

Written Exam at the Department of Economics summer 2020

## **Economics of Banking**

Final Exam

25. August 2020

(3-hour open book exam)

Answers only in English.

**This exam question consists of 2 pages in total**

***The paper must be uploaded as one PDF document. The PDF document must be named with exam number only (e.g. '127.pdf') and uploaded to Digital Exam.***

This exam has been changed from a written Peter Bangsvej exam to a take-home exam with helping aids. Notice that any communication with fellow students or others about the exam questions during the exam is considered to be cheating and will be reported. It is also considering cheating to let other students use your product.

### **Be careful not to cheat at exams!**

You cheat at an exam, if during the exam, you:

- 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
- Use the ideas or thoughts of others without making use of source referencing, so it may appear to be your own idea or your thoughts
- Or if you otherwise violate the rules that apply to the exam

**1.** A bank has decided to provide credits for small agricultural producers engaged in ecological farming. The farmers' payoffs are subject to risk arising from many different sources such as choice of crop, weather condition, and consumer demand, and the bank cannot easily verify the results obtained by the farmers. Give a survey of the loan contracts which could be used.

The bank chooses to use a standard contract, but to avoid losses in this field of business the loan rates must be rather high. The producers complain that this has a discouraging effect on the business conditions, so that the farmers become less dedicated to their work. Give a theory-based suggestion of an alternative loan contract which avoids such negative effects without changing the average profitability of this line of business for the bank.

**2.** In the aftermath of the corona pandemic, a number of small industrial enterprises want to adapt their production to the needs for medical equipment, and they apply for capital from the banks. The demand for the output is currently high and profits are known to be acceptable on the average, but since the distribution channels still have to be established, something which will depend on the skills of the entrepreneurs, they are subject to considerable risk.

Entrepreneurs complain that credit for this type of innovative business is too tight. Give a description of a theoretical model which is suitable for assessing the justification of this viewpoint, and give suggestions for what should be done if the managers are right.

Under the threat of a resurgence of the pandemic, it is decided that all distribution of medical equipment should be centralized under government control. The new innovative producers generally delivered high quality output, but in a few cases the production lines were malfunctioning and the whole production lot had to be destroyed. Do these new circumstances change the situation in the credit market and if so, how?

**3.** After a period of instability in the financial sector, a country has introduced a system of deposit insurance managed by a private institution. There has been some debate about the size of the insurance premium, and the institution has found it necessary to ask for detailed knowledge of the assets of the insured banks in order to determine its insurance premium. Give a theoretical appraisal of this policy and its impact on the deposit insurance premium.

After its first year of functioning, the deposit insurance organization has been involved in several bank closures, and it is argued that banks in trouble should rather be supported by loans from the central bank. Give an assessment of this argument based on relevant theory.