

**EXAM 6 – CANADA, FALL 2013**

29. (2 points)

A federally-regulated Canadian P&C insurer’s Dynamic Capital Adequacy Testing (DCAT) results as of December 31, 2012 for the three most adverse scenarios are shown below. Assume the Minimum Capital Test (MCT) ratio and surplus shown below reflect the most adverse results during the forecast period.

	Base Scenario	Frequency/ Severity (Loss Ratio)	Misestimation of policy liabilities (Unpaid Claims)	Premium Volume (Decrease)
MCT ratio	229%	157%	137%	200%
Surplus (\$000s)	\$400,000	\$275,000	\$240,000	\$350,000

a. (0.5 point)

Describe what a base scenario is in the context of the DCAT.

b. (0.5 point)

Determine whether or not the company is in “satisfactory financial condition.” Briefly explain your answer.

c. (0.5 point)

Briefly describe two possible ripple effects that the actuary may consider under the Premium Volume (Decrease) scenario.

d. (0.5 point)

Briefly describe two possible management actions that the actuary may recommend under the Misestimation of Policy Liabilities scenario.

There is a need to differentiate between public disclosure and disclosure to the regulator which is subject to confidentiality. Information provided to the regulator and subject to confidentiality will generally be more detailed and technical in nature. Ensuring appropriate confidentiality not only guards against disclosure of commercially sensitive information but also fosters openness between the regulator and the insurer. Insurers should provide sufficient information to give confidence to the regulator and the public at large that they are appropriately carrying out their responsibility to manage their risks and protect the interests of policyholders.

Public disclosure is critical for a well balanced solvency regime, to the operation of a sound market and to achieve the aims of transparency, comparability and convergence. The use of increasingly risk-based calculations of capital requirements is expected to increase the quality and utility of risk disclosures that should be provided by insurers.

For part C, many alternative answers are accepted as long as candidates make valid comparison between solvency 2 and OSFI framework.

**Actual candidate answer for full marks:**

No candidates received full marks for this question.

**Examiner's report:**

Candidates did well on part A as Solvency 2 has been on the syllabus and has been tested for a few times. Candidates really fell apart in Part B as many people started to cite the MCT standard, which is not what this question is asking about. In part C, many alternative answers were accepted. However, this performance was poor as many candidates were not able to get both part A and B correct, hence the comparison was incorrect.

## Question 29

**Answer key:**

Part a)

The base scenario is a realistic set of assumptions used to forecast the insurer's financial position over the forecast period.

Normally, the base scenario is consistent with the insurer's business plan.

Part b)

The prerequisite for a satisfactory opinion is that the insurer will be able to meet its future obligations under all plausible adverse scenarios, and under the base scenario it meets the minimum regulatory (supervisory target was also accepted) capital requirement. Since surplus is greater than 0 in all scenarios, the insurer is in satisfactory financial condition.

Part c)

Any 2 of the following:

- an increase in loss ratio due to a soft market, inadequate pricing or lost business that is relatively more profitable than the retained business;
- an increase in the fixed expense ratio;
- an increase for certain types of expenses (for example: more advertising costs to counter a very aggressive competitor);

- a shift in portfolio mix since the lost business could have a much different average premium or could be primarily from a specific market segment;
- an increase in reinsurance costs as a percentage of subject premium; and
- forced sale or liquidation of assets.

Part d)

Any 2 of the following:

- settling claims faster by minimizing litigation or fast tracking claims handling;
- reviewing reserving and claim settlement guidelines;
- implementing rate increases, where possible; and
- reviewing the target mix by line of business or jurisdiction.

**Actual candidate answer for full marks:**

- a) The base scenario is the expected scenario over the projection period, as a result, it should be similar to the business plan.
- b) The company is in satisfactory financial condition because under all scenarios, surplus is positive (assets > liabilities). Also, under the base scenario, the MCT exceeds the supervisory target of 150%.
- c)
  - a. Change in mix of business.
  - b. Increase in fixed expense ratio.
- d)
  - a. Increase rates where possible.
  - b. Review claims settling practices.

**Examiner’s report:**

For part a) and b), candidates performed well and a large proportion of them got full credit.

For part c) and d), many candidates failed to get full credit either by trying to guess the answer or by giving answers related to other DCAT scenarios. Most candidates managed to get at least 1 out of 2 answers correct.

**Question 30**

**Answer key:**

Part a)

-Minimum Capital Ratio: The minimum level of capital necessary for an insurer to cover the risks specified in the capital tests.

-Supervisory Target Capital Ratio: The level of capital necessary for an insurer to cover the risks specified in the capital tests as well as to provide a margin for other types of risks not included in the tests.

-Internal Target Capital Ratio: The level of capital, based on the company’s own risk and capital adequacy assessment process, necessary to cover the risks specified in the capital tests as well as all other risks of the insurer.

Part b)