation as it is introduces and what it means to owner-managers, their strategies and responses.

References

Ambler, T., Chittenden, F. and Obodovski, M. (2004) *Are Regulators Raising Their Game? UK Regulatory Impact Assessments in 2002/3,* British Chambers of Commerce. http://www.chamberonline.co.uk/policy/issues/red_tape/redtape2004.pdf

Beaver, G and Prince, C (2004) 'Management, strategy and policy in the Uk small business sector,: a critical review' *Journal of Small Business and Enterprise Development*, 11, 1, 24-49.

Better Regulation Task Force (BRTF) (1999) *Regulation and Small Firms: Progress Report*, Cabinet Office, London.

Better Regulation Task Force (BRTF) (2000) *Helping Small Firms Cope with Regulation – Exemption and Other Approaches,* www.btrf.gov.uk

Better Regulation Task Force (BRTF) (2003) *Principles of Good Regulation* http://www.brtf.gov.uk/taskforce/reports/PrinciplesLeaflet.pdf

Better Regulation Task Force (2005) *Regulation – Less is More: reducing burdens, improving outcomes.* Cabinet Office, London.

Blackburn, R. and Hart, M. (2002) *Small Firms' Awareness and Knowledge of Individual Employment Rights*, DTI Employment Relations Research Series No. 14, http://www.dti.gov.uk/er/emar/errs14.pdf

Caparellas, J., Mole, K., Greene, F. J. and Storey, D. J. (2005) 'Do More Heavily Regulated Economies Have Poorer Performing New Ventures? Evidence from Britain and Spain.' *CSME Working Paper Series No. 86*, Coventry, University of Warwick.

Carter, S. Mason, C. and Tagg, S. (2006) 'Lifting the Barriers to Growth in UK Small Businesses', The FSB Biennial membership Survey, 2006, *Report to the Federation of Small Businesses*, Knutsford.

Chilton, K.W. and Weidenbaum, M. L. (1982) Government Regulation: The Small Business Burden', *Journal of Small Business Management*, January, 4-10.

Chittenden, F., Kauser, S. and Poutziouris, P. (2003) 'Tax Regulation and Small Business in the USA, UK, Australia and New Zealand', *International Small Business Journal*, 21, 1, 93-115.

Cope, J (2003) 'Entrepreneurial learning and critical reflection: discontinuous events as triggers for high level learning', *Management Learning*, vol 34(4), pp 429-450

Edwards, P., Ram, M. and Black, J. (2003) *The Impact of Employment Legislation on Small Firms: a Case Study Analysis*, DTI Employment Relations Research Series No. 20, London.

Edwards, P., Ram, M. and Black, J. (2004) 'Why Does Employment Legislation Not Damage Small Firms?', *Journal of Law and Society*, 31, 2, 245-265.

Federation of Small Businesses (FSB) (2004a) *Better Regulation: Is it Better for Business?* http://www.fsb.org.uk/policy/assets/0952%20Better%20Regulation.pdf

Gibb, A (2000) 'SME Policy, Academic Research and the Growth of Ignorance: Mythical Concepts, Myths, Assumptions, Rituals and Confusions', *International Small Business Journal*, 18:3, 13-35.

Gunningham, N. and Cagan, R.A. (2005) 'Regulation and Business Behavior', *Law and Policy*, 27, 2, April, 213-218.

Hampton, P. (2005) *Reducing Administrative Burdens: Effective Inspection and Enforcement,* http://www.hm-treasury.gov.uk/media/AAF/00/bud05hampton_641.pdf

Harris, L (2000) 'Employment Regulation and Owner-Managers in Small Firms: Seeking Support and Guidance', *Journal of Small Business and Enterprise Development*, Vol. 7, No. 4, pp. 352-362.

Hart, M and Blackburn, R (2005) Labour Regulation and SMEs: a Challenge to Competitiveness and Employability? In Marlow, S (ed) *Managing Labour in Small Firms*, Routledge, London.

Institute of Chartered Accountants in England and Wales (ICAEW) (2004) *ICAEW Enterprise 2004 Survey: Unlocking the Growth Potential of UK Business*, http://www.icaew.co.uk/viewer/index.cfm?AUB=TB2I_73259

Institute of Directors (2004a) Reg Alert: January 2004, http://www.iod.com/intershoproot/eCS/Store/en/images/IOD_Images/pdf/RegAlertJanuary2004.pdf

Institute of Directors (2004b) The Real Impact of Red Tape: Summary, http://www.iod.com/intershoproot/eCS/Store/en/images/IOD_Images/pdf/TheRealImpactofRedTape.PDF

Keter, V (2004) Small Firms: Red Tape. *House of Commons Library Research Paper 04/52* 28 June 2004

Kitching, J. (2006 forthcoming) 'A burden on business? Reviewing the evidence base on regulation and small business performance', *Environment and Planning C: Policy and Government*, 24,.

McKeiver, C and Gadenne, D (2005) 'Environmental Management Systems in Small and Medium Businesses', *International Small Business Journal*, 23, 5, 513-537.

Mintzberg, H. (1995) 'Strategic Thinking as Seeing', in Garratt, B. (ed) *Developing Strategic Thought*, McGraw Hill, London.

National Audit Office (2006) *Regulatory Impact Assessments and Sustainable Development, Briefing for the Environmental Audit Committee*, National Audit Office, May, London.

NatWest/SERT Quarterly Survey (2004) NatWest Quarterly Survey of Small Businesses in Britain, *NatWest and Small Enterprise Research Team*, Q4, Open University,

Pittaway, L, Robertson, M, Muir, K, Denyer, D and Neely, A (2004) 'Networking and innovation: a systematic review of the evidence, *International Journal of Management Reviews*, 5/6, 2&4, 137-168.

Porter M (1998) *The Competitive Advantage of Nations*, Macmillan Press, London.

Porter, M and Van der Linde, C (1995) 'Green and Competitive, *Harvard Business Review*, Sept-Oct, 120-134.

Ram, M., Edwards, P., Gilman, M., and Arrowsmith, J. (2001) 'The Dynamics of Informality: Employment Relations in Small Firms and the Effects of Regulatory Change, *Work, Employment & Society*, 15, 4, 845-861.

Revell, A and Blackburn, R (2004) *SMEs and Their Response to Environmental Issues in the UK, Occasional Paper,* No 57, Kingston Business School, September.

SBRC (2005) Regulation and Small Firm Performance and Growth, A Review of the Literature, Small Business Service, DTI, London and Sheffield.
http://www.sbs.gov.uk/content/analytical/litreviewsmes.pdf

SBS (2006) Annual Business Survey.

SBS (2005) 'Regulation and Small Firm Performance and Growth: A Review of the Literature', Small Business Research Centre, Kingston University, Small Business Service, London.

Smallbone D, Cumbers A & Leigh R (1996) 'The Single European Market and SMEs in the UK food processing sector', *International Small Business Journal*, 14, 4, 55-71.

Stel, Van A. , Storey, D. and Thurik R. (2006) 'The Effect of Business Regulations on Nascent and Actual Entrepreneurship', *Max Planck Institute of Economics Group, Entrepreneurship, Growth and Public Policy, Discussion Paper 0406*, Jena, Germany.

Vickers, I. James, P., Smallbone, D. and Baldock, R. and Ekanem, I (2003) *Cultural influences on health and safety attitudes and behaviour ion small businesses*, Health and Safety Executive, Research Report 150, HSE, London.

Vickers, I. James, P., Smallbone, D. and Baldock, R. (2005) 'Understanding Small Firm Responses to Regulation: the Case of Workplace Health and Safety', *Policy Studies*, 26, 2, 149-169.

Vickers I, Baldock R., Smallbone D. and James P. (2003) '*Cultural Influences on Health and Safety Attitudes and Behaviour in Small Businesses',* Research Report no 150, Health and Safety Executive, HMSO, Norwich

Whittington, R (1993) *What is Strategy and Does it Matter?* Routledge, London.

World Bank (2006) ‘Doing Business in 2006: Creating Jobs’. World Bank.

Zang, M, Macpherson, A and Jones, O (2006) ‘Conceptualizing the Learning Process in SMEs: Improving Innovation through External Orientation’, *International Small Business Journal,* 23, 3, 299-323.