

Written Exam at the Department of Economics summer 2022

Economics of Banking

Final Exam

August 23, 2022

(3-hour closed book exam)

Answers only in English.

This exam question consists of 2 pages in total

Falling ill during the exam

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- leave the examination.
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- Make use of exam aids that are not allowed
- Communicate with or otherwise receive help from other people
- Copy other people's texts without making use of quotation marks and source referencing, so that it may appear to be your own text
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- Or if you otherwise violate the rules that apply to the exam

1. A small bank provides short-term deposit opportunities for retired business managers who want to avoid negative interest rates while looking for their favourite villa in Provence. The bank uses the funds for investment in rare-earth element extraction, which promises a high rate of return.

Describe the efficient contract between bank and depositor in this situation. Explain that there is an inherent instability in this contract.

It has been proposed that the instability, which is accentuated by the fact that the individual deposits are too large to be covered by deposit insurance, could be avoided if the relationship was reorganized as shadow banking. Will this be a possibility in the situation considered?

2. A bank wants to enter the market for credits for wine production. The grape harvest displays large variations in size and quality from one year to another and from one locality to another, and the bank must accept only partial repayment of the credits if the harvest has failed. Whether this is the case can only be verified by the bank if it employs a consulting bureau which demands a rather high price for its service.

Both parties, banks and potential borrowers, agree that loan contracts should be designed in such a way that both sides are treated as well as possible. Discuss the implications of this and explain how the final contract should be formulated under these circumstances.

After a change in management, the bank contemplates to change its engagements with this type of firms by issuing securities based on the loans and selling them in the money market. Give an assessment of whether or not this approach will be more profitable for the bank.

3. A bank has experienced repeated liquidity problems which could have developed into bank runs if it had not received assistance from the central bank. After each of these events, the loan portfolio of the bank has been carefully scrutinized but has been considered basically sound.

In order to reduce the need for central bank assistance in the future, it is proposed that a large share of around 20 percent of the liabilities of the bank (not including equity) should be contracted with the condition that it can be written down immediately in case of large losses, so that the remaining banking business can proceed uninterrupted with new owners. The banks argue that this will increase their cost and reduce financial stability. Comment on this.

Instead of this arrangement, the financial authorities propose to split the bank into two separate and independent units, so that one unit retains the loan portfolio but funds it by issuing securities, while the other one receives the deposits but must balance it using only government securities. It is argued that this arrangement will give the depositors the same advantages, and at the same time it will be safe against bank runs. Give an assessment based on the theory of banking.