

ECB Guide to the internal liquidity adequacy assessment process (ILAAP)

Draft

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# 1 Introduction

- 1. The recent financial crisis has shown the fundamental importance of liquidity for credit institutions, as insufficient liquidity poses an immediate threat to their continuity. One of the main lessons learned is that their liquidity risk management has to ensure their ability to fulfil their payment obligations at all times, even under adverse conditions.
- 2. Accordingly, the internal liquidity adequacy assessment process (ILAAP) plays a key role in the risk management of credit institutions. As regards significant institutions established in the Single Supervisory Mechanism (SSM), the ECB expects the ILAAP in accordance with the provisions in Article 86 of the Capital Requirements Directive (CRD IV)<sup>2</sup> to be prudent and conservative<sup>3</sup>. The ECB is of the view that sound, effective and comprehensive ILAAPs comprise a clear assessment of the risks to their liquidity, and have well-structured risk governance and risk escalation processes based on a well-thought out and thorough risk strategy which is translated into an effective risk limit system.
- In the In the ECB's view, a sound, effective and comprehensive ILAAP is based on two pillars: the economic and the normative perspectives. Both perspectives are expected to complement and inform each other.
- 4. The ILAAP is also an important input factor in the SSM Supervisory Review and Evaluation Process (SREP). It feeds into SREP assessments of business models, internal governance and overall risk management, and into the risk control assessments of risks to liquidity and the Pillar 2 liquidity determination process.
- 5. In the SREP, it is acknowledged that a good ILAAP reduces an institution's and its supervisors' uncertainty concerning the risks that the institution is or may be exposed to, and gives supervisors an increased level of confidence in the institution's ability to continue by maintaining an adequate liquidity buffers and stable funding and by managing its risks effectively. This requires the institution, in a forward-looking manner, to ensure that all material risks are identified, effectively managed (using an appropriate combination of quantification and controls) and covered by a sufficient level of high-quality liquidity buffers.

For the purpose of this Guide, the term "liquidity" covers both liquidity and funding.

Directive 2013/36/EU of the European Parliament and of the Council of 26 June 2013 on access to the activity of credit institutions and the prudential supervision of credit institutions and investment firms, amending Directive 2002/87/EC and repealing Directives 2006/48/EC and 2006/49/EC (OJ L 176, 27.6.2013, p. 338).

Article 86(1) CRD IV: "Competent authorities shall ensure that institutions have robust strategies, policies, processes and systems for the identification, measurement, management and monitoring of liquidity risk over an appropriate set of time horizons, including intra-day, so as to ensure that institutions maintain adequate levels of liquidity buffers."

# 1.1 Purpose

- 6. The purpose of the ECB Guide to the ILAAP (the "Guide") is to provide transparency by making public the ECB's understanding of the liquidity risk requirements following from Article 86 CRD IV. The Guide is aimed at assisting institutions in strengthening their ILAAPs and at encouraging the use of best practices by explaining in greater detail the ECB's expectations on the ILAAP, leading to more consistent and effective supervision.
- 7. The Guide deduces from the CRD IV liquidity risk provisions seven principles that will be considered, inter alia, in the assessment of each institution's ILAAP as part of the SREP. These principles will also be referred to in discussions with individual institutions in the supervisory dialogue.
- 8. The Guide does not substitute or supersede any applicable law implementing Article 86 CRD IV. Insofar as the Guide is not in line with applicable law, the applicable law prevails. The Guide is intended to be a practical tool that is updated regularly to reflect new developments and experience. Consequently, the principles and expectations laid out in this Guide will evolve over time. It will be reviewed in the light of the ongoing development of European banking supervision practice and methodologies, international and European regulatory developments and, for example, new authoritative interpretations of relevant directives and regulations by the Court of Justice of the European Union.
- 9. This Guide follows a principles-based approach with a focus on selected key aspects from a supervisory perspective. It is not meant to provide complete guidance on all aspects relevant for sound ILAAPs. The implementation of an ILAAP that is adequate for an institution's particular circumstances remains the responsibility of the institution. The ECB assesses institutions' ILAAPs on a case-by-case basis.
- 10. In addition to this Guide, and in addition to relevant Union law and national law, institutions are encouraged to take into account other ILAAP-relevant publications from the EBA and international fora like the Basel Committee on Banking Supervision (BCBS) and the Financial Stability Board (FSB). Furthermore, institutions should take into account all ILAAP-related recommendations addressed to them, e.g. recommendations resulting from the SREP, such as those related to sound governance, to risk management and to controls.

# 1.2 Scope and proportionality

11. This Guide is relevant for any credit institution which is considered to be a significant supervised entity as referred to in Article 2 (16) of the SSM

Framework Regulation<sup>4</sup>. The ILAAP scope is determined by Article 109 CRD IV. This means in particular that a parent institution in a Member State and institutions controlled by a parent financial holding company or parent mixed financial holding company in a Member State shall meet the ILAAP obligations set out in Article 86 CRD IV on consolidated basis or on the basis of consolidated situation of that financial holding company or mixed financial holding company. Given that Article 86 CRD IV is a minimum harmonisation provision, and its transposition has therefore been dealt with in different ways in different Member States, a wide variety of ILAAP practices and requirements for the supervision of SIs exist in participating Member States.

- 12. The ECB, together with the national competent authorities (NCAs), has developed ILAAP principles. The objective of these principles is to ensure high standards of supervision by developing common methodologies in this important supervisory area.
- 13. The ILAAP is, above all, an internal process, and it remains the responsibility of individual institutions to implement it in a proportionate and credible manner. Pursuant to Article 86 CRD IV, ILAAPs have to be proportionate to the nature, scale and complexity of the activities of the institution.
- 14. The principles developed in this Guide shall only serve as a starting point in supervisory dialogues with credit institutions. Therefore, they should not be understood as comprehensively covering all aspects necessary to implement a sound, effective and comprehensive ILAAP. It is the responsibility of the institution to ensure that its ILAAP is sound, effective and comprehensive duly taking into account the nature, scale and complexity of its activities.

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Regulation (EU) No 468/2014 of the European Central Bank of 16 April 2014 establishing the framework for cooperation within the Single Supervisory Mechanism between the European Central Bank and national competent authorities and with national designated authorities (SSM Framework Regulation) (ECB/2014/17) (OJ L 141, 14.5.2014, p. 1).

# 2 Principles

# Principle 1 – The management body is responsible for the sound governance of the ILAAP

- (i) In view of the major role of the ILAAP for the institution, all of its key elements are expected to be approved by the management body. The management body, senior management and relevant committees are expected to discuss and challenge the ILAAP in an effective way.
- (ii) Each year, the management body is expected to provide its assessment of the liquidity adequacy of the institution, supported by ILAAP outcomes and any other relevant information, by producing and signing a clear and concise statement, the liquidity adequacy statement (LAS).
- (iii) The management body has overall responsibility for the implementation of the ILAAP, and it is expected to approve an ILAAP governance framework with a clear and transparent assignment of responsibilities, adhering to the segregation of functions. The governance framework is expected to include a clear approach to the regular internal review and validation of the ILAAP.

# The management body approves key elements of the ILAAP

- 15. The management body is expected to produce and sign the LAS, and approve the key elements of the ILAAP, for example:
  - the governance framework;
  - internal documentation requirements;
  - the perimeter of entities captured, the risk identification process and the internal risk inventory and taxonomy, reflecting the scope of material risks;
  - risk quantification methodologies,<sup>5</sup> including high-level risk measurement assumptions and parameters (e.g. time horizon, confidence levels,<sup>6</sup> and maturity profile), supported by reliable data and sound data aggregation systems;
  - methodologies used to assess liquidity adequacy (including the stresstesting framework and a well-articulated definition of liquidity adequacy);

The ILAAP Guide does not prescribe a particular methodology for quantifying risks. This is explained in more detail in the section on "Choice of risk quantification methodologies" under Principle 6.

<sup>&</sup>lt;sup>6</sup> Such as in the case of non-maturing deposits modelling.

- quality assurance of the ILAAP, particularly with regard to key inputs for the LAS (including the set-up and role of internal validation, the use of selfassessment against applicable rules, regulations and supervisory expectations, controls in place for validating the institution's data, stress test results, models applied, etc.).
- 16. The management body comprises a supervisory function and a management function that may be performed by a single body or two separate bodies. Which key elements of the ILAAP are approved by which function depends on the internal governance arrangements of the institution, which will be interpreted by the ECB in accordance with national regulations and in line with Union law and EBA guidelines.<sup>7</sup>

# Internal review and validation

- 17. The ILAAP shall be subject to regular internal review. Both qualitative and quantitative aspects, including, for example the use of ILAAP outcomes, the stress-testing framework, risk capture, and the data aggregation process, are expected to be considered by this regular internal review, including proportionate validation processes for internal risk quantification methodologies used.
- 18. The ECB expects a defined process to be in place in order to ensure proactive adjustment of the ILAAP to any material changes that occur, such as entering new markets, providing new services, offering new products, or changes in the structure of the group or financial conglomerate.
- 19. ILAAP outcomes and assumptions are expected to be subject to adequate back-testing and performance measurement, covering, for example, liquidity planning, scenarios, and risk quantification.

# Liquidity adequacy statement

20. In the LAS, the management body provides its assessment of the liquidity adequacy of the institution and explains its main supporting arguments, backed by information it considers relevant, including ILAAP outcomes. The ECB is of the view that a sound LAS demonstrates that the management body has a good understanding of the liquidity adequacy of the entity, its main drivers and vulnerabilities, the main ILAAP inputs and outputs, the parameters and processes underlying the ILAAP, and the coherence of the ILAAP with its strategic plans.

See recital 56 and Article 3(1)(7) to (9) CRD IV and Title II of the EBA Guidelines on internal governance (EBA/GL/2017/11).

Internal reviews of the ILAAP are expected to be carried out comprehensively by the three lines of defence, including business lines and the independent internal control functions (risk management, compliance and internal audit), in accordance with their respective roles and responsibilities.

21. The authority to sign the LAS on behalf of the management body is expected to be decided by the institution in the light of national regulations and relevant prudential requirements and guidelines.<sup>9</sup>

The EBA Guidelines on internal governance (EBA/GL/2017/11) describe in more detail the allocation of tasks and responsibilities between the supervisory and management functions of the management body.

# Principle 2 – The ILAAP is an integral part of the overall management framework

- (i) Pursuant to Article 86(1) CRD IV, the institution is expected to have robust strategies, policies, processes and systems for the identification, measurement, management and monitoring of liquidity risk over an appropriate set of time horizons, including intraday, to ensure that it maintains adequate liquidity buffers. 10
- (ii) In addition to an adequate quantitative framework for assessing liquidity adequacy, a qualitative framework is needed to ensure that liquidity adequacy is actively managed. This includes the monitoring of liquidity adequacy indicators to identify and assess potential threats over different time horizons, including intraday, in a timely manner, drawing practical conclusions and taking preventive action to ensure that regulatory and internal liquidity buffers remain adequate.
- (iii) The quantitative and qualitative aspects of the ILAAP are expected to be consistent with each other and with the institution's business strategy and risk appetite. The ILAAP is expected to be integrated into the business, decisionmaking and risk management processes of the institution. The ILAAP is expected to be consistent and coherent throughout the group.
- (iv) Institutions are expected to maintain a sound and effective overall ILAAP architecture and documentation of the interplay between the ILAAP elements and the integration of the ILAAP into the institution's overall management framework.
- (v) The ILAAP is expected to support strategic decision-making and, at the same time, be operationally aimed at ensuring that the institution maintains adequate liquidity on an ongoing basis, thereby promoting an appropriate relationship between risks and rewards. All methods and processes used by the institution to steer its liquidity as part of the operational or strategic liquidity management process are expected to be approved, thoroughly reviewed, and properly included in the ILAAP and its documentation.

# The ILAAP as an integral part of an institution's management framework

22. In order to assess and maintain adequate liquidity to cover the institution's risks, <sup>11</sup> the internal processes and arrangements are expected to ensure that quantitative analysis of risks, as reflected in the ILAAP, is integrated into all material business activities and decisions.

<sup>&</sup>lt;sup>10</sup> For a description of internal liquidity buffers and internal stable sources of funding, see Principle 5.

<sup>11</sup> The general expectations regarding the quantitative part of the ILAAP are introduced under Principle 3.

23. This integration is achieved by using the ILAAP for, for example, the strategic planning process at group level, the monitoring of liquidity adequacy indicators to identify and assess potential threats in a timely manner, drawing practical conclusions and taking preventive action, determining liquidity allocation, and ensuring the ongoing effectiveness of the risk appetite framework (RAF). ILAAP-based risk-adjusted performance indicators (which can be based on cost-benefit allocation through a funds transfer pricing system) are expected to be used in the decision-making process, and, for example, when determining variable remuneration or when discussing business and risks at all levels of the institution, including, inter alia, in asset-liability committees, risk committees and meetings of the management body.

#### The overall ILAAP architecture

- 24. The management body is responsible for maintaining a sound and effective overall ILAAP architecture, ensuring that the different elements of the ILAAP fit coherently together and that the ILAAP is an integral part of the institution's management framework. The institution is expected to have a clear view of how these elements are consistently integrated into an effective overall process that allows it to maintain liquidity adequacy over time.
- 25. For this purpose, the institution is expected to maintain as part of its ILAAP documentation a description of the overall ILAAP architecture, for example an overview of the key elements of the ILAAP and how they work together, explaining how the ILAAP is integrated and how its outcomes are used in the institution. This ILAAP architecture description is expected to explain the high-level structure of the ILAAP, how its outcomes are used in decision-making, and the connections between, for example, business and risk strategies, funding plans, risk identification processes, the risk appetite statement, limit systems, risk quantification methodologies, the stress-testing programme and management reporting.

### Management reporting

- 26. The ILAAP is an ongoing process. The institution is expected to integrate ILAAP outcomes (such as material evolution of risks, key indicators, etc.) into its internal management reporting at an appropriate frequency. The frequency of reporting is expected to be at least quarterly, but, depending on the size, complexity, business model and risk types of the institution, reporting might need to be more frequent to ensure timely management action, given the potentially rapid changes in the liquidity and funding situation and the immediate impact that an inadequate liquidity position could have on the continuity of the institution.
- 27. The ILAAP outcomes regarding risk quantification and liquidity allocation, when approved, are expected to become a key performance benchmark and target

against which each (risk-taking) division's financial and other outcomes are measured. This is expected to be supported by the implementation of a sound ILAAP governance framework and architecture as described under Principle 1.

# The ILAAP and the risk appetite framework

- 28. The RAF of the institution is expected to formalise the interplay between the RAF and other strategic processes such as the ICAAP, the ILAAP, the recovery plan and the remuneration framework in accordance with the SSM supervisory statement on governance and risk appetite. <sup>12</sup> A well-developed RAF, articulated through the risk appetite statement, is expected to be an integral part of the ILAAP architecture and a cornerstone of sound risk and liquidity management.
- 29. In its risk appetite statement, the institution is expected to set out a clear and unambiguous view on and intended actions with regard to its risks in line with its business strategy. In particular, the statement is expected to include motivations for taking on or avoiding certain types of risks, products or regions.
- 30. The institution's overall risk profile is expected to ultimately be constrained and driven by the group-wide RAF and its implementation. Furthermore, the RAF is a critical element of the institution's strategy development and implementation process. In a structured manner, the RAF links risks taken to the institution's liquidity adequacy and strategic objectives. As part of the RAF, the institution is expected to determine and take into account its management buffers.
- 31. The institution is expected to clearly express how the implementation and monitoring of its strategy and risk appetite are supported by its ILAAP, and how this effectively allows it to comply with the agreed risk boundaries set out in the risk appetite statement. In order to facilitate sound and effective risk management, the institution is expected to use the ILAAP outcomes when setting up an effective risk monitoring and reporting system and an adequately granular limit system (including effective escalation procedures) that allocates specific limits to, for example, individual risks, sub-risks, entities and business areas, promoting the risk appetite statement of the group.
- 32. The institution is expected to have a policy in place regarding the use of public funding sources. <sup>13</sup> Such policies are expected to differentiate between the use of such sources during business as usual and during times of stressed conditions and be explicitly considered in the risk appetite (timing and amount) and liquidity adequacy statements. The actual and potential future use of such

See SSM supervisory statement on governance and risk appetite, ECB, June 2016.

The EBA Guidelines on harmonised definitions and templates for funding plans of credit institutions under Recommendation A4 of ESRB/2012/2 (EBA/GL/2014/04) define public funding sources as "sources of funding that are either directly or indirectly provided by the public sector. This includes medium- and long-term repo financing programmes, credit guarantee funding programmes and credit guarantee real economy support programmes." At present, given the current state of play, this mainly refers to the current and potential future use of central bank facilities. The institution is expected to assess what facilities are relevant when updating (components of) its ILAAP, as the nature and availability of public facilities can change during times of crisis.

sources is expected to be monitored. This monitoring is expected to take place in all material currencies. In order to quantify both the timing and the amount of potential future use of such sources stress testing is expected to be used.

# Consistency between ILAAPs and recovery plans

33. A recovery plan is aimed at ensuring the survival of the institution in times of distress that pose a threat to its viability. Since insufficient liquidity is one of the key threats to business continuity/viability, there is a natural connection between the ILAAP, which supports the continuity of operations from the liquidity perspective, and the recovery plan, which is aimed at restoring viability when an institution has entered into a distressed situation. Accordingly, the institution is expected to ensure consistency and coherence between its ILAAP and recovery planning in terms of early warning signals, indicators, escalation procedures following breaches of thresholds and potential management actions. <sup>14</sup> Moreover, potential management actions in the ILAAP are expected to be reflected without delay in the recovery plan and vice versa to ensure the availability of up-to-date information.

# Consistency and coherence across groups

- 34. The ILAAP is expected to ensure liquidity adequacy at relevant levels of consolidation and for relevant entities within the group, as required by Article 109 CRD IV. In order to be able to effectively assess and maintain liquidity adequacy across entities, the strategies, risk management processes, decision-making and the methodologies and assumptions applied when quantifying liquidity and funding need to be coherent across the relevant perimeter.
- 35. In the case of cross-border operations facing differences in local liquidity (risk management) requirements, the ILAAP at the highest level of consolidation is expected to make it clear what local differences in regulation are relevant. In general, the expectation is that such differences in regulation will only affect the details of implementation, such as stress test parameters, sign-off and reporting, etc., and will not compromise consistency in the general approach to the ILAAP. The institution is also expected to assess impediments to liquidity transferability in a conservative and prudent manner and take them into account in its ILAAP.

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However, where there are differences in the principles underlying the ILAAP and recovery planning, the envisaged management actions may be different.

# Principle 3 – The ILAAP contributes fundamentally to the continuity of the institution by ensuring its liquidity adequacy from different perspectives

- (i) The ILAAP plays a key role in maintaining the continuity of the institution by ensuring an adequate liquidity and funding position. In order to contribute to its continuity, the institution is expected to implement a proportionate ILAAP that is prudent and conservative and integrates two complementary internal perspectives.
- (ii) The institution is expected to implement an economic perspective, under which it is expected to identify and quantify all material risks that may negatively affect its internal liquidity position.
- (iii) Under the economic perspective, the institution is expected to ensure that any risks that may affect its liquidity position are adequately covered by internal liquidity in line with its internal liquidity adequacy concept. This includes the assessment of a credible baseline scenario and adequate, institution-specific adverse scenarios, as reflected in the multi-year liquidity and funding planning and in line with the overall planning objectives of the institution.
- (iv) The institution is expected to implement a normative perspective which is an assessment of the institution's ability to fulfil all of its liquidity-related regulatory and supervisory requirements and demands and to cope with other external financial constraints on an ongoing basis in the medium term.
- (v) The institution is expected to have a formal liquidity contingency plan (LCP) that clearly sets out the measures for addressing liquidity difficulties under stressed circumstances. The LCP is expected to address the risks identified in the institution's ILAAP and to set out the relationship with its recovery plan.

## Objective: to contribute to the continuity of the institution

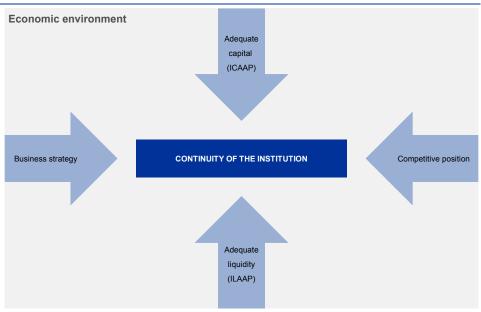
36. The objective of the ILAAP is to contribute to the institution's continuity from a liquidity perspective by ensuring that it has sufficient liquidity to fulfil its obligations when they fall due, to bear its risks and follow a sustainable strategy, even during a prolonged period of adverse developments. The institution is expected to reflect this continuity objective in its RAF (as specified under Principle 2) and use the ILAAP framework to reassess its risk appetite and tolerance thresholds within its overall liquidity constraints, taking into account its risk profile and vulnerabilities.

37. Within these liquidity constraints, the institution is expected to assess and define management buffers above the regulatory and supervisory minima <sup>15</sup> and internal liquidity needs that allow it to sustainably follow its strategy. When aiming for sufficient management buffers over the short-term horizon, the institution is expected to take into account, for example, the expectations of markets, investors and counterparties and the reliance of the business model on the ability to pay out bonuses, dividends and payments on Additional Tier 1 (AT1) instruments, etc. In addition to such external constraints, the management buffers are expected, for example, to cushion uncertainties around projections of, and possibly resulting fluctuations in, liquidity ratios, to reflect the institution's risk appetite and to allow some flexibility in its business decisions.

decisions.

Figure 1

The ILAAP contributes to the continuity of the institution



Figures and dimensions are for illustrative purposes only.

# Economic perspective

38. The institution is expected to manage its liquidity adequacy from the economic perspective by ensuring that its risks and expected outflows are adequately covered by internal liquidity taking into account the expectations of Principle 5. Economic liquidity adequacy requires the internal liquidity of the institution to be sufficient to cover its risks and expected outflows and to support its strategy on an ongoing basis. Under this perspective, the institution's assessment is

The management buffer concept does not actually set new minimum liquidity requirements above the existing legal minima. Although it is generally expected that management buffers will be larger than zero, in theory an institution may also be able to argue that, depending on the scenario assessed, a management buffer of zero would still allow it to sustainably follow its business model.

expected to cover the full universe of risks that may have a material impact on its liquidity position, taking into account cash flows and the applicable liquidity value of liquid assets. The institution is expected to manage economic risks and adequately assess them in its stress-testing programme and its monitoring of liquidity adequacy.

- 39. The institution is expected to use its own processes and methodologies to identify, quantify, and cover with internal liquidity the expected and unexpected outflows that it might be subject to, taking into account the principle of proportionality. The institution is expected to perform a point-in-time risk quantification of the current situation as at the reference date. This is expected to be complemented by a forward-looking liquidity adequacy assessment for the medium term (institutions are expected to capture one year or more for the liquidity position and three years or more for the funding position) that takes into account future developments, like changes in the external environment.
- 40. For this purpose, in addition to assessing the available liquidity against liquidity needs in its daily operations and funding planning under a baseline scenario, the institution is expected to also consider adverse scenarios. <sup>16</sup> Where relevant, the assumptions used are expected to be consistent with the recovery plan.
- 41. The institution is expected to use the outcomes and metrics of the economic liquidity adequacy assessment in its strategic and operational management, when reviewing its risk appetite in its interactions with clients (stopping new business, enforcing repayment at contract date without refinancing, etc.) and markets (fire sales and other actions that affect market perception when executed) and when reviewing its business strategies. In addition to prudent internal liquidity buffers definition <sup>17</sup> and risk quantification, the institution is expected to present an economic liquidity adequacy concept that enables it to remain economically viable and follow its strategy. This includes management processes to identify in a timely manner the need for action to overcome emerging internal liquidity deficiencies and to take effective measures (e.g. increasing liquidity buffers, changing the cash flow profile).

### Normative perspective

- 42. The normative perspective is a multi-year assessment of the institution's ability to fulfil all of its liquidity-related (quantitative) regulatory and supervisory requirements and demands, and to cope with other external financial constraints, on an ongoing basis.
- 43. The normative perspective is expected to take into account all aspects that could affect relevant regulatory ratios, including inflows, outflows and liquidity buffers, over the planning period. Therefore, although its outcomes are

<sup>&</sup>lt;sup>16</sup> The severity of adverse scenarios is discussed further under Principle 7.

<sup>&</sup>lt;sup>17</sup> Expectations regarding the internal liquidity buffers are introduced under Principle 5.

- expressed in regulatory metrics, the normative perspective is not limited by the assumptions underlying the calculation of the Pillar 1 ratios. Rather, when assessing its liquidity adequacy under the normative perspective, the institution is expected to take into account the assumptions it uses under the economic perspective and assess how they affect Pillar 1 and Pillar 2 ratios<sup>18</sup> over the planning period, depending on the scenarios applied.
- 44. The institution is expected to maintain a robust up-to-date liquidity and funding plan which is compatible with its strategies, risk appetite and liquidity resources. The liquidity and funding plan is expected to comprise baseline and adverse scenarios and to cover a forward-looking horizon which is expected to capture three or more years. The institution is expected to also take into account the impact of upcoming changes in legal, regulatory, and accounting frameworks and make an informed and reasoned decision on how to address them in the liquidity and funding planning.
- 45. To assess the expected evolution of key normative and economic internal metrics under adverse developments in ongoing business expectations, the institution needs to assess the level of these metrics under adverse conditions against internal thresholds as defined in the risk appetite statement. This does not mean that the institution needs to comply with the liquidity coverage ratio (LCR) under severe stress conditions. However, it does mean that it is expected to present a concept that enables it to remain viable and pursue its strategy, e.g. by taking concrete action (change in liquidity profile) as a result of the projections it has made. This also implies that the institution is expected to monitor the potential decline in the LCR under such conditions and link this to its risk appetite, LCP and recovery plan.

# Interaction between the economic and the normative perspectives

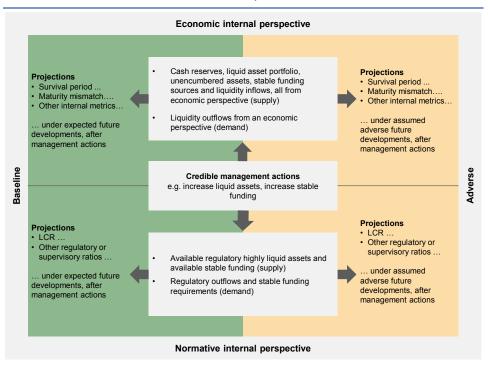
46. Figure 2 gives an overview of the aspects, measures and outcomes that are expected to be taken into account under the economic and normative perspectives for the assessment of both the liquidity and the funding position. Although the calculations of the projections under the normative perspective mechanically follow Pillar 1 provisions, the institution nonetheless is expected to form an internal view on the scenarios used and on the impacts of those scenarios on projected Pillar 1 and 2 figures. Under the economic perspective, it is expected to also select adequate scenarios and determine the impact on the respective projections. In addition, under the economic perspective it is also

Pillar 2 requirements may be expressed in broader terms than Pillar 1 ratios. For example, it could be a Pillar 2 requirement that the institution shall ensure a certain minimum survival period or a minimum amount of liquid assets. In that case, the institution would have to assess the impact of all relevant aspects on the survival period, in addition to the Pillar 1 ratios.

Depending on the likelihood and potential impact of particular changes, different treatment may be applied by the institution. For instance, some changes may seem highly unlikely, but would have such a huge impact that the institution is expected to prepare contingency measures. Other, more likely regulatory changes, however, are expected to be captured in the liquidity and funding plan itself. An example is LCR phase-in.

- expected to determine adequate assumptions and measures for all supply, demand and surplus-relevant calculation methodologies. The differences in methodologies, measures and assumptions used can lead to very different outcomes of the assessments between the two perspectives, even if the same scenario is applied.
- 47. The same is true with regard to management actions taken into account in liquidity or funding planning under the two perspectives. Moreover, such differences can even occur within the same perspective, depending on the scenario assessed. Figure 2 shows that the same management actions may have materially different impacts, depending on the perspective and the scenario considered. The institution is expected to take this into account in its liquidity and funding planning and ensure that the management action assumptions under the different perspectives are consistent with each other.

**Figure 2**Different impacts of credible management actions, depending on the perspectives and scenarios considered – illustrative example



Figures and dimensions are for illustrative purposes only.

48. The Institution is expected to be fully transparent regarding the management actions assumed in its projections, from both the economic and the normative perspective. All management actions assumed are expected to be credible in the respective scenario, i.e. they are expected to be feasible, their assumed impact is expected to be plausible and the institution is expected to justify and document all assumptions. In addition to projections that include management actions, the institution is expected to assess its liquidity and funding position under the economic and normative perspectives in the same scenarios without management actions.

49. The economic and normative perspectives are expected to mutually inform each other and be integrated into all material business activities and decisions as outlined under Principle 2.

#### Example 3.1

The economic perspective informs the normative perspective

Under the economic perspective, the institution assesses outflows from different types of products using its internal approaches. For example, under the economic perspective the institution has a comprehensive approach to model cash flows stemming from credit card business. These outcomes are used in the estimation of liquidity buffers under the economic perspective. In addition, this information is used to quantify the 30-day outflow rate for credit card cash flows under the normative perspective. In doing so, the institution makes use of all available information from the economic perspective when calculating the LCR.

# Liquidity contingency plan

50. In addition to measuring its current ability to fulfil liquidity obligations, the institution is expected to have a clear and concise plan on how to act when (unexpected) difficulties arise in meeting obligations as they fall due. The ILAAP is therefore expected to contain detailed information on liquidity contingency measures (in the form of an LCP) that can be taken, including an assessment of the potential contingent liquidity that can be generated during stress, the time the measures would take to execute, potential negative effects (on profit and loss account, reputation, business model viability, etc.) and the likelihood of completion of the measures under stressed conditions. Such liquidity contingency measures are expected to be consistent with the risks identified and quantified in the ILAAP. The institution is expected to make clear (in its ILAAP architecture) the relationship between the LCP and the liquidity part of the recovery plan and how these relate to the risks identified on an ongoing basis as described above and under stress circumstances.

# Principle 4 – All material risks are identified and taken into account in the ILAAP

- (i) The institution is responsible for implementing a regular process for identifying all material risks it is or might be exposed to under the economic and normative perspectives. All risks identified as material are expected to be addressed in all parts of the ILAAP in accordance with an internally defined risk taxonomy.
- (ii) Taking a comprehensive approach, including all relevant legal entities, business lines and exposures, the institution is expected to identify at least annually risks that are material using its own internal definition of materiality. This risk identification process is expected to result in a comprehensive internal risk inventory.
- (iii) In the case of financial and non-financial participations, subsidiaries, and other connected entities, the institution is expected to identify the significant underlying risks that it is or may be exposed to and take them into account in its ILAAP.
- (iv) For all risks identified as material, the institution is expected either to cover the risk with sufficient liquidity or to document the justification for not holding the liquidity.

# Risk identification process

- 51. The institution is expected to implement a regular process for identifying all material risks and include them in a comprehensive internal risk inventory. Using its internal definition of materiality, it is expected to ensure that the risk inventory is kept up to date. In addition to regular updates (at least yearly), institutions are expected to adjust the inventory whenever it no longer reflects the risks that are material, e.g. because a new product has been introduced or certain business activities have been expanded.
- 52. The risk identification is expected to be comprehensive and take both normative and economic perspectives into account. In addition to its current risks, the institution is also expected to consider in its forward-looking liquidity adequacy assessments any risks, and any concentrations within and between those risks, that may arise from pursuing its strategies or from relevant changes in its operating environment.
- 53. The risk identification process is expected to follow a "gross approach", i.e. without taking into account specific techniques designed to mitigate the underlying risks. The institution is then expected to assess the effectiveness of these mitigating actions.
- 54. In line with the EBA Guidelines on limits on exposures to shadow banking entities (EBA/GL/2015/20), the institution is expected, as part of its risk identification approach, to identify its exposures to shadow banking entities, all

- potential risks arising from those exposures, and the potential impact of those risks on its liquidity and funding risk profile.
- 55. The management body is responsible for deciding which risk types are to be considered material, and which material risks are to be covered by liquidity. This includes a justification of why a certain risk the institution is exposed to is not considered material.

# Risk inventory

- 56. When determining its internal risk inventory, the institution is responsible for defining its own internal risk taxonomy. It is expected not to simply adhere to a regulatory risk taxonomy.
- 57. In its risk inventory, the institution is expected to take into account and quantify the underlying risks, where material, stemming from its financial and non-financial participations, subsidiaries and other connected entities (for example, intragroup risk, reputational and operational risks, risks stemming from letters of comfort, etc.).
- 58. In a proportionate way, the institution is expected to look beyond participation risks and identify, understand and quantify significant underlying risks, and take them into account in its internal risk taxonomy, regardless of whether the entities concerned are included in the prudential perimeter or not. The depth of the analysis of the underlying risks is expected to be commensurate with the business activity and the risk management approach.
- 59. The institution is expected to look at all relevant products, clients, contracts (triggers) from a maturity and behavioural perspective for the different time horizons considered, including intraday. Such risks may, for example, stem from increased outflows, reduced inflows or reduced liquidity value of liquid assets. Both on- and off-balance-sheet items are expected to be considered in this regard, including contingent liquidity impacts from collateral calls and margin calls owing to market movements or a reduction in own creditworthiness (including voluntary buy-backs of own debt to ensure market access in the future).
- 60. One example is innovative funding instruments with call options that amend the maturity of the funding (not limited to evergreen deposits and repos) which need to be identified and captured as a source of possible contingent liquidity risk. Another is collateral swaps that can influence the size and composition of the stock of liquid assets; any potential risk stemming from such transactions is expected to be clearly identified and included in the set of risk indicators.
- 61. In the case of cross-border activities, the ILAAP is expected to include an assessment of impediments to the transfer of liquidity between legal entities, countries and currencies and quantify the impact of such impediments on the availability of liquidity throughout the group.

62. The ILAAP is expected to ensure a sound process for determining and monitoring what currencies are considered material for liquidity risk and/or funding risk. The institution is expected to clearly identify any material risks, including those stemming from cross-border activities, resulting in liquidity or funding risk being (partly) taken in a currency other than the currency of the corresponding buffers of liquid assets. Such risks are expected to be quantified in the ILAAP both under normal conditions (balance sheet positions and currency differences) and under stressed conditions (liquidity value of liquid assets in foreign currency versus stressed net outflows in foreign currency) for each currency that is considered material.

# Principle 5 – The internal liquidity buffers are of high quality and clearly defined; the internal stable sources of funding are clearly defined

- (i) The institution is expected to define, assess and maintain internal liquidity buffers and stable sources of funding under the economic perspective. The definition of internal liquidity buffers is expected to be consistent with the economic liquidity adequacy concept and internal risk quantifications of the institution.
- (ii) The internal liquidity buffers are expected to be of sound quality, and determined in a prudent and conservative manner. The institution is expected to show clearly, assuming the continuity of its operations, how its internal liquidity is available to cover risks, thereby ensuring that continuity.
- (iii) The sources of funding are expected to be stable to ensure that business operations can also continue in the longer term.

# Internal liquidity buffers definition

63. The Institution is expected to define which assets and future inflows can be considered to be liquidity available for the purpose of assessing its liquidity adequacy, taking a prudent and conservative approach. This internal definition is expected to be based on the likelihood of the liquidity sources being used to obtain liquidity under normal and stressed conditions. An explicit internal view is expected to be formed on the desired composition of the buffers of liquid assets used to cover liquidity risks. In particular, the institution is expected to differentiate between assets that are highly likely to remain liquid during times of stress and assets that can only be used to obtain liquidity from central banks. Internal limits are expected to be set for both components, with a clear link between the target size of the buffers of liquid assets and the liquidity risks that could materialise over various time frames, taking into account a time frame of at least one year.

# Internal stable sources of funding definition

64. For the purposes of assessing its funding sustainability, the institution is expected to define which funding sources can be regarded as stable, taking a prudent and conservative approach. In order to define this, an explicit internal view is expected to be formed on the stickiness of deposits and the (behavioural) cash flow profile, taking behavioural assumptions into account. The institution is expected to assess the stability of its funding profile, accounting for diversity (or concentration) of funding providers, markets and products, and assess its market access in terms of volume and pricing, taking

into account current asset encumbrance and expected changes therein when executing the funding plan.

# Principle 6 – ILAAP risk quantification methodologies are adequate, consistent and independently validated

- (i) The institution is responsible for implementing risk quantification methodologies that are adequate for its individual circumstances under both the economic and normative perspectives. In addition, the institution is expected to use adequate methodologies for quantifying the potential future changes in its liquidity and funding position in its adverse scenarios. The institution is expected to apply a high level of conservatism under both perspectives.
- (ii) The key parameters and assumptions are expected to be consistent throughout the group and between risk types. All risk quantification methodologies are expected to be subject to independent internal validation. The institution is expected to establish and implement an effective data quality framework.

# Comprehensive risk quantification

- 65. The ILAAP is expected to ensure that risks that the institution is or may be exposed to are adequately quantified. The institution is expected to implement risk quantification methodologies that are tailored to its individual circumstances (i.e. they are expected to be in line with its risk appetite, market expectations, business model, risk profile, size and complexity).
- 66. Risks are not expected to be excluded from the assessment because they are difficult to quantify or the relevant data are not available. <sup>20</sup> In such cases, the institution is expected to determine sufficiently conservative risk figures, taking into consideration all relevant information and ensuring adequacy and consistency in its choice of risk quantification methodologies. <sup>21</sup>
- 67. The key parameters and assumptions cover, inter alia, confidence levels and scenario generation assumptions.

## Level of conservatism

68. The risk quantification methodologies and assumptions used are expected to be robust, sufficiently stable, risk-sensitive, sufficiently conservative, and calibrated on the basis of the institution's own risk appetite.

For risks that are difficult to quantify (e.g. because of missing data or the absence of established quantification methodologies), the institution is expected to develop adequate methodologies to quantify risks, including using expert judgement.

Risk measurement of difficult to quantify risks should be consistent and comparable, as far as possible, with overall risk measurement assumptions. The institution is expected to ensure that such risks are appropriately factored into the risk management and risk control processes.

# Choice of risk quantification methodologies

- 69. It is the responsibility of the institution to implement adequate methodologies both to quantify its risks and to determine projections. This Guide does not set out any expectation regarding using or not using any quantification methodology per se This means that there is no predetermination as to whether, for example, economic liquidity models are expected to be used to quantify risks or whether the institution is expected to use (amended) Pillar 1 methodologies (e.g. to take into account concentration risk), stress test results or other methodologies, such as multiple scenarios, to quantify the risks it is or may be exposed to.
- 70. The methodologies used are expected to be consistent with each other, with the perspective considered and with the definitions of liquidity and stable funding. They are expected capture the risks to which the institution is exposed in an adequate and sufficiently conservative manner, taking into account the principle of proportionality. This means, for example, that larger or more complex institutions, or institutions that have more complex risks, are expected to use more sophisticated risk quantification methodologies to capture the risks in an adequate manner.
- 71. However, the institution is not expected to implement risk quantification methodologies that it does not fully understand and which, consequently, are not used for its own internal risk management and decision-making. The institution is expected to be able to demonstrate the adequacy of the methodologies for its individual situation and risk profile. In the case of vendor models, this includes the expectation that such models are not imported mechanistically, but rather that they fully understood by the institution and well-suited for, and tailored to, its business and its risk profile.

# Data quality

72. The institution is expected to deploy adequate processes and control mechanisms to ensure the quality of data. <sup>22</sup> The data quality framework is expected to ensure reliable risk information that supports sound decision-making, and it is expected to cover all relevant risk data and data quality dimensions.

### Independent validation

73. ILAAP risk quantification methodologies are expected to be subject to regular independent validation, respecting the principles underlying the standards

Data quality comprises, for example, the completeness, accuracy, consistency, timeliness, uniqueness, validity and traceability of the data. For more information, see the ECB Guide for the Targeted Review of Internal Models (TRIM) of February 2017.

- established for Pillar 1 (capital) internal models in a proportionate way, taking into account the materiality of the risks quantified and the complexity of the risk quantification methodology.
- 74. Depending on the size and complexity of the institution, various organisational solutions may be adopted to ensure independence between the development and validation of risk quantification methodologies. However, the concepts underlying the various lines of defence are expected to be respected; i.e. the independent validation is expected not to be conducted by the internal audit function.
- 75. The overall conclusions of the validation process are expected to be reported to senior management and the management body, used in the regular review and adjustment of the quantification methodologies, and taken into account when assessing liquidity adequacy.

## Example 6.1

## Organisation of independent validations

In order to ensure the independent and proportionate validation of ILAAP risk quantification methodologies, the institution is expected to take into consideration the ECB Guide for the Targeted Review of Internal Models (TRIM).

Depending on the nature, size, scale and complexity of its risks, the institution may, for example, employ one of the following three organisational arrangements to ensure the independence of the validation function from the methodology development process (i.e. design, development, implementation and monitoring of the risk quantification methodologies):

- separation into two different units reporting to different members of the senior management;
- separation into two different units reporting to the same member of the senior management;
- separate staff within the same unit.

# Principle 7 – Regular stress testing is aimed at ensuring liquidity adequacy in adverse circumstances

- (i) The ECB expects the institution to perform a tailored and in-depth review of its vulnerabilities, capturing all material risks on an institution-wide basis that result from its business model and operating environment in the context of stressed macroeconomic and financial conditions on a yearly basis and more frequently, when necessary, depending on individual circumstances. On the basis of this review, the institution is expected to define an adequate stress-testing programme for both normative and economic perspectives.
- (ii) As part of the stress-testing programme, the institution is expected to determine adverse scenarios to be used under both perspectives, taking into account other stress tests it conducts. The application of severe, but plausible, macroeconomic assumptions and a focus on key vulnerabilities are expected to result in a material impact on the institution's internal and regulatory liquidity position. In addition, the institution is expected to conduct reverse stress testing in a proportionate manner.
- (iii) The institution is expected to continuously monitor and identify new threats, vulnerabilities and changes in its environment to assess whether its stress testing scenarios remain appropriate and, if not, adapt them to the new circumstances. The impact of the scenarios is expected to be updated regularly. In the case of material changes, the institution is expected to assess their potential impact on its liquidity adequacy.

## Determination of the stress-testing programme

- 76. The stress-testing programme is expected to cover both the normative and the economic perspective. It is expected to capture different time horizons (including intraday), and take the relevant currency split into account. When defining the set of internal stress scenarios and sensitivities, the institution is expected to use a broad set of information on historic and hypothetical stress events. It is the institution's own responsibility to define scenarios and sensitivities in the manner that best addresses its individual situation and to translate them into liquidity inflows and outflows and applicable liquidity values of liquid assets.
- 77. As liquidity transferability can be very different during periods of stress when compared with normal times, an institution with significant cross-border activities is expected to assess the transferability of liquidity within the group and take this into account in its stress-testing programme. It is expected to analyse the impact of additional impediments to liquidity transferability under stressed conditions, in particular for operations outside the euro area.

# Severity level of adverse scenarios 23

- 78. In its baseline assessment, the institution is expected to assume developments that it would assume under expected circumstances, taking into account its business strategy, including credible assumptions regarding inflows and outflows, risk materialisations, etc.
- 79. In adverse scenarios, the institution is expected to assume exceptional, but plausible developments with an adequate degree of severity in terms of their impact on its liquidity position. The level of severity is expected to correspond to developments that are plausible, but as severe from the institution's perspective as any developments that could be observed during a crisis situation in the markets, factors or areas that are most relevant for the institution's liquidity adequacy.
- 80. The range of adverse scenarios is expected to adequately cover severe economic downturns, severe market disruptions and financial shocks, relevant institution-specific vulnerabilities, reliance on major funding providers, and plausible combinations of these.

# Coherence versus targeting key vulnerabilities

- 81. In stress testing, the institution is expected to focus on its key vulnerabilities when attempting to define plausible adverse scenarios.
- 82. ICAAP and ILAAP stress tests are expected to inform each other; i.e. the underlying assumptions, stress test results and projected management actions are expected to be mutually taken into account.

### Reverse stress testing

- 83. In addition to stress-testing activities that assess the impact of certain assumptions on its liquidity position, the institution is expected to conduct reverse stress-testing assessments. These assessments should start from the identification of the pre-defined outcome.
- 84. Such reverse stress tests are expected to be used to challenge the comprehensiveness and conservatism of the ILAAP framework assumptions. Moreover, reverse stress testing in the ILAAP context could be seen as a starting point for developing recovery plan scenarios.<sup>24</sup> Reverse stress tests are

The number of scenarios that is adequate for an institution depends on, among other things, its individual risk profile. It is expected that several adverse scenarios will usually be necessary to adequately reflect the different plausible combinations of risks.

As outlined in the EBA Guidelines on the range of scenarios to be used in recovery plans (EBA/GL/2014/06), these scenarios are expected to be only "near-default", i.e. they are expected to lead to an institution's or group's business model becoming non-viable unless the recovery action is successfully implemented.

expected to be conducted at least once a year. More details can be found in the relevant EBA guidelines and BCBS guidance.

# Example 7.1

#### Interaction between ICAAP and ILAAP stress tests

The institution is expected to assess the potential impact of relevant scenarios, integrating capital and liquidity impacts and potential feedback loops, taking into account, in particular, losses arising from the liquidation of assets or increases in funding costs during periods of stress.

### Example 7.2

#### Reverse stress testing

In its internal reverse stress tests, the institution determines the level of deposit outflows required to exhaust its liquidity buffers and other sources of contingent funding by determining assumptions on deposit outflows and other risk drivers (e.g. rating downgrade of the institution, debt-buy-back calls). The outcome of one such assessment is shown in the table below, illustrating outflow rates for three different scenarios.

	Scenario 1	Scenario 2	Scenario 3
Deposit outflow assumption			
Retail	49%	7%	10%
Corporate	33%	63%	60%
Financial	62%	91%	94%
Other assumptions (not exhaustive)			
Downgrade	4 notches	4 notches	4 notches
Debt buy-back	0%	15%	15%

The institution is expected to determine the probability of such scenarios being realised and whether any remedial action might be needed.

#### Example 7.3

# Calibration of adverse scenarios

Adverse scenarios take into account historical developments observed in markets and in client behaviour, but they are not limited to the institution's own historical client behaviour and market access. Furthermore, the institution's scenario design goes beyond historical observations, in particular where historical evidence is distorted (e.g. by public sector support). This limits the accuracy of the estimated stress parameters for in- and outflows and the haircuts applied to the estimated value of liquid assets.

Such adverse scenarios could include both an ongoing business perspective (normal operations continue, limited possibility of inflows from the loan book, reliance on marketable assets mainly to generate liquidity, buy-back of own debt to ensure future market access, etc.) and scenarios in which a severe disruption of the business model cannot be avoided (e.g. stop on asset generation, stop on dividend and bonus payments, using all eligible collateral to obtain liquidity, including central bank funding, not exercising call options on own debt or equity instruments).

# 3 Glossary

#### Adverse scenario

A combination of assumed adverse developments in internal and external factors (including macroeconomic and financial developments as well as severe market disruptions) that is used to assess the resilience of the liquidity adequacy of the institution to potential adverse developments over a medium-term horizon. The assumed developments in internal and external factors are expected to be combined in a consistent way and be severe but plausible from the institution's perspective, reflecting the risks and vulnerabilities that are assessed as representing the most pertinent threats to the institution.

#### **Baseline scenario**

A combination of expected developments in internal and external factors (including macroeconomic and financial developments) that is used to assess the impact of those expected developments on the liquidity adequacy of the institution. The baseline scenario is expected to be consistent with the basis of the institution's business plans and budget.

#### Cost-benefit allocation mechanism

A cost-benefit allocation mechanism allocates liquidity costs, benefits and risks and is part of the institution's strategies, policies, processes and systems.

#### **Economic internal perspective**

An ILAAP perspective under which the institution manages its liquidity adequacy by ensuring that its risks and expected outflows are sufficiently covered by available internal liquidity.

### **Economic liquidity adequacy concept**

An internal concept aimed at ensuring under the economic perspective that the financial resources (internal liquidity) of the institution will enable it to cover its risks and expected outflows and to maintain the continuity of its operations on an ongoing basis. <sup>25</sup>

#### **Funding planning**

A multidimensional internal process resulting in a funding plan presenting a multiyear projection of funding sources of the institution, taking into account its scenarios, strategy and operational plans.

#### Gross approach in risk identification

The gross approach means that risks are first identified without taking into account specific actions designed to mitigate them.

Note: It is the responsibility of the institutions themselves to implement adequate risk quantification methodologies – there is no general expectation that institutions will utilise "economic liquidity models" to ensure economic liquidity adequacy.

#### **ILAAP** architecture

Different elements of the ILAAP and how they interlink. The ILAAP architecture is expected to ensure that the different elements of the ILAAP fit together coherently and that the ILAAP is an integral part of the institution's overall management framework. The institution is expected to maintain, as part of its ILAAP documentation, a description of the overall ILAAP architecture which explains how the ILAAP is integrated and how its outcomes are used in the institution.

#### **ILAAP** outcomes

Any information that results from the ILAAP and adds value to decision-making.

#### **ILAAP**

The internal liquidity adequacy assessment process as defined in Article 86 CRD IV, which requires competent authorities to ensure that institutions have robust strategies, policies, processes and systems for the identification, measurement, management and monitoring of liquidity risk over an appropriate set of time horizons, including intra-day, so as to ensure that institutions maintain adequate levels of liquidity buffers.

#### Internal review and validation

Internal review covers a broad range of controls, evaluations and reports aimed at ensuring that ILAAP strategies, processes and models remain sound, comprehensive, effective and proportionate.

Validation, as part of the internal review, encompasses processes and activities assessing whether the risk quantification methodologies and risk data of the institution adequately capture relevant aspects of risk. In a proportionate way, the validation of risk quantification methodologies is expected to be conducted independently and respect the principles underlying the respective standards established for Pillar 1 (capital) internal models.

## **Limit system**

A documented and hierarchical system of limits set in line with the overall strategy and risk appetite of the institution in order to ensure that risks and losses can be limited effectively in line with the liquidity adequacy concept. The limit system is expected to lay down effective boundaries for risk taking for, for example, different risk types, business areas, products and group entities.

# Liquidity adequacy statement

A formal statement from the management body providing its assessment of the liquidity adequacy of the institution and explaining its main supporting arguments.

#### Liquidity adequacy

The degree to which risks are covered by the institution's liquidity. The ILAAP is aimed at maintaining adequate liquidity on an ongoing basis, from both the economic and normative perspectives, contributing to the continuity of the institution over the medium-term.

# Management buffer

An amount of liquidity above the regulatory and supervisory minima and internal

liquidity needs that allows the institution to sustainably follow its business model and to remain flexible regarding possible business opportunities, without endangering its liquidity adequacy.

#### **Material risk**

A liquidity-related downside risk that, based on the institution's internal definitions, has a material impact on its overall risk profile, and thus may affect the liquidity adequacy of the institution.

#### **Medium-term time horizon**

A time horizon which captures the near and medium-term future. It is expected to capture the liquidity position over at least the upcoming year and the funding position over the upcoming three or more years.

#### Normative internal perspective

A multi-year ILAAP perspective under which the institution manages its liquidity adequacy by ensuring that it is able to fulfil all of its liquidity-related legal requirements and supervisory demands and cope with other internal and external liquidity constraints on an ongoing basis.

#### **Proportionality**

A principle in Article 86 CRD IV which states that the ILAAP shall be proportionate to the complexity, risk profile, scope of operation of the institution and risk tolerance set by the management body.

#### **Public funding sources**

All sources of funding that are either directly or indirectly provided by the public sector as defined in Annex 1 to the EBA Guidelines on harmonised definitions and templates for funding plans of credit institutions under Recommendation A4 of ESRB/2012/2 (EBA/GL/2014/04).

## Recovery plan

A plan drawn up and maintained by an institution in accordance with Article 5 of the Bank Recovery and Resolution Directive (BRRD).<sup>26</sup>

#### **Reverse stress test**

A stress test which starts from the identification of the pre-defined outcome (e.g. the point of non-continuation) and then explores scenarios and circumstances that might cause that outcome to occur.

#### Risk appetite statement

A formal statement in which the management body expresses its views on the amounts and types of risk that the institution is willing to take in order to meet its strategic objectives.

Directive 2014/59/EU of the European Parliament and of the Council of 15 May 2014 establishing a framework for the recovery and resolution of credit institutions and investment firms and amending Council Directive 82/891/EEC, and Directives 2001/24/EC, 2002/47/EC, 2004/25/EC, 2005/56/EC, 2007/36/EC, 2011/35/EU, 2012/30/EU and 2013/36/EU, and Regulations (EU) No 1093/2010 and (EU) No 648/2012, of the European Parliament and of the Council (OJ L 173, 12.6.2014, p. 190).

## **Risk identification process**

A regular process the institution uses to identify risks that are or might be material for the institution.

### **Risk inventory**

A list of identified risks and their characteristics. The risk inventory is the result of the risk identification process.

# **Risk quantification**

The process of quantifying identified risks by developing and using methodologies to determine risk figures and enable a comparison between the risks and the available liquidity of the institution.

# **Risk taxonomy**

A categorisation of different risk types/factors enabling the institution to assess, aggregate and manage risks in a consistent way through a common risk language and mapping.

#### **Abbreviations**

AT1 Additional Tier 1

BCBS Basel Committee on Banking Supervision
BRRD Bank Recovery and Resolution Directive

CRD IV Capital Requirement Directive

EBA European Banking Authority

ECB European Central Bank

**ESRB** European Systemic Risk Board

FSB Financial Stability Board

ICAAP Internal capital adequacy assessment process
ILAAP Internal liquidity adequacy assessment process

LAS Liquidity adequacy statement
LCP Liquidity contingency plan
LCR Liquidity coverage ratio
NCA National competent authority
RAF Risk appetite framework
SI Significant institution

**SREP** Supervisory Review and Evaluation Process

SSM Single Supervisory Mechanism

TRIM Targeted Review of Internal Models

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