

Financial accounting module 21: Contractual service margin homework assignment

(The attached PDF file has better formatting.)

An insurer writes a two-year policy on December 31, 20X0, and expects to

- receive on December 31, 20X0, premium of 350
- incur and pay two claims
  - one on December 31, 20X1, for 150
  - one on December 31, 20X2, for 200

The discount rate for this insurance contract is 5% *per annum*. For simplicity, the acquisition cash flows and the risk adjustment for non-financial risk are zero and the coverage units are the same in both years.

- A. What are the fulfilment cash flows at initial recognition?
- B. What is the contractual service margin at initial recognition?
- C. What are the fulfilment cash flows at December 31, 20X0, after the premium is received?

On December 31, 20X1:

the insurer re-estimates the December 31, 20X2, claim from 200 to 180  
the discount rate changes from 5% to 7% *per annum*

- D. What are the fulfilment cash flows at December 31, 20X1?
- E. What is the contractual service margin at December 31, 20X1, after the allocation to profit or loss?