MARKETS, COMPETITION AND INNOVATION

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Abstract

This paper is concerned with the role of innovation and collaboration in the competitive process. Using evidence from recent CBR surveys it shows that the notion that firms compete in markets where the norm is a large number of customers and competitors misrepresents the competitive process in advanced economies. Additionally, most firms do not compete simply in terms of prices and costs - other factors such as personal attention to client needs, reputation and product quality are more important.

One of the essential ingredients to achieving competitive success is to establish effective collaboration with others - customers, suppliers, higher educations establishments and so on. Such collaboration allows firms to expand their range of expertise, develop specialist products and achieve other corporate objectives. Collaboration is also one of the most important means of fostering innovation and effective competition in international markets. Thus, the fostering of collaborative structures will help create a competitive and successful economy.

Acknowledgements

We are grateful to Eric Wood for advice, particularly regarding the CBR data on which he has worked, to Renee Prendergast for some of the points made in Section 6 (which are developed in more detail in Michie and Prendergast, 1997), and to Keith Cowling, John Grieve Smith, Laurence Harris, Mario Pianta, and Brian Reddaway for helpful comments on an earlier version of this paper.

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1. Introduction

Although the overall growth rate of the UK economy in the 1980s and 1990s was similar to that of the other advanced countries, this is hardly an indicator of success.[1] Output per person is lower for the UK than for any of the other G7 group of countries, and it is also below the OECD average. This output 'gap' indicates a potential for 'catching-up' growth. Lagging countries, such as the UK, could in principle borrow and adopt new technologies and management techniques from leading countries. This should enable lagging countries to achieve superior growth **rates** compared to the leading countries, at least until the output gap is closed. We have argued elsewhere (Kitson and Michie, 1996a, 1996b, 1997) that this failure of the UK to catch up with the other industrialised countries is due in part at least to a failure of economic policy as well as to the debilitating grip of various institutional constraints.

Politicians of all hues pay lip service to the need to create a competitive economy. This is often presented, in Britain at least, as requiring deregulation and the 'freeing up' of markets. Behind such policy proposals often lies a picture of economic processes where firms compete in markets with large numbers of customers and competitors, and where keen prices and low costs are the key determinants of success. This misrepresents the character of the competitive process in most sectors. This paper - using evidence from the recent innovation survey carried out by Cambridge University's ESRC Centre for Business Research (Cosh and Hughes, 1996)[2] - shows that factors such as trust and cooperation can play an important role in competitive success and may actually be undermined by a policy approach which prioritises deregulation.

In the following three sections we report the reality of the competitive process as perceived, at any rate, by those firms responding to the CBR

survey. Section 2 reports on the relatively small number of major competitors which most firms are dealing with - a far cry from a perfectly competitive world of price takers. The role of price competition is considered explicitly in Section 3, as against other forms of (non-price) competition. Section 4 then investigates the role of cooperation and innovation. In considering the theory of market competition, Section 5 argues that the empirical findings of the CBR's work, as discussed in Sections 2-4, actually matches rather well with much political economy literature - albeit at odds with the 'Austrian' theory underpinning UK Government policy under the Thatcher/Major administrations. Finally, Section 6 discusses the policy implications, including the need in Britain for policies to tackle short-termism and boost investment. This would be in start contrast to the market-oriented reforms introduced since 1979 which have discouraged links between investors and firms. More immediately it would contrast with investment in manufacturing - which still dominates world trade - having fallen by eight per cent in 1996 while public investment fell by twenty per cent.

2. The Data

The analysis in this paper is based on surveys carried out by the ESRC Centre for Business Research (CBR) at the University of Cambridge (and its predecessor the Small Business Research Centre)[3]. These surveys were intended to provide a comprehensive picture of British business, considering such factors as competitive structures, employment and skills, innovation, finance and growth.

The first survey was conducted in 1991 and was designed to provide a sample of 2000 independent businesses employing less than 500 workers, equally split between business services and manufacturing. The sampling frame used was the Dun and Bradstreet database (see Bullock, Duncan and Wood (1996) for a discussion of the advantages and disadvantages of this database). Originally, 8050 firms were approached, 1880 were discarded as they were too large, subsidiaries,

had ceased trading, or were otherwise outside the survey's scope. Of the 6170 firms that were surveyed, 2028 returned useable questionnaires, a response rate of 32.9%. The results of this survey (SBRC 1992) provided the first comprehensive analysis of the UK small and medium sized firm (SME) sector since Bolton (1971).

A second survey was conducted in 1993, using a short questionnaire focusing on a few key variables. A third survey was conducted in 1995. It is the results of this third survey, using a questionnaire similar in scale to the first survey, which forms the basis of most the analysis in this paper. Continued monitoring of the respondents to the original survey enabled identification of firms which had failed, or were failing. Of the original 2018 respondents, 436 firms were excluded because of failure or because they were now outside the survey's scope. Of the 1592 firms surveyed, 681 firms returned the full postal questionnaire, and 317 firms completed shorter questionnaires, a total response rate of 62.7%.

In order to draw a comparative picture the respondents' characteristics are analysed according to a variety of categories: two sectors (manufacturing and business services); four size groups based on 1990 employment (micro, 0-9 employees; small, 10-99 employees; medium, 100-199 employees; and larger, 200 employees); three employment growth categories between 1990 and 1995 (stable/declining - zero or negative growth; medium growth - greater than zero but less than 35%; fast growth - over 35%); two innovation categories[4] (based on whether the firm innovated or not during the period 1992-95); and two collaboration categories[5] (based on whether the firm entered into a collaborative arrangement during the period 1992-95).

3. The Competitive Environment

Firms operate in a range of competitive environments. At one extreme firms may compete in atomistic markets, with a large number of customers and competitors, and where competition is driven by price

and cost factors. At the other extreme firms may operate in monopolistic or monopsonistic markets with no effective competitors, or with only one customer. The evidence from the CBR survey indicates that, although firms operate in diverse markets, the norm is for increasingly segmented markets - with firms relying on a few main customers and facing a limited number of competitors.

Table 1 shows that in 1995, 33% of firms relied on just one customer for 25% or more of their sales. The most apparent contrast is by firm size - micro and small firms are more likely to depend on just a few customers for the bulk of their business. Additionally, innovating firms are less likely to be dependent on a single customer than are non-innovating firms; 31% of innovating firms - compared with 38% of non-innovating firms - depend on just one customer to provide 25% or more of their sales. In general, then, most firms have just a few key customers - indicating the importance to these firms of fostering their relations with customer-firms. Furthermore, as shown in Table 2 the majority of firms operate in rather segmented markets - with nearly two thirds of firms having less than 10 serious competitors.[6]

So, for the bulk of British business, the notion that firms are competing with a vast array of other enterprises - like the concept of perfect competition presented in economic textbooks - is a myth. Most firms are operating in segmented and niche markets.

4. How Firms Compete

How firms compete also reveals that any notion that prices and costs are the key to competitive success is at best simplistic. As shown in Table 3 when firms were asked to identify the sources of their competitive advantage the key factors were 'personal attention to client needs', 'reputation', and 'product quality'. 'Cost advantage' was the lowest ranked factor, especially amongst those firms with the fastest rate of growth.

There are large and significant differences in competitive strategy between innovating and non-innovating firms. As shown in Table 3, in 1995 there are statistically significant differences between the two sectors for seven out of the eleven competitiveness factors. The largest differences, in terms of rank as well as scores, were for product design, flair and creativity, product quality, specialised expertise or products, and range of expertise or products; all these factors were more important for innovating firms than they were for non-innovating firms. Further evidence of the differences in competitive factors is provided in Table 4 which shows the percentage of firms rating the factors as 'very significant' or 'crucial'. Innovating firms were far more likely to rank highly such factors as product design, flair and creativity, and specialised expertise or products compared to non-innovating firms.

Overall, innovating firms stress the importance of higher-order qualitative factors which require investment in skills and technical capability. Conversely, in terms of rankings, they put less emphasis on cost and price factors compared with non-innovating firms. These major differences were also evident in an earlier Survey which assessed competitive advantage in 1990 (CBR 1992). This suggests that such differences do not merely reflect the contrast between firms that innovate and those that do not, but they also reflect differences between those firms that **intend** to innovate, or are receptive to such developments, and those that do not or are not.

One of the important ingredients for achieving competitive success appears to be to establish effective collaboration with others - customers, suppliers, higher education establishments and so on. Such collaboration allows firms to expand their range of expertise, develop specialist products, and achieve various other corporate objectives.[7]

5. Collaboration, Innovation, and Corporate Performance

Innovation is a key element in long-term economic growth. And, collaboration is one of the most important means of fostering

innovation - as shown in Figure 1, half of the innovating firms in the CBR survey had entered into collaborative partnerships, whereas only one in six of the non-innovating firms had entered into such arrangements. Also, collaboration is particularly important for firms facing foreign competition; as the process of globalisation continues apace such collaborative behaviour may become more important as domestic firms face stiffer competition in both home and overseas markets.

Figure 2 shows that firms undertake collaboration for a range of reasons. The four most important were to help expand the range of expertise and products, to assist in the development of specialist services and products required by customers, to provide access to UK markets, and to provide access to overseas markets. The process of collaboration allows firms to exploit economies of scale and scope. The reason given for collaboration that has shown the greatest increase since 1990 (from 29% to 38%) is to help keep current customers. This suggests that collaboration may have increased for defensive reasons - perhaps in response to increased domestic and international competition.

Figure 3 shows the reasons for collaboration according to whether firms were innovators or non-innovators. In general, innovating firms are more likely to collaborate for all reasons compared to non-innovating firms. The one exception is to help keep current customers, suggesting that non-innovators are more defensive in regard to maintaining market share. Additionally, and not surprisingly, the reason for collaboration for non-innovators that has shown the greatest fall is the sharing of research and development.

The overall impact of increased innovation and collaboration is improvements in both output and employment growth rates - for individual businesses as well as for the economy as whole.[8] In terms of employment, fast growth firms were almost twice as likely to have collaborated compared to firms with negative or no growth. Figures 4a

and 4b give the distribution of employment growth in firstly, innovating and non-innovating firms and secondly, collaborating and non-collaborating firms; as shown in Figure 4a, innovating firms were far less likely to have zero or negative employment growth than were non-innovating firms. Conversely, innovators were far more likely to have achieved fast growth in employment. Figure 4b indicates a similar picture in the contrast between collaborators and non-collaborators - superior employment growth being shown by the collaborators. Figures 5a and 5b, and 6a and 6b, show that this superior performance of innovating firms and of collaborating firms is also apparent in terms of turnover growth and in terms of the growth of profit margins.[9]

6. The Theory of Market Competition

What might explain these results, of market competition apparently benefiting from cooperation? The issue of whether the competitive environment promotes innovation or cut-throat price cutting has been discussed independently by Lazonick (1991) who argues that the key determinant of whether or not the firm's decision makers choose an innovative strategy is the extent to which 'they control an organisational structure that they believe provides them with the capability of developing productive resources that can overcome the constraints they face' (Lazonick, 1991, p. 328). Such structures include not only the internal organisation of firms themselves and their relationships with the public authorities but also networks of relationships between firms in a particular industry or cluster of industries.[10]

Lazonick's emphasis on the need for control over the requisite organisational structure derives at least in part from his own work as an economic historian, particularly his work relating to the failure of the British cotton industry to innovate in the late nineteenth and the twentieth centuries. Referring to a period of stagnation following the end of the post-World War II boom, Lazonick characterizes the situation in the following terms:

"The fundamental problem was an industry mired in its own highly competitive and vertically specialised structure, lacking any internal forces to set organisational transformation in motion" (Lazonick, 1986, p. 35).

"The vast majority of businesspeople in the cotton industry had neither the incentive to participate nor the ability to lead in the internal restructuring of their industry" (*ibid.*, p. 45). "Given this absence of leadership from within private industry, what was required was the visible hand of co-ordinated control not the invisible hand of the self-regulating market" (Elbaum and Lazonick, 1986, pp. 10-11).

The issue of the relationship between industry structure and the capacity for innovation is a complex one. On the one hand, there is evidence that forms of long-term relationship between independent firms may be superior to vertical integration as a means of co-ordinating the activities required for innovation especially where these activities involve a high degree of technological 'strangeness' (Gomes-Casseres, 1994, p. 63). These new forms of alliance are prevalent in high technology industries and there are indications that they contribute most to innovative performance when they involve a dense network of interpersonal relationships and internal infrastructures that enhance learning, unblock information flows and facilitate coordination by creating trust and by mitigating perceived differences of interest (Porter, 1991, pp. 152-3; Moss Kanter, 1994, p. 97).[11]

These points regarding information flows and so forth were also brought out by Dore (1983) in his discussion of the 'obligated relational contracting' found between Japanese firms. This involves long-term trading relations in which goodwill (with 'give and take') is expected to temper the pursuit of self-interest, although this and other labour market practices have since come under strain, especially following the relatively slow economic growth of the 1980s.[12] In his 1983 article Dore argued that such relations were more common in

Western economies than is generally recognised. While it may be objected that relational contracts lead to price-distortions and hence to a loss of allocative efficiency, they do lead to high levels of other kinds of efficiency. Specifically, 'the relative security of such relations encourages investment in supplying firms', 'the relationships of trust and mutual dependency make for a more rapid flow of information', and 'a by-product of the system is a general emphasis on quality'. This discussion links to a number of classic papers (such as Richardson, 1972, and Mariti and Smiley, 1983), with Dore citing Macaulay's 1962 paper as demonstrating that relational contracting is indeed valued by firms in the USA as well as in Japan.[13]

With these apparent benefits of collaboration, why do not more firms enter into such arrangements? In part the answer may lie in the short-termism that prevails in many firms and industries, and a financial system more geared to quick pay-back periods and a high priority to maintaining dividend payout levels than to long-term investment commitments.[14] In particular, the attempt to squeeze productivity growth out of UK firms during the 1980s and 1990s via the intensification of competitive pressures allied with the opening up of cost-cutting competitive avenues may have had two contradictory effects - firstly, recording what have been interpreted by some as impressive and welcome productivity growth figures (Crafts, 1996; Eltis, 1996) while at the same time undermining the conditions for long-term, sustainable economic development.

7. Policy Implications

The fostering of collaborative structures may be an important element in creating a competitive and successful economy - an economy capable of closing the output gap with its major competitors.[15] This opens up a very different policy agenda than that which was pursued in the UK during the Thatcher and Major Governments of the 1980s and 1990s. Instead of the 'freeing up' of labour and product markets through policies of deregulation and casualisation we need new

industrial, innovation, and macroeconomic policies which will develop new forms of corporate finance and create effective mechanisms of corporate governance; provide a modern productive infrastructure which private firms can utilise, in many cases in a cooperative fashion; ensure a macroeconomic regime conducive to the creation of new industrial capacity, including low interest rates and a competitive exchange rate; ensure the expansion of employment opportunities so that investment in education and training will translate into the increased output levels which in the long run will repay such investments; and promote productive cooperation and industrial innovation. On this last point of promoting innovation, as suggested by Wood (1998), innovation policy could distinguish the different determinants of innovation between types of innovating firm so that the particular policy targets can be more effectively hit.

Notes

1. Particularly given the scale of North Sea oil production and employment, and the contribution made by North Sea oil to Britain's trade account and Government revenues over these decades.

2. See also Wood (1998).

3. See Bullock, Duncan and Wood (1996), and Cosh, Duncan and Hughes (1996) for more detail of the surveys.

4. Firms were classified as innovators or non-innovators on the basis of their answers to the following questions:

   (i) Has your firm introduced any innovations in products (goods or services) or processes during the last three years which were new to your firm?

   (ii) if you introduced a product (process) innovation was it, to the best of your knowledge, already in use in other firms either in (a) your industry or (b) other industries? If you made more than one product innovation please answer with respect to your most important product (process) innovation.

5. Firms were classified as collaborators or non-collaborators on the basis of their answer to the following question: Has your firm in the last three years entered into formal or informal collaborative or partnership arrangements with any other organisations?

6. There is some evidence of fewer competitors in manufacturing than in services, although there is no clear pattern in the differences between innovators and non-innovators, or between collaborators and non-collaborators.

7. This issue of collaboration between firms raises a separate issue not discussed in the current paper, namely the question of when collaboration becomes collusion, and how this is (and should be) handled in the context of competition policy. Oughton and Whittam (1996) contains an interesting discussion of the relation between cooperation between firms on the one hand and competition policy on the other, combined with an analysis of the benefits to be had from reaping internal and external economies of scale. Cooperative external economies of scale enable small and medium sized enterprises to pool fixed costs which can result not only in greater efficiency but also, by overcoming entry barriers, thereby increase competition. Thus public sponsorship of such cooperative industrial activities should not be seen as necessarily at odds with promoting competition. But a failure to appreciate this point could lead to a simple-minded competition policy failing to promote such cooperation - or even outlawing it - thus actually undermining the conditions for healthy competition. On these issues of competition policy, see also Deakin, Goodwin, and Hughes (1997) and Anderman (1997). This discussion also cuts across the distinction that can be made between the different views of the innovation process - and the roles played within this by competition on the one hand, and large firms able to fund R&D on the other - within Schumpeter's Capitalism, Socialism and Democracy (1947) and The Theory of Economic Development (1961), on which see Michie and Prendergast (1997).

8. Note that our data are all for small and medium sized enterprises. There is a mass of evidence to suggest that collaboration between firms of roughly comparable size tends to be of a very different nature from that between large and small firms where the power relations are quite different. We are grateful to Keith Cowling for making this point. See also the discussion by Oliver and Blakeborough (1998).

9. For further discussion of these employment, turnover, and profit data see Cosh, Hughes, and Wood (1996) and Cosh and Hughes (1997).

10. These points are argued in more detail by Michie and Prendergast (1997) on which this section draws.

11. For further discussion of the role of trust see the March 1997 Special Issue of the Cambridge Journal of Economics on Contracts and Competition, and in particular the Introduction by Deakin and Michie and the papers by Arrighetti, Bachmann and Deakin; Lane; and Burchell and Wilkinson. See also Deakin and Michie (1997b), Deakin, Goodwin and Hughes (1997), Michie (1997), and Deakin and Wilkinson (1997).

12. A point taken up by Dore (1998).

13. This literature is discussed in more detail in Buckley and Michie (1996).

14. An additional problem of a principal-agent nature may occur where the financial sector is dealing with networks or other alliances of firms, the legal definition of which may not be entirely clear; we are grateful to Laurence Harris for drawing this point to our attention. The socio-legal context of contracting and some of the implications of this for competitive performance are discussed by Deakin and Michie (1997b).

15. Indeed, when releasing a report in 1997 showing that British firms had reduced spending on innovation in 1996 - at a time when the lifespan of their established products was falling - the UK's Confederation of British Industry warned manufacturers that they would go to the wall unless they invested in developing new products (as reported in the Guardian of 9th June 1997). Interestingly from the point of view of the analysis of the current

paper, this report also indicated that the growth in collaboration between manufacturing companies and academics, universities and consultants had ended; (on the implications of this, see also Wood, 1998).

TABLES AND FIGURES

Table 1 Concentration of sales (% distribution of firms)

% of sales for largest customer	less than 10%	10%-24%	25%-49%	50%-100%	No of firms
Micro	19.7	38.2	29.2	13.0	169
Small	25.8	43.0	20.1	11.2	375
Medium	40.3	32.8	14.9	11.6	65
Large	41.3	34.8	15.2	9.7	44
Manufacturing	26.8	41.2	19.6	12.4	347
Services	26.6	39.5	23.5	10.4	309
Innovators	28.8	40.7	21.8	8.8	441
Non-innovators	21.7	40.1	20.7	17.5	206
All	26.7	40.4	21.4	11.5	656

Source : University of Cambridge, ESRC Centre for Business Research 1995 Survey into Growth, Innovation and Competitive Advantage in Small and Medium Sized Firms.

Table 2 Competitive Structures (% distribution of firms)

Number of serious competitors	All	Manufacturing	Services	Innovators	Non-Innovators	Collaborators	Non-Collaborators
0 (monopoly)	3.3	2.9	3.6	2.5	5.0	2.0	4.3
1-9 (highly segmented)	61.3	69.1	52.4	60.9	63.9	60.5	61.2
10-49 (partially segmented)	27.3	23.6	31.5	29.3	20.6	29.0	26.3
50-99 (partially atomistic)	2.6	1.2	4.3	2.5	3.0	3.6	2.1
100 + (highly atomistic)	5.5	3.3	8.2	4.8	7.5	4.8	6.2

Source : University of Cambridge, ESRC Centre for Business Research 1995 Survey into Growth, Innovation and Competitive Advantage in Small and Medium Sized Firms.

Table 3 Assessment of key factors which contribute to competitive advantage

	All		Average Score and Ranking Manufacturing		Services		Innovators		Non-innovators		Stable/ Declining		Medium Growth		Fast growth	
	Score	Rank	Score	Rank	Score	Rank	Score	Rank	Score	Rank	Score	Rank	Score	Rank	Score	Rank
Personal attention to client needs	4.4	1	4.3 **	1	4.6 **	1	4.4	1	4.5	1	4.5	1	4.4	1	4.4	1
Established reputation	4.2	2	4.1 *	3	4.2 *	2	4.2	=2	4.2	2	4.2	2	4.1	3	4.1	=3
Product quality	4.1	3	4.2 **	2	4.0 **	4	4.2 **	=2	3.9 **	4	4.1	3	4.3	2	4.2	2
Speed of service	4.0	4	4.0	4	3.9	5	3.9 *	5	4.1 *	3	4.0	4	4.0	4	3.9	5
Specialised expertise or products	3.9	5	3.8 **	5	4.1 **	3	4.0 **	4	3.7 **	5	3.9	5	3.9	5	4.1	=3
Range of expertise or products	3.6	6	3.5	=6	3.6	7	3.7 **	6	3.4 **	7	3.6	6	3.5	6	3.7	6
Price	3.4	=7	3.5 **	=6	3.2**	=9	3.3 **	9	3.5 **	6	3.4 *	7	3.4 *	7	3.2 *	=8
Flair and creativity	3.4	=7	3.0 **	10	3.7 **	6	3.5 **	7	3.0 **	9	3.2 **	=8	3.3 **	8	3.6 **	7
Product design	3.2	9	3.2	8	3.2	=9	3.4 **	8	2.7 **	11	3.2	=8	3.2	=9	3.3	10
Marketing	3.1	10	2.9 **	11	3.3 **	8	3.2 **	10	2.9 **	10	3.0	=10	3.2	=9	3.2	=8
Cost advantage	3.0	11	3.1 **	9	2.9 **	11	3.0	11	3.1	8	3.0	=10	3.1	11	2.9	11
Range (highest score - lowest score)	1.4		1.4		1.7		1.4		1.8		1.5		1.3		1.5	
Total responses (No)	652		350		302		208		437		341		140		157	

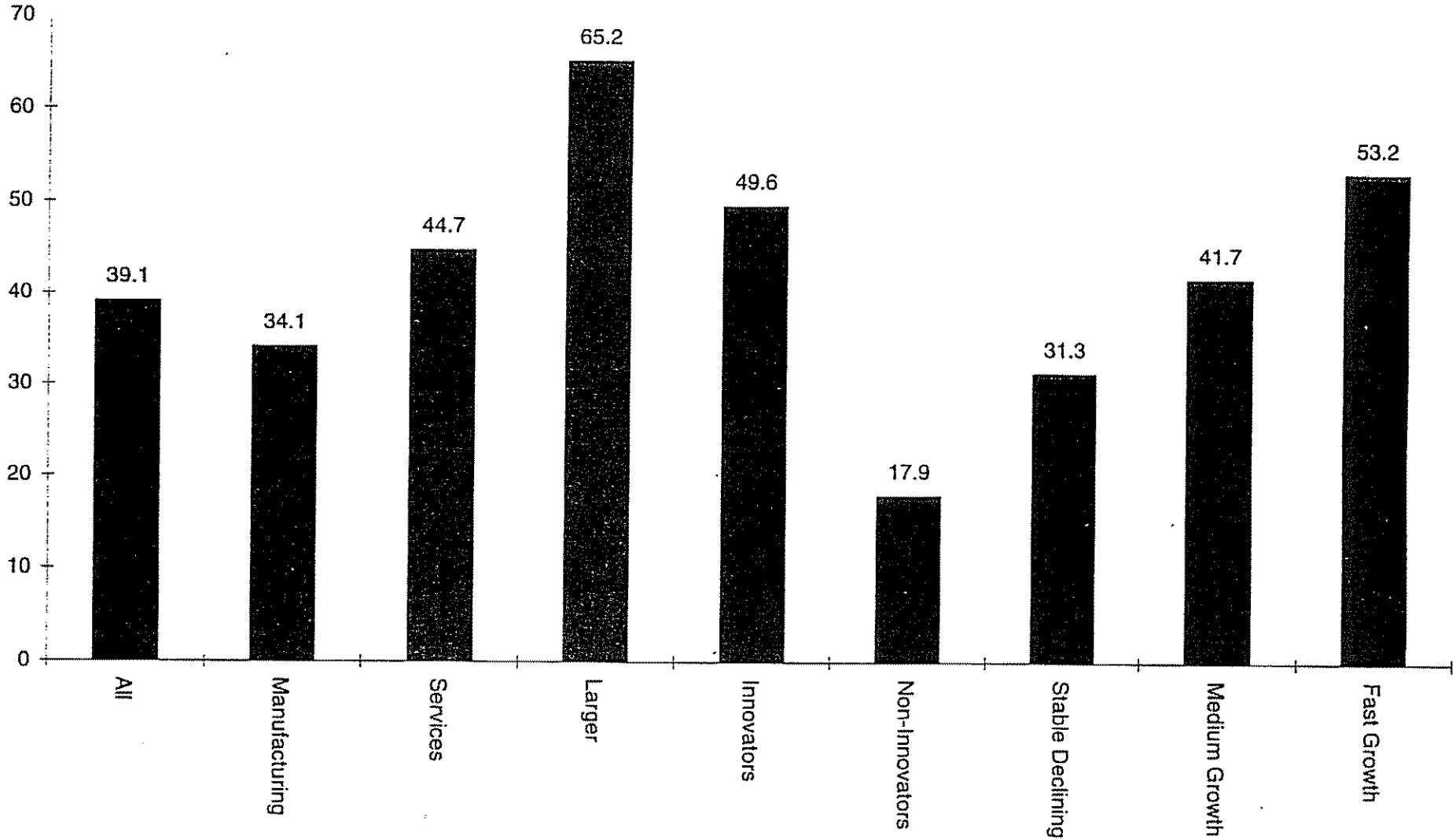
Source : University of Cambridge, ESRC Centre for Business Research 1995 Survey into Growth, Innovation and Competitive Advantage in Small and Medium Sized Firms.

Table 4 Competitive Advantage: Factors rated very significant or crucial (% of respondents)

	All	Innovators	Non-Innovators	Collaborators	Non-Collaborators
Personal Attention to client needs	90.1	88.9	93.2	87.4	91.9
Product Quality	85.2	87.6	78.9	87.0	83.7
Established Reputation	83.4	82.7	84.9	82.2	83.9
Specialised expertise or Products	75.2	79.1	67.5	80.5	71.7
Speed of service	75.2	73.5	79.9	66.0	81.8
Range of expertise or products	60.9	64.2	54.3	62.6	59.4
Price	46.8	43.6	53.3	37.8	53.0
Flare and creativity	50.1	55.1	39.5	55.4	45.8
Product Design	51.8	57.5	35.7	58.0	47.0
Marketing	38.5	41.0	33.8	45.1	34.6
Cost Advantage	34.3	33.8	34.9	26.9	38.9

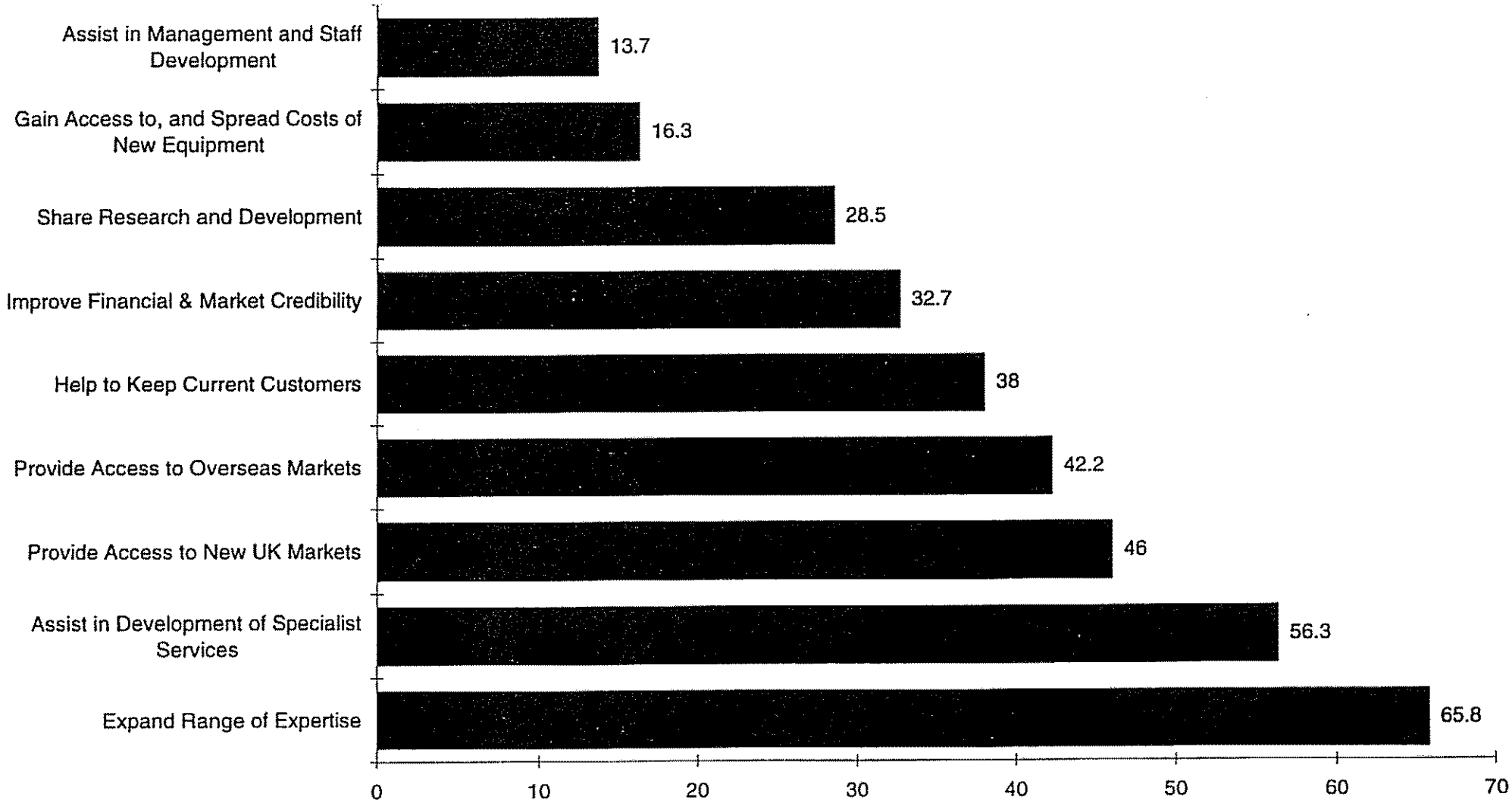
Source : University of Cambridge, ESRC Centre for Business Research 1995 Survey into Growth, Innovation and Competitive Advantage in Small and Medium Sized Firms.

Figure 1 : Percentage of firms entering into formal or informal collaborative partnerships



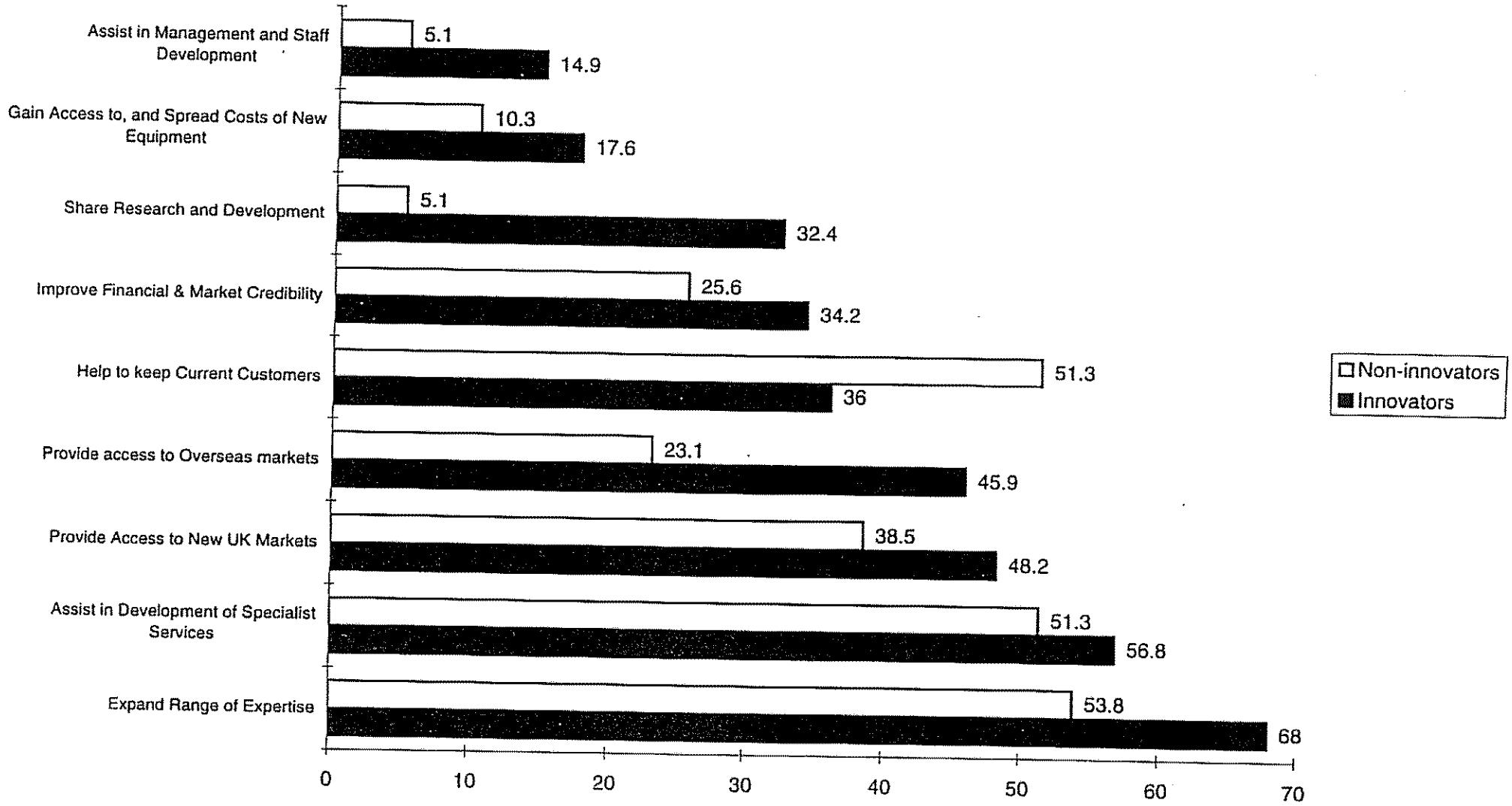
Source : University of Cambridge, ESRC Centre for Business Research 1995 Survey into Growth, Innovation and Competitive Advantage in Small and Medium Sized Firms

Figure 2 : Reasons for collaboration (% of collaborating firms giving these reasons)



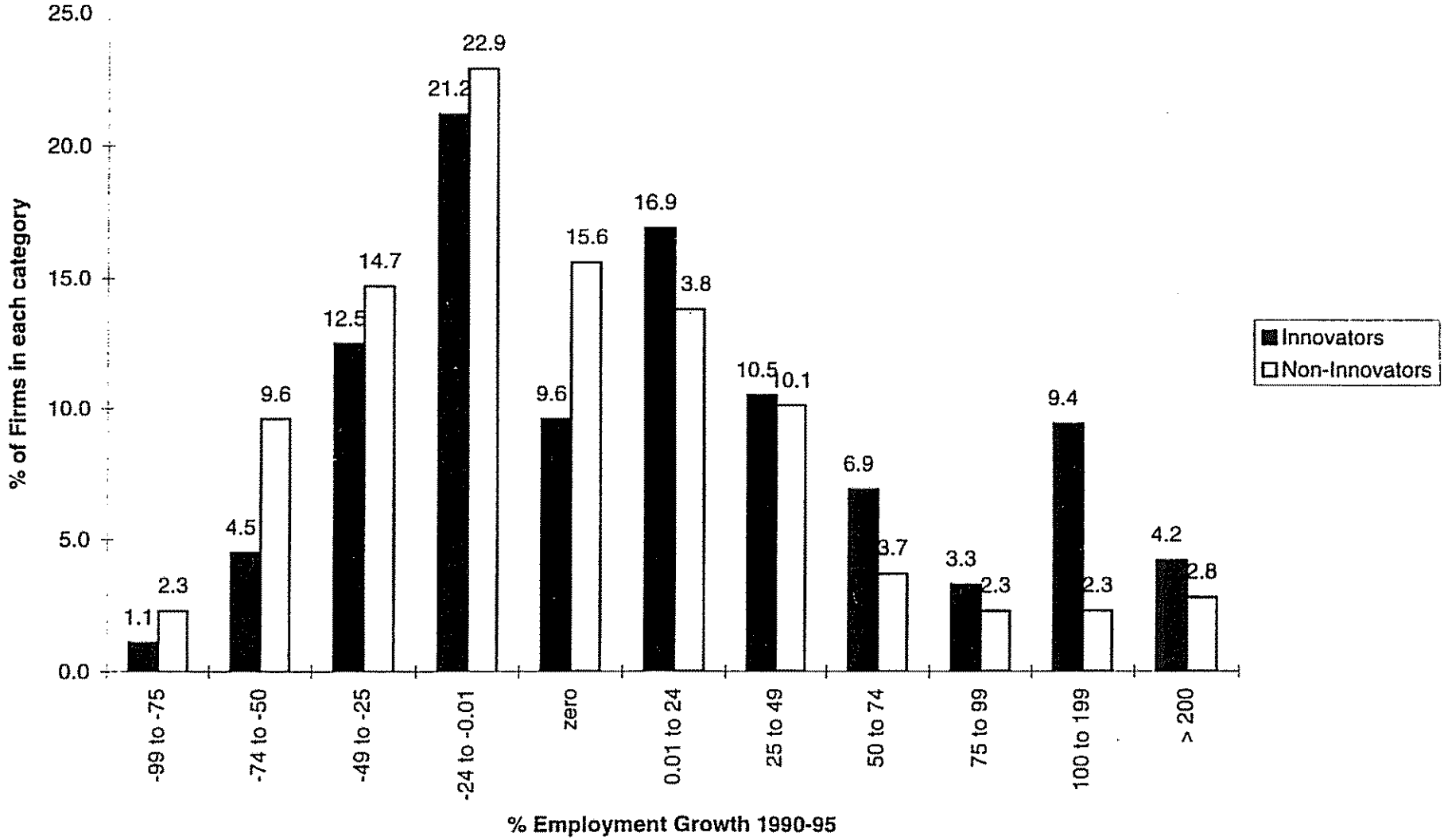
Source : University of Cambridge, ESRC Centre for Business Research 1995 Survey into Growth, Innovation and Competitive Advantage in Small and Medium Sized Firms.

Figure 3 : Reasons for Collaboration, Innovators and Non-innovators



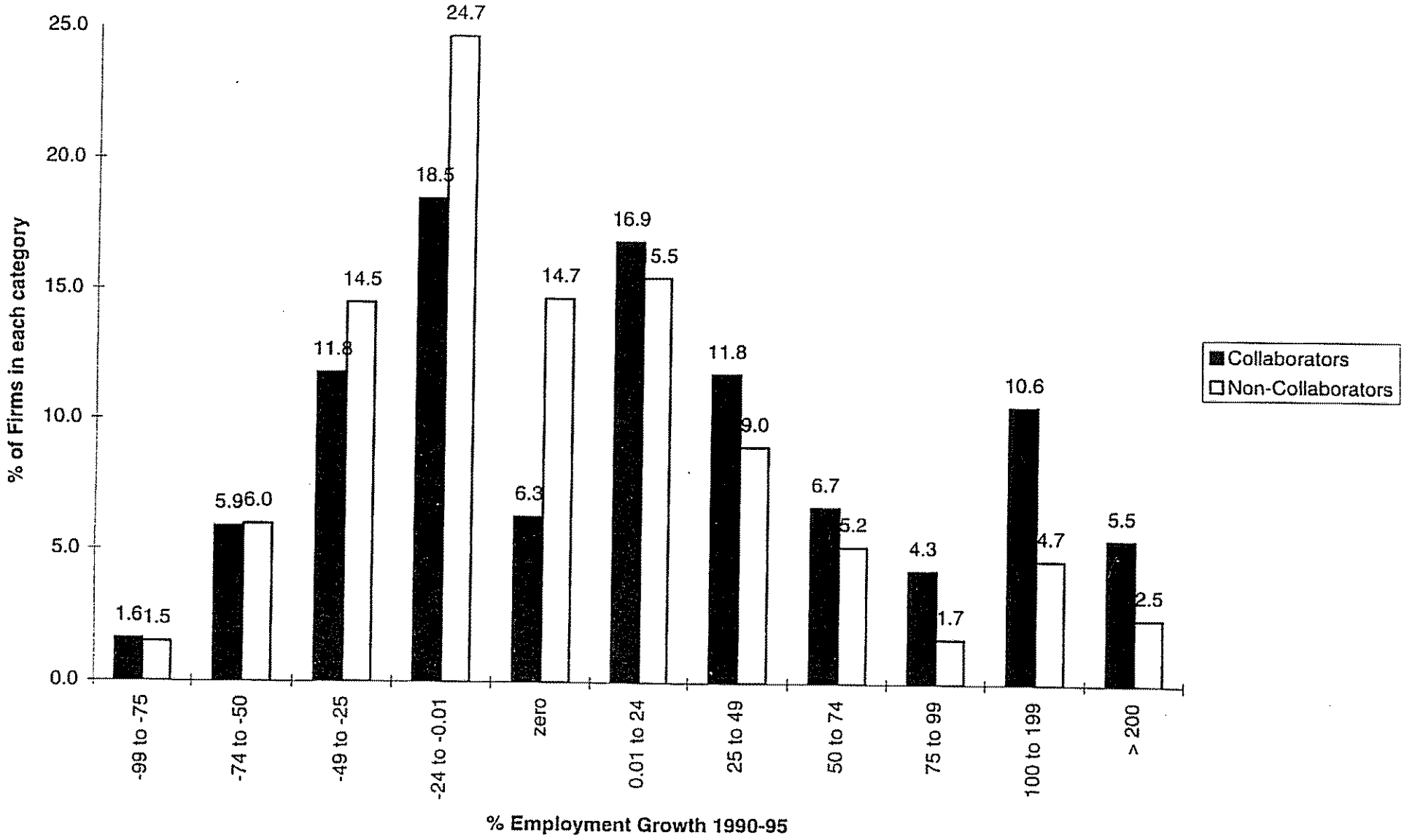
Source : University of Cambridge, ESRC Centre for Business Research 1995 Survey into Growth, Innovation and Competitive Advantage in Small and Medium Sized Firms

Figure 4a Employment Growth 1990-95



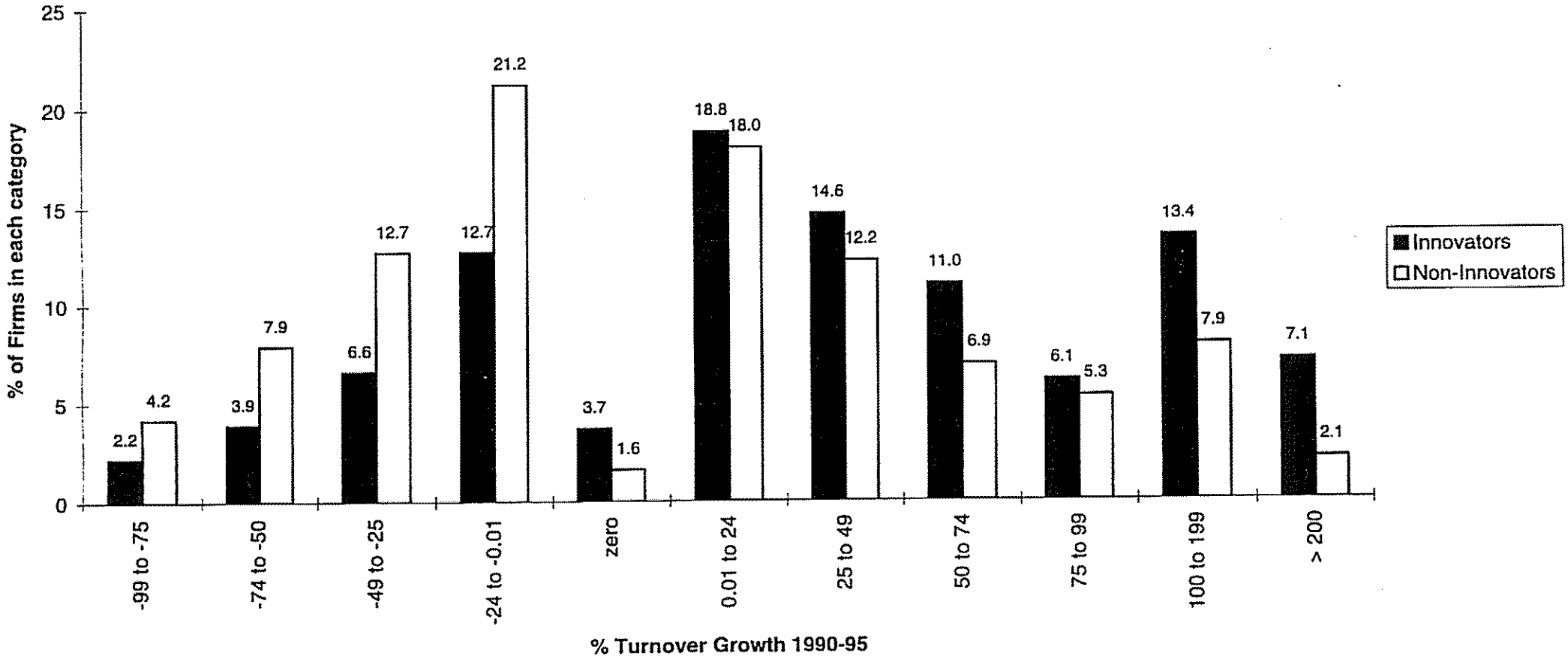
Source : University of Cambridge, ESRC Centre for Business Research 1995 Survey into Growth, Innovation and Competitive Advantage in Small and Medium Sized Firms

Figure 4b Employment Growth 1990-95



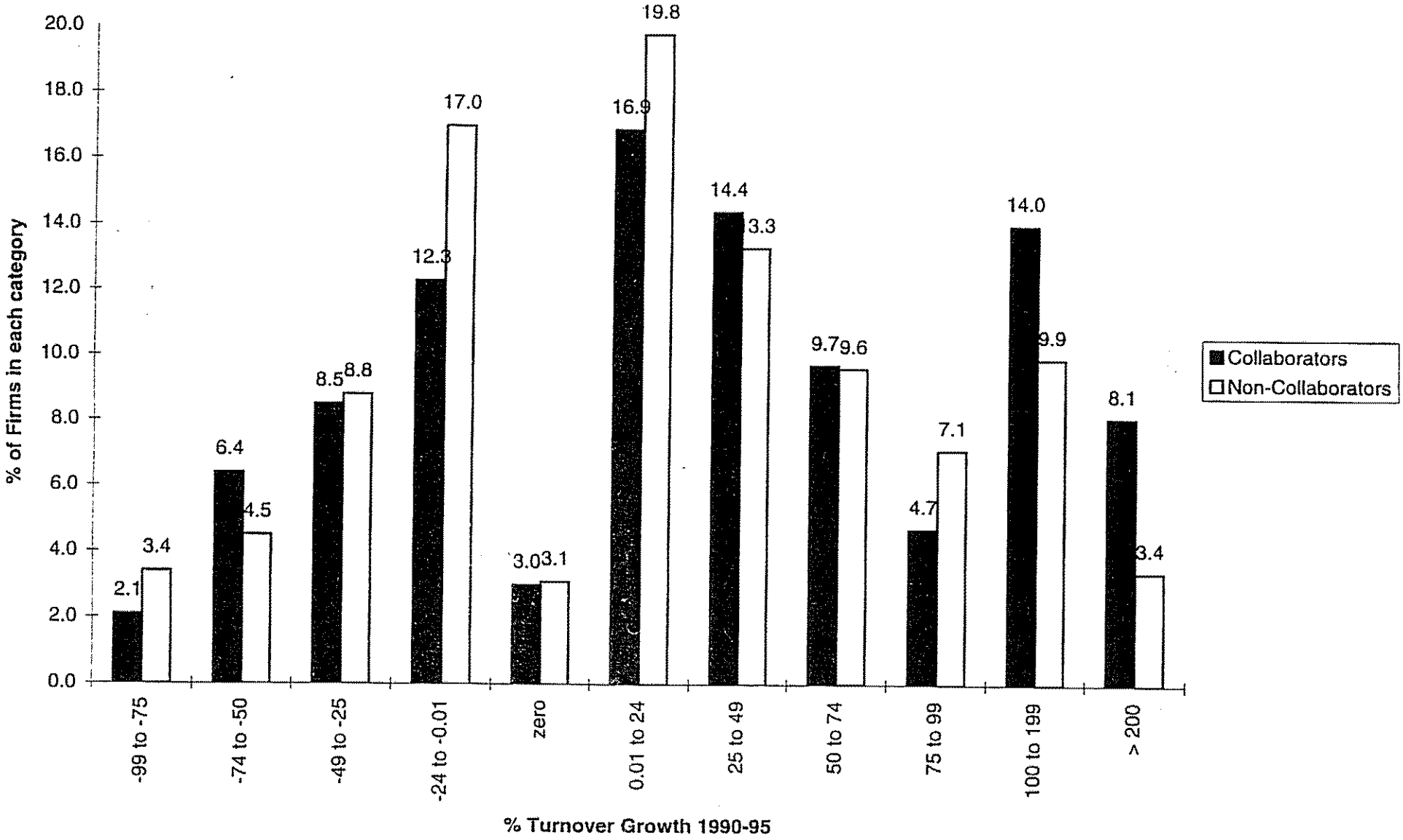
Source : University of Cambridge, ESRC Centre for Business Research 1995 Survey into Growth, Innovation and Competitive Advantage in Small and Medium Sized Firms

Figure 5a Turnover Growth 1990-95



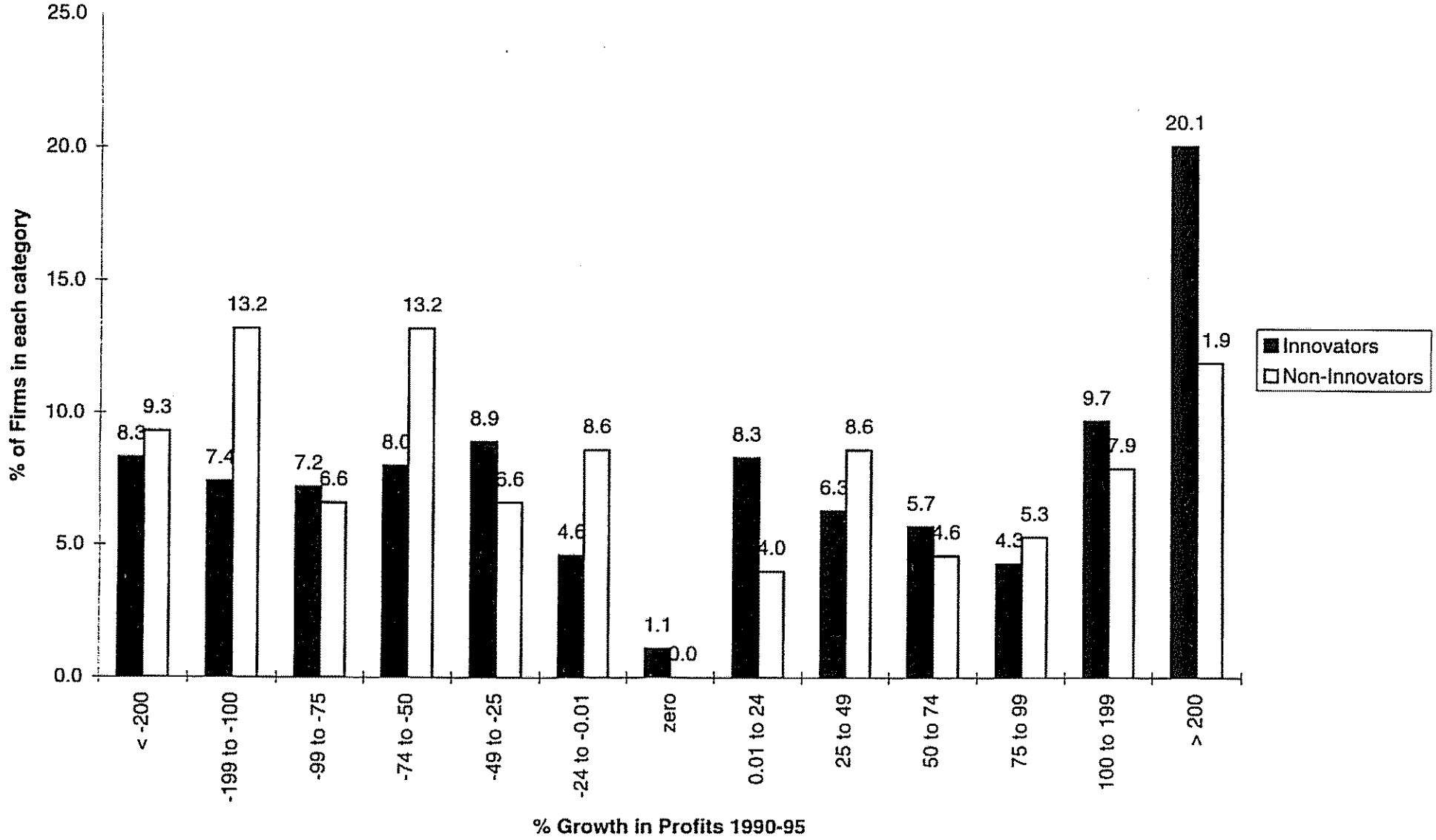
Source : University of Cambridge, ESRC Centre for Business Research 1995 Survey into Growth, Innovation and Competitive Advantage in Small and Medium Sized Firms

Figure 5b Turnover Growth 1990-95



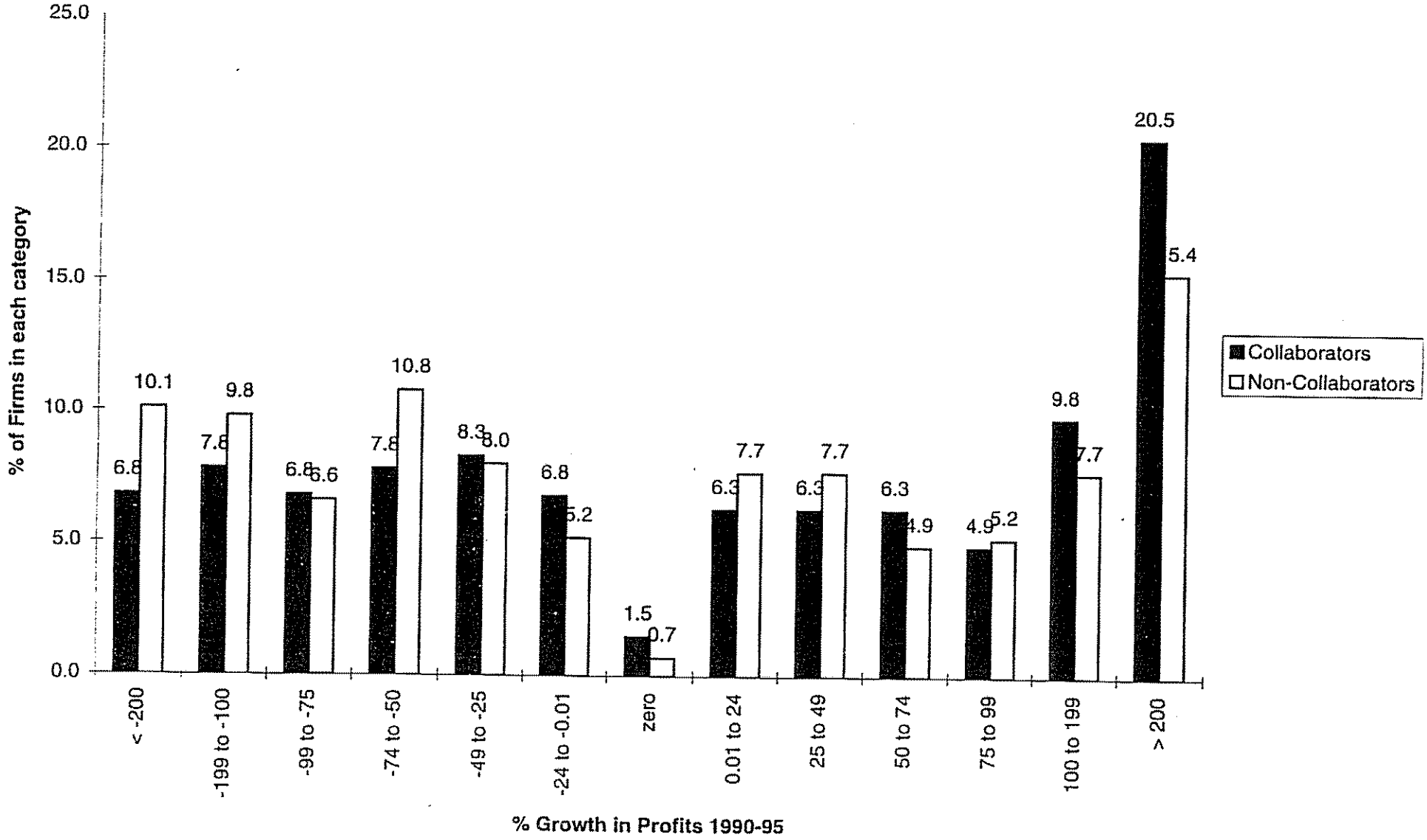
Source : University of Cambridge, ESRC Centre for Business Research 1995 Survey into Growth, Innovation and Competitive Advantage in Small and Medium Sized Firms

Figure 6a Growth in Profits 1990-95



Source : University of Cambridge, ESRC Centre for Business Research 1995 Survey into Growth, Innovation and Competitive Advantage in Small and Medium Sized Firms

Figure 6b Growth in Profits 1990-95



Source : University of Cambridge, ESRC Centre for Business Research 1995 Survey into Growth, Innovation and Competitive Advantage in Small and Medium Sized Firms

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