ACT 471 Assignment 3

Part 3: Government and Industry Insurance Programs

1. (7 points)
   1. (1 point) Briefly describe 2 methods of loss subsidization that the government insurer can use to fill insurance needs unmet by private insurance

**Ans:**

The first method is to tax taxpayers for the insurance program even those who do not benefit from the program. Another method involves charging less than the actuarial cost of providing insurance coverage and making up the difference through government-provided funds.

* 1. (2 points) Identify and briefly describe 2 reasons for government participation in insurance, other than to fill insurance needs unmet by private insurance.

**Ans:**

One reason for government participation is compulsory purchase of insurance. When government require individuals or businesses to obtain insurance such as automobile insurance to meet social responsibilities, they might step in to make sure the mandatory insurance is affordable and available, even for less profitable customers. Some states felt obliged to offer the insurance to individuals who cannot find a private market. In theory, the cost of insurance would be cheaper if offered by a not-for-profit government agency.

Another reason might be convenience.

* 1. (1 point) For each of the reasons provided in part b., briefly describe 1 situation in which the reasoning for government participation may not be justified

**Ans:**

For the reason of compulsory purchase of insurance, if the private insurance companies are able to provide the insurance which is available and affordable for all, then the reasoning for government participation may not be justified, especially when the government’s expense ratio is higher than that of private sector, which means the government is not efficient enough. Moreover, in the situation of perfect competition, the government’s profit margin might tends to be zero and the cost of insurance may not be cheaper, which not reasonable for government participation in this case.

For the second reason,

* 1. (3 points) Identify 3 evaluation criteria for government insurance programs and evaluate the performance of the Québec's public automobile insurance plan based on these criteria.]

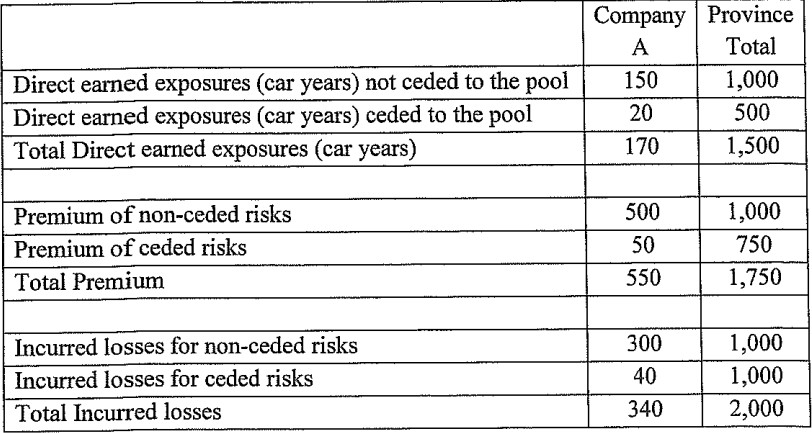
**Ans:**

The first criteria is whether the provision of the insurance by the government necessary or whether achieve a social purpose that cannot be provided by private insurance.

The second criteria is whether the government insurance program is insurance or a social welfare program.

The third criteria is whether the government insurance program is efficient and accepted by the public.

1. (6 points)
   1. (3 points) Describe 3 reasons for historical limited availability of flood insurance in Canada
   2. (1 point) Explain 1 precondition that is essential to establishing a strong flood risk management culture which is not included within your response to part a.
   3. (1 point) Explain why government involvement in a national flood program may still be needed to supplement the flood coverage offerings from private insurers.
   4. (1 point) Flood coverage for personal property has not been typically offered by private insurers in Canada. Describe 1 reason why insurers have historically paid for a large proportion of these losses.
2. (2 points) Identify 2 similarities and 2 differences between the Ontario and Alberta RSPs.
3. (6.5 points) The following information is provided for the RSP in Nova Scotia. All amounts are in 000’s.



Company A exclusively writes business in Nova Scotia and their usage is below the RSP maximum total allowable transfer limit. Assume expenses are 0%.

* 1. (1 point) Calculate the loss ratio for Company A on their share of the risk-sharing pool
  2. (1 point) Calculate the total loss ratio for Company A which includes the results of the risk sharing pool
  3. (1.5 points) Suppose the above information were for Ontario. Calculate the difference in participation ratio for Company A.
  4. (2.5 points) Calculate the revised total loss ratio for Company A if they choose not to cede any risks to the RSP
  5. (0.5 points) Propose how the company can use the RSP to lower its total loss ratio.