Economics of Banking

Exam August 24, 2021

Hints for solution

1. The textbook background is the theory of bank regulation and capital ratios in Chapter 17-18 and the problems of competition and financial stability in Chapter 11.

The first part should contain a definition of capital ratio and an outline of the Basel regulations. Following this, the assessment of the effect of an increased capital ratio should include a consideration of the competition of the two banks for deposits which now constitute a smaller fraction of the loans, and the expected profits of the investments. If expected payoff decreases, the overall effect will be a reduction in the amount of projects selected, which was not the intention of the policy.

Alternative ways of regulation would be deposit insurance, in particular one with differentiated payments for deposit insurance, favoring banks with large investments in innovative projects, or possibly setting up an agreement between the two banks to support each other in case of of liquidity crisis.

2. The textbook background is Chapters 6 on credit rationing and Chapter 5 on loan contracts. The situation outlined fits with a downwards bending relationship between nominal and expected repayment rates. This relationship can have many different causes (adverse selection, moral hazard, use of standard contract with inspection) and to improve the situation, some more knowledge of the industry is necessary, so that the main causes can be dealt with.

In the second part, the availability of specific courses improving entrepreneur competence and reducing risk points to the use of differential contracts, involving a collateral for entrepreneurs who cannot document competence. This will make it possible for the banks to give preferential treatment to the experienced entrepreneurs without discriminating according to previous business relations.

3. The textbook background is Chapter 17 on deposit insurance and Chapter 14 on bank crises. The first part should contain a brief survey of deposit insurance, its advantages in form of protecting depositors from losses and its disadvantages related to the effects on risk taking in banks. The combined effects of no deposit insurance and exemption from capital regulation means that the new deposits are particularly exposed to risk.

A change of the deposit contracts to marketable deposit certificates can be made without interfering with the payoffs to both parties, provided that the dividend on the deposits are set correctly. This theoretical equivalence will however be difficult to achieve if assets are subject to considerable uncertainty, which must be assumed given the prevailing level of interest. The bank will probably not be able to increase earnings in this way, in particular if there are competitive investment products available for the depositors.