

Comments on Roman Inderst's “Firm Objective and Sustainability Agreements”

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Questions

- (1) Should an antitrust authority be open to horizontal agreements on sustainability standards (particularly relevant in the EU)?
- (2) Does an antitrust authority have the information to properly evaluate, let alone, enforce, something like this?
- (3) Can this cooperation spillover to price competition?
- (4) Do these agreements require any coordination between government agencies, competition and environmental authorities?
- (5) But if companies are setting sustainability standards, why not let the environmental authority do that?
- The paper addresses only question (1)
 - ▶ firms tend to agree on sustainability standards below what would happen otherwise
 - ▶unless firms' intrinsic preferences for sustainability are sufficiently large and similar
 - ▶ take away message? may not be a good idea (see also Shinkel and Treuren 2023)

Setting

- think of a two-stage Hotelling model
- at $t = 1$, firms 1 and 2 must decide on quality a (sustainability level), which does two things:
 - ▶ it increases marginal cost of production $c(a)$, with $c'(a) > 0$ and $c''(a) > 0$
 - ▶ it increases consumer's valuation $u(a)$ for the product, with $u'(a) > 0$ and $u''(a) < 0$
- at $t = 2$, and after observing a_1 and a_2 , firms compete in prices
- two extensions:
 - ▶ there may be a fixed cost $F(a)$ when choosing a , with $F'(a) > 0$
 - ▶ firms may have an intrinsic value for a : $\pi + \lambda a$

No strategic effects?

- when $F(a) = 0$ and $\lambda = 0$, $a_1 = \hat{a}$

$$u'(\hat{a}) - c'(\hat{a}) = 0$$

independent of a_2 ; equivalent to only considering the direct effect of investment,

- but actually there is a strategic (puppy-dog or fat-cat) effect,

$$(p_1 - c(a)) \frac{1}{2t} \frac{\partial p_2(a_1, a_2)}{\partial a_1} \text{ with } \frac{\partial p_2(\cdot)}{\partial a_1} = -\frac{1}{3}(u'(a_1) - c'(a_1))$$

- which just disappears when $F(a) = 0$ and $\lambda = 0$.
- when $F(a) > 0$, $a < \hat{a}$, so the strategic effect is now negative (underinvestment), but nevertheless $a_1 = a_2 > 0$
- any horizontal agreement would reduce investments; in this Hotelling setting to $a_1 = a_2 = 0$

Add intrinsic preferences for sustainability

- when $\lambda_i > 0$, $a_i > \hat{a}$, and the strategic effect is now positive (overinvestment)
- but if a_i increases, firm j may actually have incentives to decrease a_j when $\lambda_j > 0$
- there are may be **strategic leakage** (this was not anticipated at all!)
- here is when an horizontal agreement on a can push things up, increasing consumer welfare
- but only if intrinsic preferences are high enough, enough to overcome the previous zero-investment result
- an agreement may not even form if $\lambda_j \ll \lambda_i$ (no side payments available)
- but what if the agreement take a minimum standard form? j would choose the standard and i would go above the standard

Other comments

- firms assumed highly patient, so only attention to participation constraints, not to incentive-compatibility constraints.
- from homogeneous to heterogeneous consumers
 - ▶ in a setting where consumers value a differently, firms would have incentives to vertically differentiate, particularly if $\lambda_i \gg \lambda_j$
 - ▶ not clear whether and how an agreement would form in this case
- more work on policy making under incomplete information