

Written Exam for the M.Sc. in Economics, Winter 2010/2011

**Economics of Banking**

Final Exam/ Master's Course

16.12.2010

(3-hour open/closed book exam)

Please note that the language used in your exam paper must correspond to the language of the title for which you registered during exam registration. I.e. if you registered for the English title of the course, you must write your exam paper in English. Likewise, if you registered for the Danish title of the course or if you registered for the English title which was followed by “eksamen på dansk” in brackets, you must write your exam paper in Danish.

If you are in doubt about which title you registered for, please see the print of your exam registration from the students' self-service system.

**1.** A bank contemplates a new line of business, offering small unsecured loans to be used for trading in the stock market. The borrower may choose the securities freely, but the loan is given for only a year at the time, with the possibility of renewal. The bank cannot monitor the use of the loan made by the borrower.

Discuss how this type of loans can be commercially feasible for the bank.

After some time, the conditions for this type of loans are changed so that the borrowers will have to report their trading electronically to the bank. Due to the large number of costumers and trades it is however costly for the bank to make use of this information.

It now turns out that although the stock market has performed unsatisfactory for some years so that most traders have lost money in the short run, the costumers in this specific line of business has remained almost unchanged. Give an explanation of this phenomenon.

**2.** 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.

To put an end to the problems, 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 takes care of the deposits but is restricted in its investment policy to purchase of marketable securities. It is argued that this arrangement will give the depositors the same advantages and at the same time will be safe against bank runs. Give an assessment based on the theory of banking.

**3.** After a period of financial distress with several bank failures, there is increased public concern about the earnings of the banks, which are consistently obtaining very big profits. It is suggested that a specific tax on bank profits should be introduced which limits the profits to a fixed percentage of the total assets. However, to allow for a consolidation of the banks after the recent crisis, the new rules should be applied only after one year.

The banks argue that this new rule will lead to more rather than fewer bank failures, at least in the short run. Give a theoretical argument which supports this viewpoint.