

Innovation and the credit crunch



Innovative small and medium-sized enterprises (SMEs) are of great importance to the economy overall. How are they faring in a climate of reduced demand for goods and services and retreat from risk by credit providers. By **Andy Cosh**

How are innovative small and medium-sized firms coping during the prolonged downturn? Anecdotes abound but good evidence is hard to find, but two studies from the ESRC's UK Innovation Research Centre provide important insights. The first study at the start of the current recession found that the retreat from risk that accompanied the credit crunch created difficulties for innovative firms, but they may be showing more resilience than in the past. The second study about smaller companies' open innovation practices suggests that smaller firms may benefit from openness, but cautions SMEs about some drawbacks.

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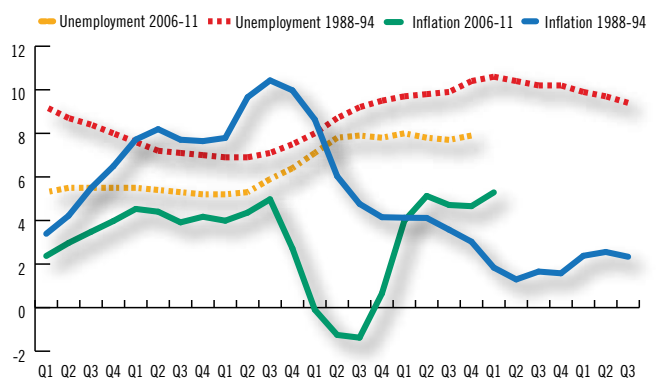
The first study, SME finance and innovation in the current economic crisis (www.ukirc.ac.uk/object/rproject/3286/doc/CrCr_EconCrisis.pdf), returned in November 2008 to a panel of firms previously surveyed in 2004 so that direct comparisons could be made with their situation prior to the credit crunch. Although the recession was initiated by a credit crisis, the firms had become much more concerned about demand for their goods and services – 81 per cent of them saw this as a significant or crucial constraint compared with 63 per cent in 2004. Consistent with this, the proportion seeking to grow over the following three years fell from 80 per cent to 59 per cent.

Finance was also a problem for those seeking to raise funds, but the proportion of firms seeking new finance in the previous year fell from 35 per cent in 2004 to only 16 per cent in 2008. Despite this reduction in funds sought, the average percentage obtained fell from 78 per cent to 55 per cent.

The report also compared the recession that started to bite at the end of 1990 with the recent recession that took hold in the second half of 2008. The figure above right compares 1988-94, including the period before and after the recession, with what has happened in the period surrounding the credit crunch recession. It shows some key differences. For example, in the earlier recession inflation was initially at a much higher level but then fell over an extended time; but in the present recession, the initial drop in inflation was rapidly

followed by a rise to an uncomfortable level where it has stayed. On the brighter side, the level of unemployment has not, so far at least, risen for as long, or by as much, as it did in the early 1990s.

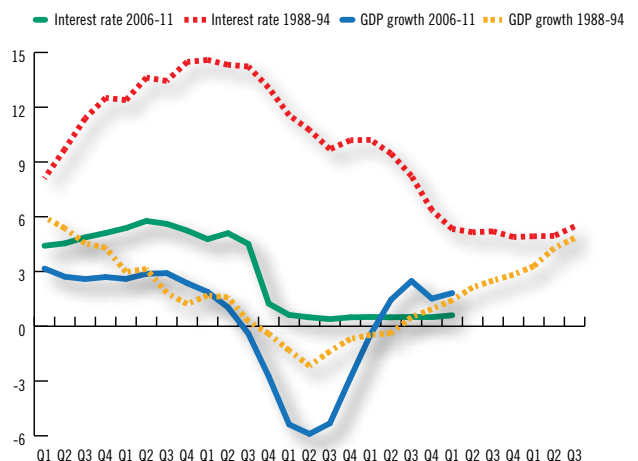
Comparison of present recession with 1988-1994 - inflation and unemployment



The figure below examines GDP growth and interest rates for the same periods. Interest rates were much higher in the earlier period than were found leading up to the credit crunch. In both periods rates fell during the recession, but to unprecedentedly low levels in 2009. This interest rate that measures the cost of short-term borrowing by the government should not be confused with what SMEs have to pay when margins are added.

The picture for growth is also different since the recent recession was more abrupt in its impact. Economic output fell more dramatically in 2009 than occurred in 1991, but has also recovered more sharply. However, there is some evidence that it has stalled recently.

Comparison of present recession with 1988-1994 - GDP growth and interest rate



So how have SMEs faced this recession compared with in the early nineties? We can say that they were more concerned this time about demand constraints than about the cost and availability of finance; and this is consistent with the larger fall in GDP and the lower level of interest rates. In 2008 only 16 per cent were seeking finance compared with 22 per cent at the same stage of the 1991 recession. Growth ambitions were also lower despite the quicker initial recovery this time round. We hope to return to this panel of firms in the coming months to discover how their performance and prospects have changed since 2008.

The reaction of finance providers to the credit crunch was to retreat from risk, or to price risk more highly in their offerings. The UK-IRC report shows that this was potentially damaging to the type of firm of great importance to the economy overall – the innovative SME. The report finds that they not only found it harder to raise overdrafts and commercial loans, but were also more likely to have faced a rise in the cost of finance relative to non-innovative firms. The impact of these changes on their innovative performance has yet to be assessed, but the findings give some cause for concern.

One cause for optimism is that there is some evidence that SMEs may be more resilient than in the past. The Centre for Business Research has been tracking UK SMEs over the past 20 years. They find that the proportion of start-ups that are de novo (and potentially less experienced) has fallen from 68 per cent in 1991 to 51 per cent in 2004. Business planning and the use of other management tools amongst SMEs has also increased. This may also account for some of the observed rise in business survival rates prior to the current recession. Whether improved skills and experience are sufficient to leave a thriving SME sector when the economy recovers is not yet known.

How can innovative SMEs respond to the problems resulting from the credit crunch recession? The second study from the UK-IRC, Open Innovation Choices – what is British Enterprise doing? (www.cbr.cam.ac.uk/pdf/OI_Report.pdf) may provide some clues. The term ‘open innovation’ was coined in 2003 by Henry Chesbrough, an economics professor at the University of California, Berkeley. It encompasses those activities that involve the exchange of knowledge and technology between the firm and the outside world designed to enhance the firm’s innovation. The UK-IRC report divides these activities into hunting, cultivating and exploiting.

Hunting activities involve the search for knowledge outside the firm through engagement with customers and suppliers, the research base, consultants and public information sources. Cultivating activities take place through informal and formal collaborations and partnering with

other firms and organisations. Exploitation results not only from bringing innovative products and services to market, but also through external transfers of knowledge and technology through licensing, spin-outs and exchange activities.

The report finds that these practices are not the preserve of large businesses; many SMEs have active Open Innovation (OI) practices. Hunting activities are widespread with similar proportions of larger and smaller firms involved with each source. Cultivating activities are less common and the smaller the firm, the less likely it is to be involved. External transfer activities were carried out by similar proportions of firms in each size group, but smaller firms were more likely to have done this free of charge. The latter were also less likely to use both legal and strategic methods to protect their innovations.

The companies are categorised into three OI types:

- Traditional
 - These firms had made no external transfers and had low searching activities and little formal collaboration;
- Hunting-cultivating
 - These firms had made no external transfers but were active in their searching and collaborative activities.
- Ambidextrous
 - These firms had made external transfers, but were also engaged in hunting-cultivating.

The study finds significant benefits from openness in terms of both innovation and growth.

There are reasons for SMEs to be cautious and to not think that openness provides a quick-fix for their current needs. First, there are many different approaches to being open, so the selection of the right strategy to suite the firm’s particular needs is vital. Second, to be effective openness requires the necessary internal skills and attitudes to leverage the potential benefits. Third, the relationship between SMEs and larger businesses requires careful management. The report provides some evidence that openness is not necessarily providing an equality of benefit.

This suggests that SMEs need to continue to develop their managerial skills, as they have done over the past 20 years, and learn how to leverage the external environment in their innovation process. Success in this area will leave SMEs in a stronger position as the economy recovers. ■

i *British Enterprise: thriving or surviving?* Andy Cosh and Alan Hughes, Centre for Business Research (2006)
Business demography 2009: Enterprise births, deaths and survival. Office for National Statistics (2010)
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