Intellectual Property Rights Protection Versus Antitrust in Developing Economies: Interactions and Results

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Intellectual Property Protection and Antitrust: What is The Relationship?

- Coherent goals in the area of innovations: promotion of innovations by means of pro-innovative market competition
- Different policies in different periods
  - IPR protection provokes competition *ex ante* by promising considerable gains to a winner
  - Antitrust policy supports competition *ex post* by preventing the winner from market power abuse

Area of conflict

- Protection of specific property rights restricting free market competition (may be applied not only to IPR as far as antitrust policy is based on exclusions from property rights).
- Especially acute for IPR because of lesser legal clarity around IPR and the importance of IPR-objects

Literature

- Applied regulations: the U. S. “Guidelines” by FTC and DOJ (1995), the EU Technology Transfer Block Exemptions (1996 and 2004), art. 10 of the Russian law on the protection of competition
- Theory: Encaoua & Hollander (2002), Dumont & Holmes (2002), Anderman (2007), Ganslandt (2008), Vickers (2009) etc.

Why comparative studies?

<u>Different institutional environment in IPR protection as well as in antitrust policy</u>

- Different level of property rights protection
- Differences in antitrust rules and practice
- Different entry barriers

<u>Corresponding model assumptions for developing economies</u>

- Poor protection of property rights, including IPR
- Lack of specific antitrust approaches for IPR
- No substitutes for the object of IPR

Counterfeiting and the problem of product boundaries

- Prerequisites for counterfeiting:
  - Crucial importance of IPR objects for the economic activity
  - High costs of production of substitutes
  - Minimal costs of copying
  - Negligible expected penalties for counterfeiting
- Product boundaries: key component of antitrust cases
  - Is it possible to include "pirates" in the product boundaries? (Sellers, 2004, "The Black Market and Intellectual Property: A Potential Sherman Act Sec.2 Antitrust Defense?")

Model: Assumptions

- 2 periods (‘0’ and ‘1’)
- One entrepreneur, who can produce a product (IPR object) with no legal substitutes
- Variety of pirates who can produce illegal copies
- Fixed necessary investment in ‘0’ period = X (for the entrepreneur), no preliminary investments for pirates
- Constant marginal cost of production in ‘1’ period = c (for the entrepreneur and pirates)
- Only N customers may switch to illegal copies
- Market demand: $P = a\text{-}bQ$

Possible situations

	Effective antitrust policy is present	Effective antitrust policy is absent
Intellectual property is protected	**I**	**II**
Intellectual property is NOT protected	**III**	**IV**

Situation I

- Effective antitrust policy is present
- Property rights are protected

<u>Result:</u>

Market (enterpreneur's) quantity < Q_{comp}:

$$Q_I = \frac{a - c + \sqrt{(a-c)^2 - 4bX}}{2b} < \frac{a-c}{b}$$

Entrepreneur's price = $c+X/Q_I > P_{comp}$

Expected <u>economic</u> profit of entrepreneur =0 but the market can exist

Situation II

- Antitrust policy is absent
- Property rights are protected

<u>Result:</u>

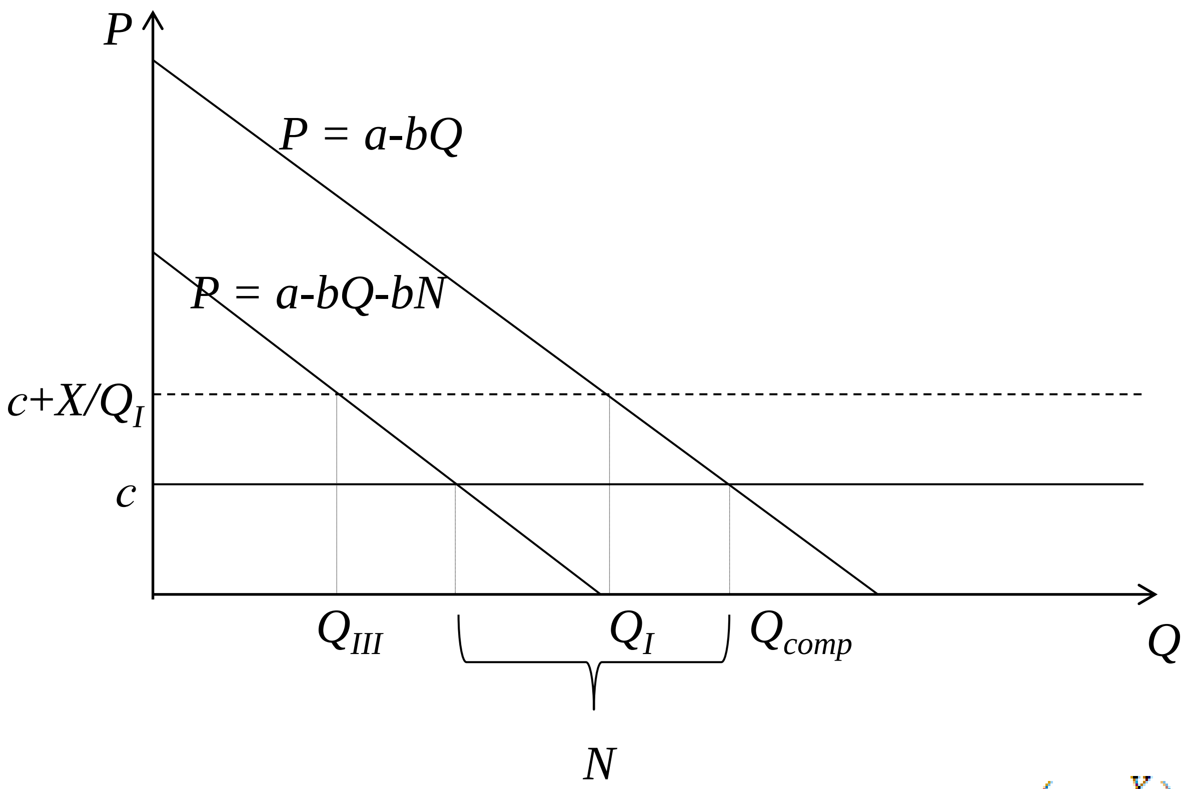
Market (entrepreneur's) quantity = $(a\text{-}c)/2b = Q_{monop}$

Entrepreneur's price = $(a+c)/2 = P_{monop}$

Monopoly: entrenepreneur's profit is positive, consumer surplus is low

Situation III

- Effective antitrust policy
- Property rights are NOT protected



<u>Result:</u>
Market quantity = Q_I
Entrepreneur's quantity = Q_{III}
Entrepreneur's price = $c+X/Q_I$
Pirates' quantity = N
Pirates' price = c
Expected profit of entrepreneur <0 <u>market will not be created</u>

Expected profit of entrepreneur = $\Pi_{III} = \left(c + \frac{X}{Q_I}\right) Q_{III} - X - cQ_{III} = X\left(\frac{Q_{III}}{Q_I} - 1\right) < 0$

Situation IV

- Antitrust policy is absent
- Property rights are NOT protected

Result:

Market quantity = $Q_{IV} + N = \frac{a-c}{2b} + \frac{N}{2}$

Entrepreneur's quantity = $Q_{IV} = \frac{a-c}{2b} - \frac{N}{2}$

Entrepreneur's price = $P_{IV} = \frac{a+c}{2} - \frac{bN}{2}$

Pirates' quantity = N

Pirates' price = c

Expected profit of entrepreneur = $\Pi_{\mathrm{IV}} = \frac{(a-c-bN)^2}{4\mathrm{b}} - X$

may be positive

Solutions

	Effective antitrust policy is present	Effective antitrust policy is absent
Intellectual property is protected	**Sol. 1** **I**	**II**
Intellectual property is NOT protected	**Sol. 3** **III**	**Sol. 2** **IV**

Conclusions

- The direct implementation of traditional antitrust measure may impede the development of new markets
- Poor protection of property rights should be taken into account while assessing competition in IPR-markets