

Written Exam for the M.Sc. in Economics 2010-I

Economics of Banking

Master's Course

December 17, 2009

(4-hour 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. After several years of problems for small and innovative business enterprises it has been decided to set up a special financial institution for such credits funded by bonds with government guarantee. The first problem for this new institution is to identify the sectors of business, which cannot obtain credits through the usual channels but should be offered credits from the point of view of society.

Give an explanation of why the problem may have arisen and give suggestions as to what the new financial institution should look for when deciding upon credits.

After a period, it can be seen that the new enterprises asking for credits for development are concentrated in two sectors, namely one where the income to be obtained from a new product may vary from small to very large, and another one where the incomes to be obtained are more easily assessed but where the success may depend very much on the entrepreneur. Explain why credits should be given to one of these sectors rather than the other one.

2. A country has experienced a period of exceptionally low interest rates, and there is a general agreement that the interest rates will move upwards in the course of the next years. In this situation a new financial enterprise has been started, which has as its purpose to hold a fixed portfolio of bonds over a number of years, promising the investors a payoff which corresponds very closely to the long run payoff on the bonds in which the capital is invested.

The new financial enterprise argues that the reason why its promised repayment to its creditors is almost identical to what can be earned on the bond portfolio is that the competition in the financial markets is very fierce. However, some financial advisors suggest that one should be very reluctant to invest in this new financial enterprise. Give a theoretical argument why they may be right.

3. A bank is specialized in credits to small restaurants, and it has collected considerable experience with borrowers in this field of business: The borrowers may be more or less talented, and they put up different degree of effort in their conduct of business; not very talented entrepreneurs may perform well if they offer rather large sums on education, whereas the talented borrowers can do without this. The bank has however no way of dictating the choice of effort to their borrowers, and they may not be able to decide upon their talent when the loan contract is signed.

Give a theoretical treatment of this situation with an indication of what is the best possible solution given the circumstances.