Discussion on "Control Rights over Intellectual Property: Corporate Venturing and Bankruptcy Regimes" by Bhattacharya and Guriev

Mikko Leppämäki

Helsinki School of Economics

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# What the Paper is about?

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- Control rights in the hand of development unit is a kind of counter force against the fact that the innovator holds property rights over the generated knowledge
- Interestingly, allocation of control rights in the hand of development unit may have beneficial incentive effects ex ante (more effort in knowledge generation)

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# When and Why Control rights matter?

• At interim stage there may be a conflict over the licensing mode of generated knowledge

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- Lack of financial flexibility *ex interim* can thus be a useful commitment device

# This Paper vs Prior Literature

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- More generally the current paper belongs to the literature of incomplete contracting and control rights



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- Two licensing modes: patent vs trade secrets
- Under patenting: *RU* gets a fee, *F*°
- Under trade secret: RU may be tempted to resell his knowledge secretly to other DU and in order to constrain this RU gets fee F<sup>C</sup> and a stake of ex post surplus sP<sup>C</sup>

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- IC compatible mechanism for closed sale:  $s^*(K; L) = ((1 + L \sqrt{(1 + L)^2 8(1 L)(1/K 1)})/4 < 1/2$ , which is feasible only when  $K \ge \widehat{K}(L)$ , where  $\widehat{K}(L) = (1 + \frac{(1 + L)^2}{8(1 L)})^{-1}$ .

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- Interestingly, as RU is financially constrained, F<sup>C</sup> ≥ 0, but this may actually be violated when his IC compatible ex post stake sP<sup>C</sup> is high enough as it would call for transfer from RU to DU, i.e. F<sup>C</sup> < 0, which is not feasible.</li>

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- Trade secret mode feasible only if RU has an access for external funding, BUT this is precisely ruled out by DU having control rights (and vetoing outside finance).

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- The lack of *ex interim* financial flexibility -> commitment device -> provide RU with stronger ex ante incentives for exerting high research effort (materializing ultimately higher K) under open mode
- Main result: Corporate venturing (i.e. DU having control rights) will strictly increase RU's effort *ex ante* under certain conditions and total surplus will be maximized

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### Concerns

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- Exactly how DU acquires control over RU at *ex ante* stage and exercises control at *ex interim* stage is not really modeled.

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# Suggestions

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- Product market expansion/market structure ex post consumer's that would value products

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# Conclusion

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- Technically solid model and analysis is carefully executed.
- A (very) neat mechanism of providing incentives for RU to take higher effort at *ex ante* stage
- On the whole the paper advances our understanding of the role of control rights in corporate venturing and how they interact with licensing of knowledge.