Loan Contracts with Collateral and Credit Rationing: a Signaling Approach

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Abstract

Loan contracts with collateral are a common instrument to allocate credit to entrepreneurs who invest in risky projects. Collateral provides lenders with partial insurance against bad outcomes. Since typically, credit is provided under incomplete information about the nature of the project to be undertaken, we investigate in this paper whether collateral can be used as an instrument to *identify* projects which the bank may consider to be 'bad.' We prove that the ability of collateral to serve as a screening device depends on whether the entrepreneurs and the bank have similar rankings of project quality. If they do not, collateral is less effective as a signal. Within each regime, we identify conditions under which *separating* and *pooling* equilibria take place and we characterize the properties of these equilibria. When credit is scarce, we derive equilibria in which credit is rationed. A rationing regime eliminates pooling equilibria and generates more surplus to the bank on every project for which a loan is granted.