

Compulsory licensing of IP rights

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Economic approach

- How can compulsory licensing of IP rights be part of an optimal policy?
 - *Ex ante* it is hard to assess the appropriate reward for each specific innovation, and the one-size-fits-all problem prevents the policymaker from fine tuning the reward
 - *Ex post* it may become apparent that certain innovators are being grossly over-rewarded and thus it may be socially desirable to expropriate their IP rights

Problems

- *Ex post*, it is desirable to expropriate all IP rights!
- To avoid impairing the incentives to innovate, compulsory licensing should be limited to those IP rights that over-compensate innovators beyond reasonable doubts
 - How frequent is over-compensation?
 - How can we identify innovators that are clearly over-compensated?

How likely is over-compensation?

- Elsewhere I have argued that currently patent-holders are more likely to be under-compensated than over-compensated (*Economic Policy*, November 2007)
- However, there is a great deal of heterogeneity across patents
- Moreover, things may be different for “artistic” works. For various reasons, copyrights may actually over-protect authors, although the empirical evidence is more limited than for patentable innovations

Policy solutions

- “American solution”: no compulsory licensing of IP rights
 - This is a clean solution, but not necessarily the most preferable one in view of the great heterogeneity of innovations and the concrete risk that authors of copyrightable works may be over-protected
- “European solution”: compulsory licensing in exceptional circumstances
 - More flexible and hence potentially preferable, but it all depends on how good we are at indentifying the “exceptional circumstances”

Magill test

(and its interpretation in *Microsoft*)

- Indispensability (*indispensable to compete on equal footing with IP holder*)
- Elimination of competition (*some risk that competition may be eliminated in the distant future*)
- New product (*a minimal degree of differentiation, or even the possibility that some minimally differentiated variants be developed in the future*)
- Objective justification (*no objective justification*)

Magill test

- Even if more narrowly interpreted, the *Magill* test seems especially inappropriate for patentable innovations
- The indispensability and elimination of competition tests are typically easy to pass with patented innovations
- The new product test then should be significantly strengthened, but is inherently ambiguous
- *Magill* test should be abandoned

R&D expenditure not a proper test

- Simple model of innovative activity: the innovation is achieved instantaneously and for sure at a cost c and yields profits v : over-compensation if $v > c$
- But
 - Innovation is uncertain (should account for cost of failures)
 - There is competition in research (should account for R&D expenditures of other firms)

Over-compensation

- Trivial innovations (no real *quid pro quo*)
 - *Magill*: program listing
 - Normally cannot be patented
- *De facto* standards
 - *IMS Health* “brick structure”
 - *Microsoft* communication protocols (?)
- Serendipitous innovations (low elasticity of supply)

Caution

- Must account for “joint production” of innovations