Examination Period 3: 2018/19

Module Title: Risk Management in Banking
Level: Six
Time Allowed: Two hours plus fifteen minutes reading time

Instructions to students:
- Enter your student number not your name on all answer books.
- Students are encouraged to use the first fifteen minutes of the exam to read the questions carefully and to plan answers.
- Answer four out of eight questions.
- All questions carry equal marks. Where the question has more than one part, the division of marks is clearly stated.
- The use of a calculator is permitted.
- Neither books nor notes may be taken into the examination.

No. of Pages: 3
No. of Questions: 8
Answer four out of eight questions.

Question 1

a. With the aid of examples and with reference to the functions performed by banks, critically evaluate the risk taking and risk management role of banks. (15 marks)

b. Explain the importance of risk management function for an individual bank and for the overall banking industry. (10 marks)

Total: 25 marks

Question 2

a. Discuss how Modern Portfolio Theory guides banks to manage their portfolio risk by diversifying their assets. Explain how banks have an advantage in using Capital Asset Pricing Model (CAPM) to manage their portfolio risk and capture the normative relation between security risk and expected return. (18 marks)

b. Analyse key strengths and weaknesses of CAPM especially in relation to portfolio risk management by global banks. (7 marks)

Total: 25 marks

Question 3

a. What is credit risk in banks? Explain why it is important for banks to manage credit risk. (15 marks)

b. Banks use different credit scoring models (Linear Probability, Logit, and Linear Discriminant) to identify and measure credit risk. Using examples, critically evaluate those models and highlight their strengths and weaknesses. (10 marks)

Total: 25 marks

Question 4

a. Define liquidity risk and critically evaluate liquidity risk arising from both the liability-and the asset-side of the balance sheet of a bank. (15 marks)

b. Discuss the following measures of liquidity risk and explain how each measure can be implemented effectively.
   
i. Peer-group ratio comparison
   
ii. Financing gap and financing requirements

(10 marks)

Total: 25 marks
Question 5

a. Define risk regulation and explain key objectives of risk regulations.
   (10 marks)

b. Discuss drawbacks of Basel 1 and explain how Basel 2 is an improvement of Basel 1.
   (15 marks)

Total: 25 marks

Question 6

a. Define market risk and evaluate different types of market risk in the banking institutions.
   (10 marks)

b. Critically evaluate the following approaches for measuring market risk in the banks:
   i. Historical Simulation approach
   ii. Variance/Covariance (RiskMetrics) approach
   (15 marks)

Total: 25 marks

Question 7

a. Define operational risk and discuss the key drivers of operational risk in the banking industry.
   (10 marks)

b. Basic Indicator Approach and Standardised Approach are key regulatory models for calculating operational risk capital requirements. Critically evaluate these approaches and highlight their strengths and weaknesses.
   (15 marks)

Total: 25 marks

Question 8

a. What are financial derivatives? Explain forward and futures with reference to their application in financial risk management.
   (15 marks)

b. A major lesson learnt from recent global financial crisis is that incorrect use of derivatives can potentially cause catastrophic consequences. Take examples of forward rate agreements, collateralised debt obligations, credit defaults swaps, etc to extend the argument.
   (10 marks)

Total: 25 marks

End of Paper