

Class 5: takeovers

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This problem set is based on the model of share holding and takeovers presented in ★ [Grossman and Hart \(1988\)](#). A discussion of it can also be found in [Hart \(1995, Ch. 8\)](#).

James Soat, president of Missouri Gumballs, is preparing a takeover bid for Corman Enterprise. Neither the incumbent management nor Soat own any Corman shares. Corman's shareholders are all small: none regard their decision to sell or hold their shares as having any bearing on the firm's ownership. They are risk neutral and have rational expectations, in the sense that they can predict the outcome of a takeover bid.

Suppose that Corman has two classes of shares. The first, class A shares, collectively entitle their holders to 50% of the firm's market value, but do not have voting rights. The second, class B shares, also entitle their owners collectively to 50% of the firm's value, but 100% of the votes. Thus, class B shareholders will determine whether Soat's management team will replace Corman's incumbent team.

Soat makes unconditional and unrestricted offers to buy shares. They are unconditional in the sense that Soat must buy all shares offered at his announced price even if he realises that his bid has failed. They are unrestricted in the sense that Soat must buy all shares whose owners are willing to sell at his announced price for that class.¹

¹A buyer can announce separate prices for different classes of shares.

Finally, suppose that Corman's market value under the incumbent management is $v = 200$, while under Soat's management it would only be $\hat{v} = 180$. Against this, while the existing management team derives no private benefits from controlling Corman, Soat's team would receive benefits of $\hat{w} = 15$ if they controlled it.

1. (a) From a social point of view, which team should manage Corman?
 - (b) What is the maximum amount that the incumbent managers would be willing to pay to buy the class B shares?
 - (c) What is the maximum amount that Soat would be willing to pay to buy the class B shares?
 - (d) What are the payoffs of the class B shareholders if they hold their shares and:
 - i. Soat wins?
 - ii. Soat loses?
 - (e) Thus, what is the minimum amount, if any, that Soat can successfully offer to buy out the class B shares?
 - (f) What do you expect to happen? What value do the class A and the initial class B shareholders derive from this?
 - (g) Now suppose that Corman had followed a one share–one vote rule in which there are only class B shares. Thus, class B shareholders own 100% of Corman, as well as having 100% of its votes. Following the steps suggested in the previous parts of this question, which of the teams - incumbent or Soat - ends up running Corman? Under which system of shares are the original shareholders better off?
2. When might departures from the one share–one vote rule might be desirable from the point of view of shareholder wealth?

References

- S. Grossman and O. D. Hart. One share-one vote and the market for corporate control. *Journal of Financial Economics*, 20:175 – 202, 1988.
- O. Hart. *Firms, Contracts and Financial Structure*. Clarendon Lectures in Economics. Oxford University Press, Oxford, 1995.