16. (2.25 points)

a. (1.5 points)

For each of the following contracts explain whether there is a transfer of risk.

i. Excess of loss treaty: \$2M excess of \$1M
Aggregate limit: \$2M
Aggregate deductible: \$1M
Reinsurance premium: \$1M

ii. 50% quota share
Ceding commission: 20%
Expected loss ratio: 40%
Reinsurer expenses: 5%

iii. \$300M excess of \$50M earthquake reinsurance
Reinsurance premium: \$5M
100 years PML: \$50M
200 years PML: \$200M
500 years PML: \$350M

b. (0.75 point)

Identify three conditions that may limit the transfer of risk in a reinsurance contract.

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EXAM 6C FALL 2016 SAMPLE ANSWERS AND EXAMINER'S REPORT

QUESTION 16	
TOTAL POINT VALUE: 2.25	**LEARNING OBJECTIVE(S): C1**
SAMPLE ANSWERS	

Part a: 1.5 points

<u>Sample Responses for (i)</u>

- No risk transfer
  Reinsurer has no losses for event of less than 2M because of the aggregate deductible of 1M and the company retention of 1M.
  For events greater than 2M, only losses up to 3M are covered.
  Max loss for the reinsurer = reinsurance premium, thus no risk transfer

<u>Sample Responses for (i)</u>

- Sample 1: Yes, quota share can be an exemption to the significant loss requirement because reinsurer assumes significantly all risk on the ceded portion.
- Sample 2: Yes, there is risk transfer. It passes the "substantially all" rule. Risk transfer exists if the reinsurer assumes "substantially all" risks under the reinsurance portion, which is the case here with 50% QS.

<u>Sample Responses for (iii)</u>

- Sample 1: Yes there is risk transfer. Although the likelihood of a payment from the reinsurer is very low, the magnitude of the payment would be very large.
- Sample 2: Yes, risk transfer is self-evident. There are no risk limiting features and it is clear that the insured is covered in case of an adverse event with significant risk of loss to the reinsurer.

Part b: 0.75 point

Any 3 of the following:

- Profit Sharing
- Adjustability of reinsurance premiums and/or commissions
- Pre-set limits to timing of payments
- Expected duration of contract
- High front-end reinsurance commissions
- Counterparties
- Future terms based on past experience
- Forced renewals
- Commutation clause
- Scheduled payments of claims
- Final commission based on the actual experience
- Aggregate limits
- Multi-year contract which usually have other risk limiting features
- Reinstatement clause
- Loss ratio cap
- Swing-rated premium
- Sliding scale commission
- Contingent commission
- Loss corridors

- Arbitrage amongst reinsurance contracts
- Pre-exempt clause that prevents transfer of risks. E.g. exclusion of coverage
- A high reinsurance premium that leave a small chance of having a loss for a reinsurer
- Pre-settlement amount

EXAMINER'S REPORT

Candidates were expected to be able to determine whether a reinsurance contract exhibits risk transfer and the conditions that may limit that transfer.

Part a

Candidates were expected to be able, given a specific situation, to explain whether a reinsurance contract exhibits risk transfer. Candidates were expected to demonstrate understanding of risk transfer in the context of specific situations based on multiple risk transfer criteria, including quantitative and qualitative components.

Common mistakes included:

- Not considering the reinsurance premium in part i.
- Not being able to properly determine the reinsurer's retention using the limit and deductible in i.
- Not considering the "substantially all" condition for part ii.
- Not considering the "reasonably self-evident" class of contract in iii.
- In part (iii), some candidates answered based on the 10-10 rule, without further qualitative considerations that would indicate that there is a transfer of risk
- In part (iii), candidates who mentioned expected policyholder deficit with a conclusion of a transfer of risk were given full credit.

Part b

Candidates were expected to identify conditions that may limit the transfer of risk in a reinsurance contract.

Common mistakes included:

- Providing fewer than three conditions.
- Providing answers that were too vague (e.g. clauses that limit transfer of risk)