Stockholm University

Department of Economics

Course name:	**Financial Development and Crises**
Course code:	**EC7213**
Examiner:	**Jonas Vlachos**
Number of credits:	**7,5 credits**
Date of exam:	**Sunday 22 October 2017**
Examination time:	**3 hours [09:00-12:00]**

Write your identification number on each paper and cover sheet (the number stated in the upper right hand corner on your exam cover).

Use one cover sheet per question. Explain notions/concepts and symbols. If you think that a question is vaguely formulated, specify the conditions used for solving it. Only legible exams will be marked. **No aids are allowed.**

The exam consists of 4 questions, with a total of 70 points. The exact points are stated for each question and an additional maximum of 30 points are awarded for the term paper. For the grade E 45 points are required, for D 50 points, C 60 points, B 75 points and A 90 points.

Your results will be made available on your "My Studies" account **(**www.mitt.su.se), 15 working days after the exam occasion, at the latest.

Good luck!

Question 1. Multiple choice, 2 points per correct answer (20 in total)

A) According to the efficient market hypothesis, the current price of a financial security
   a) is the discounted net present value of future interest payments.
   b) is determined by the highest successful bidder.
   c) fully reflects all available relevant information.
   d) is a result of none of the above.

B) If the optimal forecast of the return on a security exceeds the equilibrium return, then
   a) the market is inefficient.
   b) an unexploited profit opportunity exists.
   c) the market is in equilibrium.
   d) only A and B of the above are true.
   e) only B and C of the above are true.

C) Algorithms used to predict movements in stock prices based on past patterns are, according to the efficient markets hypothesis,
   a) a waste of time
   b) profitably employed by many financial analysts.
   c) the most efficient rules to employ
   d) consistent with the random walk hypothesis

D) The efficient markets hypothesis is weakened by evidence that
   a) stock prices tend to follow a random walk.
   b) stock prices are more volatile than fluctuations in their fundamental values can explain.
   c) technical analysis does not outperform the overall market.
   d) an investment adviser's past success or failure at picking stocks does not predict his or her future performance.

E) The elimination of a riskless profit opportunity in a market is called
   a) the efficient market hypothesis.
   b) random-walk.
   c) Arbitrage
   d) market fundamentals

F) Which of the following statements is false?
   a) A bank's assets are its uses of funds.
   b) A bank issues liabilities to acquire funds
   c) A bank's assets provide the bank with income.
   d) Bank capital is an asset on the bank balance sheet.

G) Which of the following are reported as liabilities on a bank's balance sheet?
   a) Reserves
   b) Checkable deposits
   c) Loans
   d) Deposits with other banks

H) Which of the following bank assets is the most liquid?
   a) Consumer loans
   b) Reserves
   c) Cash items in process of collection
   d) Government securities

I) When you deposit $50 in currency at Old National Bank, which of the following must be true
   a) its assets increase by less than $50.
   b) its reserves increase by less than $50.
   c) its liabilities increase by $50.
   d) only A and B of the above occur.

J) For a given return on assets, the lower is bank capital,
   a) the lower is the return for the owners of the bank.
   b) the higher is the return for the owners of the bank.
   c) the lower is the credit risk for the owners of the bank
   d) both A and C of the above

Question 2 (15 points).
It is not uncommon to suggest that central bank should “lean against the wind” when facing increasing asset prices and corresponding growth in credit.

a) Explain what leaning against the wind means, what the rationale for such policies, and why they are potentially problematic.

b) Provide a stylized account of the model of costs and benefits of leaning against the wind as discussed by Lars Svensson. Is this analysis convincing, in your opinion?

c) An alternative to leaning against the wind is to aggressively counteract asset price increases. Explain why/why not you would recommend such policies.

Question 3 (15 points).

A) Draw a simplified version of a bank's balance sheet containing: Equity, Reserves, Short- and Long Term Debt, The bank's main buildings, Deposits, and Investments.

B) Outline the main components of the Diamond-Dybvig model and explain the logic behind its main conclusions regarding bank fragility.

C) What are the general policies that have been implemented to deal with this fragility? Discuss how these policies work and what their weaknesses are. If useful, refer to the bank's balance sheet.

D) Briefly discuss if the logic of the Diamond-Dybvig model also applies to other circumstances than banks.

Question 4 (20 points).

i) A lender can potentially compensate for the riskiness of an investment by raising the interest rate charged. Explain why this may not be possible in the presence of asymmetric information between borrower and lender.

ii) Not so long ago, many investment banks were partnerships with unlimited personal liability. Nowadays, they are usually listed on the stock market which means that the owners have limited liability. Explain why such a shift in industry structure can induce so called *risk shifting* into riskier assets.

iii) Explain why banks that are insolvent do not have an incentive to reveal this to the public.

iv) Why can a delay in finding out that a bank is insolvent increase the cost of the ultimate bankruptcy. Which actors will bear these costs?