

Banking Competition and Welfare

This paper develops of GE model with risky investment that is subject to moral hazard. Banks have market power and can extract rents. The main results are that more bank competition results in lower economy-wide risk, higher social welfare, lower bank capital ratios and more efficient production. This is an interesting result because there is a debate in the banking literature regarding whether more or less bank competition is optimal. The idea in the extant literature using partial equilibrium models is that less competition can make banks better able to sustain risk. This paper challenges this view and derives optimal levels of bank risk and capitalization.

The paper discusses the “charter value hypothesis” (CVH), which holds that under limited liability and unobservable risk choices, borrowers choose riskier investments when the cost of debt is higher. This occurs because under debt, borrowers retain upside investment gains, but losses are limited when returns are poor. Competition erodes borrower charter value (expected profit), leading the borrower to take on risk that is higher than the socially optimal level. There is a tradeoff between competition and financial stability in a partial equilibrium model.

While GE models exist, this paper claims that they lack the appropriate type of moral hazard regarding investment choices. This paper develops two GE models in which the choice of risky investment cannot be observed by investors, opening the problem to moral hazard. Notably, bank market power rents accrue from the deviation of an equilibrium interest rate from the interest rate in the core, i.e. perfectly competitive allocation. As in Boyd and Prescott (1986), banks are coalitions of entrepreneurs. The production technology is constant returns to scale so the size distribution of banks is indeterminate.

The paper considers two information structures: moral hazard and no moral hazard. The key insight is that in GE agents’ specialization choices and funding decisions are not independent. The cost of funding causes borrowers to choose a lower level of risk, consistent with empirical studies. A potential weakness of the paper is that other decentralized arrangements, such as credit markets, might also support the optimal allocation. However, this is clearly noted on the top of p. 13. In addition, depositors are not allowed to extract rents from the bank. This is also clearly stated in footnote 5, and seems plausible. The derivations of the results are clear. In the “extended model” an agent can choose to be an entrepreneur or a bank, and monitoring remains costly.

Minor comments

1. page 2, lines 35-36: rewrite: ... Importantly, welfare implications and the optimal *level of* banking capital are not clearly assessed

2. page 10, line 1: The paper assumes perfect diversification and constant returns to scale so the size distribution of banks is indeterminate. At the end of the sentence that ends on the top of the page please add the footnote: "See Krasa and Villamil (1992) for a model of a bank with imperfect diversification and an optimal bank size." Alternatively this could be mentioned on p. 25, section C.

The reference is:

Krasa, S. and A. Villamil, "A Theory of Optimal Bank Size," *Oxford Economic Papers*, 44, 1992, 38-63.

Recommendation: I recommend the paper for publication. There are some strong assumptions, but they are clearly stated and the results are interesting, consistent with empirical literature, and challenge conventional wisdom.