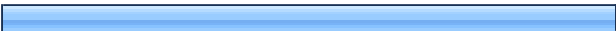






Reserving for income protection (IP) business (individual and group)









1. Please could you give us your name and contact details so that we can ensure that we get a wide spread of responses to this survey. These details will only be used for administrative purposes.

		Response Percent	Response Count
Name:		100.0%	17
Company:		100.0%	17
Email address:		100.0%	17
answered question			17
skipped question			1





2. Is income protection considered to be a significant business line for your company?

		Response Percent	Response Count
Yes		55.6%	10
No		44.4%	8
answered question			18
skipped question			0

3. Do you value each policy individually?			
		Response Percent	Response Count
Yes		88.9%	16
No - grouped model points are used		0.0%	0
Combination		11.1%	2
answered question			18
skipped question			0

4. Which actuarial valuation models do you currently use for the valuation of your income protection business?			
		Response Percent	Response Count
Prophet		72.2%	13
MoSes		16.7%	3
VIP/VIPitech		0.0%	0
Mo.net		5.6%	1
Internal model		16.7%	3
answered question			18
skipped question			0

5. Which actuarial valuation models do you intend to use for your income protection business for Solvency II?


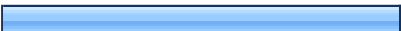


		Response Percent	Response Count
Prophet		70.6%	12
MoSes		11.8%	2
VIP/VIPitech		0.0%	0
Mo.net		5.9%	1
Internal model		29.4%	5
answered question			17
skipped question			1



6. Which of the following actuarial valuation methodologies do you use to value active lives under individual and group income protection business?



	Individual	Group	Response Count
Manchester Unity	100.0% (4)	50.0% (2)	4
Inception/annuity	100.0% (10)	10.0% (1)	10
Multistate model	100.0% (6)	16.7% (1)	6
Unearned premium	28.6% (2)	85.7% (6)	7
Other	100.0% (2)	100.0% (2)	2
answered question			18
skipped question			0



7. Which of the following actuarial valuation methodologies do you use to value claims in payment under individual and group income protection business?			
	Individual	Group	Response Count
Included in active life reserve methodology	100.0% (4)	25.0% (1)	4
Case estimate based on cause of claim	0.0% (0)	0.0% (0)	0
Statistical method independent of cause of claim	100.0% (5)	20.0% (1)	5
Statistical method based on cause of claim	100.0% (2)	100.0% (2)	2
Multistate termination model independent of claim cause	100.0% (6)	50.0% (3)	6
Multistate termination model dependent on claim cause	100.0% (1)	100.0% (1)	1
Other	80.0% (4)	80.0% (4)	5
answered question			18
skipped question			0

8. For statutory reserves calculated under Solvency I how do you allow for rate guarantees under individual income protection business?			
	Yes	No	Response Count
Higher best estimate claim assumption	18.2% (2)	81.8% (9)	11
Increased margin for adverse deviation	61.5% (8)	38.5% (5)	13
Lower interest rate	8.3% (1)	91.7% (11)	12
Deterioration charge	18.2% (2)	81.8% (9)	11
Other	27.3% (3)	72.7% (8)	11
answered question			15
skipped question			3

9. How often are claim inception experience investigations performed?			
		Response Percent	Response Count
More frequently than yearly		5.9%	1
Each year		64.7%	11
Every two years		5.9%	1
Not regularly		23.5%	4
answered question			17
skipped question			1








10. In determining best estimate claim inception rate assumptions, over what period do you average the experience?			
		Response Percent	Response Count
1 or 2 years		0.0%	0
3 or 4 years		64.7%	11
5 or more years		35.3%	6
answered question			17
skipped question			1



11. What data do you use for your most recent experience investigations into claim inception rates?			
		Response Percent	Response Count
The latest data but adjusted for delays in reporting		58.8%	10
Up to the date where no reporting delay adjustment will be needed		41.2%	7
answered question			17
skipped question			1

12. Do you analyse claim inception rates by cause of claim?				
			Response Percent	Response Count
Yes			11.8%	2
No			88.2%	15
answered question				17
skipped question				1





13. Please indicate whether you make an increase or decrease to your best estimate claim inception experience assumption to allow for:				
	Increase	Decrease	No change	Response Count
Credit crunch	12.5% (2)	0.0% (0)	87.5% (14)	16
Treating customers fairly	6.3% (1)	0.0% (0)	93.8% (15)	16
Changes in claims admittance practices	0.0% (0)	0.0% (0)	100.0% (15)	15
answered question				16
skipped question				2

14. Please specify the broad weighting that you apply to each of the following sources when setting your best estimate claim inception rate assumptions.						
	0%	1%-25%	26%-50%	51%-75%	76%-100%	Response Count
Own experience	5.9% (1)	5.9% (1)	11.8% (2)	11.8% (2)	64.7% (11)	17
Industry experience	35.7% (5)	35.7% (5)	7.1% (1)	14.3% (2)	7.1% (1)	14
Advice from reinsurer	42.9% (6)	42.9% (6)	7.1% (1)	0.0% (0)	7.1% (1)	14
Advice from consultants	91.7% (11)	8.3% (1)	0.0% (0)	0.0% (0)	0.0% (0)	12
answered question						17
skipped question						1








15. What base table do you start with when setting your claim inception rates?			
		Response Percent	Response Count
Own table		0.0%	0
Reinsurer's rates		11.8%	2
SM7578 (CMIR12)		58.8%	10
IPM 1991-98		0.0%	0
CIDA 85		5.9%	1
MU 1893/97		5.9%	1
Other		17.6%	3
answered question			17
skipped question			1

16. Individual business only: Do you allow for the effect of temporary initial selection in your best estimate claim inception assumptions?			
		Response Percent	Response Count
Yes		29.4%	5
No		70.6%	12
answered question			17
skipped question			1

17. Individual business only: Do you apply adjustment factors to the standard tables to reflect your own experience, or to allow for differentiating features of your experience?			
	Yes	No	Response Count
Age	43.8% (7)	56.3% (9)	16
Gender	93.8% (15)	6.3% (1)	16
Occupation status	75.0% (12)	25.0% (4)	16
Smoker status	62.5% (10)	37.5% (6)	16
Definition of disability	37.5% (6)	62.5% (10)	16
Duration in force	18.8% (3)	81.3% (13)	16
Location/Postcode	6.7% (1)	93.3% (14)	15
Sales channel	26.7% (4)	73.3% (11)	15
Product	80.0% (12)	20.0% (3)	15
answered question			16
skipped question			2

18. Please specify your approach in allowing for future claim inception rate changes.			
		Response Percent	Response Count
Fixed factor per annum applies to all future years (e.g. 1% p.a. for all future years)		11.8%	2
Fixed factor per annum up to a fixed number of future years (e.g. 2% p.a. for the next 10 years, then nothing thereafter)		0.0%	0
Other pattern of future changes		5.9%	1
No allowance for future changes		70.6%	12
Not applicable		11.8%	2
answered question			17
skipped question			1




19. Please specify the range of claim inception rate trend factors that you use for your best estimate assumptions.




		Response Percent	Response Count
0%-1.4% improvement		0.0%	0
1.5%-2.4% improvement		0.0%	0
2.5%+ improvement		6.7%	1
0%-1.4% deterioration		0.0%	0
1.5%-2.4% deterioration		13.3%	2
2.5%+ deterioration		0.0%	0
No improvement/deterioration		80.0%	12
answered question			15
skipped question			3



20. What margin (%) between your best estimate claim inception rate assumptions and your valuation assumption do you use in your statutory valuation?

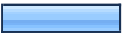

	0%-12%	13%-17%	18%-22%	23%-27%	28% or above	Not applicable	Response Count
Individual guaranteed rate business	38.5% (5)	15.4% (2)	23.1% (3)	15.4% (2)	7.7% (1)	0.0% (0)	13
Individual reviewable rate business	25.0% (4)	18.8% (3)	31.3% (5)	6.3% (1)	12.5% (2)	6.3% (1)	16
Group business	16.7% (2)	33.3% (4)	8.3% (1)	0.0% (0)	8.3% (1)	33.3% (4)	12
If you chose 'Not applicable', please explain why.							4
answered question							16
skipped question							2

21. Do you intend to develop stochastic claims models for active lives?				
	Yes	No	Already have a stochastic model	Response Count
Best estimate	0.0% (0)	100.0% (17)	0.0% (0)	17
ICA/ORSA	0.0% (0)	94.1% (16)	5.9% (1)	17
answered question				17
skipped question				1




22. How often are claim termination experience investigations performed?				
			Response Percent	Response Count
More frequently than yearly			5.9%	1
Each year			64.7%	11
Every two years			0.0%	0
Not regularly			29.4%	5
answered question				17
skipped question				1

23. In determining best estimate claim termination rate assumptions, over what period do you average the experience?				
			Response Percent	Response Count
1 or 2 years			6.3%	1
3 or 4 years			56.3%	9
5 or more years			37.5%	6
answered question				16
skipped question				2




24. What data do you use for your most recent experience investigations into claim termination rates?			
		Response Percent	Response Count
The latest data but adjusted for delays in reporting		50.0%	8
Up to the date where no reporting delay adjustment will be needed		50.0%	8
answered question			16
skipped question			2



25. Do you analyse claim termination rates by cause of claim?			
		Response Percent	Response Count
Yes		18.8%	3
No		81.3%	13
answered question			16
skipped question			2

26. Please specify the broad weighting that you apply to each of the following sources when setting your best estimate claim termination rate assumptions.						
	0%	1%-25%	26%-50%	51%-75%	76%-100%	Response Count
Own experience	6.7% (1)	13.3% (2)	6.7% (1)	13.3% (2)	60.0% (9)	15
Industry experience	40.0% (6)	33.3% (5)	0.0% (0)	6.7% (1)	20.0% (3)	15
Advice from reinsurer	46.2% (6)	38.5% (5)	7.7% (1)	0.0% (0)	7.7% (1)	13
Advice from consultants	100.0% (11)	0.0% (0)	0.0% (0)	0.0% (0)	0.0% (0)	11
answered question						16
skipped question						2

27. What base table do you start with when setting your claim termination rates?			
		Response Percent	Response Count
Own table		6.3%	1
Reinsurer's rates		6.3%	1
SM7578 (CMIR12)		87.5%	14
IPM 1991-98		0.0%	0
CIDA 85		0.0%	0
Other		0.0%	0
answered question			16
skipped question			2




28. Do you apply adjustment factors to the standard tables to reflect your own experience, or to allow for differentiating features of your experience?			
	Yes	No	Response Count
Age	31.3% (5)	68.8% (11)	16
Gender	43.8% (7)	56.3% (9)	16
Occupation status	18.8% (3)	81.3% (13)	16
Smoker status	12.5% (2)	87.5% (14)	16
Definition of disability	26.7% (4)	73.3% (11)	15
Duration in force	56.3% (9)	43.8% (7)	16
Location/Postcode	0.0% (0)	100.0% (15)	15
Sales channel	6.7% (1)	93.3% (14)	15
Product	56.3% (9)	43.8% (7)	16
answered question			16
skipped question			2




29. Please specify your approach in allowing for future claim termination rate changes.			
		Response Percent	Response Count
Fixed factor per annum applies to all future years (e.g. 1% p.a. for all future years)		6.3%	1
Fixed factor per annum up to a fixed number of future years (e.g. 2% p.a. for the next 10 years, then nothing thereafter)		0.0%	0
Other pattern of future changes		0.0%	0
No allowance for future changes		81.3%	13
Not applicable		12.5%	2
answered question			16
skipped question			2

30. Please specify the range of claim termination rate trend factors that you use for your best estimate assumptions.			
		Response Percent	Response Count
0%-1.4% improvement		0.0%	0
1.5%-2.4% improvement		0.0%	0
2.5%+ improvement		6.3%	1
0%-1.4% deterioration		0.0%	0
1.5%-2.4% deterioration		0.0%	0
2.5%+ deterioration		0.0%	0
No improvement/deterioration		93.8%	15
answered question			16
skipped question			2

31. What margin (%) between your best estimate claim termination rate assumptions and your valuation assumption do you use in your statutory valuation?							
	0%-12%	13%-17%	18%-22%	23%-27%	28% or above	Not applicable	Response Count
Individual guaranteed rate business	30.8% (4)	15.4% (2)	30.8% (4)	23.1% (3)	0.0% (0)	0.0% (0)	13
Individual reviewable rate business	25.0% (4)	18.8% (3)	25.0% (4)	12.5% (2)	6.3% (1)	12.5% (2)	16
Group business	16.7% (2)	25.0% (3)	25.0% (3)	8.3% (1)	0.0% (0)	25.0% (3)	12
If you chose 'Not applicable', please explain why.							3
answered question							16
skipped question							2






32. Do you intend to develop stochastic claims models for claims in payment?				
	Yes	No	Already have a stochastic model	Response Count
Best estimate	0.0% (0)	100.0% (16)	0.0% (0)	16
ICA/ORSA	0.0% (0)	93.8% (15)	6.3% (1)	16
answered question				16
skipped question				2

33. Individual business only: How often are lapse rate experience investigations performed?			
		Response Percent	Response Count
More frequently than yearly		13.3%	2
Each year		80.0%	12
Every two years		0.0%	0
Not regularly		6.7%	1
answered question			15
skipped question			3


34. Individual business only: In determining best estimate lapse assumptions, over what period do you average the experience?			
		Response Percent	Response Count
1 or 2 years		25.0%	4
3 or 4 years		50.0%	8
5 or more years		25.0%	4
answered question			16
skipped question			2

35. Individual business only: In setting your best estimate lapse assumptions, do you adjust past experience for:			
	Yes	No	Response Count
Special factors occurring in that period	37.5% (6)	62.5% (10)	16
Management's view of factors that will influence lapses in the future	46.7% (7)	53.3% (8)	15
answered question			16
skipped question			2

36. Individual business only: What margin (%), above or below depending on what is prudent, between your best estimate lapse assumptions and your valuation assumption do you use in your statutory valuation?

		Response Percent	Response Count
0%-12%		6.3%	1
13%-17%		0.0%	0
18%-22%		18.8%	3
23%-27%		12.5%	2
28% or above		50.0%	8
Not applicable		12.5%	2
If you chose 'Not applicable', please explain why.			2
answered question			16
skipped question			2



37. For options with an explicit policyholder charge do you calculate the reserve held:

		Response Percent	Response Count
Prospectively		6.7%	1
Retrospectively		0.0%	0
Not applicable		93.3%	14
answered question			15
skipped question			3

38. Do you set up explicit additional reserves for:			
	Yes	No	Response Count
IBNR	68.8% (11)	31.3% (5)	16
Notified claims awaiting authorisation	66.7% (10)	33.3% (5)	15
Data quality	20.0% (3)	80.0% (12)	15
Substandard extra risk	20.0% (3)	80.0% (12)	15
Other contingencies	26.7% (4)	73.3% (11)	15
answered question			16
skipped question			2

39. Which of these scenarios do you use in your ICA calculations for income protection business?			
	Yes	No	Response Count
Future trends	40.0% (6)	60.0% (9)	15
One-off morbidity shocks	60.0% (9)	40.0% (6)	15
Best estimate mis-estimation	28.6% (4)	71.4% (10)	14
Immediate step change	57.1% (8)	42.9% (6)	14
answered question			15
skipped question			3

40. What disability claim rate (allowing for both inceptions and terminations) margins over best estimate (representing a 99.5% confidence level over 1 year) do you assume in your ICA calculation?						
	0%-22%	23%-27%	28%-32%	33% or more	Not applicable	Response Count
Individual guaranteed rate business	15.4% (2)	23.1% (3)	15.4% (2)	38.5% (5)	7.7% (1)	13
Individual reviewable rate business	14.3% (2)	7.1% (1)	7.1% (1)	42.9% (6)	28.6% (4)	14
Group business	36.4% (4)	0.0% (0)	18.2% (2)	27.3% (3)	18.2% (2)	11
If you chose 'Not applicable', please explain why.						3
answered question						15
skipped question						3

41. Is your company planning to obtain approval for internal models for income protection business under Solvency II?			
		Response Percent	Response Count
Yes		62.5%	10
No		37.5%	6
answered question			16
skipped question			2

42. If you answered 'Yes' to question 39, what are the purposes for using an internal model for income protection business?			
	Yes	No	Response Count
Full internal model being used for whole business	88.9% (8)	11.1% (1)	9
Better risk management and understanding	100.0% (8)	0.0% (0)	8
Expect lower capital requirement	75.0% (6)	25.0% (2)	8
Regulator requires it	16.7% (1)	83.3% (5)	6
answered question			10
skipped question			8

43. If you answered 'No' to question 39, is this due to:			
	Yes	No	Response Count
Grounds of materiality	66.7% (4)	33.3% (2)	6
Insufficient data	66.7% (4)	33.3% (2)	6
answered question			6
skipped question			12

44. We welcome any feedback about this survey. Please provide any comments or suggestions you may have - particularly if there are any ambiguities in the questions that could be material to the interpretation and the corresponding response. We would also welcome your suggestions should there be any additional information that you would be interested in seeing in a future survey.			
			Response Count
			5
answered question			5
skipped question			13