
SOCIETY OF ACTUARIES
Strategic Decision Making Exam

Exam CFESDM

MORNING SESSION

Date: Thursday, April 30, 2015

Time: 8:30 a.m. – 11:45 a.m.

INSTRUCTIONS TO CANDIDATES

General Instructions

1. This examination has a total of 100 points. It consists of a morning session (worth 60 points) and an afternoon session (worth 40 points).
 - a) The morning session consists of 5 questions numbered 1 through 5.
 - b) The afternoon session consists of 4 questions numbered 6 through 9.

The points for each question are indicated at the beginning of the question. Questions 1 – 3, 5 – 7, and 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****
Morning Session

Question 1 pertains to the Case Study.
Each question should be answered independently.

- 1.** (15 points) A Dashboard can be defined as a single page report showing the recent and current status of an organization's Key Performance Indicators (KPIs) and may include past and projected information for these KPIs.
- (a) (1 point) Explain how a Dashboard can be transformed into a Balanced Scorecard.

Blue Ocean's Dashboard includes:

- year-to-date new premium
- net income per share
- loss ratios for all business units

Information on Blue Ocean can be found in Section 5 of the Case Study.

- (b) (7 points)
- (i) Recommend three performance measurements that can be added to Blue Ocean's Dashboard to make it a Balanced Scorecard. Justify your recommendation.
- (ii) Rank the measurements in part (i) in terms of the greatest impact on company performance. Justify your ranking.
- (iii) Assess the potential impact adding these measurements will have on the Blue Ocean's risk profile.

1. Continued

The following Risk Management Process Styles are obtained from the reading, *Managing the Multiple Dimensions of Risk – Part II: The Office of Risk Management*:

- Active and Intrusive
- Facilitator
- What If / Stress Testing

(c) (4 points)

- (i) Describe three examples of how Blue Ocean's risk profile should be managed given its strategies, from the perspective of the Office of Risk Management.
- (ii) Recommend a Risk Management Process Style that should be utilized by RPPC to specifically contend with Blue Ocean's risks. Justify your recommendation.

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

Big Ben is in the process of creating its own Balanced Scorecard in order to construct a more robust set of performance measures and planning tools. Maggie Crawley, CRO, suggests Big Ben should begin the process by using Blue Ocean's Scorecard as a foundation.

(d) (3 points)

- (i) Recommend one strategic objective that Big Ben should include in its Balanced Scorecard, which would not be used by Blue Ocean, from either the Customer perspective or the Learning and Growth perspective. Justify your recommendation.
- (ii) Explain why the strategic objective from (i) would not be appropriate for Blue Ocean.

**Question 2 pertains to the Case Study.
Each question should be answered independently.**

- 2.** (9 points) Information on Blue Jay Air and Blue Ocean can be found in Sections 2 and 5 of the Case Study respectively.

John Feather, CEO of Blue Jay Air (BJA), consults you on the travel insurance proposal. He emphasizes that none of BJA's competitors currently offer these types of packages.

- (a) (2 points) Describe one advantage and one disadvantage of BJA being the first mover in the custom travel insurance market.

Feather wants to better understand the value chain activities that will be performed by Blue Ocean. He wants you to focus on the following value chain activities as they apply to travel insurance:

- (i) Operations
- (ii) Follow-up Service

- (b) (2 points) Identify two specific tasks relevant to the travel insurance business for each value chain activity.

Feather is very optimistic about the strategic partnership with Blue Ocean and Blue Ocean's ability to perform the value chain activities identified in (b), citing how Disney was able to successfully leverage its affiliates in marketing "The Lion King." An alternative is to outsource the activities to an external partner.

- (c) (2 points) Assess one advantage and one disadvantage of leveraging Blue Ocean to execute these value chain activities. Justify your answer based on Disney's success with "The Lion King."

Feather forwards you the email thread between Jim Peters and Geoff Olive, outlining some of their concerns.

- (d) (1 point) Explain why Jim is concerned about tail dependence.
- (e) (2 points) Recommend a catastrophic risk transfer option for the tail event risks that concern Geoff. Justify your recommendation.

Question 3 pertains to the Case Study.
Each question should be answered independently.

3. (11 points)

- (a) (1 point) Explain why wrong-way risk is dangerous.

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

As a credit analyst in the office of the CRO, you have been invited to the next RPPC Dynasty Operations committee meeting. Prior to the meeting you familiarize yourself with the four assets shown in Section 1, Exhibit 2.

- (b) (4 points) Assess whether each of the four assets in Section 1, Exhibit 2 contains wrong-way risk.

To steer future investments with the intention of minimizing exposure to wrong-way risk, consider the following:

Figure 1

Asset	Sensitivity Variable
Forward contract	Time since issue
Forward contract	Counterparty rating
Pay floating, receive fixed interest rate swap	Counterparty correlation with interest rates
Payer-side currency swap	Volatility of denominated currency

- (c) (4 points) Explain how each of the sensitivity variables in Figure 1 impacts the exposure to wrong-way risk to the holder of the corresponding asset.

Earlier this year, Big Ben Bank started writing call options on the stocks of various airline companies. This new strategy has been successful in generating revenue. RPPC's CRO, Julia Reich, has asked you to evaluate RPPC's risk from Big Ben's strategy.

- (d) (2 points) Assess whether there is wrong-way risk inherent in the call option strategy.

4. (14 points)

- (a) (2 points) Describe each of the four risk management strategies: loss controlling, risk trading, risk steering, and diversification.

Company XYZ utilizes three pillars of governance as follows:

- I. Business Operating Group
- II. Office of the Chief Risk Officer (CRO), Executive Risk Officers (EROs), and Subject Matters Experts (SMEs)
- III. Corporate Audit Division

- (b) (2 points) Identify which risk strategy from part (a) should be used for each pillar. Justify your answer.

The behavior of the following Company XYZ groups can be described as:

1. Audit officers – seek to minimize risk in the processes that are needed to run the company.
2. CRO and EROs – when making decisions, they recognize that often higher profits come from taking riskier projects, but also take into consideration the potential losses that can occur if the risk does not pay off.
3. Board – keeps an open mind when it comes to decisions about risk.
4. Chief Executive Officer (CEO) – solely focused on increasing profits.

Most people identify with one of the four risk perspectives: Maximizers, Conservators, Managers, and Pragmatists.

- (c) (2 points) Identify the risk perspective for each of the four Company XYZ groups. Justify your answers.

4. Continued

ABC Life, a subsidiary of Company XYZ, has the following risk management practices:

- I. The risk management team has regular meetings with the audit team. They collaborate with one another to discuss potential risk concerns and to develop control practices to minimize unnecessary risk.
- II. Surveys are sent to all company employees to get opinions on various topics related to ABC Life's business. The results of these surveys are then discussed in open forums.
- III. The executives receive the information gathered from the forums, the subject matter experts, and the risk management teams. They then meet privately to reach their decisions regarding risk strategies. Since the executives should know what is best for the company, their decisions are implemented right away without any pushback.

(d) (3 points)

- (i) Explain whether each of ABC Life's risk management practices is effective or ineffective based on the principles of ORM (Office of Risk Management).
- (ii) Recommend an improvement for each of the ineffective practice(s) in part (i).

One role of ABC Life's risk management committee is to monitor the company's risk exposure. This involves discerning when and how risk and profit levels change over time. The key decision-makers always consider trade-offs between risk and reward. Risk preferences, appetite, and tolerances are outlined in the ERM program. The limits and strategies within the program are reviewed and updated once every two years. Over the past year, interest rates have been very volatile. One of ABC Life's close competitors was recently downgraded, while another competitor was upgraded. At the beginning of the quarter, ABC Life implemented assumption changes reflecting industry data. ABC Life has not assessed the impacts on a new universal life secondary guarantee product. ABC Life's projected profits are highly unpredictable.

Question 4 continued on next page

4. Continued

(e) (5 points)

- (i) Explain which risk regime ABC Life is facing.
- (ii) Identify which risk perspective and ERM program/risk strategy the company should hold in this environment in order to fare best. Justify your answer.
- (iii) Describe one success and one shortfall ABC Life has in relation to rational adaptability.
- (iv) Recommend two improvements that can be made in order for the company to thrive under all future risk environments. Justify your recommendations.

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***Question 5 pertains to the Case Study.
Each question should be answered independently.***

5. (11 points) Three different negotiation tactics are:

- A. Distributive bargaining
- B. Iterative bargaining
- C. Attitudinal structuring

(a) (2 points) For each negotiation tactic:

- (i) Define the tactic.
- (ii) Describe how the tactic is used.

Information on Frenz can be found in Section 4 of the Case Study.

(b) (1 point) Describe the cause of conflict between Jeff Bemowski and Kitty Dunn regarding overhead allocation.

Five possible responses to conflict are:

- I. Competing
- II. Accomodating
- III. Avoiding
- IV. Compromising
- V. Collaborating

(c) (2 points) Identify the conflict response used by:

- (i) Jeff Bemowski
- (ii) Kitty Dunn

Justify your answer.

5. Continued

For each negotiation tactic from part (a):

- (d) (3 points) Describe an approach Jeff Bemowski should use to produce his desired result.
- (e) (1 point) Recommend one of the approaches described in part (d). Justify your recommendation.
- (f) (2 points) Assess whether the cost-center approach to overhead allocation proposed by Bemowski would be a good fit with Frenz's Asian expansion strategy.

****END OF EXAMINATION****
Morning Session

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