Chapter 10.3.1 Adverse selection and competition

is.

Andreas Krause

Key assumptions

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- Banks not lending to a company do not know its type and will assume loans are repaid with the average success rate
- $\blacktriangleright \Pi_B = \pi (1 + r_L) L$

Banks not lending to a company do not know its type and will assume loans are repaid with the average success rate, and they pay their depositors
Π_B = π(1 + r_L) L − (1 + r_D) L

$$\square_B = \pi (1 + r_L) L - (1 + r_D) L$$

$$\Rightarrow 1 + r_L = \frac{1 + r_D}{\pi} + \frac{\Pi_B}{\pi L}$$

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Banks already lending to a company know the success rate at which the loan is repaid, and they pay their depositors, as well as face additional costs

$$\hat{\Pi}_{B}^{i} = \pi_{i} \left(1 + \hat{r}_{L}^{i} \right) L - (1 + r_{D}) L - C$$

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Bank profits

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Companies accept the offer with the lowest loan rate

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$$\Rightarrow \hat{\Pi}_B^i = \left(\frac{\pi_i}{\pi}\Pi_B - C\right) + \pi_i \left(\frac{1}{\pi} - \frac{1}{\pi_i}\right) (1 + r_D) L$$

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•
$$\frac{\partial \xi^*}{\partial \theta} = \frac{C}{L} \frac{1 + r_D - (1 - \theta)(1 - p)\frac{C}{L}}{(1 - p)(1 + r_D + (1 - \theta)\frac{C}{L})^2} > 0$$

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