



7.7 Morbidity / Disability

Q79 Section 7.7 Is the simplified segmentation by contract term for Morbidity/Disability risk appropriate? Please explain.

Organisation	Jurisdiction	Confidential	Answer	Answer Comments
China Banking and Insurance Regulatory Commission (CBIRC)	China	No	Yes	
European Insurance and Occupational Pensions Authority (EIOPA)	EIOPA	No	No	We appreciate the reduction of contract term segments from three to two. However, we believe that an approach even without any differentiation by contract term would also be sufficiently risk sensitive.
Insurance Europe	Europe	No	Yes	
Bundesanstalt für Finanzdienstleistungsaufsicht (BaFin)	Germany - BAFIN	No	No	We appreciate the reduction of contract term segments from three to two. However, we believe that an approach even without any differentiation by contract term would also be sufficiently risk sensitive.
Dai-ichi Life Holdings, Inc.	Japan	No	Yes	The segmentation is appropriate, while the calibration result is overly high.
General Insurance Association of Japan	Japan	No	Yes	The simplification is relevant. From a workload point of view, segmentation based on contract terms should be simplified to the best extent possible.

INTERNATIONAL ASSOCIATION OF
INSURANCE SUPERVISORS

The Life Insurance Association of Japan	Japan	No	Yes	• The LIAJ thinks that the segmentation is appropriate, but calibration level is overly high.
Financial Supervisory Service (FSS) & Financial Services Commission (FSC)	Korea (Republic of)	No	Yes	
Legal & General	UK	No	Yes	No comment provided
Association of British Insurers	United Kingdom	No	Yes	The ABI notes the IAIS's proposal to simplify the number of contract segments to only two (Short Term and Long Term) by merging the 2017 Short Term and Medium Term contract buckets. We also note the new calibrations for the Long Term contract bucket and the long-term-recurring payments benefit category in the Short Term contract bucket. We consider this simplified segmentation to be appropriate.
National Association of Insurance Commissioners (NAIC)	USA, NAIC	No	Yes	This appears to be appropriate but will be further informed by the current field testing.

Q80 Section 7.7 Should any other modifications be made to the design? Please describe.

Organisation	Jurisdiction	Confidential	Answer	Answer Comments
China Banking and Insurance Regulatory Commission (CBIRC)	China	No	No	



European Insurance and Occupational Pensions Authority (EIOPA)	EIOPA	No	Yes	We believe that it is inappropriate to calculate the capital charge in the long-term recurring category as maximum of the inception risk charge and the recovery risk charge. In contrast to other risks where the capital charge is also determined as maximum of several sub-risk charges insurers are exposed to both an increase of inception rates and a decrease of recovery rates at the same time. Thus, the stresses should be simultaneous or at least aggregated using an appropriate correlation (e.g. assuming independency).
Insurance Europe	Europe	No	Yes	Insurance Europe believes the ICS design, providing different shocks on a scenario basis for life, 'similar to life' and 'not similar to life', is unnecessarily complex. It suggests a simplification of the categorisation for morbidity/disability shock.
Bundesanstalt für Finanzdienstleistungsaufsicht (BaFin)	Germany - BAFIN	No	Yes	See above. Furthermore, we believe that it is inappropriate to calculate the capital charge in the Long-term recurring category as maximum of the Inception risk charge and the Recovery risk charge. In contrast to other risks where the capital charge is also determined as maximum of several sub-risk charges insurers are exposed to both an increase of inception rates and a decrease of recovery rates at the same time. Thus, the stresses should be simultaneous or at least aggregated using an appropriate correlation (e.g. assuming independency).
General Insurance Association of Japan	Japan	No	Yes	With regard to policies which make benefit payments in multiple categories, it is practically difficult to use different uplift factors according to different components. Therefore, the approach prescribed in paragraph 561 of the 2018 FT Technical Specifications (*) should be maintained. Also, for insurers who have difficulties applying different segmentations to different benefit categories, we propose applying average uplift factors calculated for the whole medical insurance segment or for relevant sub-segments based on the policies in-force at the reference date. Such factors should be applied either to all policies or relevant sub-segments respectively. (*) However, if it is not feasible for the individual stresses to be applied to each component of the policy, the stress applied to a given policy should be based on the dominant component of that policy.
Financial Supervisory Service (FSS) & Financial Services Commission (FSC)	Korea (Republic of)	No	No	



Legal & General	UK	No	No	No comment provided
Association of British Insurers	United Kingdom	No	No	
National Association of Insurance Commissioners (NAIC)	USA, NAIC	No	No	Further modification appears to be unnecessary but will be further informed by the current field testing.

Q81 Section 7.7 Are the stress levels appropriate for the Long-Term contract segment? Please explain. If “no”, please provide supporting evidence and rationale for a different stress level.

Organisation	Jurisdiction	Confidential	Answer	Answer Comments
China Banking and Insurance Regulatory Commission (CBIRC)	China	No	Yes	
European Insurance and Occupational Pensions Authority (EIOPA)	EIOPA	No	No	Currently some of the Morbidity / Disability stress levels are still placeholder calibrations. They should be recalibrated using reliable data. If this is not possible, i.e. because reliable data is unavailable, the IAIS should consider stress factors in existing solvency regimes where the factors were calibrated reliably and apply some expert judgement to derive factors that comply with the current design of the Morbidity / Disability risk module (possibly omitting segmentation by contract terms).
Insurance Europe	Europe	No	Yes	



INTERNATIONAL ASSOCIATION OF
INSURANCE SUPERVISORS

Bundesanstalt für Finanzdienstleistungsaufsicht (BaFin)	Germany - BAFIN	No	No	Currently some of the Morbidity / Disability stress levels are still placeholder calibrations. They should be recalibrated using reliable data. If this is not possible, i.e. because reliable data is unavailable, the IAIS should consider stress factors in existing solvency regimes where the factors were calibrated reliably and apply some expert judgement to derive factors that comply with the current design of the Morbidity / Disability risk module (possibly omitting segmentation by contract terms).
Global Federation of Insurance Associations	Global	No	No	GFIA considers that the level of calibration is too conservative.
Dai-ichi Life Holdings, Inc.	Japan	No	Yes	<p>The stress level should be determined for each jurisdiction based on data submitted by volunteer groups. Although we submitted data, the calibration result is too high compared to our internal model.</p> <p>Our company is large in size compared to ordinary insurance companies, and our business focuses mainly on protection. We believe that the fact that risk diversification is more effective due to Low of Large Numbers is not reflected in the current ICS proposal, but we have not been able to propose specific improvement plan to IAIS because the method of calibration by IAIS is not shared. The calibration method should be disclosed and constructive discussions should be promoted.</p>
General Insurance Association of Japan	Japan	No	Yes	
The Life Insurance Association of Japan	Japan	No	No	<ul style="list-style-type: none">• The LIAJ heard Japanese life insurers (Volunteer Groups) have submitted the additional data for calibration and the LIAJ would like the IAIS to set stress level by individual region basis based on the additional data submitted by the Volunteer Groups. The LIAJ believes the current level of the calibration is overly high compared to their internal models.• Volunteer Groups in Japan are relatively larger in terms of size and their business mainly focus mainly on offering protections. It does not seem to reflect strong effects of the risk diversification by the law of large numbers. However, insurers have not been able to make concrete proposals for the improvement due to the calibration methods in the IAIS is not shared with insurers..



				<ul style="list-style-type: none"> In order to raise shared awareness, the LIAJ urge the IAIS to share calibration method with stakeholders and pursue constructive discussions among stakeholders.
Financial Supervisory Service (FSS) & Financial Services Commission (FSC)	Korea (Republic of)	No	Yes	
American Council of Life Insurers	Office of General Counsel	No	No	The current calibration levels are overly excessive and must be lowered to reflect real world experiences. For example, the stress level applied to the long-term contract bucket for “lump sum” type products appear to ignore the fact that for these types of long-term contracts, the stresses are being applied over the entire life of the contract which may exceed upwards of 80 years, while the calculation is essentially using volatility to estimate a one-year shock. Such stresses are simply not viable. This is further reinforced by public cancer incidence data that is available in major developed countries. Given this, ACLI urges the IAIS to lower the shock levels for long-term contracts considerably to be more in line with existing data and experience.
Legal & General	UK	No	Yes	No comment provided
Association of British Insurers	United Kingdom	No	Yes	
Prudential Financial, Inc.	United States of America	No	No	In 2018, morbidity stresses were generally made even more severe than 2017, and in some cases significantly more severe, absent a risk-based rationale from the IAIS. For example, the long-term lump sum benefit segment saw an increase to incidence base stresses of approximately 50%, which is significantly more severe than 99.5% VaR for insurers with credible claims data. We believe that the risk charge should be conceptually sound and provide a reliable measure of risk. It is not obvious to us how the increase in the morbidity stress calibration aligns with these objectives or ICS targeted calibration, nor was it supported by experience data.

				Prudential Financial recommends the stress level for Category 2 (lump sum in case of a health event) with long term contracts should be reduced to a stress level equal to or less than the 13% level used in 2017 Field Testing.
MetLife, Inc	USA	No	No	<p>The IAIS have increased the risk charge on A&H lump sum business from 13% in 2017 to 20% in 2018, severely impacting required capital in jurisdictions where this option is offered. No explanation has been given as to why the long term lump sum category has been singled out for this excessive increase in shock level. We consider the increase unwarranted and recommend the shock level be reduced to the industry recommended 13% level.</p> <p>Please see our comments in response to Q78 above. Our concern regarding inadequate diversification, in particular geographical diversification applies equally to equity, lapse, mortality, morbidity and operational risk.</p>
National Association of Insurance Commissioners (NAIC)	USA, NAIC	No	Yes	We are not answering 'yes' or 'no' on this question but simply note that these stresses were prudentially based on the current data provided by the volunteers and should be reviewed in light of further data being provided.

Q82 Section 7.7 Are the stress levels appropriate for the Short-Term contract segment? Please explain. If "no", please provide supporting evidence and rationale for a different stress level.

Organisation	Jurisdiction	Confidential	Answer	Answer Comments
China Banking and Insurance Regulatory Commission (CBIRC)	China	No	Yes	

European Insurance and Occupational Pensions Authority (EIOPA)	EIOPA	No	No	see Q81
Insurance Europe	Europe	No	Yes	
Bundesanstalt für Finanzdienstleistungsaufsicht (BaFin)	Germany - BAFIN	No	No	See Q81 above.
General Insurance Association of Japan	Japan	No	Yes	
Financial Supervisory Service (FSS) & Financial Services Commission (FSC)	Korea (Republic of)	No	Yes	
Legal & General	UK	No	Yes	No comment provided
Association of British Insurers	United Kingdom	No	Yes	
Prudential Financial, Inc.	United States of America	No	No	Prudential Financial believes that maintaining the 2017 placeholder calibration for the short-term contract bucket for the newly merged short-term contract segment for benefit categories 1 through 3, as well as the increase in the calibration for benefit category 4, is excessive relative to a notional 99.5% VaR. We recommend that the stress levels for the newly merged short-term contract segment be reduced, not maintained, to reflect the fact that this segment now covers contracts up to five years in length (previously up to one year).



National Association of Insurance Commissioners (NAIC)	USA, NAIC	No	Yes	These stresses were prudentially based on the current data provided by the volunteers and should be reviewed in light of further data being provided.
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Q83 Section 7.7 Are there any further comments on Morbidity/Disability risk, which the IAIS should consider in the development of ICS Version 2.0? If “yes”, please elaborate with sufficient detail and rationale.

Organisation	Jurisdiction	Confidential	Answer	Answer Comments
China Banking and Insurance Regulatory Commission (CBIRC)	China	No	Yes	We suggest that the IAIS continue its current experience-data-collection exercise, sett risk parameters based on the proper experience of each market if available, and update regularly when there is significant experience changes.
European Insurance and Occupational Pensions Authority (EIOPA)	EIOPA	No	No	
Insurance Europe	Europe	No	No	
Bundesanstalt für Finanzdienstleistungsaufsicht (BaFin)	Germany - BAFIN	No	Yes	The current approach to calculate the risk charge as a result of solely an upward inception rate stress might be inappropriate in regard to policies with a premium adjustment clause, i.e. an arrangement by which the insurance company has the obligation or the right to adjust the future premiums to reflect material changes in the expected level of claims. Due to premium adjustments, the increase of future premiums in reaction to permanently increased claims may reduce or even reverse the impact on NAV. Whereas the reduction of future premiums in reaction to decreased claims (e.g. due to a permanent downward inception rate stress) can lead to a decrease in the NAV and therefore has to be taken into account as an additional risk



				factor. A similar approach as in lapse risk (maximum of upward and downward risk) is recommended.
Global Federation of Insurance Associations	Global	No	Yes	See response to Q81
Dai-ichi Life Holdings, Inc.	Japan	No	Yes	<p>The stress level should be determined for each jurisdiction based on data submitted by volunteer groups. Although we submitted data, the calibration result is too high compared to our internal model.</p> <p>Our company is large in size compared to ordinary insurance companies, and our business focuses mainly on protection. We believe that the fact that risk diversification is more effective due to Low of Large Numbers is not reflected in the current ICS proposal, but we have not been able to propose specific improvement plan to IAIS because the method of calibration by IAIS is not shared. The calibration method should be disclosed and constructive discussions should be promoted.</p>
General Insurance Association of Japan	Japan	No	No	
The Life Insurance Association of Japan	Japan	No	Yes	<ul style="list-style-type: none"> • The LIAJ heard Japanese life insurers (Volunteer Groups) have submitted the additional data for calibration and the LIAJ would like the IAIS to set stress level by individual region basis based on the additional data submitted by the Volunteer Groups. The LIAJ believe the current level of the calibration is overly high compared to their internal models. • Volunteer Groups in Japan are relatively larger in terms of size and their business mainly focus mainly on offering protections. It does not seem to reflect strong effects of the risk diversification by the law of large numbers. However, insurers have not been able to make concrete proposals for the improvement due to the calibration methods in the IAIS is not shared with insurers.. • In order to raise shared awareness, the LIAJ urge the IAIS to share calibration method with stakeholders and pursue constructive discussions among stakeholders.



Financial Supervisory Service (FSS) & Financial Services Commission (FSC)	Korea (Republic of)	No	No	
American Council of Life Insurers	Office of General Counsel	No	Yes	The current calibration levels are overly excessive and must be lowered to reflect real world experiences. For example, the stress level applied to the long-term contract bucket for “lump sum” type products appear to ignore the fact that for these types of long-term contracts, the stresses are being applied over the entire life of the contract which may exceed upwards of 80 years, while the calculation is essentially using volatility to estimate a one-year shock. Such stresses are simply not viable. This is further reinforced by public cancer incidence data that is available in major developed countries. Given this, ACLI urges the IAIS to lower the shock levels for long-term contracts considerably to be more in line with existing data and experience.
The Life Insurance Association of the Republic of China	CHINESE TAIPEI	No	Yes	<p><input type="checkbox"/> Grading shock mechanism or scaling factor mechanism as similar to 2016FT Health risk may be more appropriate. Company experience consideration may better reflect the true material risk IAIGs are exposed to.</p> <p>1. It is stated in B56 and B57 that the assumption of current estimate is not necessary to be made by the most-recent experience. If there is substantial change on the experience, one should analyze and investigate the reasons of the change in the experience and make assumption based on both the previous and most-recent experience. That is, If the updated experience shows significant change, both the most recent and previous experience together should be considered and hence the most recent one might not be fully reflected in the new assumption.</p> <p>2. The VaR 99.5% shock over the lifetime might overstate the risk but over the first year might underestimate on the other hand. We propose two methods to address this issue:</p> <p>1) We suggest applying grading shock level in the future years. (E.g. If the company uses 5-year average of actual experience as assumption. The original shock is 10% and 2% at 2nd year and thereafter.)</p>

				<p>2) The scaling factor for morbidity risk in 2016 FT is designed to capture the different characteristics of products IAIGs underwriting. Therefore the uplift factor may differ when companies underwrite different products. However, the floor (fi) set within the mechanism may drive the design away from its original concept with insufficient theory grounded. In the 2017 FT, the scaling factor mechanism is removed but the newly-applied stress level deliver similar results. The scaling factors of our company are mostly below 5%, way below the floor (fi) (20% and 50% in 2016FT), and it implies that the risk capital would be overstated because of the floor (fi). We suggest removing the floor (fi) to reasonably reflect the risk.</p> <p>3. The morbidity experience for health insurance largely differs from jurisdiction to jurisdiction. When determining morbidity shock, jurisdictional specific factors or experiences should be taken into consideration.</p>
Legal & General	UK	No	No	No comment provided
Association of British Insurers	United Kingdom	No	No	
Prudential Financial, Inc.	United States of America	No	Yes	<p>Prudential Financial supports the possibility of the IAIS allowing the morbidity risk charge or stress implementation to reflect the unique characteristics of each jurisdiction by allowing stress or stress implementation to be differentiated by geographic region. This would better reflect the true risk by region by reflecting the impacts of factors such as government control over healthcare or healthcare capacity constraints that could limit the potential range of outcomes.</p> <p>In Japan, for example, private insurer health products are generally tied to the national healthcare system by providing supplemental benefits. Therefore, government policies and actions on behalf of the national system could affect the outcomes and trends experienced by private insurers relative to other regions without government control over healthcare. Over the past decade, it has been a key policy objective for the Japanese government to contain the growth in medical insurance spending and address capacity constraints for hospitals, driven</p>



				by demographic changes. Under a stress scenario, government control over healthcare may lead to interventions that limit the range of potential outcomes (e.g., accelerating the efforts to shorten the length of hospital stays, on average, if the hospitalization/inception rates deviate adversely). As a result, Prudential Financial believes it is appropriate to allow stress levels or the stress implementation to be differentiated by geographic region to reflect their idiosyncratic features and characteristics.
Actuarial Institute of Chinese Taipei, AICT	Chinese Taipei	No	Yes	<p>Grading shock mechanism or scaling factor mechanism as similar to 2016FT Health risk may be more appropriate. Jurisdictional experience may better reflect the true material risk IAIGs are exposed to.</p> <p>Applying similar concept of IFRS 17 B56 and B57 that the assumption of current estimate is not necessary to be made by the most-recent experience. If there is substantial change on the experience, one should analyze and investigate the reasons of the change in the experience and make assumption based on both the previous and most-recent experience. That is, if the updated experience shows significant change, both the most recent and previous experience together should be considered and hence the most recent one might not be fully reflected in the new assumption.</p> <p>The VaR 99.5% shock over the lifetime might overstate the risk but over the first year might underestimate on the other hand. There are two measures that can produce a more balance result:</p> <ol style="list-style-type: none"> 1. Applying grading shock level in the future years. (E.g. If the company uses 5-year average of actual experience as assumption. The original shock is 10% and the 2 % at 2nd year and thereafter.) 2. The scaling factor for morbidity risk in 2016 FT is designed to capture the different characteristics of products IAIGs underwriting. Therefore the uplift factor may differ when companies underwrite different products. However, the floor (fi) set within the mechanism may drive the design away from its original concept with insufficient theory grounded. In the 2017 FT, the scaling factor mechanism is removed but the newly-applied stress level deliver similar results. If the scaling factors is way below the floor (fi) (20% and 50% in 2016FT), it would lead



				<p>to the risk capital being overstated. We suggest removing the floor (fi) to reasonably reflect the risk.</p> <p>3. The morbidity experience for health insurance largely differs from jurisdiction to jurisdiction. When determining morbidity shock, jurisdictional specific factors or experiences should be taken into consideration.</p>
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End of Section 7.7