Japan's new insurance solvency regime

Provisional decisions on technical specifications

October 2022

Content

1. Introduction

The Financial Services Agency of Japan (FSA) has been working on a new solvency regulation framework for insurers that has certain characteristics in common with the Insurance Capital Standard (ICS) that is under development by the International Association of Insurance Supervisors (IAIS). Japan's new solvency regulation framework and the current framework are often referred to as the ESR and the SMR, respectively, while the ESR and the SMR, respectively, normally stand for the Economic Solvency Ratio and the Solvency Margin Ratio. One of the underlying concepts of the ESR is the measurement of assets and liabilities at 'market(-adjusted) value'.

The FSA published a report in June 2022 (hereinafter referred to as 'the 2022 FSA Report' or 'the 2022 Report') that presents (i) provisional decisions on key technical specifications and (ii) basic directions for the finalisation of the new solvency framework[1]. The 2022 FSA Report, entitled 'Provisional decisions on fundamental elements of an economic value-based solvency regulation, etc.', is the third report concerning the ESR in the past three years. The first report, which was prepared by the Study Group formed by the FSA, was published in June 2020[2]. The 2020 Study Group Report was followed in June 2021 by a report on the status of development of the ESR.

The 2022 FSA Report encourages insurers to advance their preparations towards the scheduled implementation of the new solvency framework in 2025. Following the publication of the 2022 Report, the FSA undertook field testing exercises with updated specifications that reflected the views expressed in the report.

Section 2 of this paper is a review of recent developments with respect to insurance solvency regulations at both global and jurisdictional levels. Section 3 consists of a summary of the 2022 FSA Report, which focuses on key provisional decisions and basic directions presented in the report. Section 4 is a discussion of certain critical issues. Any opinions expressed in this paper are the author's own and should not be regarded as the official opinions of the organisations to which the author is affiliated.

[1] Financial Services Agency (2022) 'Provisional decisions on fundamental elements of the economic value-based solvency regulation, etc.', https://www.fsa.go.jp/policy/economic_value-based_solvency/03.pdf.

[2] Financial Services Agency (2020) 'The Advisory Council on the Economic Value-based Solvency Framework: Final Report', https://www.fsa.go.jp/en/refer/councils/economic_value-based_solvency/report/01.pdf.

2. Modernisation of solvency regulations

Insurance solvency regulations have been modernised around the world.

Global

In a global context, the Insurance Capital Standard (ICS) has been under development by the International Association of Insurance Supervisors (IAIS). The ICS is a consolidated group-wide capital standard for large, international insurance groups (namely, Internationally Active Insurance Groups or IAIGs). Its objective is to create a common language for supervisory discussions of group solvency to enhance global convergence among group capital standards[3]. The IAIS intends ultimately to develop a single ICS that includes a common methodology by which a uniform ICS achieves comparable outcomes across jurisdictions[4].

The IAIS published 'ICS Version 2.0 for the monitoring period' in November 2019[5], with a five-year monitoring period established from January 2020. During this period the ICS is to be used for confidential reporting to group-wide supervisors and discussion in supervisory colleges. The IAIS has reaffirmed its commitment to the ICS monitoring period timeline and to the delivery of an ICS that is fit for implementation by supervisors as a Prescribed Capital Requirement (PCR)[6] by the end of 2024.

Before it is finalised, the ICS will be updated to take account of at least the following two points. The first is the differentiated treatment of investments in infrastructure and strategic equity. For confidential reporting purposes in 2022, the IAIS is collecting data on specified investment segments where application of a different treatment and calibration[7] may be justified.

The second point is the treatment of the Aggregation Method that the U.S. and some other interested jurisdictions are developing for the assessment of group solvency. A draft set of the criteria for judging whether the Aggregation Method provides comparable outcomes to the ICS was published for consultation in June 2022[8], and a data collection for

[3] IAIS (2019) 'Explanatory note on the Insurance Capital Standard (ICS) and Comparability Assessment', https://www.iaisweb.org/uploads/2022/01/191120-Explanatory-Note-on-the-ICS.pdf.

[4] IAIS (2019) 'Level 1 Document: ICS Version 2.0 for the monitoring period', https://www.iaisweb.org/uploads/2022/01/191120-Level-1-Document-for-ICS-Version-2.0-for-the-monitoring-period1.pdf.

[5] IAIS (2019) 'IAIS adopts first global frameworks for supervision of internationally active insurance groups and mitigation of systemic risk in the insurance sector', https://www.iaisweb.org/uploads/2022/01/191114-Media-Release-IAIS-adopts-first-global-frameworks-for-supervision-of-internationally-active-insurance-groups-and-mitigation-of-systemic-risk-in-the-insurance-sector.pdf .

[6] IAIS (2022) '2022-2023 Roadmap', https://www.iaisweb.org/uploads/2022/03/2022-2023-Roadmap.pdf.

[7] IAIS (2022) 'Instructions for the April 2022 Insurance Capital Standard (ICS) Data Collection Exercise of the Monitoring Period Project ("the ICS Technical Specifications")', https://www.iaisweb.org/uploads/2022/06/220531-Public-2022-ICS-Data-Collection-Technical-Specifications.pdf.

[8] IAIS (2022) 'Public Consultation on the draft criteria that will be used to assess whether the Aggregation Method provides comparable outcomes to the Insurance Capital Standard', https://www.iaisweb.org/uploads/2022/06/Draft-Comparability-Criteria-for-Public-Consultation.pdf.

the Aggregation Method was undertaken[9]. These criteria are expected to be finalised in Q1 2023[10].

Consultation on the ICS as a PCR is planned for Q3 2023[11], including consultation on GAAP Plus as well as other methods of calculation of the ICS capital requirements, such as internal models, treatment of supervisor-owned/-controlled credit assessment processes and infrastructure and strategic equity.

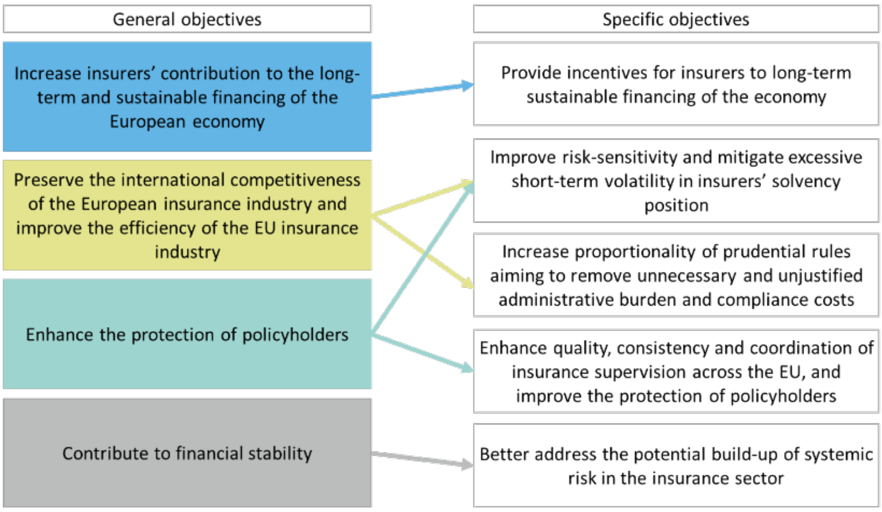
Europe

In Europe the Solvency II Directive, which has been applied since 2016, is currently under review. The European Commission proposes to amend the existing Solvency II framework as well as to introduce a new framework on recovery and resolution for insurers. Diagram 1 summarises the objectives of the review of Solvency II[12].

Key proposed updates in the review include the following[13].

- To improve risk-sensitivity and to mitigate excessive short-term volatility in insurers' solvency positions through changes to the long-term guarantee measures, such as extrapolation of risk-free interest rates and volatility adjustment.
- To ensure that climate and systemic risks are better managed and supervised by introducing new requirements on long-term climate change scenario analysis.
- To make prudential rules more proportional by allowing small insurers to be exempted from Solvency II rules.

Diagram 1. Objectives of the Solvency II review



[9] IAIS (2022) 'Instructions for the April 2022 Aggregation Method (AM) Data Collection Exercise of the Monitoring Period Project ("the AM Technical Specifications")', https://www.iaisweb.org/uploads/2022/06/220630-Public-2022-AM-Data-Collection-Technical-Specifications.pdf.

[10] IAIS (2022) 'Project Update for the Aggregation Method Comparability Assessment', https://www.iaisweb.org/uploads/2022/10/Project-Update-for-the-Aggregation-Method-Comparability-Assessment-1.pdf?preview=true.

[11] International Association of Insurance Supervisors (2022) '2022-2023 Roadmap', https://www.iaisweb.org/uploads/2022/03/2022-2023-Roadmap.pdf.

[12] European Commission (2021) 'Commission staff working document: Impact assessment report', https://eur-lex.europa.eu/resource.html?uri=cellar:ee978a3f-1c51-11ec-b4fe-01aa75ed71a1.0001.02/DOC_1&format=PDF.

[13] European Commission (2021) 'Communication from the Commission to the European Parliament and the Council on the review of the EU prudential framework for insurers and reinsurers in the context of the EU's post pandemic recovery', https://eur-lex.europa.eu/legal-content/EN/TXT/PDF/?uri=CELEX:52021DC0580&from=EN.

In the U.K., the government has been reviewing the Solvency II framework to make its insurance sector internationally competitive and to protect policyholders[14]. Key areas of the review include the risk margin, matching adjustment and eligibility criteria for assets and liabilities in terms of the matching adjustment[15]. The Prudential Regulation Authority (PRA) estimates that a combination of reforms could reduce overall capital levels for life insurers by around 10 to 15%[16].

Asia-Pacific

In the Asia-Pacific region, Australia has updated its capital and reporting frameworks for insurers[17]. The principal objective of this update is to align these frameworks with the Australian Accounting Standards Board 17 Insurance Contracts (AASB 17)[18]. In New Zealand, the Reserve Bank of New Zealand started a review of the Insurance Solvency Standards in October 2020, taking into consideration multiple developments since the introduction of these standards in 2014. This review is scheduled for completion by the end of 2023[19].

Japan

In Japan, the FSA has been working on modernising its insurance solvency regulations. The 2020 Study Group Report made several recommendations, including a recommendation on the implementation of a new solvency framework in April 2025[20]. A summary of the recommendations in the 2020 Report as well as a history of initiatives to modernise solvency regimes undertaken by the IAIS, the European Union and Japan, respectively, up until early 2020 can be found in the paper, 'Japan's new insurance solvency regime,' published in August 2020[21].

---

[14] HM Treasury (2022) 'Solvency II Review: Consultation', https://www.gov.uk/government/consultations/solvency-ii-review-consultation.

[15] HM Treasury (2022) 'Review of Solvency II: Consultation', https://assets.publishing.service.gov.uk/government/uploads/system/uploads/attachment_data/file/1071899/20220328_Review_of_Solvency_II_Consultation.pdf.

[16] Prudential Regulation Authority (2022) 'The PRA's statement of the 'Review of Solvency II' consultation published by HM Treasury', https://www.bankofengland.co.uk/prudential-regulation/publication/2022/april/pras-statement-on-the-review-of-solvency-ii-consultation-published-by-hm-treasury.

[17] APRA (2022) 'APRA aligns capital and reporting frameworks for insurance with AASB 17', https://www.apra.gov.au/news-and-publications/apra-aligns-capital-and-reporting-frameworks-for-insurance-aasb-17.

[18] Australian Prudential Regulation Authority (2021) 'APRA proposes changes to align capital and reporting frameworks for insurance with AASB 17', https://www.apra.gov.au/news-and-publications/apra-proposes-changes-to-align-capital-and-reporting-frameworks-for-insurance.

[19] Reserve Bank of New Zealand (2020) 'Review of Insurance Solvency Standards', https://www.rbnz.govt.nz/-/media/project/sites/rbnz/files/consultations/insurers/iss-review/solvency-standard-review-launch-october-2020.pdf.

[20] Financial Services Agency (2020) 'The Advisory Council on the Economic Value-based Solvency Framework', https://www.fsa.go.jp/en/refer/councils/economic_value-based_solvency/report/01.pdf.

[21] Kobayashi, S. (2020) 'Japan's new insurance solvency regime -A blueprint of the new regime for insurance supervision', Deloitte Japan, https://www2.deloitte.com/content/dam/Deloitte/jp/Documents/financial-services/ins/Japans%20new%20insurance%20solvency%20regime_final.pdf.

3. Outline of the 2022 FSA Report

Table 1 outlines the structure of the 2022 FSA Report.

Table 1. Structure and content of the FSA report

I.	Introduction (Objectives, etc.)
II.	Baseline design of Pillar 1
II.1	Timeline
II.2	ESR as Japanese ICS
II.3	Supervisory reporting
II.4	Proportionality
III.	Standard Method
III.1	Scope of consolidation
III.2	Balance sheet
III.3	Valuations
III.3.1	Current estimate
III.3.2	Discounting
III.3.3	MOCE
III.4	Qualifying capital resources
III.5	Capital requirements
III.5.1	Life insurance risks
III.5.2	Non-life insurance risks
III.5.3	Catastrophe risks
III.5.4	Market risks
III.5.5	Credit risks
III.5.6	Operational risks
III.6	Non-insurance businesses
III.7	Tax effect
IV.	Validation and verification
IV.1	Internal validation
IV.2	External verification
V.	Internal models
VI.	Supervisory measures and Pillars 2 and 3
VI.1	Supervisory measures
VI.2	Pillar 2
VI.3	Pillar 3

The 2022 FSA Report is described in the rest of this section, with a focus on its key items.

I. Objectives of the 2022 FSA Report

The 2022 Report presents (i) provisional decisions on key technical specifications and (ii) basic directions on essential issues that need to be further considered towards the finalisation of the new framework. The aim of making these provisional decisions at this stage is to encourage insurers to advance their preparations, including further investments in IT systems, to ensure the smooth implementation of the ESR.

'Provisional decisions' are intended to remain unchanged for the finalisation of the new regulations, other than in exceptional circumstances. On the other hand, 'basic directions' are intended to provide a basis for further development of the regulations. In the rest of this section, provisional decisions and basic directions are labelled as '[**PD**]' and '[**BD**]', respectively, unless otherwise described.

In line with its objective, the 2022 FSA Report focuses primarily on key items associated with the Standard Method under Pillar 1 and validation/verification frameworks, rather than items related to Pillars 2 and 3.

II. Baseline design of Pillar 1

With regard to the **timeline**, the 2025 milestone for the timing of the implementation of the new framework has been unchanged since it was recommended by the Study Group in June 2020.

The ESR Standard Method will be developed broadly in line with that of the ICS. Where deemed reasonable, adjustments will be made to the ICS, taking Japan-specific factors, etc., into account. This Standard Method will be applied to all insurers, including IAIGs, on a consolidated basis as the **Japanese ICS**.

With respect to **supervisory reporting**, insurers will be required to report on an annual and semi-annual basis [PD]. At the same time, for the purpose of interim ESR reporting, simplification of certain requirements for the calculation of the ESR may be explored in order to ease the burden for insurers. An initial report on the ESR will be prepared as at end-March 2026 [PD] and submitted to the supervisor within a reasonable period after the 2025 financial year end.

As to the principle of **proportionality**, further consideration is needed to ensure, for example, fair application of the principle.

III. Standard Method

In principle, the ESR Standard Method will be designed in a manner that is broadly consistent with the ICS Version 2.0. Nevertheless, it is considered appropriate to make some adjustments, given that the ICS is being developed as a standard for IAIGs that is applicable on a consolidated basis.

As to the **scope of consolidation**, the following entities will be consolidated for the purpose of the ESR: (i) entities that meet the criteria for consolidation stipulated in the accounting standards and (ii) financial subsidiaries that do not meet the criteria but are deemed by the insurer to be material in light of their potential impact on the ESR [PD]. Guidelines on the materiality of potential impacts will be developed.

A **balance sheet** prepared in accordance with both the JGAAP and the IFRS will be used as the basis for the calculation of the ESR (i.e., a starting balance sheet) [BD].

Current estimate

For the calculation of the **current estimate**, guidelines will be developed [BD]. These guidelines are expected to address issues relating to valuation and validation of insurance liabilities as listed in Table 2.

Table 2. Draft guidelines on the current estimate

Item(s)	Expected content(s)
Future cash flows relating to expenses	• Scope of expenses • Definitions of acquisition costs and on-going administration costs • Processes for the allocation of on-going administration costs
Future cash flows associated with guarantees and options	• Dynamic lapse • Policyholder dividends • Minimum guarantees for variable insurance and annuities • Minimum guaranteed rates for interest rate sensitive products
Economic scenarios on which the valuation of guarantees and options is based	• Validation of scenarios • Documentation of data, settings and models used
Policyholder behaviour	• Assumptions relating to policyholder behaviour • Measures to ensure appropriateness of assumptions
Contract boundaries	• Clarifications of the specifications
Assumptions and data quality in general	• Measures to ensure appropriateness of assumptions, including treatment of data

Future trends reflected in mortality rates, etc.	• Measures to ensure the objectivity in expert judgment
Assumptions for new products, etc.	• Descriptions of the data and assumptions used
Future catastrophic events not based on experience	• Consideration of these events in relevant assumptions
Exclusions of anomalies	• Rationale for adjustments to the data
Data quality	• Check points for determining data quality in terms of accuracy, completeness and appropriateness
Use of external data	• Rationale for the use of external data • Measures to ensure understanding of external data
Approximations in case where data is not sufficiently available	• Criteria that need to be met for the use of approximation
Management action	• Measures to ensure appropriateness of management action
Changes to the calculation methods, models and/or assumptions	• Documentation of relevant processes • Governance mechanisms relating to changes

Discount rates

In terms of **discount rates**, the discounting framework adopted in the ICS (i.e., the three-segment approach together with adjustments using the Three-Bucket Approach) will be used as the basis for the ESR [PD]. The 2022 FSA Report sets out the following two points relating to the three-segment approach.

- LOT (Last Observed Term): To retain the current 30-year LOT for Japanese yen [BD], but to further consider the appropriateness of the term, given that some insurers hold bonds with a remaining maturity in excess of 30 years.
- LTFR (long-term forward rate): To retain 3.8% (i.e., 1.8% expected real interest rate and 2.0% expected inflation target) as the current LTFR for Japanese yen [BD], but to further consider its appropriateness, given that the expected real interest rate estimated using the latest data is 0.9%.

A framework for **adjustments to the risk-free yield curve**, such as the Three-Bucket Approach in the ICS, will be introduced in the new regulations [BD], keeping in mind that these adjustments should not hinder insurers from making further enhancements to their risk management. The 2022 FSA Report highlights some issues with regard to the Three Bucket Approach, including the following.

- The Middle Bucket spread: To be calculated on a portfolio basis [PD].
- Middle Bucket Criterion d[22]: To use the General Bucket yield curve, not the risk-free yield curve, for the calculation of the current estimate [PD].
- Middle Bucket Criterion e[23]: To retain the current criterion for the purpose of the 2022 field testing and collect further information.

[22] The total market value of assets identified for this portfolio is, at the reporting date, greater than the current estimate of the liabilities calculated using the risk-free yield curve.

[23] The contracts underlying the liabilities do not include future premiums or include only future premiums that are contractually fixed.

- Overshooting[24]: To test in the 2022 field testing the modulation factor ω defined as $\min(1, \max(0, \frac{PVBPU\ (assets)}{PVBPU\ (liabilities)}))$ [25] in order to analyse how overshooting can be mitigated.

Other issues, such as use of a spread term structure, differentiated treatment of non-fixed income assets in the determination of spread adjustments and composition of a representative portfolio of assets, will be further considered.

MOCE

MOCE (Margin over Current Estimate) will constitute part of insurance liabilities and will neither be deducted from the capital requirements nor be counted as qualifying capital resources [PD]. MOCE will be calculated using a cost of capital approach rather than a percentile approach [PD]. A plausible level of cost of capital is considered to be around 3% at this stage, but further discussion is needed. MOCE is assumed to be stable under stress for the purpose of calculating capital requirements [PD].

Qualifying capital resources

In terms of **qualifying capital resources**, 'an initial maturity of at least 10 years' criterion will be retained as a criterion for Tier 1 capital in terms of perpetuality of Foundation Funds (*kikin*) issued by mutual insurers [PD]. Capital composition limits will also be retained as shown in Table 3 [PD]. Transferability and fungibility of excess capital resources within a group will be further considered.

Table 3. Qualifying capital composition limits

	Non-mutual	Mutual
Tier 1 limited capital resources	10% of the capital requirements (15% where the instruments in excess of the 10% limit possesses a Principal Loss Absorbency Mechanism (PLAM))	30% of the capital requirements
Tier 2 capital resources	50% of the capital requirements	The sum of Tier 1 limited and Tier 2 is 60% of the capital requirements
Tier 2 non-paid-up capital	No allowance	10% of the capital requirements

Capital requirements

One of the provisional decisions on the **capital requirements for life insurance risks** concerns homogeneous risk groups. Policies or portfolios will need to be grouped in such a way that risks within a group are homogeneous in terms of the nature and complexity of these risks [PD]. To that end, it is necessary to ensure, for example, that grouping processes are documented and that initial grouping and any subsequent changes are subject to independent validation.

In terms of **lapse risks**, the mass lapse component will be retained [PD], although there is a view that mass lapse can be better addressed in Pillar 2, considering the limitations of the data and difficulties in risk calculation. On the other hand,

[24] Capital resources increase when credit spreads widen (i.e., the decrease in the value of liabilities exceeds the decrease in the value of assets).

[25] PVBPU stands for the price value of a basis point up and is calculated as follows: PVBPU (X) = PV (X) – PVup (X). PV (X) is the current price and PVup is the price obtained by applying a parallel shift of one basis point upwards to the relevant yield curve.

grouping of risks and stress factors will be further analysed.

In terms of stress factors for life insurance risks, four of these were updated for the 2022 field testing as outlined in Table 4.

Table 4. Updated stress factors (life insurance risks)

	FT 2021	FT 2022[26]
Mortality risk	10%	12.5% (10.0%)
Morbidity/disability risk (category 2/long-term)	8%	20% (8%)
Morbidity/disability risk (category 3/long-term)	10%	12% (10%)
Lapse risk (level and trend components)	20%	25% (20%)

Likewise, some risk factors for **non-life insurance risks** were also updated for the 2022 field testing as shown in Table 5.

Table 5. Updated stress factors (non-life insurance risks)

	FT21	FT22[27]
Accident (Claims reserve)	15%	20% (15%)
Automobile (Claims reserve)	10%	15% (10%)
Pet (Premium)	35%	15% (35%)
Pet (Claims reserve)	40%	30% (40%)

As for **catastrophe risks**, relevant models developed by the General Insurance Rating Organization of Japan will be used for the calculation of earthquake and flood/windstorm risks in Japan covered by fire insurance [**PD**]. For other earthquake and flood/windstorm risks in Japan, the development of a standard method will be explored. For natural catastrophe risks in other jurisdictions, company-specific internal models may be used, subject to appropriate governance, for the calculation of risks that represent material perils and/or are in material jurisdictions [**BD**].

Where the insurer uses their own model(s), these models need to be validated appropriately by the insurer themselves and to be subject to supervisory review. From the second half of 2022, the supervisory review as well as self-validation by the insurer is expected to be performed in accordance with a draft set of the seven criteria (safeguards). These criteria are: (i) scope of application; (ii) validation; (iii) sign-off by senior management; (iv) statistical quality test; (v) use test and governance; (vi) documentation standards and (vii) list of catastrophe risk sources that are not modelled. A preliminary review in accordance with a finalised set of the criteria will be performed from the latter half of 2024.

For the calculation of the **interest rate risk, spread risk, real estate and currency risk charge**, the current specifications that have been used for field testing will be retained [**PD**]. It should be noted, however, that interest rate risk hedging could give rise to unintended consequences where the LTFR is not applied; this issue will be further considered. In terms of **equity risks**, application of the look-through approach to investments in subsidiaries will not necessarily be required [**PD**]. Introduction of a symmetric adjustment mechanism and application

[26] Risk factors in the brackets are those used in the IAIS 2022 data collection.

[27] Risk factors in the brackets are those used in the IAIS 2022 data collection. 35% for Premium and 40% for Claims reserve, respectively, are the risk factors for the ICS Segment 'Others'.

of differentiated capital charges to infrastructure and long-term strategic equity investments will be further considered.

With regard to **asset concentration risks**, the capital charge based on the Granularity Adjustment in the ICS can be excessive if exposures are overly concentrated on certain counterparties. To address this issue, adjustments will be made to the methodology used in the ICS [**BD**]. For the 2022 field testing a factor will be applied to cap exposures to certain counterparties, such as subsidiaries and reinsurers. In terms of **credit risks**, municipal bonds issued by local governments in Japan will be excluded from the scope of calculation of credit risks [**PD**].

The **operational risk** capital charge will be capped by applying a certain factor [**PD**]. In the 2022 field testing, a 20% factor is applied to the capital requirements (except for those for operational risks) with diversification effects.

IV. Internal validation and external verification

The 2022 FSA Report presents basic directions relating to internal validation and external verification. These will be considered in further detail.

Internal validation

Basic directions relating to **internal validation** are as follows [**BD**].

Table 6. Basic directions relating to internal validation

Area(s)	Expected actions
Overall ESR	• The insurer identifies a person who is responsible for the validation of the final calculation of the ESR. (This person can be a Chief Risk Officer). • The responsible person has in place processes and procedures necessary to ensure the appropriateness of the calculation of the ESR. • The responsible person reports the result of the validation to the Board and the supervisor.
Areas that are subject to judgment and estimation	• The actions listed above. • The insurer is required by regulation to have an appropriate governance system in place covering areas that are subject to judgment and estimation. • The insurer reports the result of the validation of these areas as well as validation processes to the Board and the supervisor. (Those areas include calculation of insurance liabilities, calculation of capital requirements using internal models and items for which simplified methods are applied).

Insurers will be required to have an **actuarial function** to ensure appropriateness in respect of actuarial matters [**BD**]. The actuarial function will (i) validate the appropriate of the calculation of insurance liabilities and (ii) prepare a report on the results of the validation (Insurance Liability

Validation Report) annually and submit this report to the Board and the supervisor [**BD**]. The head of the actuarial function does not have to be the Appointed Actuary stipulated in the Insurance Business Act [**BD**].

To ensure the independence and eligibility of an actuarial function, the following basic directions are set forth [**BD**].

- The insurer will have in place a framework that evaluates independence and eligibility of the function on an on-going basis in accordance with laws and regulations as well as its own policies.
- The insurer will report the framework and the results of the evaluation, etc., to the supervisor.
- The supervisor will (i) review the measures taken by the insurer to ensure independence and eligibility of the function and the results of the evaluation, (ii) perform peer reviews and (iii) have a dialogue with the insurer.

Insurance liabilities on a consolidated basis will be validated by a **group actuarial function** [**BD**]. The group actuarial function will submit a report that summarises the results of the validation to the Board and the supervisor [**BD**].

External verification

External verification will be institutionalised [**BD**]. The benefits of external verification are that it can (i) complement insurers' governance, (ii) ensure confidence of users in the ESR information, (iii) ensure credibility of the ESR information used for supervisory purposes and (iv) ensure effectiveness and efficiency of verification by the supervisor as well as users of the information. Details associated with external verification will be further considered.

V. Internal models

Up until around 2024 a supervisory focus will be placed on (i) finalisation of review criteria relating to internal models for natural catastrophe risks and (ii) further considerations regarding the planned preliminary review of internal models [**BD**]. Directions on the use of internal models for risks other than natural catastrophe risks will be set out after 2023, taking into consideration the status of (i) preparation by the supervisor and insurers for the review of internal models for natural catastrophe risks, (ii) the status of the development of a standard method (including use of company-specific stress factors) and (iii) discussions on internal models in the context of the ICS [**BD**].

VI. Supervisory measures and Pillars 2 and 3

Issues associated with the Prescribed Capital Requirement (PCR), including the level of the PCR, **supervisory measures** to be taken in the event of a breach of the PCR, a recovery period from a breach of the PCR and the requirement for an interim point between the PCR and the Minimum Capital Requirement (MCR), will be further considered.

Further discussion is also required for the MCR. MCR-related issues that need to be considered include the approach to calculating the MCR, the level of the MCR, a recovery period from a breach of the MCR, the relationship of the supervisory measures triggered by a breach of the MCR to the measures to be taken in the case of a breach of the 'Net Capital Level' stipulated in the Insurance Business Act (IBA), which is basically calculated by subtracting the amount of liabilities measured on a 'locked-in' basis (except for 'capital-like' liabilities) from the market value of the assets. The relationship between the MCR and the current resolution regime, which is designed based on the current solvency framework, will also need to be considered further.

With respect to **Pillar 2**, insurers will be required to report ESR-related quantitative information, such as the ESR, qualifying capital resources, capital requirements and sensitivity analysis, using templates to be developed based on the templates used for field testing [**BD**]. A list of qualitative information to be reported to the supervisor will be developed leveraging the Insurance Liability Validation Report that is currently submitted through field testing.

With respect to **Pillar 3**, information on the breakdown of the capital requirements and qualifying capital resources, as well as basic financial and risk information relating to the balance sheet, will be reported in accordance with templates to be developed by the supervisor to ensure comparability [**BD**], while details of the information to be reported will be further considered. Likewise, information on the results of sensitivity analysis and analyses of the reasons for changes in the capital requirements and qualifying capital resources will also be reported to the supervisor utilising these templates [**BD**].

4. Discussions and conclusion

Steady progress has been made on the development of a new solvency regulation framework since the FSA Study Group recommendations made in June 2020. The 2022 FSA Report, which was published broadly in line with the schedule set out in June 2020 (see Appendix), should help insurers advance their preparations for 2025. There are nevertheless several issues, including those identified in the 2022 Report, on which further consideration is needed.

This section discusses some of critical issues, with a focus on those relating to the design and supervisory aspects. It is obvious that insurers need to further strengthen their governance and internal control systems ahead of the implementation of the new regulations, but it is not the objective of this section to discuss these issues.

Fit for the market

The ESR is being designed to ensure that it aligns in principle with the ICS with limited adjustments. Those adjustments made or proposed can give rise to gaps or differences between the ESR and the ICS. These differences seem evident at this stage in the methodology for the calculation of MOCE, risk factors for certain risk categories and certain differentiated treatments relating to adjustments to the risk-free yield curve.

Any adjustments to the ICS by themselves should be deemed appropriate as far as these adjustments can be justified. As the 2022 FSA Report describes, the most important aspect is that the regulations reflect the specificities of insurers operating in Japan, such as size, risk profiles and business models, although attention should also be paid to ensuring global comparability on certain levels. In this respect, approaches taken by other jurisdictions can inform the development of the ESR. For example, the U.K. aims to make the solvency regime fit better with the U.K. market through its review of the Solvency II[28]. New Zealand has established principles for their review of the Insurance Solvency Standards, which states that while international comparability will be taken into account, the key principle is to take a substance over form approach and to tailor requirements to New Zealand[29].

Adjustments to achieve policy objectives

In the EU, a risk factor of 22%, 30% and 36% is applied, respectively, to strategic and long-term equity investments, equity investments in infrastructure project entities and equity investments in infrastructure project entities under the Solvency II[30]. In China, the China Banking and Insurance Regulatory Commission (CBIRC) has revised its solvency regulations, China Risk Oriented Solvency System or C-ROSS as C-ROSS II, with a 10% discount given to the longevity risk factor to reflect

[28] Bank of England (2021) 'Solvency II Review: Unlocking the potential – speech by Gareth Truran', https://www.bankofengland.co.uk/speech/2021/september/gareth-truran-speech-at-the-bank-of-america-26-financials-ceo-conference.

[29] Reserve Bank of New Zealand (2021) 'Review of Insurance Solvency Standards: Principles and Timeline Consultation – Feedback Statement', https://www.rbnz.govt.nz/-/media/project/sites/rbnz/files/consultations/insurers/iss-review/review-of-insurance-solvency-standards-mar-2021.pdf.

[30] European Commission (2022) 'Commission Delegated Regulation (EU) 2015/35 of 10 October 2014 supplementing Directive 2009/138/EC of the European Parliament and of the Council on the taking-up and pursuit of the business of Insurance and Reinsurance (Solvency II), http://publications.europa.eu/resource/cellar/163318c6-1824-11ed-8fa0-01aa75ed71a1.0009.03/DOC_1.

supervisory encouragement[31]. The 2022 FSA Report states that careful consideration is needed concerning these types of adjustment since simply adjusting risk factors to achieve policy objectives can give rise to regulatory arbitrage. At the same time, the Report says such adjustments can be justified where the adjustments are based on quantitative evidence.

That kind of discussion could arise in the context of sustainability-related policy objectives with the potential for divergent views. For instance, European supervisors have expressed their opinion that any change to the capital requirements must be based on a proven risk differential compared to the status quo [32]. The U.K. Prudential Regulation Authority (PRA) appears to have adopted a similar stance. The PRA is of the view that the regulatory capital framework can be used to address the consequences, not the causes of climate change[33]. The U.K. government, on the other hand, sought views through its review of the Solvency II on how the prudential regulatory regime can better enable insurers to contribute to the government's objectives to provide long-term capital to support the government's climate change objectives[34].

ESR and insurance accounting standards

A primary objective of insurance solvency regulation is to protect policyholders and to ensure insurers' financial soundness, which can differ from the objective of financial reporting. The approach to the valuation of assets and liabilities needs to be fit for a purpose.

In Japan insurers are required to prepare their financial statements in accordance with the insurance accounting standards stipulated in the Insurance Business Act (IBA), unless otherwise specified. The Solvency Margin Ratio (SMR) is calculated based on the insurance accounting standards. Broadly speaking, this means that the statutory accounting principles (SAP) are almost the same as the generally accepted accounting principles (GAAP).

With the introduction of a new solvency regulation regime, which is expected to replace the current SAP, clarification of the insurance accounting framework as set forth by the IBA would be needed in that whether or not the current insurance accounting standards will be replaced by the new solvency regulations. The 2022 FSA Report refers to a 'Net Capital Level' that is calculated in accordance with the IBA. This seems to imply that the current insurance accounting framework may be retained even after the implementation of the ESR.

ESR as a supervisory framework

The 2020 Study Group Report highlighted three benefits of introducing an economic value-based solvency regulation regime. First, the supervisor will be able to take necessary action vis-a-vis insurers in

[31] Deloitte China 'Interpretations on C-ROSS II', https://www2.deloitte.com/cn/en/pages/financial-services/articles/china-risk-oriented-solvency-system-c-ross-phase-ii.html.

[32] EIOPA (2019) 'Opinion on Sustainability within Solvency II', https://www.eiopa.europa.eu/sites/default/files/publications/opinions/2019-09-30_opinionsustainabilitywithinsolvencyii.pdf.

[33] Prudential Regulation Authority (2021) 'Climate-related financial risk management and the role of capital requirements: Prudential Regulation Authority Climate Change Adaptation Report 2021', https://www.bankofengland.co.uk/-/media/boe/files/prudential-regulation/publication/2021/october/climate-change-adaptation-report-2021.pdf?la=en&hash=FF4A0C618471462E10BC704D4AA58727EC8F8720.

[34] HM Treasury (2020) ' Review of Solvency II: Call for Evidence', https://assets.publishing.service.gov.uk/government/uploads/system/uploads/attachment_data/file/927345/Solvency_II_Call_for_Evidence.pdf.

a timely fashion, thereby ensuring policyholder protection. Second, the new regime will give insurers an incentive to enhance their internal risk management. Third, the new regulations will enhance communication between insurers and their stakeholders, thereby strengthening market discipline.

While these three benefits make intuitive sense, no clear message on how they will be achieved has yet been expressed, particularly with regard to the first of these benefits. The 2022 FSA Report sets out a list of issues concerning the PCR and the MCR that require consideration. Further details on these issues would give insurers and other stakeholders a better understanding in that, for example, what supervisory tools, including recovery and resolution tools, are triggered at what level of the ESR and how insurers will be resolved.

More fundamentally, it would be necessary for the supervisor to send out a clearer message on how they intend to supervise insurers under the new solvency regime and what benefits the new regime will bring to the market [35] at the earliest stage possible.

Expectations of the supervisor

With the introduction of the ESR, comparability of levels of the solvency position among insurers is likely to be reduced and individual insurers' ESR levels tend be more volatile. These can pose a challenge to the supervisor. The supervisor would need to have an understanding of, for example, the assumptions used for the calculation of insurance liabilities and the reasons for changes in the ESR. Moreover, the supervisor may face more situations in which they are required to exercise their expert judgment fulfilling their supervisory responsibilities. The supervisor is therefore expected to further enhance their supervisory capabilities.

Conclusion

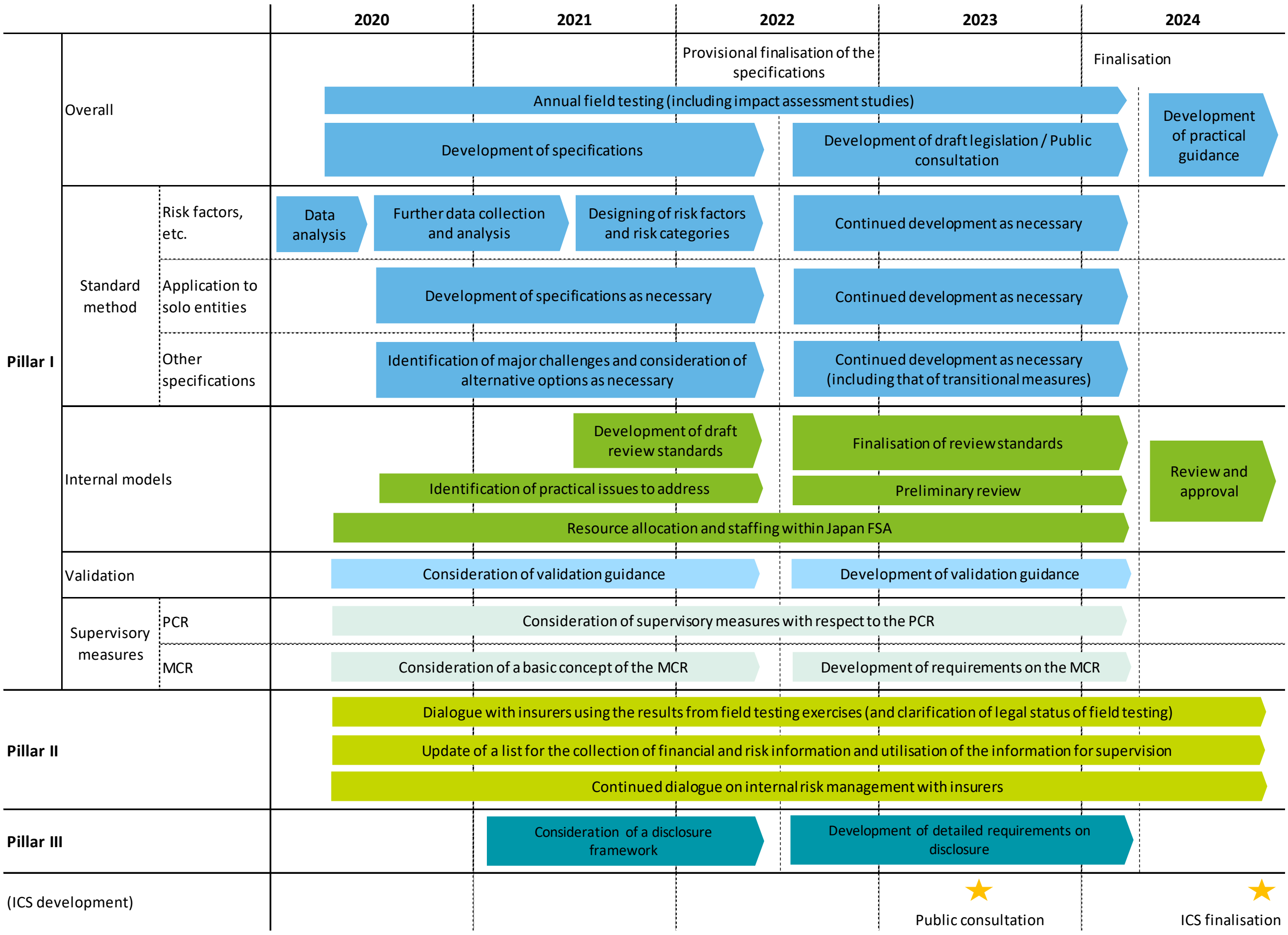
The 2022 FSA Report will help accelerate insurers' preparations for 2025. There is nonetheless a need for further discussion of fundamental issues, such as those discussed above. Both insurers and the supervisor would need to be able to accelerate their respective preparations towards 2025.

(End of the article)

[35] See the report 'Japan's new insurance solvency regime: A blueprint of the new regime for insurance supervision (August 2020)'on this. Section 4 of the report discusses (i) 'smoothing' measures, (ii) internal models and (iii) supervisory intervention. https://www2.deloitte.com/content/dam/Deloitte/jp/Documents/financial-services/ins/Japans%20new%20insurance%20solvency%20regime_final.pdf.

Appendix

The timeline presented in the 2020 Study Group Report.



Author

Shinya Kobayashi

Managing Director
Financial Services
Risk Advisory
Deloitte Touche Tohmatsu LLC
shinya.kobayashi@tohmatsu.co.jp