
SOCIETY OF ACTUARIES
Strategic Decision Making Exam

Exam CFESDM

AFTERNOON SESSION

Date: Thursday, April 26, 2018

Time: 1:30 p.m. – 3:45 p.m.

INSTRUCTIONS TO CANDIDATES

General Instructions

1. This afternoon session consists of 4 questions numbered 6 through 9 for a total of 40 points. The points for each question are indicated at the beginning of the question. Questions 6 - 9 pertain to the Case Study, which is enclosed inside the front cover of this exam booklet.
2. Failure to stop writing after time is called will result in the disqualification of your answers or further disciplinary action.
3. While every attempt is made to avoid defective questions, sometimes they do occur. If you believe a question is defective, the supervisor or proctor cannot give you any guidance beyond the instructions on the exam booklet.

Written-Answer Instructions

1. Write your candidate number at the top of each sheet. Your name must not appear.
2. Write on only one side of a sheet. Start each question on a fresh sheet. On each sheet, write the number of the question that you are answering. Do not answer more than one question on a single sheet.
3. The answer should be confined to the question as set.
4. When you are asked to calculate, show all your work including any applicable formulas.
5. When you finish, insert all your written-answer sheets into the Essay Answer Envelope. Be sure to hand in all your answer sheets because they cannot be accepted later. Seal the envelope and write your candidate number in the space provided on the outside of the envelope. Check the appropriate box to indicate morning or afternoon session for Exam CFESDM.
6. Be sure your written-answer envelope is signed because if it is not, your examination will not be graded.

Tournez le cahier d'examen pour la version française.

CASE STUDY INSTRUCTIONS

The case study will be used as a basis for some examination questions. Be sure to answer the question asked by referring to the case study. For example, when asked for advantages of a particular plan design to a company referenced in the case study, your response should be limited to that company. Other advantages should not be listed, as they are extraneous to the question and will result in no additional credit. Further, if they conflict with the applicable advantages, no credit will be given.

****BEGINNING OF EXAMINATION****

**Afternoon Session
Beginning with Question 6**

*Question 6 pertains to the Case Study.
Each question should be answered independently.*

- 6.** (10 points) Information on Blue Jay Air (BJA) can be found in Section 2 of the Case Study.

An ultra-low-cost airline, Ace, has grown rapidly over the past few years. The following summarizes Ace's core business strategy:

- Ace flies out of smaller airports that charge lower landing and gate fees. These airports are typically farther away from city center and have fewer amenities than larger airports.
- Many services including baggage, seat choice, food and drink options, and entertainment are on an a-la-carte basis (i.e., these items are charged extra on top of the base fare).

Ace employs five specific actions to reduce the costs of operating flights:

- I. Operating only one type of aircraft to lower maintenance costs
- II. Implementing tighter scheduling to increase flight hours per plane
- III. Retiring standby planes typically used to fill-in for planes in need of repair
- IV. Decreasing legroom in planes in order to fit more seats
- V. Hiring less experienced, non-unionized flight crews

- (a) (1 point) Assess whether or not BJA's target customer group would be well-served by Ace. Justify your response.

Three key factors that increase bargaining power of customers are:

- A. Price sensitivity
- B. Product differentiation
- C. Consumer switching costs

- (b) (3 points) Contrast the bargaining power of customers between Ace and BJA for each of the three factors (A-C) identified above. Justify your response.

6. Continued

- (c) (5 points) Assess whether BJA could adopt each of the five cost reduction actions (I-V) used by Ace, without compromising BJA's existing strategy. Justify your response.
- (d) (1 point) Explain why BJA may be less impacted by barriers to entry into the ultra-low-cost segment than a new start-up airline.

Question 7 pertains to the Case Study.
Each question should be answered independently.

7. (9 points)

- (a) (1 point) List two purposes of a cash flow statement.
- (b) (1 point) Identify one key income statement difference between an airline company and a manufacturing company.

Information on Blue Jay Air (BJA) can be found in Section 2 of the Case Study.

BJA had planned to finance the purchase of a new \$200m aircraft by issuing \$200m of debt at the beginning of 2015. BJA's cost of debt is 5%, and BJA plans to pay off the debt in its entirety in 10 years. The aircraft is expected to have a residual value of \$80m at the end of its useful life in 8 years. Below are the expected marginal revenues and servicing expenses for this aircraft.

	2015	2016	2017	2018	2019	2020	2021	2022	2023	2024
Revenue	30	30	35	40	40	40	40	40	40	40
Expense	5	5	5	7	8	8	10	10	10	12

- (c) (4 points)
 - (i) (1 point) Calculate the impact on Income (loss) before income taxes of the new aircraft for each year assuming the purchase is entirely financed with debt. Show your work.
 - (ii) (1 point) Calculate the Return on Equity in 2015 assuming BJA had purchased the aircraft entirely with debt financing. Show your work.
 - (iii) (2 points) Describe two reasons why the results in part (ii) may mislead the decision to proceed with the purchase above.

BJA will use the following three measures to evaluate this purchase:

- Impact on cash flows statement
 - Payback period
 - Actuarial Approach
- (d) (3 points) Explain how BJA should use the above three measures to evaluate the aircraft purchase.

*Question 8 pertains to the Case Study.
Each question should be answered independently.*

8. (13 points)

- (a) (2 points) Describe two main differences between Liquidity Coverage Ratio and Net Stable Funding Ratio.

Information on Big Ben Bank can be found in Section 6 of the Case Study.

The Year End Balance Sheet shows that Big Ben assets at YE2015 totaled \$36.168M.

- (b) (4 points) Assess whether these assets would be considered High Quality Liquid Assets for each of the categories of assets (with the exception of “other assets”). Justify your answer.
- (c) (2 points) Explain whether Big Ben meets the BIS Liquidity Coverage Ratio as of YE2015 based on the information provided below. Justify your answer.

Net Cash Outflows over	\$
1 day	1,270M
30 days	3,810M
60 days	7,000M
120 days	10,000M
364 days	14,000M

- (d) (2 points)
- (i) Describe the cause of the liquidity crisis faced by Home Capital Group (HCG).
- (ii) Identify the action taken by HCG to meet its liquidity needs.
- (iii) Describe one benefit and one cost of HCG’s action.
- (e) (3 points) Assess whether the lessons learnt from HCG are relevant to Big Ben. Justify your answer.

**Question 9 pertains to the Case Study.
Each question should be answered independently.**

9. (8 points)

- (a) (1 point) Describe four main obstacles which must be overcome to improve risk management according to Hubbard's "The Failure of Risk Management".
- (b) (1 point) Describe four characteristics of a genuine risk appetite framework.

Information on RPPC can be found in Section 1 of the Case Study.

- (c) (3 points) Evaluate RPPC's risk appetite statements and risk management framework using the four characteristics described in part (b). Justify your answer.

RPPC has received the financial and product data from Myhotel. The data indicated that the margin is currently higher under the Myhotel loyalty program than the BJA loyalty program because fewer customers redeem their points from the Myhotel loyalty program. However, Julia confirms that the barrier to entry for the Myhotel loyalty program is low because most other major hotel chains also offer their own in-house loyalty programs similar to the Myhotel loyalty program. Gilroy concludes:

"It looks like the margin of the Myhotel loyalty program is high despite the low barrier to entry. We should enter into this business as the risks are fairly manageable."

- (d) (3 points) Critique Gilroy's statement based on RPPC's risk appetite statements.

****END OF EXAMINATION**
Afternoon Session**

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