

Partnership dissolution with cash-constrained agents

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April 2019

Fields: *Mechanism design, cash constraints, property rights theory.*

Extended Abstract

When businesses come to an end, their members must find a way to reallocate the business assets among themselves. A dissolution is ex post efficient if it allocates the assets to the members who value them the most. Although, this requires that the aforementioned members possess enough financial resources to buy out the others' share.

Following the seminal work of Cramton, Gibbons and Klemperer (1987, *Econometrica*), the literature has covered many problems of partnership dissolution like for instance interdependent valuations or ex post individual rationality constraints. However, the problem of limited financial resources has received little attention. In this paper, I investigate ex post efficient dissolution when agents are ex post financially constrained. I derive necessary and sufficient conditions for ex post efficient partnership dissolution with Bayesian (resp. Dominant Strategy) incentive compatible, interim individually rational, ex post (resp. ex ante) budget balanced and ex post cash constrained mechanisms.

I show that the optimal ownership structures to achieve ex post efficient dissolution typically allocate more initial property rights to partners with low cash resources. Intuitively, in case a very cash-constrained partner i has to buy out the share of the other partners (because i 's valuation is the highest one) it is better that the share i has to buy is not too large. This result mitigates the optimality of equal-share ownership structures found in the literature when agents do not have limited financial resources.

I also show that the usual equivalence theorem between Bayesian and Dominant Strategy implementation is robust to the addition of cash constraints. That is, any partnership that can be ex post efficiently dissolved by an interim incentive compatible, interim individually rational, ex post budget balance and ex post cash-constrained

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mechanism can also be ex post efficiently dissolved by an ex post incentive compatible, interim individually rational, ex ante budget balance and ex post cash-constrained mechanism, and vice versa.

Finally, I propose a first-price all-pay auction that replicates the ex post dissolution mechanisms stated above. Before the auction takes place, each partner receives a side payment that depends only on her/his initial share of property rights and cash constraints. Then, each partner submits a bid and the highest bidder receives the asset. The auction is constructed so that equilibrium bidding strategies are increasing in partners' valuations. The side payments are such that individual rationality, budget balance and cash constraints are satisfied. Interestingly, the lower the initial cash resources of a partner, the higher is the side payment to this partner. I also show that the bidding game proposed in Cramton, Gibbons and Klemperer (1987) fails as long as cash resources are low.

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