Characteristics of IP policies relative to other innovation policies

IP policies are a type of policy tool within the set of alternative and complementary innovation policies (see overview of instruments for innovation in public policy and governance module). It is important to emphasise their key characteristics to better understand how they can best serve in support of innovation.

What are key characteristics of IP policies?

The impact of innovation policies differs along various dimensions such as the target group, type of innovation supported, nature of funding, among others. This is not only due to their explicit design but also because their impacts can be different in different contexts (e.g. sectoral differences in the use of IP imply that different sectoral strengths across countries will impact on the role IP policy will play).

The following are key characteristics for the case of patent systems as well as, in most cases, for other types of IP (Guellec and van Pottelsberghe, 2007).

Customers provide inventor funding

Funding for the inventor is provided by customers, not by government resources. The fact that the reward is not paid by taxpayers money allows the IP system to operate at a much larger scale than most other types of innovation policies. R&D tax credits and policies aimed at generating adequate framework conditions such as competition policy are similar in that respect. However, an important caveat to this statement is the fact that the IP system will not be equally accessible to all users, particularly small entities. This might bias the support for innovation provided by the IP system, unless, as discussed in the previous section, it is done in conjunction with complementary policies. These policies, however, involve frequently public funding and thus cannot operate at as large a scale as the IP system.

Value of invention provides funding

Funding for the inventor is provided ex post for the value of the invention rather than upfront to cover the costs of the invention. With patents, the funding that accrues to the inventor is closely related to the value of the invention. The volume of sales and willingness of customers to pay a higher price is the “patent premium”. A patent gives its holder the right to market exclusively, although customers retain a strong influence and competition still prevails.

Only by convincing customers and outperforming competitors can the patent holder realise gains to their title. Thus, the rewards are decided for on markets. The same principle applies for all other types of IP. However, inventors still face a series of risks, including market and technological risks that might compromise their incentives to innovate—and might even challenge their survival—which IP systems do not address. Moreover, lack of access to finance for viable innovation investments substantially constrains the extent to which a wider set of actors are incentivised. This is even more challenging in development contexts, given the well-known shortage of access to sources of finance.

Policies reward commercialization

It is applied research that will mostly be supported by the IP system which rewards commercialisation. One of the criteria for patent grants is industrial applicability, thus, complementary policies will be needed to support more basic research. In addition, because successful commercialisation leads to rewards, the IP system should provide businesses with incentives to develop innovations rather than simply develop inventions. This recommendation also holds for other types of IP, but it will only be the case if market conditions allow for fair competition among firms, if the IP system provides for legal quality and if, in the case of universities and public research institutes, conditions for the commercialisation of IP are provided.

Private decisions on economic and technical issues

Economic and technical decisions are taken by companies or research institutions and not by governments. Local or state authorities might not be in the best position to decide optimally on how to go about generating inventions. If the inventor can obtain returns from IP, then incentives should be set so that inventors will optimise investments. From that perspective, such a system can enhance efficiency and reduce costly control mechanisms for other types of initiatives. However, this is based on the assumption that companies are well equipped to take those decisions and face an environment allowing them to operate optimally.

IP instruments have exclusionary effects

Patents and other types of IP have exclusionary effects. The potential return on patents comes at no small price: the cost of access to the innovation goes up because of the need to privatize the invention. The exclusionary effect is highest for those at the lower end. This dilemma raises issues of inequalities for end users and for businesses. With highly unequal business structures, gaps in industrial performance may be pushed wider apart. The exclusionary effect can also perpetuate inequalities in opportunities and welfare. The factors that will be critical are measures that help ensure a level-playing field not only in principle but also in practice (implying that also unfavourable conditions are adjusted). This challenge also arises for most other types of IP including design right, copyright and PVP.

Detriments of prize-type incentive system

The prize-type incentive system provided by patents has mixed effects. On the positive side, the competitive element of patents□the inventor who files first gets the reward□ can be positive in speeding up invention processes. However this system comes at a cost—namely “patent wars”. Competitors may over-invest in research activities to collect the entire reward, when from a social perspective all sides might benefit from a joint reward. This question can similarly arise for other types of IP that are rewarded based on “novelty” including notably those where substantial research investments are required. But there are situations in which this concern will be weakened, such as when inventions produced by competitors are ultimately quite different in nature, or are not equivalent, or might serve other purposes rather than be fully redundant.

References

- Guellec, D. and B. van Pottelsberghe (2007), The Economics of the European Patent System:

IP Policy for Innovation and Competition, Oxford University Press, UK.