

PROTECTING INNOVATION THROUGH TRADE SECRETS AND PATENTS: DETERMINANTS FOR EUROPEAN UNION FIRMS

EXECUTIVE SUMMARY



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Despite their economic importance, and in particular their role in protecting returns from innovation, trade secrets are poorly studied and their relationship with patents is often misinterpreted. This study tries to shed light on the subject based on representative firm-level data from the Community Innovation Survey (CIS), covering almost 200 000 firms operating across manufacturing and service industries in Europe.

In a study carried out in collaboration with the Centre for European Economic Research in Mannheim (ZEW) in 2016, the EUIPO, through the Observatory, examined the determinants and performance impacts of protecting innovation through the use of patents and trade secrets by German firms. Particular attention was paid to the interaction of patenting and secrecy and to the performance impacts of the chosen protection strategy, not only on the level of the firm but also on the level of the individual innovation¹.

Building on this work, the EUIPO, through the Observatory, is now seeking to enhance its understanding of the role and contribution of trade secrets within the IP portfolio of firms at the European Union level.

Starting from propositions of theoretical models on the interaction between patenting and secrecy, a number of factors are investigated that are thought to influence the use of the two protection mechanisms. Particular emphasis is placed on preferences for either patents or secrecy, and the factors affecting the choice of a protection strategy. While previous analyses have often treated the two as substitutes, this study emphasises the complementary role of the two protection methods.

The main findings that emerge from the analysis are as follows.

1. Innovating firms often use both patents and trade secrets to protect their innovations.
2. The use of trade secrets for protecting innovations is higher than the use of patents by most types of companies, in most economic sectors and in all Member States².
3. Both trade secrets and patents are likely to be used in companies with internal R&D, with high innovation expenditure and when the innovation is new to the market. Trade secrets are preferred in innovation new only to the firm.
4. Patents are more likely to be used (alone or in combination with trade secrets), when the innovative product is a physical good rather than a service.
5. Trade secrets (often without patents) are more likely to be used for process innovation and for innovations in services.
6. Trade secrets (alone or in combination with patents) are likely to be used for maintaining or increasing the competitiveness of innovations introduced by companies involved in open innovation practices such as research cooperation, especially with distant (non-European) partners.

¹ Data on individual innovations was only available in the German CIS. For the present study based on data from all EU Member States, all analyses refer to the level of the firm.

² This study is based on data for 24 Member States. The Czech Republic, Denmark, France and Spain did not include the questions about trade secret use in their versions of the CIS.

7. There is a propensity to favour trade secrets over patents in markets with strong price competition. There is a propensity to use both trade secrets and patents in markets with strong quality competition. This is related to finding 5 above. Strong price competition is typical of commodity-type markets, where opportunities for product differentiation /innovation are scant, and margins may be enhanced with cost/process innovation.

It should be noted that as with all econometric analyses of this type, a caveat must be made in respect of the interpretation of the findings. The results in this study uncover relationships between certain characteristics of the companies and the markets in which they operate and their choice of protection strategy. However, this should not be construed as conclusive proof of cause-and-effect relationships. More in-depth research and better data are required to more clearly identify the causal factors.

Nevertheless, the results of this study hopefully will provide a basis for policy-makers to further develop policies in this area following the adoption of the Trade Secrets Directive in 2016.