

**The Use of Intellectual Property Protection amongst Innovators in the UK:  
Evidence from the UK-CIS3**

**Dr. Silvia MASSINI, Dr. Bruce TETHER**

Contact : Silvia.Massini@umist.ac.uk

This paper examines empirically the use of eight forms of intellectual property protection by firms that innovated (i.e., introduced new products or processes) in the UK between 1998 and 2000. The eight different forms of IP protections considered are: 1. Patents; 2. Registered Designs; 3. Trademarks; 4. Copyrights; 5. Confidentiality Agreements; 6. Secrecy; 7. Complexity of designs; and 8. Lead time advantages. The first four of these can be labelled 'formal, institutional protection', the latter four strategic protection (Confidentiality agreements arguably fit between these two categories).

In 2001, the UK version of the third European Community Innovation Survey (CIS-3) gathered responses from over 8,000 enterprises active in the UK. The enterprises were active in a wide variety of manufacturing sectors, in construction and utilities, in business and certain trade services, and in communications. They also range enormously in size, from those with 20 employees to those with many thousands. Of the total sample, a sub-sample of around 2,500 enterprises had successfully introduced new product or process innovations (which were at least new to the enterprises themselves). For all eight of these types of protection outlined above, the survey asked the enterprises to indicate whether or not they used the mechanisms, and if they did use it, to grade its importance as of 'low', 'medium' or 'high importance'.

Our initial analysis shows that the 'strategic forms' of IP protection were much more widely used than the 'formal, institutional forms'; moreover, the great majority of firms that did use the 'formal, institutional forms' used these in conjunction with the 'strategic forms'. Simply put, amongst firms that used IP protection, the 'formal, institutional forms' were complements but not substitutes for the 'strategic forms'. Meanwhile, a substantial minority (about a quarter) of the firms did not bother with any forms of IP protection.

We explore the use of these forms of IP protection in industry and services further. After briefly outlining the nature of the protection provided (which is necessary to set the context for the analysis), we examine the extent to which different types of firms used these forms of IP protection. Amongst the characteristics examined are structural factors such as the size and industrial sector of the enterprises, but beyond this we can also examine strategic factors such as the extent to which firms committed human and financial resources to innovation (e.g., R&D employment; expenditures on R&D), and the nature of the innovations introduced (new to the world or new to the firm; product innovation or process innovation), and the extent to which the firm is internationalised. We examine these matters through the use of (ordinal) logistic regressions. Finally, we use the survey to investigate, at the industry level, whether there is any link between the use or non-use of IP protection and the extent of the perceived barriers to innovation in the different industries. Here, the barriers to innovation included the perceived economic risk of innovation, which relates (at least in part) to weak IP protection.

All told, we suggest this paper would provide an interesting contribution to the conference because it draws on a large-scale survey including a wide diversity of industrial sectors and investigates both a number of formal and strategic forms of IP protection (rather than just patents). This provides valuable information, at very least to contextualise the issues in relation to IP and innovation in industry (including services).