

# Subject SP7

## Corrections to 2019 study material

### 0 Comment

This document contains details of any errors and ambiguities in the Subject SP7 study materials for the 2019 exams that have been brought to our attention. We will incorporate these changes in the study material each year. We are always happy to receive feedback from students, particularly details concerning any errors, contradictions or unclear statements in the courses. If you have any such comments on this course please email them to [SP7@bpp.com](mailto:SP7@bpp.com).

You may also find it useful to refer to the Subject SP7 threads on the Actuarial Discussion Forum. (You can reach the Forums by clicking on the 'Discussion Forums' button at the top of the ActEd homepage, or by going to [www.acted.co.uk/forums/](http://www.acted.co.uk/forums/).)

### Important note

This document was created on 29 November 2018. The date on which any subsequent corrections have been added is noted below.

# 1 ASET

## April 2015 – Solutions

*Page 34*

*(added on 29 November 2018)*

Towards the middle of the page, the paragraph beginning: 'From page 192 of the *Tables ...*' should refer to page 162 of the *Tables* instead.

## 2 Revision Notes

### Booklet 1

*Page 187*

*(added on 7 February 2019)*

The solution to Past Exam Question 42 (Subject ST7 April 2017 Question 7) is incomplete. The remainder of the solution is reproduced below.

#### *(iii) Strengths and weakness of proposed regime*

The proposed regime:

- will be relatively inexpensive as it uses publicly available information
- may suit a small insurance market for which a more rigorous regime could prove burdensome
- is based on a 'true and fair' view
- offers no further protection beyond reporting / accounting requirements
- does not prescribe the basis on which assets and liabilities should be valued, making it hard to:
  - assess changes over time
  - compare the relative solvency of market participants
- does not require any free assets to be held, so:
  - provides no protection against experience being worse than expected
  - increases the risk of insolvency
  - reduces potential payouts in the event of insolvency
- does not ensure continuous solvency
- is retrospective rather than prospective
- does not take account of the different risks faced by insurers
- ignores the greater volatility of reinsurance business
- places no restrictions on the assets that can be used to back the liabilities
- does not take account of the riskiness of the classes written or any diversification between them.

***(iv) Advantages and disadvantages of each proposed measure***

*Measure 1*

Reduces the probability of money owed to the policyholders not being paid in the event of insolvency.

The calculation method has the advantage of simplicity, but it might be better to apply:

- a different percentage charge for premiums and reserves
- a cap to avoid it becoming overly costly.

As the levy is based on the previous year's data, which is known in advance, it aids business planning.

It is unclear what happens if the levy proves to be inadequate, *eg*:

- policyholders may not be fully refunded
- insurers might have to meet the deficit.

New insurers will have low levels of premiums and reserves and so will be charged an inappropriately low levy.

Insurers who under-serve are more likely to become insolvent, but pay a lower levy.

Insurers whose premiums are inadequate are more likely to become insolvent, but pay a lower levy.

*Measure 2*

Potentially overcomes the risk with Measure 1 of the levy being inadequate, because the reinsurer assumes the risk of the premium it charges being inadequate.

Relies on there being a reinsurer willing to provide the cover, which seems optimistic since the:

- reinsurer will essentially be providing stop-loss cover to all market participants
- risk is intensified as insurers are not required to hold free reserves
- reinsurer will be assuming all sorts of risks, including company-specific risks, *eg* operational risk.

Poor experience may result in:

- no reinsurer being willing to provide the cover
- a substantial rise in the levy.

The reinsurer may default, leaving:

- policyholders of insolvent insurers hit with the shortfall
- insurers unable to recoup the levies paid.

### 3 Mock Exam 2

#### Solution 5

*Page 10*

*(added on 10 September 2019)*

The fitted incremental triangle should read as follows:

*Fitted data (incremental)*

<i>Accident year</i>	<i>Development year</i>			
	<i>0</i>	<i>1</i>	<i>2</i>	<i>3</i>
<i>2015</i>	39,460	25,547	4,040	1,852
<i>2016</i>	35,366	22,897	3,621	
<i>2017</i>	40,068	25,941		
<i>2018</i>	51,296			

The triangle of residuals should read as follows:

*Residuals*

<i>Accident year</i>	<i>Development year</i>			
	<i>0</i>	<i>1</i>	<i>2</i>	<i>3</i>
<i>2015</i>	-350	519	-169	0
<i>2016</i>	511	-680	169	
<i>2017</i>	-161	161		
<i>2018</i>	0			