

4. (1.5 points)

Given the following information:

Report Year	Loss Costs by Report Year Lag (\$)		
	0	1	2
2015	500	300	200
2016	525	330	210
2017	550	365	220

a. (0.25 point)

Calculate the report year 2015 loss costs for a claims-made policy.

b. (0.25 point)

Calculate the accident year 2015 loss costs for an occurrence policy.

c. (0.5 point)

Compare the effect of an unexpected increase in underlying trend on the accuracy of the pricing for a claims-made policy and an occurrence policy. Briefly explain why one of the policies is impacted more than the other.

d. (0.25 point)

Briefly explain why the risk of reserve inadequacy is reduced for a claims-made policy relative to an occurrence policy.

e. (0.25 point)

Briefly describe why the investment income earned from claims-made policies is less than under occurrence policies.

EXAM 5 FALL 2018 SAMPLE ANSWERS AND EXAMINER'S REPORT

QUESTION 4	
TOTAL POINT VALUE: 1.5	LEARNING OBJECTIVE(S): A3
SAMPLE ANSWERS	
Part a: 0.25 point	
<u>Sample 1</u> Report year 2015 loss costs for a claims-made policy = 500 + 300 + 200 = 1000	
<u>Sample 2</u> Assuming this is a first-year claims-made policy Report year 2015 loss costs = 500	
Part b: 0.25 point	
Accident year 2015 loss costs for an occurrence policy = 500 + 330 + 220 = 1050	
Part c: 0.5 point	
<u>Sample 1</u> A change in underlying trend will have little to no impact for a claims-made policy relative to an occurrence policy. The occurrence policy will be impacted more because occurrence policies are susceptible to both report and settlement lag, while claims-made policies only have settlement lag. As a result, occurrence policies remain open longer and are thus more susceptible to trends.	
<u>Sample 2</u> An unexpected increase in underlying trend will distort the accuracy of the occurrence policy more than the claims-made policy. Whereas claims-made are all reported within one report year/term, occurrence losses could be reported over several years, and all of those losses would be subject to trends, at varying trend periods.	
<u>Sample 3</u> This unexpected increase has less impact on the accuracy of claims-made policy pricing as claims-made policy has no pure IBNR. All claims are reported within the year. The change only impacts IBNER and has short term development period. It has bigger impact on occurrence policy as there are IBNR and IBNER and it has longer development period.	
Part d: 0.25 point	
<u>Sample 1</u> Because claims-made policies do not have report lag, there is no risk of IBNR and thus reserve adequacy risk is greatly reduced. They only have IBNER, i.e. settlement lag.	
<u>Sample 2</u> Because claims-made policies only cover the lag from reported date to settlement date. However, occurrence policies need to cover the lag from occurrence date to report date as well. So occurrence policies have higher reserve risks.	
Part e: 0.25 point	
<u>Sample 1</u>	

EXAM 5 FALL 2018 SAMPLE ANSWERS AND EXAMINER'S REPORT

Relative to the occurrence policy, the claims-made policy shortens the period of time between collection of premium and payment of claim; consequently, funds invested for a shorter time horizon result in less investment income.
EXAMINER'S REPORT
Candidates were expected to understand how a claims-made policy works and know the main differences between an occurrence policy and a claims-made policy.
Part a
Candidates were expected to know that all loss costs reported during the year 2015 would be covered by a claims-made policy, regardless of when the losses occurred. A common mistake was to assume that the claims-made policy only covered loss costs reported and occurred in 2015 without stating any assumptions (i.e. \$500).
Part b
Candidates were expected to know that all loss costs that occurred during the year 2015 would be covered by an occurrence policy, accounting for various lags in reporting. A common mistake was to assume an occurrence policy covered claims reported in 2015
Part c
Candidates were expected to understand that an occurrence policy has a longer development period than a claims-made policy because claims can still be reported further into the future for an occurrence policy. They were expected to recognize that these claims would be more impacted by a change in future trend. A common mistake was simply stating that claims-made policies are shorter tailed than occurrence policies, without explaining why they were shorter tailed or why it matters.
Part d
Candidates were expected to know that the IBNR includes two components: pure IBNR or IBNYR for losses incurred but not yet reported, and IBNER for losses incurred but not enough reported. Candidates were expected to know that a claims-made policy only has IBNER, while an occurrence policy has both pure IBNR and IBNER. A common mistake was to mention that claims-made policies had no IBNR, without elaborating why this is meaningful to the question being asked.
Part e
Candidates were expected to understand that the investment period is shorter for a claims-made policy since there is less time between the collection of premium and the claim payment, thus resulting in less investment income. A common mistake was stating that claims-made policies have a longer time lapse between the claim occurrence and the claim payment, instead of between the premium collection (or beginning of coverage) and the claim payment.