6.9 Expense risk

Q132

Q132 Section 6.9.2 Is the stress level for Expense risk appropriate? Please explain. If “no”, please provide supporting evidence and rationale for a different stress level.

Organisation	Jurisdiction	Role	Confidential	Answer	Answer Comments
China Insurance Regulatory Commission	China	IAIS Member	No	No	The 3% inflation shock is too high for China.
EIOPA	EIOPA	IAIS Member	No	Yes	The design of the module is fine. We find the unit expense stress too low: non-expected expenses in the stress scenario are usually higher, as proved by approved internal models in the EU. A stress of 10% would be more in line with increases that have been observed in the accounts of undertakings
BaFin	Germany	IAIS Member	No	Yes	
Financial Supervisory Service	Korea	IAIS Member	No		It is difficult to assess the appropriateness of the stress level at the moment. Korean FSS plans to calibrate the stress levels based on Korean Insurance market in the near future and the appropriateness of the stress level can be assessed afterwards.

National Association of Insurance Commissioners	USA	IAIS Member	No	Yes	While it is difficult to assign a single stress level to expenses that are subject to a wide variety of future sensitivities, based on U.S. experience, the stress levels for the trend and level components appear not unreasonable.
Ageas	Belgium	Other	No	Yes	
Canadian Institute of Actuaries	Canada	Other	No	No	The combination of both a permanent increase in expense level and a permanent increase in inflation (trend) seems excessive. We cannot offer supporting evidence at this time, but offer the following thoughts: • Expenses are influenced by a variety of factors, some external to the company (e.g., general inflation, general improvements in technology/productivity) and some internal to the company (e.g., management choices and actions). We believe that, in the event of expense inflation to the point of expenses becoming disproportionately large relative to the insurance benefits, management actions could counter to materially reduce such expenses. • We imagine that the varying inflation shocks bear some relation to the level and shocks in future interest rates for each region. Our comments on base discount rates (section 4.1) suggest more uniformity in the LTFR. It would follow that we would suggest more uniformity in the long-term inflation rate.
Ping An Insurance (Group) Company of China Ltd.	China	Other	No	No	We think a 3% long-term inflation shock assumption is too high and unreasonable, because: 1) It does not fully reflect the fact that the central banks of developing countries will have more measures to control their inflation rates with the growth of total economy scale. China's central bank has a target for long-term inflation rate, and compared to 20 years ago, it now has more policy tools and clearer target to control the long-term inflation rate within the range. It is possible that short-term inflation rate could rise, however, a large volatility on long-term inflation rate is much less likely than 10-20 years ago.

					2) China has been in an economy adjustment and control period for the recent 10 years, and the volatility of CPI will gradually decrease in the future when China market gradually become mature. This can be seen from inflation data of developed countries in the past 30 or 40 years. According to CPI data of U.S., Japan and European countries, volatility was quite high in 1970s to 1980s and decreased gradually year by year afterwards. Therefore we think it is unreasonable to just use the inflation data of past years to set a fixed inflation stress for the next 100 projection years, the deceasing trend of inflation rate along the economy maturity should also be reflected.
Institut des Actuaires	France	Other	No	Yes	
Allianz	Germany	Other	No	Yes	
GDV - Gesamtverband der Deutschen Versicherungswirtschaft	Germany	Other	No	Yes	
Munich Re	Germany	Other	No	Yes	
AIA Group	Hong Kong	Other	No	No	We think especially for the unit expense shock, there should not be a distinction by geography. We challenge the IAIS to provide a coherent rationale for the stress levels. Companies in emerging markets are generally growing faster than those in developed markets. Unit expenses are driven by business volumes. It can be argued that stress levels should therefore be lower for emerging markets. More fundamentally, we think any geographic variations should be based on scientific studies.
International Actuarial Association	International	Other	No	No	Although we do not have a current opinion regarding the appropriate level (which a field test could provide a basis for), we have several observations regarding the relativities used in the Expense risk test. In assessing whether a given stress level for expense risk is appropriate, several

					factors need to be considered. o It is difficult to assign a single stress level to expenses that are subject to a wide variety of future sensitivities. For example, some expenses are a direct multiple of a benchmark value, e.g., premiums for agent commission or premium tax/duty, claim amounts for claim expenses and investment management for investment expenses, and thus not subject to inflation/productivity effects. Since companies have different mixes of sensitive/un-sensitive expenses, it is inappropriate to apply a single inflation factor to all company expenses. Therefore, we suggest any such test separate these two types of expenses. o Other expenses are often partially fixed and partially variable, thus complicating the sensitivity to both current levels of expenses and sensitivity to inflation. “Inflation” in this case is a combination of general inflation, changes in productivity, changes in units for which expenses are spread, and other factors. The variable expenses should in most cases correspond to changes in corresponding units (e.g., premium or other measure of the volume of business, claims or assets), management productivity and general inflation. o The fixed and semi-fixed components of expenses are generally subject to economies of scale – thus, the larger the company, the smaller the unit-expense level tends to be. Faster growing companies can experience reductions in unit expense levels, while those companies with plateauing or declining volumes of business can experience unit expense increases. o Nature of the expense guarantee. For some classes of insurance, expense charges are built directly into the premiums charged and are not subject to change over the term of the contract. If this term is for many years, the expense risk can be large and a combination of both a level risk charge and inflation factor is needed. For other classes of longer-term insurance, expense charges may be subject to management action and adjustment. In these situations, credit should be allowed for management action although it is prudent to still retain some provision for expense risk due to inherent friction in passing along the cost increases to policyholders (e.g., time delays in assessing experience, regulatory approvals, and competitive pressures)

					o Inflation factor. This factor is, among other factors (indicated above), sensitive to the general inflation of the country. The first step is to ensure that the insurance company reflects the effect of general inflation in the first place. It is logical that an inflationary stress differs by region/country based upon variability of inflation in that region/country. Therefore, an expected shock might vary by geographic area, which might differ by strength of the monetary authority and the strength of the industry in that country, as well as the possibility of a significant decrease in number of units. An insurer that manages its expenses efficiently relative to its competitors may be able to achieve year over year expense improvements which help to offset some of the effects of inflation. However, insurers whose expense growth (year over year) is less well managed may experience higher levels of inflation than the general rate of inflation for their country. Based on the above points, the IAA supports the structure of the stresses for expense risk (i.e., both level and rate of inflation). However, expenses to be stressed should not include truly variable expenses (e.g., commissions and taxes/fees). In addition, the IAA believes the shocks proposed are not unreasonable as a starting point (i.e., subject to further field testing and more study of insurer expense practices) for the ICS.
Great Eastern Holdings Ltd	Singapore	Other	No	No	Expense inflation looks onerous as resulting capital is higher than other insurance risk capital (i.e. mortality, longevity)
MetLife	United States	Other	No	No	The methodology for determining the Expense risk charge is not appropriate; it applies to all future expenses and is excessive. This expense risk charge should not be part of the IAIS framework, as management has the ability to manage short term and long term expenses over time through various means, and in fact, has the most control over this type of risk. Inflation expense risk may be mitigated, considering: --Historical productivity improvement offsets

					--High correlation with interest rates --Geographical flexibility (e.g. choosing lower cost markets to operate)
New York Life	United States	Other	No	No	We are concerned by the level of the expense inflation shock for developing markets, which typically have higher baseline inflation assumptions over developed markets. A +3% modification is likely to result in expenses spiraling out of control rapidly. Perhaps an initial 3% adjustment, with grading down to 1% over time, makes more sense. And finally, stresses should be the same for all companies that operate in the same environment. Therefore, stressing a baseline assumption by a delta is not as appropriate as declaring the stress scenario. We would recommend the inflation expense assumption be stressed with more rigor. That is, we recommend declaring what the expense inflation rate should be in the stress scenario as opposed to the delta, so that all companies operate on a level playing field in the stress regardless of their internal baseline assumptions.
Liberty Mutual Insurance Group	USA	Other	No	No	An expense risk charge is unwarranted, because the expense risk is outside the risk for claims. Therefore, it is not material. Further, although there is a potential for increased costs due to inflation risk, expenses would or should be discounted, and as such, nominal expenses should be considered a reasonable estimate.
MassMutual Financial Group	USA	Other	No	Yes	

Q133

Q133 Section 6.9.3.1 Is there evidence to support the use of stresses for Expense risk that vary by geographical region? Please explain and provide supporting evidence.

Organisation	Jurisdiction	Role	Confidential	Answer	Answer Comments
China Insurance Regulatory Commission	China	IAIS Member	No	Yes	For the unit expense risk, the policy acquisition and maintaince costs can be sigifnicalty different across regions, therefore the stresses should be different. For the inflation risk, similar to interest rate risks, it's highly dependent on each country's economic conditions and fiscal policies, so the stresses should be different.
EIOPA	EIOPA	IAIS Member	No	No	Expenses depend on the product. However, the materiality of this risk does not justify a different approach per geographical region
BaFin	Germany	IAIS Member	No	No	
Financial Supervisory Service	Korea	IAIS Member	No	Yes	The future developments of expenses and inflation rate would be different between developed and emerging regions and hence should be differentiated.
Ageas	Belgium	Other	No	No	Expenses are company specific.
Canadian Institute of Actuaries	Canada	Other	No	No	

Ping An Insurance (Group) Company of China Ltd.	China	Other	No	Yes	We think it is necessary to set stresses for expense risk by geographical region. As for unit expense risk, the policy acquisition and maintenance costs vary significantly by country, the stresses should also be different accordingly. As for inflation rate risk, as the economic policies such as monetary policies are different across countries, and Chinese government has stringent control measures in this aspect, we suggest that stresses for expense risk should vary by geographical region.
Institut des Actuaires	France	Other	No	Yes	
Allianz	Germany	Other	No	Yes	We think this would be adequate.
GDV - Gesamtverband der Deutschen Versicherungswirtschaft	Germany	Other	No	No	
Munich Re	Germany	Other	No	No	
AIA Group	Hong Kong	Other	No	No	Not that we are aware.
International Actuarial Association	International	Other	No	Yes	As partly noted in our response to question 132, the areas in which a stress for Expense risk might vary by geographical region include: (1) strength of the monetary authority in the appropriate country(ies) with respect to general inflation, that is, for general/wage inflation; and (2) the expected growth/volatility of the volumes of new business generally within a geographical region. Regarding the latter point, rapid business growth in some markets can place significant stress and uncertainty on insurers' ability to manage expenses and to price them appropriately. The IAA notes that even in mature markets with slow insurance product growth, careful expense management is important. Nevertheless, as indicated in our response to question 132, stresses should not be

					applied to those expenses truly of a variable nature (e.g., commissions and taxes/fees based on premium)
Great Eastern Holdings Ltd	Singapore	Other	No	No	NA
MetLife	United States	Other	No	Yes	Please see our response to Q. 132 above and Q. 216 below
MassMutual Financial Group	USA	Other	No	No	

Q134

Q134 Section 6.9.3.1 Is there a specific methodology and reference data that the IAIS should use to determine appropriate expense stress levels by geographic region? Please explain.

Organisation	Jurisdiction	Role	Confidential	Answer	Answer Comments
China Insurance Regulatory Commission	China	IAIS Member	No	Yes	We view that it is inappropriate to use 99.5% VaR of 10-20 years' historical CPI. flat for the next 100 years for China and emerging markets, the stress level should be gradually reduced or capped. China is in a fast-growing period during the past 10-20 years, the inflation volatility is expected to reduce along with the development of the economy. If we look at the 99.5% VaR of past 10 years' CPI, both US and Japan show a high VaR in the fast-growing years and gradually decreasing thereafter. Hence we suggest gradually decrease or cap the inflation stress for China and emerging market, for example, start from 3% and gradually drop to 1% (the developed market level) in 20 years.
EIOPA	EIOPA	IAIS Member	No	No	
BaFin	Germany	IAIS Member	No	No	
Financial Supervisory Service	Korea	IAIS Member	No	No	
Ageas	Belgium	Other	No	No	

Canadian Institute of Actuaries	Canada	Other	No	No	
Ping An Insurance (Group) Company of China Ltd.	China	Other	No	Yes	Please refer to Q132. As for inflation rate, we agree to set the risk parameter based on historical CPI. However, based on the current development stage of China, we think it is not appropriate to set the stress for the next 100 years based on the historical data of only recent past years. We recommend setting the expense inflation rates by segment based on China's historical inflations as well as the inflation development trend of the developed countries several decades ago. Because we observed that for developed countries, such as U.S. and Japan, their CPI volatility 30 years ago was quite similar to China for recent past 10 years, and their CPI volatility drops gradually when the market become mature. As expense inflation stress will be applied to policy liabilities, which is projected around 100 years, it is suggested that the inflation volatility trend should be reflected in the risk parameter setting. We recommend setting the parameters by segment for developing countries, such as segments of the first 10 projection years, 10-20 years and 20 years plus, along which the inflation stress decrease gradually by segment and eventually reach the inflation stress used for developed countries.
Allianz	Germany	Other	No	No	
GDV - Gesamtverband der Deutschen Versicherungswirtschaft	Germany	Other	No	No	
Munich Re	Germany	Other	No	No	
AIA Group	Hong Kong	Other	No	No	Not that we are aware.

International Actuarial Association	International	Other	No	Yes	A study as part of a field test could be conducted for certain types of geographic region regarding trends in unit expenses (e.g., maintenance expenses divided by number of inforce policies). However, it is useful to separately study these expenses by lines of business, e.g., don't combine individual life insurance and group pensions, as the mix of business can more than offset any inflationary trend. In addition, expenses should be categorized by whether they are exposed to inflation or are strictly variable in nature (e.g., agent commissions, premium taxes and much of claim expenses).
Great Eastern Holdings Ltd	Singapore	Other	No	No	NA
MetLife	United States	Other	No	Yes	Please see our response to Q. 132 above and Q. 216 below
MassMutual Financial Group	USA	Other	No	No	

Q135

Q135 Section 6.9.3.1 Is there evidence that the volatility of expense inflation experience for insurance companies varies from that of general inflation? Please explain.

Organisation	Jurisdiction	Role	Confidential	Answer	Answer Comments
China Insurance Regulatory Commission	China	IAIS Member	No	Yes	China's insurance industry is in a very high growth period, with policy expenses keep significantly decreasing in the past years, due to the scale of economy and IT developments. The implied inflation from the insurance expenses may be smaller than the CPI but the data is not readily available.
EIOPA	EIOPA	IAIS Member	No	No	For life insurance products, we do not see specificities in the expense inflation (as opposed to non-life).
BaFin	Germany	IAIS Member	No	No	Not so much for life insurance products. Superimposed inflation is more an issue for non-life business.
Financial Supervisory Service	Korea	IAIS Member	No	No	
Ageas	Belgium	Other	No	Yes	Possibly, first it needs to be investigated company by company's expense structure and cost allocation models. Second, the determination of the inflation is depending on the setting the definition ie which indices should be taken into account.

Canadian Institute of Actuaries	Canada	Other	No	No	
Ping An Insurance (Group) Company of China Ltd.	China	Other	No	Yes	As China's insurance business is at the stage of rapid growth, business volume expansion and IT technology development will have significant impact on the expense control and expense efficiency of insurance companies. So it is not appropriate to adopt the volatility of CPI as the expense change of China insurance market. Although the unit expense assumptions adopted by insurance companies have taken into account the decrease of unit cost due to business volume increase in the past years, such trend will continue in the future. So the 3% of inflation rate shock assumption is not consistent with improvement of expense management in China.
AIA Group	Hong Kong	Other	No	No	We are not aware of any such evidence, but we feel intuitively that this could be the case because insurance company unit expenses are driven not just by inflation generally, but also by business volumes.
International Actuarial Association	International	Other	No	Yes	As indicated in our response to earlier questions, for those expenses not directly tied to specific business-related metrics (such as premiums, claims or invested assets) the volatility of expense inflation is subject to (1) changes in the number of corresponding business units (e.g., number of new policies written or inforce); and (2) productivity changes, as well as general inflation. In addition, in many companies and countries, the use of technology and economies of scale have reduced unit expenses, at least over short periods of time. In contrast, increases in regulatory and related expenses, as well as large projects, especially those to enhance technology such as increased use of social media, can introduce greater volatility. Thus, overall, the multiple factors involved, we would expect volatility of insurers' expense inflation to be greater than that of general inflation. Therefore the overall volatility of that part of total expenses not directly related to a business-

					related metric should be expected to experience greater volatility than that of general inflation. In contrast, the volatility of expenses directly related to a business-related metric should be less than that of general inflation as they are variable in nature and should form a relatively stable relationship to the corresponding metrics.
General Insurance Association of Japan	Japan	Other	No	No	
Great Eastern Holdings Ltd	Singapore	Other	No	No	NA
Prudential Financial, Inc.	United States of America	Other	No	Yes	General inflation data may be a reasonable proxy for insurance expense inflation; however, there are insurance specific indexes which should also be considered, such as the Producer Price Index for the life insurance industry.
MassMutual Financial Group	USA	Other	No	No	

Q136

Q136 Section 6.9.3.2 Should the IAIS assume 100% correlation between unit expense and expense inflation? Please explain. If “no”, how could correlation be built into the assumptions?

Organisation	Jurisdiction	Role	Confidential	Answer	Answer Comments
China Insurance Regulatory Commission	China	IAIS Member	No	No	The unit expense is highly dependent on scale, management efficiency of the company, while the inflation is more macro-economic, the correlation between the two compoment should be less than 100%.
EIOPA	EIOPA	IAIS Member	No	Yes	Combining the two shocks seems the most proportionate approach for this risk.
BaFin	Germany	IAIS Member	No	Yes	
Financial Supervisory Service	Korea	IAIS Member	No	No	In some cases, increase in inflation rate may not as linear increase as in unit expense such as overhead cost. In that case, some correlation may be considered.
National Association of Insurance Commissioners	USA	IAIS Member	No	No	Expenses, particularly in life insurance, have benefited from technological improvements in administration, medical underwriting information technology and distribution channels. Also sums insured have increased in most jurisdictions more rapidly than the rate of inflation. U.S. experience, exemplified by the Generally Recognized Expense Table, has been that since the beginning of the millennium unit expenses have increased by 3% for insurers operating as branches and increased by 20% (still less than 1½% per annum) for the home insurer. However expenses decreased by 31% for insurers who sell directly over the same time period.

					Without additional analysis, it is difficult to suggest an alternative analytical correlation.
Ageas	Belgium	Other	No	Yes	We agree that there should be a capital charge for expense inflations, and also on the correlation with the expense risks. However it should be further investigated how much the correlation would be.
Canadian Institute of Actuaries	Canada	Other	No	Yes	
Ping An Insurance (Group) Company of China Ltd.	China	Other	No	No	The assumption of inflation rate is based on the market, however, the unit expense risk comes from the uncertainty of expense assumption of the company. Increasing CPI will not directly result in the rising of unit expense, which indicates that they are not 100% correlated. We suggest adopting a correlation coefficient of around 50%.
Institut des Actuaires	France	Other	No	Yes	For simplicity.
Allianz	Germany	Other	No	No	Using separate stresses and correlation might be an option.
AIA Group	Hong Kong	Other	No	No	The level of unit expense is also driven by business volume and operational efficiency. Both can be achieved even under a general inflationary environment. Stress level of unit expenses should be based on experience data while inflation stress should consider economic outlook.
International Actuarial Association	International	Other	No	No	It is not unreasonable to assume for stress purposes that for those expenses not directly tied to specific business-related metrics, the volatility of unit expenses should be expected to vary in a manner similar to that of general inflation.

Dai-ichi Life Holdings, Inc.	Japan	Other	No	No	・100% correlation is overly conservative. ・For example, in the field test conducted by Japan´s Financial Services Agency (JFSA) in 2014, JFSA assumed no correlation between unit expense and expense inflation.
General Insurance Association of Japan	Japan	Other	No	No	Assuming a 100% correlation is excessive stress. The driver for manifestation of risks for unit expense and expense inflation are different. Therefore, we think correlation is zero.
The Life Insurance Association of Japan	Japan	Other	No	No	・We believe assuming a 100% correlation between these components is excessively conservative. ・For instance, taking the Field Testing conducted by the Japanese Financial Service Agency in 2014, it assumed non-correlation between these components.
Great Eastern Holdings Ltd	Singapore	Other	No	No	Expense inflation should not be included at all.
Prudential Financial, Inc.	United States of America	Other	No	Yes	It is excessive to run both the unit expense and expense inflation shocks simultaneously. The drivers between a unit expense stress and an expense inflation stress scenario are different. If both a unit expense and expense inflation shock are required, they should be treated as independent.
MassMutual Financial Group	USA	Other	No	No	

Q137

Q137 Section 6.9.3.2 Are there data sources available that could be used to calibrate the correlation between unit expense and expense inflation? If "yes", please provide information on the source.

Organisation	Jurisdiction	Role	Confidential	Answer	Answer Comments
China Insurance Regulatory Commission	China	IAIS Member	No	No	
EIOPA	EIOPA	IAIS Member	No	No	
BaFin	Germany	IAIS Member	No	No	
Financial Supervisory Service	Korea	IAIS Member	No	No	
Ageas	Belgium	Other	No	No	
Canadian Institute of Actuaries	Canada	Other	No	Yes	In the United States, LIMRA regularly performs expense studies on behalf of its member organizations, including expense inflation.
Ping An Insurance (Group) Company of China Ltd.	China	Other	No	No	

GDV - Gesamtverband der Deutschen Versicherungswirtschaft	Germany	Other	No	No	
Munich Re	Germany	Other	No	No	
AIA Group	Hong Kong	Other	No	No	
International Actuarial Association	International	Other	No	No	
General Insurance Association of Japan	Japan	Other	No	No	
Great Eastern Holdings Ltd	Singapore	Other	No	No	
MassMutual Financial Group	USA	Other	No	No	

Q138

Q138 Section 6.9.3.3 Should the IAIS consider introducing a cap to moderate the compounding effect of expense inflation? If “yes”, what would be a reasonable level for the cap? Please provide rationale for the proposed level of the cap.

Organisation	Jurisdiction	Role	Confidential	Answer	Answer Comments
China Insurance Regulatory Commission	China	IAIS Member	No	Yes	As answered in Q134, we view that it is more appropriate to assume a decreasing or capped inflation stress for China and emerging markets, for example cap the inflation stress to 1% (inflation stress for developed markets) after year 20.
EIOPA	EIOPA	IAIS Member	No	No	This would overly complicate the design.
BaFin	Germany	IAIS Member	No	No	
Financial Supervisory Service	Korea	IAIS Member	No	Yes	Increasing inflation rate indefinitely (such as 100 years) is too unrealistic. Setting inflation shock period such as 10 years is deemed appropriate.
Ageas	Belgium	Other	No	No	
Canadian Institute of Actuaries	Canada	Other	No	No	
Ping An Insurance (Group) Company of China Ltd.	China	Other	No	Yes	We think that the expense inflation stress should take into consideration the long-term inflation target, so we support to set a cap to the proposed stresses, for example, cap it

					to the stress in developed market after 20 years. In addition to what we have answered in Q134 and Q135, we think the current risk parameter is not suitable for China market environment because: 1.The change of current interest rate environment: The change of the inflation rate depends on the change of nominal interest rate. When interest rates decline, the expected inflation rate will decrease as well, and in theory the volatility of inflation rate will also fall accordingly. 2.It is not reasonable to adopt the short-term volatility data as the long-term assumptions for developing countries. Please refer to Q135 for details. 3.The improvement of expense efficiency should be considered. Insurance business have been growing rapidly in China during the past years, and the experience during these years show that, unit expense declined gradually due to economics of scale while IT innovation also significantly improved the expense efficiency.
Institut des Actuaires	France	Other	No	No	
Allianz	Germany	Other	No	Yes	Either using a cap or allowing for management actions could be a solution. Integration of caps may be difficult.
GDV - Gesamtverband der Deutschen Versicherungswirtschaft	Germany	Other	No	Yes	However, in case of reasonable assumptions for expense inflation a cap could become unnecessary.
AIA Group	Hong Kong	Other	No	Yes	We do not believe it is reasonable to project inflation indefinitely because expenses are subject to management control. This, combined with the level of stresses, leads to completely unreasonable results. For example, an 8% shock combined with 3%

					inflation indefinitely leads to an assumption that unit expenses will increase to 145% of current levels after 10 years and 195% after 20 years.
International Actuarial Association	International	Other	No	Yes	Although conceptually there should be no cap on expense inflation, we recognize that policy features (such as policyholder dividends/bonuses) can provide a buffer to offset a part of expense inflation.
Great Eastern Holdings Ltd	Singapore	Other	No	No	
MassMutual Financial Group	USA	Other	No	Yes	Companies are likely to take actions (workforce reductions, outsourcing, etc.) to reduce unit expenses as part of the normal course of doing business (not a management action in the sense which has been considered in ComFrame). We suggest that inflation either be capped at some number of years of inflation or a percentage increase over starting expenses. As a suggestion with no support, 20 years or 20% might be a starting point.

Q139

Q139 Section 6.9.4 Are there any further comments on Expense risk that the IAIS should consider in the development of ICS Version 1.0? If "yes", please explain with sufficient detail and rationale.

Organisation	Jurisdiction	Role	Confidential	Answer	Answer Comments
China Insurance Regulatory Commission	China	IAIS Member	No	No	
BaFin	Germany	IAIS Member	No	No	
Ageas	Belgium	Other	No	Yes	Please refer to question 122 where the expense inflation risk should be explicitly taken into account in the health risk module, whichever the approach is chosen.
Canadian Institute of Actuaries	Canada	Other	No	No	
Ping An Insurance (Group) Company of China Ltd.	China	Other	No	No	
Allianz	Germany	Other	No	No	
GDV - Gesamtverband der Deutschen Versicherungswirtschaft	Germany	Other	No	No	

Munich Re	Germany	Other	No	No	
AIA Group	Hong Kong	Other	No	No	
International Actuarial Association	International	Other	No	Yes	The following are general observations relating to expense risk, some of which are also included in our responses to questions 132-138. • The expense risk of long-term health products, such as individual disability income and long-term care, is more similar to life insurance products. In contrast, the expense risk for short-term health products, such as most medical reimbursement policies or those offered through group insurance, is more similar to property & casualty insurance products, so should be treated accordingly. • It has to be remembered that not all expenses are subject to inflation risk. For example, commissions and taxes on premiums are strictly variable in nature. As such, inflation and inflation risk should only be applied to inflation-exposed expenses. • Unit expense inflation is comprised of: (1) general inflation, (2) changes in volume and mix of units, especially in relation to fixed or semi-fixed expenses, (3) changes in productivity and (4) mix of fixed versus variable expenses. [Note: An example of a semi-fixed expense is property costs that, while fixed in nature, at some point the company may run out of office space or staff numbers may reduce sufficiently to enable the company to move into a smaller building.] As such, the relation between unit expense inflation and general inflation is far from perfect. • Stress levels related to expenses that form part of required capital should be consistent with the stresses in other variables. For example, if there is business whose return to policyholders also includes policyholder dividends/bonuses, it is possible that these policy features can consider significant changes in expense levels and inflation. As a result, at least theoretically, such stresses should consider the type of business to which capital relates. Nevertheless, there can be practical limits to the use of these policy features (e.g., due to competitive pressure and lapse risk or

					curbs required by regulators). • Inflation-related stress is expressed as “expense inflation”. It would be more appropriate to express it as “unit expense inflation”. Without recognition of unit expenses, inflation would not be applied to the appropriate measure and should reflect the effect of stresses on corresponding units as well. • Although it is unlikely that a large insurer will prove to be financially unsound due to expense risk, if the insurer is not well managed or if its amount of new or inforce business decreases, its expense ratios are likely to increase, thus causing additional capital strain. In a stress situation (e.g., requiring close in, say, 12 months), although a firm typically can reduce fixed expenses, it can take considerable time to do so (e.g., due to redundancy costs or time it takes to sell a large property). Thus, there may be a short-term period during which unit expenses will increase. Any stress scenario should recognize the effect of such a delay. • One of the most common reasons for expense stresses arises when new business volumes fall or the company goes into run-off. In either case, fixed expenses that were apportioned to acquisition become part of maintenance expenses, which increases unit maintenance expenses. • Special situations may require special consideration. For example, if a firm has an especially large outsourcing service agreement, the conditions under which service costs may be revised/reviewed can be important.
Dai-ichi Life Holdings, Inc.	Japan	Other	No	Yes	・Assuming inflation risk (1% up p.a.) for operating cost, the discount rate should be also adjusted accordingly. It is highly probable that interest rate will rise when rising in inflation. At least, the risk charge should be calculated based on adjusted LTFR since LTFR contains the element of inflation in the mid-long term.

General Insurance Association of Japan	Japan	Other	No	No	
The Life Insurance Association of Japan	Japan	Other	No	Yes	・If the IAIS assumes a 1% per annum increase in expense inflation when considering expense risk, the discount rate used for the calculation of insurance liabilities should also be adjusted to a consistent level with expense risk. In particular, as the LTFR (UFR) incorporates medium and long term inflation factors, we believe the level of the LTFR (UFR) should reflect such factors in its calculation.
Great Eastern Holdings Ltd	Singapore	Other	No	Yes	Generally not supportive of the idea of holding additional capital for expense inflation. Expense overrun is unlikely to be tolerated for too long (i.e. Moreover, the calibration for unit expense increase may have overlapped with past inflationary effect, unless the calibration is able to reasonably allow for unit expense and inflation separately.
MetLife	United States	Other	No	Yes	Best practices would incorporate Expense Risk in Operational Risk. This is due to the fact that expenses can be managed and controlled through various management actions, such as non-guaranteed rate or premium increases, budget reductions, dividend reductions, etc. With the control options in place for management with this type of risk, long term risks can be avoided and controlled.
Prudential Financial, Inc.	United States of America	Other	No	Yes	We understand the argument for an expense inflation stress; however, we believe there is some argument to excluding an explicit unit expense stress from a capital framework which has an operational risk component. Furthermore, as expense risk is managed differently and is within a firm's control, holding capital for unit expense risk could be considered excessive. Expense inflation risk calibration should be aligned with the macro-economic inflation underlying the calibration of the market risk stresses.

MassMutual Financial Group	USA	Other	No	No	

End of Section 6.9