

6. (2.5 points)

a. (0.5 point)

Contrast the components of IBNR for a claims-made policy and an occurrence policy.

b. (0.5 point)

Explain why a claims-made policy should cost less than an occurrence policy, provided claim costs are increasing.

c. (0.5 point)

Explain why a change in underlying trends will impact the estimated premium for an occurrence policy more than for a claims-made policy.

d. (0.5 point)

Briefly describe the provision that exists to eliminate coverage overlap if an insured switches from an occurrence policy to a claims-made policy, and why an overlap would exist without it.

e. (0.5 point)

Explain why there would be a coverage gap if an insured switches from a claims-made policy to an occurrence policy and what an insurer can do to provide coverage.

### Exam 5 Question #6

- a. Occurrence Policy has both pure IBNR + IBUER, CM policy only has IBNER

OR

CM has no pure IBNR @ report year end because all claims in the report have been reported (by def.), development is limited to IBNER. Occurrence policies will see development due to both pure IBNR + IBNER, since policies can be reported long after they occur.

- b. Claims made policy has a much shorter period of time between the coverage trigger and the settlement date- not as much impacted by loss cost increase.

OR

Occurrence policies incur liability for claims that occur now but are reported much later so inflation/loss trend accumulates on these costs whereas CM policies incur liability for claims reported @ today's cost levels.

- c. With occurrence policy, claims are covered that are reported much further out into the future. These loss trends will therefore have a greater impact on the losses covered by an occurrence policy - more impact of inflation/loss trends

OR

Occurrence policy can have losses reported much later, trends have leverage on future costs than current costs →  $\Delta$  in trend affects occurrence more than CM.

- d. Retroactive date= losses only covered by CM policy if they occur after retro date

		Lag		
		0	1	2
Report Year	10	L(10,0)	L(10,1)	L(10,2)
	11	L(11,0)	L(11,1)	L(11,2)
	12	L(12,0)	L(12,1)	L(12,2)

Occurrence policy in 10 would cover losses on shaded diagonal. CM policy in 11, without a retro date would cover entire row=overlap on L (11,1)

OR

Apply retroactive date to the new CM policy to limit coverage to losses that occur after such a date.

A=occ. Policy covg

B= CM covg w/o adj

	<u>LOG</u>			
year	0	1	2	3
11	A			
12	B	A/B	B	B
13		↑	A	
"		(Over Lap)		A

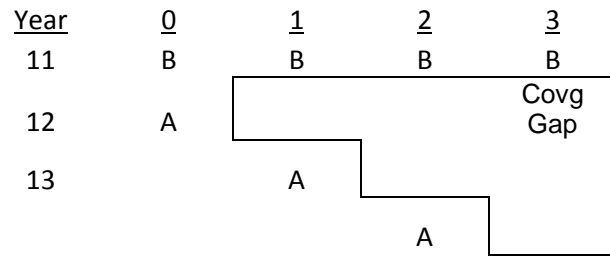
(previous years as well if avg covg provided before 2011)

- e. Use Extended reported period Endorsement = provides coverage for losses that occurred when CM coverage effective, but reported after expiration of last CM policy.

CM policy in 10 covers entire row. Occurrence policy in 11 covers diagonal = L(11,0) and L (12,1).  
No coverage for L(11,1) or L(11,2) or L(12,2).

		Lag		
		0	1	2
Report Year	10	L(10,0)	L(10,1)	L(10,2)
	11	L(11,0)	L(11,1)	L(11,2)
	12	L(12,0)	L(12,1)	L(12,2)

OR



Purchase tail coverage to cover during gap

1. Most candidates recognized an adjustment needed to be made for the commission change, but the adjustment wasn't consistently done correctly.

2. The trend period for losses and premium was often determined incorrectly. Although rates were in effect for 18 months, candidates are expected to know to properly determine trend period.

6.

- a. More than half of the candidates provided enough components of IBNR for both claims-made and occurrence to get full credit. Many candidates named only the pure IBNR component but did not state that it was the only difference between the policies. No credit was granted for candidates stating that Occurrence has IBNR and Claims-Made does not, because Claims-Made has IBNER, a component of IBNR.

Other candidates named additional components of IBNR, such as claims in transit or reopened claims. No credit was granted or deducted for these additional components, unless they were assigned incorrectly.

In general the majority of candidates seemed to understand the question and what was being asked. The most common mistakes were not including both Pure IBNR and IBNER in their contrast or simply stating that Claims-made has no IBNR.

- b. About half of the candidates received full credit for either some reference to Occurrence policies having claims reported further in the future at a higher cost level, or additional pricing risk associated with having to make a longer projection for Occurrence policies.

Several candidates received partial credit for showing a specific numeric example of lower costs, but without a full explanation of the cause.

Some candidates received no credit for simply stating that Claims-Made lack pure IBNR, or have no claims reported after the policy expiration, so the overall cost is less. However, these claims are balanced by claims reported from earlier accident years, such that it is the higher future cost levels (& additional pricing risk), not additional claims, that result in Claims-Made policies costing less than Occurrence policies.

Many candidates stated that Claims-Made policies have only one year of trend, or are fully settled &/or paid at the end of the year, while Occurrence policies have many years of trend. These responses received no credit, as it is the report lag that is shorter for the Claims-Made policies, not the settlement lag. Just like for Occurrence policies, inflation will act on Claims-Made policies for as long as the settlement lag lasts, which will likely be several years for a long-tailed line.

In general, a large number of candidates spent far too much time on this part. A simple statement with one or two sentences would have garnered full credit, but candidates seemed to misunderstand the intent and provided much lengthier responses – which cost them time and also increased the risk that they would misstate something resulting in only partial credit.

- c. About half of the candidates received full credit for some reference to Occurrence policies having claims reported further in the future.

Several candidates received partial credit for showing a specific numeric example of the higher impact, but without a full explanation of the cause.

Many candidates stated that Claims-Made policies have only one year of trend, or are fully settled &/or paid at the end of the year, while Occurrence policies have many years of trend. These responses received no credit, as it is the report lag that is shorter for the Claims-Made policies, not the settlement lag. Just like for Occurrence policies, inflation will act on Claims-Made policies for as long as the settlement lag lasts, which will likely be several years for a long-tailed line.

Similar to part B, we found that candidate provided much lengthier responses than was necessary for full credit.

- d. More than half the candidates received credit for stating any of the following for the provision: retroactive date, first-year claims-made policy (or second-year, etc.), or for describing the provision as a date restricting the mature claims-made policy to cover only claims occurring on or after that date.

Several candidates did not get credit for the provision because they incorrectly described it as the date on or after which claims must be reported for the claims-made policy, which is simply the effective date of the claims-made policy.

About half of the candidates received partial credit for the overlap description using either a written description or a diagram showing at least one occurrence & claims-made policies, and where the policies intersected as the overlap.

Several candidates did not get credit for the written overlap description because they did not mention both the reporting & occurring situation for the overlap to happen, or they did not assign them correctly.

Several candidates did not get credit for the diagram overlap description because they labeled one axis as AY with the Occurrence policy on the diagonal, which is incorrect. Other candidates did not get credit for the diagram because they did not identify the following: the axis labels, the occurrence and claims-made policies & the overlap.

In both the written response and diagram, several candidates received no credit for describing the overlap as happening when both the claims-made and occurrence policies were effective at the same time (rather than in a subsequent year), which would cause an overlap regardless of the type of policy.

Based on the responses of the candidates, it does seem that they understood the question part and formulated appropriate responses. Some candidates did spend more effort than necessary elaborating on the provision and overlap rather than 'briefly describing' them as requested.

- e. Most candidates received at least partial credit for stating either of the following for the provision: tail policy or extended reporting endorsement. Similar responses were also accepted, as long as either the tail or extended reporting period for the claims-made policy was included in the response.

About half of the candidates received credit for the gap description using either a written description or a diagram showing at least one occurrence & claims-made policies, and the area between the policies where the gap would be.

Several candidates did not get credit for the written gap description because they did not mention both the reporting & occurring situation for the gap to happen, or they did not assign them correctly.

Several candidates did not get credit for the diagram gap description because they labeled one axis as AY with the Occurrence policy on the diagonal, which is incorrect. Other candidates did not get credit for the diagram because they did not identify the following: the axis labels, the occurrence and claims-made policies & the gap (or alternatively, the area where the tail coverage would fill in).

In both the written response and diagram, several candidates received no credit for describing the gap as happening when both the claims-made and occurrence policies were effective at the same time, rather than in a subsequent year.

As with part D, candidates did demonstrate a strong understanding of what was being asked, but some provided responses that were more involved than needed.

7. This question was a straightforward calculation. The most challenging part for candidates was the part of the question where it stated that losses given were prior to the 7/1/11 benefit change, and that all accident years needed to be adjusted by the both benefit changes (the full amounts) for full credit.

The majority of candidates missed this subtlety and approached the question by adjusting each accident year by a different amount. A common mistake among these candidates was to treat the 7/1/11 benefit change as applying to policies written on or after 7/1/11 (question stated that it applied to losses on or after) and/or treat the 10/1/12 benefit change as applying to losses on or after 10/1/12 (question stated that it was applied to policies written on or after).

Several candidates correctly calculated the average benefit level for losses in each of the given accident years, but then multiplied the given losses by the average benefit level (rather than using the average benefit level to calculate a benefit level adjustment factor before applying).

8. Only a very small number of candidates received the full credit. One of the most popular mistakes is the incorrect trending periods. Very few candidates got it right. A significant portion of candidates missed the assumption that "All policies are annual and written on January 1" and therefore calculated the total trending period as incorrect 3.5 years. Another common mistake is the application of one step trending without any adjustment. Most candidates did not use two step trending or one step trending plus onetime adjustment to account for the underwriting guidelines change. Regarding the loss development part, most candidates got it correct. A small percentage of candidates misread the ultimate LDFs provided in the question as age-to-age factors. Almost all candidates understood the correct trend factor calculation  $(\text{freq} \times \text{sev})^{\text{trend period}}$ . They also understood the projected ultimate loss is calculated by multiplying the incurred loss by the loss development factor to ultimate and trend factor. About 10% of all candidates did not attempt the question (having a blank or almost blank answer sheet).
9.
  - a. Many candidates received full credit for this question. When there was an error committed, candidates either used the permissible loss ratio as the experience loss ratio or flipped the variable and fixed expense percentages.
  - b. Many candidates had trouble with this question. The answer was a verbalization of part a of this question. Many didn't realize this and tried to define fixed and expense rather than stating how reflecting fixed impacted indication.