

7.14 Equity risk

Q122 Section 7.14 Is the four-bucket approach to the segmentation of equities appropriate? Please explain. If “no”, please provide an alternative suggestion and rationale.

Organisation	Jurisdiction	Confidential	Answer	Answer Comments
China Banking and Insurance Regulatory Commission (CBIRC)	China	No	No	We strongly suggest introducing more segments for equity investments, and set risk charges separately for each segment. The ICS segments currently for equity investments are broad and the majority of the equity exposures for Chinese insurers go under 'Other' segment, with a risk charge of 49%. The equity risk has now become the highest risk for Chinese firms under the current approach and it may not be true in reality. The equity investments which fall under 'Other' segment are mainly strategic equity, private equity, infrastructure and asset management products. The underlying risks, the holding purpose and the risk management practice of these investments are significantly differed and should be considered separately when setting risk charges. The C-ROSS sets separate risk charges for all these categories and can be referred to by the ICS.
European Insurance and Occupational Pensions Authority (EIOPA)	EIOPA	No	Yes	We generally support segmenting the equities according to their riskiness. For simplicity reasons we could also consider a less granular segmentation, e.g. two segments. Also, the segmentation of risk charges depending on rating category might even be too sophisticated for a global capital standard.
Insurance Europe	Europe	No	No	Insurance Europe believes that the segmentation of equity in four buckets is generally appropriate. However, there is evidence that a tailored calibration of capital charges is more appropriate, especially in cases where the nature and risk profile of a particular asset differs



IAIS

INTERNATIONAL ASSOCIATION OF
INSURANCE SUPERVISORS

PUBLIC

				from the “basket” that it is placed in. For example, the prudential treatment of infrastructure investments should be aligned to the true risks to which insurers are exposed. A wrong design of the capital requirements calibration will have a negative impact on efficient use of capital and on the industry capacity for investment in these assets. Specifically, Insurance Europe strongly believes that a separate asset class meeting specified criteria should be created based on the risk characteristics of infrastructure. The unnecessarily high calibration of capital charges for infrastructure equity under the equity basket is unjustified: a 49% risk charge is excessively punitive, especially in consideration of the solid evidence showing that infrastructure investments calibrations should be lower and closer to the calibrations for listed shares in developed markets.
Bundesanstalt für Finanzdienstleistungsaufsicht (BaFin)	Germany - BAFIN	No	Yes	We generally support segmenting the equities according to their riskiness. For simplicity reasons we could also live with a less granular segmentation, e.g. two segments. Also, the segmentation of risk charges depending on rating category might even be too sophisticated for a global capital standard.
Global Federation of Insurance Associations	Global	No	Yes	Infrastructure investments should be independent of other equity.
Dai-ichi Life Holdings, Inc.	Japan	No	Yes	
General Insurance Association of Japan	Japan	No	Yes	
The Life Insurance Association of Japan	Japan	No	No	• Returns from unlisted stocks have a low correlation with returns from infrastructure investments. A new segment which enable insurers to separate infrastructure investments from Other Equity, and diversification effects should be appropriately reflected .
Financial Supervisory Service (FSS) & Financial Services Commission (FSC)	Korea (Republic of)	No	Yes	

Public

Compiled Comments on Risk-based Global Insurance Capital Standard Version 2.0

Public Consultation Document

31 July 2018 – 30 October 2018

Page 2 of 17

Legal & General	UK	No	No	We believe that a fifth category should be added for long-term strategic equity investments – see question 124 for rationale.
National Association of Mutual Insurance Companies	United States	No	No	The ICS is not yet fit for purpose. Significant additional work is needed to achieve an appropriate global capital standard and it may be completely unachievable. Equity risk and all other risks and their factors should be determined by the local jurisdictional supervisor. NAMIC disagrees with the mandate of a standard method, the 99.5% VaR calibration level and the IAIS dictating the factors to be used in the formula. Jurisdictional flexibility is the appropriate way to capture these risks with mutual recognition and shared understanding of the jurisdictional approach at supervisory colleges.
Prudential Financial, Inc.	United States of America	No	No	The Other Equity bucket, which is a catch-all classification, represents a broad range of investments, many of which have a lower risk profile than is reflected by the application of a 49% stress factor. We recommend a move towards further granularity within this classification group. For instance, we believe a carve-out for hedge fund strategies, an asset class with historically low volatility (along with having low correlation to other equity sub asset classes), should be considered. Additional suggestions for equity sub asset class carve-outs include infrastructure corporate and strategic equity assets which are reported separately in the supplemental data request segment of the 2018 field test.
Property Casualty Insurers Association of America (PCI)	USA	No	No	PCI's yes or no response was simply required in order to open the text box and file comments. We believe this question to be best addressed by field test volunteers who have the ability to do so with the benefit of actual data for support and context. The absence of a response by PCI should not be taken one way or the other with respect to the subject of the question.
National Association of Insurance Commissioners (NAIC)	USA, NAIC	No	Yes	Yes.

Q123 Section 7.14 Is the approach taken to calculate the aggregation and diversification for Equity risk appropriate? Please explain. If “no”, please provide an alternative suggestion and rationale.

Organisation	Jurisdiction	Confidential	Answer	Answer Comments
China Banking and Insurance Regulatory Commission (CBIRC)	China	No	Yes	We support introducing the diversification within the equity risk, and suggest that the IAIS further calibrate and regularly review the correlation factors.
European Insurance and Occupational Pensions Authority (EIOPA)	EIOPA	No	Yes	
Insurance Europe	Europe	No	No	Insurance Europe believes that if an equity volatility stress is needed then its contribution to the capital requirement should capture its interaction with the price stress. At present, the summation of the requirements from the volatility stress and equity stress does not achieve this.
Bundesanstalt für Finanzdienstleistungsaufsicht (BaFin)	Germany - BAFIN	No	Yes	
Global Federation of Insurance Associations	Global	No	No	Intra-risk diversification and interaction should be taken into consideration when calibrating the overall risk charge; this includes capturing the interaction between the level and volatility drivers when calculating the stress impact. An alternative to the current approach would be to allow the combined stress impact allowing for both risks, rather than summing up individual impacts.
Dai-ichi Life Holdings, Inc.	Japan	No	No	Returns from unlisted stocks have a low correlation with returns from infrastructure investments. It is welcomed the recognition of diversification effects between the segments of stocks. However, infrastructure investments should be separated from Other Equity and



IAIS

INTERNATIONAL ASSOCIATION OF
INSURANCE SUPERVISORS

PUBLIC

				categorised as an independent segment. The appropriate correlation factor between infrastructure investments and other segments is about 0.5. We are willing to present backing data.
General Insurance Association of Japan	Japan	No	Yes	
The Life Insurance Association of Japan	Japan	No	No	• Returns from unlisted stocks have a low correlation with returns from infrastructure investments. It is welcomed the recognition of diversification effects between the segments of stocks. However, infrastructure investments should be separated from Other Equity and categorised as an independent segment. The appropriate correlation factor between infrastructure investments and other segments is about 0.5.
Financial Supervisory Service (FSS) & Financial Services Commission (FSC)	Korea (Republic of)	No	Yes	
Legal & General	UK	No	Yes	We are happy with this.
Association of British Insurers	United Kingdom	No	No	Intra-risk diversification and interaction should be taken into consideration when calibrating the overall risk charge; this includes capturing the interaction between the level and volatility drivers when calculating the stress impact. An alternative to the current approach would be to allow the combined stress impact allowing for both risks, rather than summing up individual impacts.
National Association of Mutual Insurance Companies	United States	No	No	The ICS is not yet fit for purpose. Significant additional work is needed to achieve an appropriate global capital standard and it may be completely unachievable. Equity risk and all other risks and their factors should be determined by the local jurisdictional supervisor. NAMIC disagrees with the mandate of a standard method, the 99.5% VaR calibration level and the IAIS dictating the factors to be used in the formula. Jurisdictional flexibility is the appropriate way to capture these risks with mutual recognition and shared understanding of the jurisdictional approach at supervisory colleges.

Property Casualty Insurers Association of America (PCI)	USA	No	No	PCI's yes or no response was simply required in order to open the text box and file comments. We believe this question to be best addressed by field test volunteers who have the ability to do so with the benefit of actual data for support and context. The absence of a response by PCI should not be taken one way or the other with respect to the subject of the question.
---	-----	----	----	--

Q124 Section 7.14 Is the treatment of long-term equity investments (such as strategic and infrastructure investments) appropriate? Please explain. If "no", how should they be treated differently, and what criteria should be used to define long-term equity investments? Please highlight key design features and provide supporting evidence (including data).

Organisation	Jurisdiction	Confidential	Answer	Answer Comments
Canadian Institute of Actuaries	Canada	No	No	There is a significant amount of quantitative analysis, including a report from the World Bank Group in 2018, that supports a lower risk charge for infrastructure assets. In contrast, ICS applies a higher risk charge to infrastructure assets which potentially disincentivizes investment in this asset class.
China Banking and Insurance Regulatory Commission (CBIRC)	China	No	No	We suggest assigning a risk factor for strategic investment lower than the listed equity. The investment purpose of the strategic investments are different from the common stock investments. The insurers use the strategic investments often for long-term stable dividend returns and the significant influence to the invested firm could reduce their potential volatilities
European Insurance and Occupational Pensions Authority (EIOPA)	EIOPA	No	No	We think that long-term equity investments that are of strategic nature should profit from a reduced equity risk charge. These kind of investments could be defined as equity investments for which the participating insurer or reinsurer demonstrates that the value of the equity investment is likely to be materially less volatile for the following 12 months than the value of other equities over the same period as a result of both the nature of the investment and the influence exercised by the participating undertaking in the related undertaking. Further, the nature of the investment should be strategic, taking into account all relevant factors, including:

				(a) the existence of a clear decisive strategy to continue holding the participation for long period; (b) the consistency of the strategy referred to above (i.e. less volatile) with the main policies guiding or limiting the actions of the undertaking; (c) the insurer's ability to continue holding the participation in the related undertaking; (d) the existence of a durable link; (e) where the insurer reinsurer is part of a group, the consistency of such strategy with the main policies guiding or limiting the actions of the group.
Insurance Europe	Europe	No	No	Long-term equity investments should have a more tailored capital treatment, reflecting the cases where insurers are not exposed to forced sale of these assets, and have therefore the ability to invest with a long-term perspective and be exposed to long-term risks rather than 1-year short-term risk. An insurer's ability to adopt and maintain a long-term view in the management of assets is a direct consequence of the long-term nature of liabilities. Insurers managing their assets with a long-term view are not exposed to forced sales on a one-year basis and the short-term volatility of assets is "hedged" by the duration of the holdings, including in the case of common stocks. Such asset management strategies allow for an enhanced diversification of the asset portfolio improving key indicators such as profitability, liquidity and solvency. They also lead to a countercyclical investment behaviour whereby insurers can buy when everyone else is selling. Therefore, the calibration of capital requirements should reflect the true level of risks for insurers with long term strategies. Typically, the volatility of common stock portfolios is much lower if assessed in a long-term perspective. Such an approach would in fact lead to a much lower calibration of equity held long-term.
German Insurance Association	Germany	No	No	Long-term equity investments should have a more tailored capital treatment, reflecting the cases where insurers can hold these assets for a long term. An insurer's ability to adopt and maintain a long-term view in the management of assets is a direct consequence of the long duration of liabilities. Insurers managing their assets with a long-term view are not exposed to forced sales on a one-year basis and the short-term volatility of assets is "hedged" by the duration of the holdings, including in the case of common stocks. Such asset management strategies allow for an enhanced diversification of the asset portfolio improving key indicators such as profitability, liquidity and solvency. They also lead to a countercyclical investment behaviour whereby insurers can buy when everyone else is



IAIS

INTERNATIONAL ASSOCIATION OF
INSURANCE SUPERVISORS

PUBLIC

				selling. Therefore, the calibration of capital requirements should reflect the true level of risks for insurers with long term holdings. Typically, the volatility of common stocks is much lower if assessed in a long-term perspective. Such an approach would in fact lead to a much lower calibration of equity held long-term.
Bundesanstalt für Finanzdienstleistungsaufsicht (BaFin)	Germany - BAFIN	No	No	We think that long-term equity investments that are of strategic nature should profit from a reduced equity risk charge. These kind of investments could be defined as equity investments for which the participating insurer or reinsurer demonstrates that the value of the equity investment is likely to be materially less volatile for the following 12 months than the value of other equities over the same period as a result of both the nature of the investment and the influence exercised by the participating undertaking in the related undertaking. Further, the nature of the investment should be strategic, taking into account all relevant factors, including: (a) the existence of a clear decisive strategy to continue holding the participation for long period; (b) the consistency of the strategy referred to above (i.e. less volatile) with the main policies guiding or limiting the actions of the undertaking; (c) the insurer's ability to continue holding the participation in the related undertaking; (d) the existence of a durable link; (e) where the insurer reinsurer is part of a group, the consistency of such strategy with the main policies guiding or limiting the actions of the group.
Global Federation of Insurance Associations	Global	No	No	Long-term equity investments should have a more tailored capital treatment, reflecting the cases where insurers can hold these assets for the long term. An insurer's ability to adopt and maintain a long-term view in the management of their assets is a direct consequence of the long duration of their liabilities. Insurers managing their assets with a long-term view are not exposed to forced sales on a short-term basis, and the short-term volatility of assets is 'hedged' by the duration of the holdings, including in the case of common stocks. Such asset management strategies allow for enhanced diversification of the asset portfolio, improving key indicators such as profitability, liquidity and solvency. They also lead to a countercyclical investment behaviour, whereby insurers can buy when everyone else is selling. Therefore, the calibration of capital requirements should reflect the true level of risks for insurers with long term holdings. Typically, the volatility of common stocks is much lower if assessed with a long-term perspective. Such an approach would in fact lead to a much lower calibration of equity held long-term.

Public

Compiled Comments on Risk-based Global Insurance Capital Standard Version 2.0

Public Consultation Document

31 July 2018 – 30 October 2018

Page 8 of 17

Dai-ichi Life Holdings, Inc.	Japan	No	No	We support the direction of considering the risk mitigation arrangements of long-term investment assets from the viewpoint of stabilizing the management of insurers by stabilizing their profits and stabilizing the financial system. Risk mitigation arrangements should be introduced not only for strategic equities but also for non-trading equities, i.e., those with long-term equity holdings corresponding to long-term debt DUR. The average number of years a company holds shares in the life and non-life insurance sector in Japan is about 16 years and has been held continuously for a long time.
General Insurance Association of Japan	Japan	No	No	Since such treatment provides room for arbitrariness, we do not agree with the idea of categorizing strategic equity and private equity differently from other assets and applying a lower risk charge.
The Life Insurance Association of Japan	Japan	No	No	• The LIAJ supports the direction of considering the risk mitigation arrangements of long-term investment assets from the viewpoint of stabilizing the management of insurers by stabilizing their profits and the financial system. • Risk mitigation arrangements should be introduced not only for strategic equities but also for non-trading equities, i.e., those with long-term equity holdings corresponding to long-term debt duration. The average number of years a company holds equities in Japanese life and non-life insurance sector is about 16 years and has been held continuously for a long time. • In addition, in order to mitigate the procyclicality effect, the LIAJ believes that the adjustment of a symmetric equity risk factor in response to changes in equity prices should be considered.
Financial Supervisory Service (FSS) & Financial Services Commission (FSC)	Korea (Republic of)	No	Yes	
Legal & General	UK	No	No	Our main concern is situations where a firm has been purchased in full or in part by an IAIG for reasons other than investment, for example because that firm has strategic value to the IAIG that is not captured in its balance sheet value. Such holdings are likely to be held over a longer term than investment-related equity holdings and the firm is unlikely to be concerned by short-term fluctuations in the value of the holding.



IAIS

INTERNATIONAL ASSOCIATION OF
INSURANCE SUPERVISORS

PUBLIC

				We believe that, in a situation where an IAIG holds an equity investment for strategic purposes, it is not appropriate to apply the same equity stress as for assets held for investment purposes. If an IAIG has no intention to sell a holding as ownership of the equity investment is integral to meeting the business objectives of the firm – the short-term fluctuation in the value placed on that firm is not of concern to the IAIG. If a firm is able to demonstrate that the holding is long-term and strategic, and that the value it takes within the IAIG's available capital is therefore less volatile than a more conventional equity investment then that holding should be subject to a significantly lower capital charge, as is the case within the Solvency II framework in Europe.
Association of British Insurers	United Kingdom	No	No	Long-term equity investments (such as strategic and infrastructure investments) should have a tailored capital treatment, reflecting the differences in the risk from these different asset types. As holders of long-term liabilities, insurers should be taking a long-term view of asset management. To encourage asset liability matching and the counter-cyclical investment created by insurers' long-term views, the Standard Method needs to reflect the true level of risks for insurers with long-term holdings. The special characteristics of long-term equity investments (higher quality, lower volatility, long-term holding, strategic features) should be given appropriate recognition.
National Association of Mutual Insurance Companies	United States	No	No	The ICS is not yet fit for purpose. Significant additional work is needed to achieve an appropriate global capital standard and it may be completely unachievable. Long-term equity investment risk and all other risks and their factors should be determined by the local jurisdictional supervisor. NAMIC disagrees with the mandate of a standard method, the 99.5% VaR calibration level and the IAIS dictating the factors to be used in the formula. Jurisdictional flexibility is the appropriate way to capture these risks with mutual recognition and shared understanding of the jurisdictional approach at supervisory colleges.
RAA	United States and many other jurisdictions	No	No	Long-term equity investments should have a more tailored capital treatment, reflecting the cases where insurers can hold these assets for the long term. An insurer's ability to adopt and maintain a long-term view in the management of their assets is a direct consequence of the long duration of their liabilities. Insurers managing their assets with a long-term view are not exposed to forced sales on a short-term basis, and the short-

Public

Compiled Comments on Risk-based Global Insurance Capital Standard Version 2.0

Public Consultation Document

31 July 2018 – 30 October 2018

Page 10 of 17



IAIS

INTERNATIONAL ASSOCIATION OF
INSURANCE SUPERVISORS

PUBLIC

				term volatility of assets is 'hedged' by the duration of the holdings, including in the case of common stocks. Such asset management strategies allow for enhanced diversification of the asset portfolio, improving key indicators such as profitability, liquidity and solvency. They also lead to a countercyclical investment behavior, whereby insurers can buy when everyone else is selling. Therefore, the calibration of capital requirements should reflect the true level of risks for insurers with long term holdings. Typically, the volatility of common stocks is much lower if assessed with a long-term perspective. Such an approach would in fact lead to a much lower calibration of equity held long-term.
Prudential Financial, Inc.	United States of America	No	No	We do not believe the current treatment of strategic and infrastructure corporate investments is appropriate. These sub asset classes are currently classified within the catch-all "Other Equity" category and have a 49% stress factor collectively applied to them, which is a more stringent calibration than we feel is warranted given the quality of these assets. However, we would be comfortable with maintaining the infrastructure project exposure within the Other Equity bucket.
Property Casualty Insurers Association of America (PCI)	USA	No	No	PCI's yes or no response was simply required in order to open the text box and file comments. We believe this question to be best addressed by field test volunteers who have the ability to do so with the benefit of actual data for support and context. The absence of a response by PCI should not be taken one way or the other with respect to the subject of the question.

Q125 Section 7.14 Is the current method of adding the shock to the current volatility appropriate? If "no", please provide an alternative suggestion with rationale.

Organisation	Jurisdiction	Confidential	Answer	Answer Comments
Canadian Institute of Actuaries	Canada	No	No	There is significant empirical evidence, including the 2008 financial crisis, to demonstrate that spikes in implied volatility are temporary in nature. Given their temporary nature, it is unclear

Public

Compiled Comments on Risk-based Global Insurance Capital Standard Version 2.0

Public Consultation Document

31 July 2018 – 30 October 2018

Page 11 of 17

				how a spike in implied volatility meaningfully impacts the ability of an insurer to fulfil its long-term liabilities. The ICS specification of this risk assumes that a volatility shock is permanent in nature, and as a result, the volatility risk specified in ICS as a component of equity risk is fundamentally miscalibrated.
CLHIA	Canada	No	No	Similar to NDSR, changes to implied volatility are short term in nature and have limited relevance to an insurer's ability to discharge its long term business. It is notable that other jurisdictions, including Solvency II, do not include a volatility shock and the IAIS should therefore give consideration to the rationale for including the volatility shock in ICS.
China Banking and Insurance Regulatory Commission (CBIRC)	China	No	Yes	
European Insurance and Occupational Pensions Authority (EIOPA)	EIOPA	No	No	We acknowledge that many insurers are sensitive to changes in equity volatility either through the investments they hold (equities and equity derivatives) or through equity-linked options and guarantees embedded in their liability portfolio. Equity volatility might thus have an impact particularly on insurers writing traditional participating business, investment-linked business and other investment contracts. However, due to simplicity reasons building a global minimum standard, we could also accept that volatility is not explicitly covered.
Insurance Europe	Europe	No	No	Insurance Europe supports the removal of the equity implied-volatility shock as market price shocks already consider implicitly volatility. Insurance Europe notes also that, in any case, price and volatility shocks are not independent, which is not properly considered when aggregating the impacts. Two solutions can be jointly explored for considering it: - introducing a proper correlation between price and volatility shocks - applying the volatility shocks on the price-shocked market values. In any case, a permanent change to equity volatility under stress is not an appropriate treatment, since volatility shows strong mean reverting properties. A permanent stress implies sustained high levels of cost of capital and equity risk premium, which is not realistic.



IAIS

INTERNATIONAL ASSOCIATION OF
INSURANCE SUPERVISORS

PUBLIC

				Additionally, the additive volatility levels are unjustifiably high compared to calibrations based on market data.
Bundesanstalt für Finanzdienstleistungsaufsicht (BaFin)	Germany - BAFIN	No	No	We acknowledge that many insurers are sensitive to changes in equity volatility either through the investments they hold (equities and equity derivatives) or through equity-linked options and guarantees embedded in their liability portfolio. Equity volatility might thus have an impact particularly on insurers writing traditional participating business, investment-linked business and other investment contracts. However, due to simplicity reasons building a global minimum standard, we could also accept that volatility is not explicitly covered.
Global Federation of Insurance Associations	Global	No	No	A permanent change assumed under stress to equity volatility is not an appropriate treatment. A permanent stress implies sustained high levels of cost of capital and equity risk premium, which is not realistic. Additionally, the additive volatility levels are unjustifiably high compared to calibrations based on market data. Therefore, GFIA proposes that the calibration be reduced to reflect market consistent levels.
General Insurance Association of Japan	Japan	No	Yes	
Financial Supervisory Service (FSS) & Financial Services Commission (FSC)	Korea (Republic of)	No	Yes	
American Council of Life Insurers	Office of General Counsel	No	No	Implied volatility is an artificial market construct that is based on the inferred, or “implied” volatility used in pricing short-dated (less than 5 years in most markets) equity options. This pricing is often subject to short term market sentiment, e.g., short term liquidity, market supply and demand, etc., that has little, if any direct relevance on the insurers ability to fulfill its long-term obligations to policyholders. In addition, not only does implied volatility have little relevance to an insurer’s financial performance, there is also strong empirical evidence, including through the 2008 financial crisis, that implied volatility exhibits very strong mean reversion characteristics. Implied volatility spikes can be measured in months (or even weeks) but certainly not in years. In

Public

Compiled Comments on Risk-based Global Insurance Capital Standard Version 2.0

Public Consultation Document

31 July 2018 – 30 October 2018

Page 13 of 17

				contrast, the implied volatility shock specified in the ICS 2.0 equity risk shock assumes that an increase in implied volatility is permanent in nature.
Legal & General	UK	No	No	We believe that there should be some diversification allowed between equity level risk and equity volatility risk, albeit with a high positive correlation. This would be more consistent with how the equity level required capital is aggregated.
Association of British Insurers	United Kingdom	No	No	A permanent change assumed under stress to equity volatility is not an appropriate treatment. A permanent stress implies sustained high levels of cost of capital and equity risk premium, which is not realistic. Additionally, the additive volatility levels are unjustifiably high compared to calibrations based on market data. Therefore, the ABI proposes that the calibration be reduced to reflect market consistent levels.
National Association of Mutual Insurance Companies	United States	No	No	The ICS is not yet fit for purpose. Significant additional work is needed to achieve an appropriate global capital standard and it may be completely unachievable. Long-term investment risk and all other risks and their factors should be determined by the local jurisdictional supervisor. NAMIC disagrees with the mandate of a standard method, the 99.5% VaR calibration level and the IAIS dictating the factors to be used in the formula. Jurisdictional flexibility is the appropriate way to capture these risks with mutual recognition and shared understanding of the jurisdictional approach at supervisory colleges.
RAA	United States and many other jurisdictions	No	No	A permanent change assumed under stress to equity volatility is not appropriate. A permanent stress implies sustained high levels of cost of capital and equity risk premium, which is not realistic. Additionally, the additive volatility levels are unjustifiably high compared to calibrations based on market data. Therefore, we propose that the calibration be reduced to reflect market consistent levels.
Prudential Financial, Inc.	United States of America	No	No	It is important to apply the stresses simultaneously, rather than disaggregate them and apply a 100% correlation to 2 separate shocks. The latter method will overstate equity risk significantly for products with strong built-in risk management mechanism, for example, some variable annuity products with auto rebalancing features into fixed income as account values decline.
Property Casualty Insurers Association of America (PCI)	USA	No	No	PCI's yes or no response was simply required in order to open the text box and file comments. We believe this question to be best addressed by field test volunteers who have the ability to

				do so with the benefit of actual data for support and context. The absence of a response by PCI should not be taken one way or the other with respect to the subject of the question.
--	--	--	--	---

Q126 Section 7.14 Are there any further comments on Equity risk that the IAIS should consider in the development of ICS Version 2.0? If “yes”, please explain with sufficient detail and rationale.

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	No	
Insurance Europe	Europe	No	Yes	Insurance Europe encourages the IAIS to provide more information and details on the calibration of the equity volatility, to understand better the data, model and judgements used in the calibration process. In addition, Insurance Europe supports the inclusion of an anti-cyclical tool for equity within the ICS. This could take the form of a symmetric adjustment calculated on the basis of a floating average of market prices. Insurance Europe further supports the recognition of long-term equity investment portfolios in association with a reduced capital charge. The demonstration of the long-term investment strategy regarding equity can be made as follows: - predictable and stable liabilities on the insurer's balance sheet - the long-term nature of the investment is reflected in its ALM and investment policies. - the insurer demonstrates its ability to avoid forced sales of equity by a liquidity test



IAIS

INTERNATIONAL ASSOCIATION OF
INSURANCE SUPERVISORS

PUBLIC

German Insurance Association	Germany	No	Yes	We would like to highlight the worsening in comparison to Solvency II in terms of penalisation on long term investments.
Bundesanstalt für Finanzdienstleistungsaufsicht (BaFin)	Germany - BAFIN	No	No	
Global Federation of Insurance Associations	Global	No	Yes	GFIA considers the current stress to equity implied volatility to be unjustifiably high compared to calibrations based on market data. The current calibration also fails to recognise that in practice volatility, both implied and realised, exhibits strong mean reversion characteristics – i.e., the ICS volatility shock is treated as being permanent in nature, which is not realistic. Using data from the 2008 financial crisis as an example, the VIX peaked on 20 November 2008; however, the implied volatility was back to the pre-crisis range of 20%-30% by the end of June 2009.
General Insurance Association of Japan	Japan	No	Yes	
Financial Supervisory Service (FSS) & Financial Services Commission (FSC)	Korea (Republic of)	No	No	
American Council of Life Insurers	Office of General Counsel	No	Yes	Implied volatility is an artificial market construct that is based on the inferred, or “implied” volatility used in pricing short-dated (less than 5 years in most markets) equity options. This pricing is often subject to short term market sentiment, e.g., short term liquidity, market supply and demand, etc., that has little, if any direct relevance on the insurers ability to fulfill its long-term obligations to policyholders. In addition, not only does implied volatility have little relevance to an insurer’s financial performance, there is also strong empirical evidence, including through the 2008 financial crisis, that implied volatility exhibits very strong mean reversion characteristics. Implied volatility spikes can be measured in months (or even weeks) but certainly not in years. In contrast, the implied volatility shock specified in the ICS 2.0 equity risk shock assumes that an increase in implied volatility is permanent in nature.

Public

Compiled Comments on Risk-based Global Insurance Capital Standard Version 2.0

Public Consultation Document

31 July 2018 – 30 October 2018

Page 16 of 17

Legal & General	UK	No	No	We are broadly comfortable with the design and calibration of equity risk capital in the 2018 field testing.
Association of British Insurers	United Kingdom	No	Yes	The ABI considers the current stress to equity implied volatility to be unjustifiably high compared to calibrations based on market data. The current calibration also fails to recognise that in practice volatility, both implied and realised, exhibits strong mean reversion characteristics – i.e., the ICS volatility shock is treated as being permanent in nature, which is not realistic. Using data from the 2008 financial crisis as an example, the VIX peaked on 20 November 2008; however, the implied volatility was back to the pre-crisis range of 20%-30% by the end of June 2009.
National Association of Mutual Insurance Companies	United States	No	Yes	The ICS is not yet fit for purpose. Significant additional work is needed to achieve an appropriate global capital standard and it may be completely unachievable. Equity risk and all other risks and their factors should be determined by the local jurisdictional supervisor. NAMIC disagrees with the mandate of a standard method, the 99.5% VaR calibration level and the IAIS dictating the factors to be used in the formula. Jurisdictional flexibility is the appropriate way to capture these risks with mutual recognition and shared understanding of the jurisdictional approach at supervisory colleges.
Prudential Financial, Inc.	United States of America	No	Yes	While we consider the 35% equity shock for developed market appropriate, the implementation of such a stress should consider market specific factors such as circuit breakers. As such, we think it is more appropriate to break the shock into a decline over a multi-day period rather than a one-day event.
Property Casualty Insurers Association of America (PCI)	USA	No	Yes	PCI's yes or no response was simply required in order to open the text box and file comments. We believe this question to be best addressed by field test volunteers who have the ability to do so with the benefit of actual data for support and context. The absence of a response by PCI should not be taken one way or the other with respect to the subject of the question.

End of Section 7.14