

Written Exam at the Department of Economics summer 2023

Economics of Banking

ReExam, August 22, 2023

Outline of solution

1. The textbook background is Chapter 6 on credit rationing. The problem outlined is one where borrowers have largely identical projects but may differ in the probability of succeeding with this project. This corresponds rather closely to the situation in the deMeza-Webb model, where the result is an oversupply of credits, so that credit is extended to borrowers whose probability of success is too small from a social point of view. The argumentation that credit is too limited seems therefore not to be correct. (The alternative model of credit rationing under asymmetric information, the Stiglitz-Weiss model, seems less appropriate here but is acceptable provided that its choice is explained in the text)

To improve the situation, it is necessary to prevent unsuccessful borrowers from taking loans, and this may be achieved either by taxing loan rates, or alternatively by introduction of suitable collateral.

2. The problem here is about credits and use of collateral together with interest rates in situations of hidden information (the Bester model, Chapter 6 in the textbook). In the case at hand the export industry has larger risk than the industry directed towards the home market, and the theoretical model then suggests that two contracts should be proposed, one with no collateral but high interest rate intended for the risky (export) industry, and a contract with low interest rate but some amount of collateral for the less risky (home market) industry.

The reduced value of real estate will hit the part of the credit market using collateral, that is the home market industry, so that (1) cannot be upheld. With respect to (2), a breakdown of the traditionally stable credit market will occur if competing banks find it advantageous to offer an alternative (pooling) contract to both types of borrowers, since this type of contract would again not constitute an equilibrium in the market.

3. The problem deals deposit insurance and lenders of last resort, covered in Chapters 15 and 16 of the textbook. A deposit insurance should be priced in such a way that the expected cost of default is covered by the premium, and usually a small bank may be bought by a larger one at a price which is higher than the liquidation value of the assets. Consequently, the price of deposit insurance would reasonably be smaller (per unit of deposit) for small banks than for large banks, where such a takeover is rarely possible, making the insurance premium progressive rather than degressive.

If there is only a few banks on the economy, all rather large, then takeovers cannot be expected to happen, so that banks must rely on being assisted by a lender of last resort. The cost of such a solution may possibly be reflected in the deposit insurance premium.