Development of Liquidity Metrics: Phase 2
Public background session

30 November 2021
13.30 – 15.00 CET
Agenda

• GME and Liquidity Metrics Project
• Public Consultation 2021
• Phase 2: Scope, components and main aspects
• Exposure Approach
• Company Projection Approach
• Other liquidity metrics
• Next steps

Speakers:
• Dieter Hendrickx, Chair of the Macroprudential Committee
• Michael Popp, Chair of the Macroprudential Monitoring Working Group
• Daniel Weijand, Vice-Chair of the Macroprudential Monitoring Working Group
• Tomas Stastny, IAIS Secretariat
GME AND LIQUIDITY METRICS PROJECT
Global Monitoring Exercise and ancillary indicators

- Global Monitoring Exercise (GME) – one of the key elements of the IAIS Holistic Framework for the assessment and mitigation of systemic risk in the global insurance sector (adopted in November 2019)

- Global Monitoring Exercise serves:
  - to assess global insurance market trends and developments and
  - to detect the possible build-up of systemic risk in the global insurance sector.

- This includes an annual assessment by the IAIS of potential systemic risk arising from sector-wide trends with regard to specific activities and exposures, but also the possible concentration of systemic risks at an individual insurer level (using an updated assessment methodology) arising from these activities and exposures

- To further aid the assessment of systemic risk in the global insurance sector, the IAIS can make use of ancillary indicators in its analysis

- Ancillary indicators are used in the context of the IIM exercise and do not affect the total individual quantitative score. However, they may provide additional context that can inform the overall assessment. Liquidity metrics are potential ancillary indicators

- IAIS has published this morning the key outcomes of this year GME in its Global Insurance Market Report (GIMAR) 2021
Liquidity metrics project and the two-phase approach

• Paragraph 58 of the November 2019 GME document states: “The IAIS is currently developing liquidity metrics. These liquidity metrics will serve as a tool for the IAIS to assess insurers’ liquidity exposures. They will not be a binding requirement, but rather a monitoring tool, and will help identify trends in insurer and insurance-sector liquidity. The IAIS plans to consult on metrics for liquidity monitoring in 2020 and 2021.”

• The IAIS has split the development of liquidity metrics into two phases:
  o During Phase 1 (2020-2021), the IAIS started the development of an Insurance Liquidity Ratio (ILR), which uses an exposure approach (EA); and was the main focus of the interim public consultation 2020;
  o During Phase 2 (2021-2022), the IAIS is further developing other liquidity metrics, including a company projection approach (CPA). The CPA approach utilizes insurers’ projections of cash flows to assess liquidity risk. Moreover, Phase 2 also contains refinements to the EA, in particular to the ILR, and work on insurers’ own liquidity metrics.

• The IAIS plans to finalise the development of liquidity metrics in 2022.
PUBLIC CONSULTATION 2021 AND PHASE 2
Public Consultation on the Development of Liquidity Metrics: Phase 2

- The Public Consultation was launched on 18 November 2021
- Feedback is invited by **23 January 2022 24.00 CET (Basel time)**
- Feedback received by this deadline will enable the IAIS to calibrate the company projection approach, further improve the exposure approach and continue the development of liquidity metrics.
- Partial submissions, covering a subset of questions, will be considered
- Only comments provided via the IAIS consultation tool will be considered
- Please do not hesitate to contact the IAIS Secretariat should you have any questions or comments (Tomas.Stastny@bis.org and Nicolas.Colpaert@bis.org)
Phase 2: Scope

- During Phase 2, the IAIS develops other liquidity metrics. This includes but is not limited to the development of a company projection approach (CPA), analysis of own liquidity metrics and their various aspects, further refinement of the exposure approach (EA) and Insurance Liquidity Ratio (ILR) that were presented in the public consultation document (PCD) in 2020.
- Moreover, IAIS analyses also following aspects of liquidity metrics, as raised in the PCD 2020:
  - Variability of business models with focus on following business types:
    - Predominantly life insurers
    - Composite insurers
    - Predominantly non-life insurers
    - Reinsurers
  - Fungibility of assets:
    - (Perfectly fungible) Enterprise as a basis
    - Fungible liquidity pools as a basis
  - Relations between liquidity and capital: Simplified and detailed methods
  - Time horizons
  - Liquidity of separate accounts
  - Trade-off between model simplicity and complexity
### Phase 2: Components

**Strengths and weaknesses**

Approaches to liquidity risk monitoring:

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<th>Exposure approach</th>
<th>Company projection approach</th>
<th>Other liquidity metrics</th>
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<td>Additional information about timing mismatches between liquidity need and sources</td>
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<td>More complicated</td>
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<td>Decreased comparability due to differences in assumptions across companies</td>
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<td>More risk sensitive</td>
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<td>More suited to insurers operational, legal and regulatory set up</td>
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<td><strong>Weaknesses</strong></td>
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<td>Limited comparability</td>
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<td>Dependent on insurers’ parameters and accuracy</td>
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EXPOSURE APPROACH
Exposure Approach (EA)

• The EA applies factors to balance sheet items and to off-balance sheet exposures to measure liquidity risk. In the EA, the IAIS leverages current and prior work on systemic risk assessment to develop the Insurance Liquidity Ratio (ILR).

• The ILR is the ratio of an insurer’s liquidity sources and needs over a selected time horizon of an assumed liquidity stress:

\[
\text{Insurance Liquidity Ratio (ILR)} = \frac{\text{Liquidity Sources}}{\text{Liquidity Needs}}
\]

• During Phase 1, the IAIS developed the first version of the Insurance Liquidity Ratio (ILR), which used the EA and was calculated using PC 2020 weights/factors.

• In Phase 2, the IAIS implemented the feedback received during the interim PC 2020, outcomes of the data/sensitivity analysis and updated the EA methodology and calculation of the ILR.

• The ILR focuses on an insurer’s general accounts. Liquidity risk within separate accounts is borne by the policyholder, rather than the insurer. The IAIS may develop separate metrics for monitoring in a future period to capture any potential risk from these products.

• Two time horizons currently considered: 1 year (main) and 3 months (supplementary).
Liquidity Sources after Phase 2 refinements

Insurance Liquidity Ratio (ILR)

• All Phase 1 liquidity sources were kept

• In addition, new categories of liquidity sources are included:
  o Corporate debt and equities issued by financials
  o Liquid investment funds
  o Certificates of deposit
  o Undrawn committed lines
  o Non-life premiums earned in last 12 months

• New factors proposed for the 3-month time horizon

• Sensitivity analysis will continue with IIM 2022 data
Liquidity Needs after Phase 2 refinements

Insurance Liquidity Ratio (ILR)

• Phase 1 liquidity needs were refined. Main changes include:
  o Consideration of all business models
  o Inclusion of non-life claims and expenses
  o Consideration of operational liquidity needs
  o Refinement of the CatRisk approach
  o Consideration of reserving risk
  o Consideration of reinsurance recoveries
  o Refinements for derivatives
  o Consideration of capital

• Sensitivity analysis will continue with IIM 2022 data
Impact of the Phase 2 refinements on the ILR

- Refinements based on: data analysis and sensitivity analysis outcomes including the Public Consultation 2020 feedback
- More homogeneous and more robust ILRs in 2021 (using YE20 data)
- Better comparability across business models

ILRs: Public Consultation 2021 Factors (YE20)

* ILRs 2020: ILRs calculated using PC 2020 weights and YE20 data
** ILRs 2021: ILRs calculated using PC 2021 weights and YE20 data
COMPANY PROJECTION APPROACH
Company Projection Approach

- The IAIS received comments in the Public Consultation 2020, some of which supported the development of alternative liquidity metrics to the Insurance Liquidity Ratio (ILR), such as a cash flow Company Projection Approach (CPA).

- CPA includes 4 main steps:

  1. Baseline cash flows projection (Pre-stress)
  2. Stressed cash flows projection (liquidity stress test applied)
  3. Stress impact evaluation
     - Cash flow liquidity ratio (CFLR)
     - Positive/negative net cash flows
  4. Haircuts consideration (if negative cash flows identified)
Company Projection Approach

- Company Projection Approach includes 3 types of data elements planned for the IIM 2022 data collection:
  - Historical cash-flows (last 12 months)
  - Baseline/Pre-stress projection (no stress applied)
  - Stressed projection (1 adverse scenario planned)
- Time horizons considered: 30 days, 90 days and 1 year
- Types of cash inflows and outflows:
  - Operating
  - Investing
  - Financing
- Stress scenario setting:
  - Weakening economic activity, deflation and increasing unemployment rates across all economies.
  - This economic downturn is accompanied by a global aversion to long-term fixed-income assets that, despite lower short-term rates, brings about a near-term rise in long-term rates and steepening yield curves.
  - In addition, the scenario counts with equity prices decline by roughly 40% and material increase in market volatility.
  - The adverse liquidity stress scenario may cover also stress on insurance liabilities.
OTHER LIQUIDITY METRICS
Aspects for consideration in own liquidity metrics

• Fungibility and fungible liquidity pools
• Currency and liquidity currency baskets
• Assumptions for discretionary cash flows
• Off-balance sheet items
• Access to liquidity platforms
• Variability of business models
• Different assumptions for baseline going concern and stressed
• Various models for short and long-term liquidity
• Simulations for lapse risk
Data collection on own liquidity metrics

• Current liquidity (business as usual, pre-stress)

\[ \text{Current Liquidity Ratio} = \frac{\text{Current Liquidity Sources}}{\text{Current Liquidity Needs}} \]

• Reduced data collection for stressed liquidity

• Qualitative questions on aspects and their usage:
  o Internal liquidity management and/or
  o Internal liquidity measurement

Excess Liquidity

\[ \text{Current Liquidity Sources} - \text{Current Liquidity Needs} \]
NEXT STEPS
Next steps

• The IAIS welcomes feedback from stakeholders on the proposed CPA, EA and other liquidity metrics. The responses and suggestions collected in the interim PC 2020 helped to refine the ILR and the EA in general.

• During 2022, the IAIS will focus on the following tasks:
  o Refinements and finalisation of the EA (including calibrations of factors and finalisation of the ILR formula);
  o Refinements and finalisation of the CPA (including calibration of the stress scenario, its application and calculation of different types of cash flows);
  o Refinements of other liquidity metrics;
  o Consideration of various business models in the CPA/EA;
  o Consideration of fungibility in the CPA/EA;
  o Consideration of capital in the CPA/EA; and
  o Consideration of various time horizons in the CPA/EA.

• The IAIS plans to finalise Phase 2, including a set of liquidity monitoring metrics, in 2022. Phase 2 is planned to be accomplished by a publication of the Level 2 document “Liquidity metrics as an ancillary indicator” (expected in November 2022).
QUESTIONS AND COMMENTS