

Financial Stability And Systemic Risk

Financial stability refers to a condition in which the financial system – including banks, financial markets, and market infrastructures – is capable of withstanding shocks and continuing to provide essential services such as credit intermediation, payment settlement, and risk transfer. When the system operates smoothly, the flow of funds to households and firms is uninterrupted, and the economy can grow without the disruptive effects of financial distress. A loss of stability can manifest as a sudden contraction of credit, a sharp decline in asset prices, or a failure of a major institution that triggers a cascade of problems throughout the economy.

Systemic risk is the risk that the failure of one or more financial institutions or a sharp deterioration in market conditions will lead to widespread disruption of the financial system, impairing its ability to function and potentially causing severe economic damage. Unlike idiosyncratic risk, which is confined to a single entity or a narrow segment, systemic risk is characterized by its potential to affect the entire system. It can arise from interconnections among institutions, common exposures to particular asset classes, or from behavioural phenomena such as herding and panic.

Macroprudential policy is the set of regulatory tools and supervisory actions aimed at safeguarding the stability of the financial system as a whole. It complements microprudential supervision, which focuses on the safety and soundness of individual institutions, by addressing vulnerabilities that emerge from the aggregate behaviour of the system. Macroprudential instruments include countercyclical capital buffers, loan-to-value caps, sectoral risk weights, and liquidity requirements that are calibrated to the prevailing macroeconomic environment.

Countercyclical capital buffer (CCyB) is a capital requirement that rises when credit growth is exuberant and falls when credit contraction threatens to amplify a downturn. By forcing banks to hold extra equity in good times, the buffer provides a cushion that can be drawn down during stress, thereby limiting the need for government bailouts. For example, if the credit-to-GDP ratio rises rapidly over several quarters, the supervisory authority may raise the CCyB from 0% to 1% of risk-weighted assets, compelling banks to increase their capital holdings.

Liquidity coverage ratio (LCR) is a short-term liquidity standard that requires banks to hold high-quality liquid assets sufficient to cover net cash outflows over a 30-day stress scenario. The LCR helps ensure that banks can survive a sudden run on deposits or a market freeze without resorting to emergency funding. A typical LCR requirement mandates that banks maintain assets equal to at least 100% of projected net cash outflows over the stress horizon.

Net stable funding ratio (NSFR) measures a bank's reliance on stable funding sources over a one-year horizon. The ratio compares the amount of available stable funding (such as long-term deposits and equity) with the amount of required stable funding (determined by the liquidity characteristics of assets). By encouraging banks to match the maturity of their assets and liabilities, the NSFR reduces the likelihood of

funding mismatches that could trigger systemic stress.

Stress testing is a forward-looking analytical technique that evaluates the resilience of financial institutions or the system under adverse but plausible scenarios. Stress tests can be micro-level, focusing on a single bank's balance sheet, or macro-level, assessing the impact of shocks on the entire financial sector. Scenarios may include a sharp decline in house prices, a sovereign debt crisis, or a sudden rise in interest rates. The results inform supervisory actions such as capital injections, asset-quality reviews, or the activation of macroprudential tools.

Contagion describes the transmission of financial distress from one institution or market to another, often through direct exposures (e.G., Interbank loans) or indirect channels (e.G., Asset-price correlations). Contagion can amplify an initial shock, turning a localized failure into a system-wide crisis. An illustrative case is the 2008 collapse of Lehman Brothers, which triggered a wave of counterparty losses, market freezes, and a loss of confidence that spread globally.

Interconnectedness refers to the network of bilateral exposures among financial institutions, including interbank lending, derivatives contracts, and securities holdings. A highly interconnected system can be efficient under normal conditions but becomes vulnerable when a shock propagates through the network. Measuring interconnectedness often involves constructing a matrix of exposures and applying network-analysis techniques such as centrality measures or clustering coefficients.

Common exposures arise when many institutions hold similar assets or are exposed to the same risk factors, such as a particular sector of the economy, a sovereign issuer, or a commodity price. When the value of the shared asset falls, all holders experience losses simultaneously, potentially overwhelming the capacity of individual institutions to absorb the shock. The European sovereign debt crisis illustrated how common exposure to peripheral sovereign bonds created systemic strain across the banking sector.

Leverage is the ratio of a financial institution's total assets to its equity capital. High leverage magnifies both gains and losses, making institutions more vulnerable to adverse market movements. In a high-leverage environment, a modest decline in asset values can erode capital quickly, potentially leading to insolvency. Regulatory leverage ratios, such as the Basel III leverage ratio, set a floor on the amount of capital relative to total exposure, irrespective of risk weighting.

Risk-weighted assets (RWA) are a measure of the riskiness of a bank's assets, calculated by assigning risk weights to different asset classes (e.G., 0% For cash, 100% for corporate loans). Capital requirements are expressed as a percentage of RWA, ensuring that banks hold more capital against riskier exposures. RWA calculations are central to the Basel capital framework and underpin many macroprudential tools.

Procyclicality describes the tendency of financial variables to move in the same direction as the macroeconomy, amplifying booms and busts. For instance, during an expansion, credit growth may accelerate, asset prices may rise, and risk-taking behaviour may increase, further fueling the cycle. Conversely, during a downturn, credit may contract sharply, exacerbating the slowdown. Macroprudential policies aim to dampen procyclical dynamics by introducing counter-cyclical buffers and constraints.

Liquidity risk is the risk that an institution cannot meet its short-term obligations without incurring

unacceptable losses. Liquidity risk can be caused by a sudden withdrawal of funding, a market freeze, or an inability to sell assets at reasonable prices. Central banks monitor liquidity risk through indicators such as funding spreads, market depth, and the composition of banks' funding profiles.

Funding risk is the broader concept that includes both liquidity risk and the risk of a mismatch between the maturity of assets and liabilities. Funding risk can arise from reliance on short-term wholesale funding markets, which may dry up during periods of stress. The "run-risk" that banks face when depositors pull funds en masse is a classic example of funding risk.

Resolution planning (often called "living wills") involves the development of strategies for the orderly wind-down of a failing financial institution without causing systemic disruption. Resolution plans identify critical functions, viable restructuring options, and the necessary legal and operational steps. Effective resolution planning reduces the need for ad-hoc bailouts and helps preserve confidence in the financial system.

Systemically important financial institution (SIFI) is a bank, insurer, or other financial entity whose failure would pose a significant risk to the stability of the financial system. SIFIs are subject to heightened supervisory scrutiny, higher capital buffers, and more stringent liquidity standards. The identification of SIFIs typically involves quantitative criteria such as size, interconnectedness, substitutability, and complexity.

Too big to fail (TBTF) captures the notion that certain institutions are so large and interconnected that their failure would be unacceptable to policymakers, leading to the expectation of government support. TBTF creates moral hazard, as managers may take on excessive risk believing that the state will intervene. Macroprudential measures such as higher loss-absorbing capacity aim to mitigate TBTF concerns.

Too interconnected to fail (TITF) emphasizes the role of network linkages rather than pure size. An institution that is a major hub in the interbank market may be critical for the functioning of payment and settlement systems, even if its balance sheet is not the largest. Reducing TITF risk involves diversification of funding sources and limits on exposure concentrations.

Too complex to resolve (TCTR) refers to institutions whose operational or legal structures are so intricate that an orderly resolution would be highly problematic. Complexity can arise from extensive use of off-balance-sheet vehicles, cross-border operations, or opaque derivative positions. Simplifying structures, improving transparency, and enhancing cross-border cooperation are ways to address TCTR risk.

Capital adequacy is the extent to which a bank's capital buffers exceed the minimum regulatory requirements. Adequate capital protects depositors and the wider financial system against losses, supports lending during downturns, and provides a source of loss absorption. Capital adequacy is assessed through ratios such as the Common Equity Tier 1 (CET1) ratio, which compares high-quality capital to risk-weighted assets.

Common Equity Tier 1 (CET1) capital consists of the highest quality capital elements, primarily common shares and retained earnings, after deducting certain regulatory adjustments. CET1 is the core component of the Basel III capital framework and is measured as a percentage of RWA. Regulators often set a minimum CET1 ratio of 4.5 % And may impose additional buffers for SIFIs.

Loss-absorbing capacity (LAC) denotes the ability of a financial institution to absorb losses without external assistance, typically through the use of equity or bail-in instruments. Higher LAC reduces the probability that a failing institution will require taxpayer support. Instruments such as contingent convertible bonds (CoCos) are designed to convert to equity when a pre-specified trigger event occurs.

Contingent convertible bond (CoCo) is a hybrid debt instrument that automatically converts into equity when a trigger event, such as a decline in the CET1 ratio below a set threshold, is reached. CoCos provide additional loss-absorbing capacity and help align the interests of investors with the stability of the institution. However, they also introduce pricing and valuation challenges for market participants.

Macro-stress scenario is a hypothetical set of macroeconomic conditions used in stress testing to evaluate systemic resilience. Scenarios may involve severe recessions, sharp commodity price drops, or sudden spikes in interest rates. The design of macro-stress scenarios requires careful calibration to ensure plausibility while capturing tail-risk events that could threaten stability.

Liquidity stress scenario focuses specifically on funding and market liquidity disruptions. It may assume a rapid withdrawal of short-term wholesale funding, a freeze in repo markets, or a sudden widening of bid-ask spreads for sovereign bonds. Liquidity stress testing helps identify institutions that are vulnerable to market freezes and informs contingency planning.

Sectoral risk is the risk associated with exposure to a particular economic sector, such as real estate, energy, or technology. Concentrations in sectoral risk can lead to systemic problems if the sector experiences a downturn. Macroprudential tools such as sector-specific loan-to-value caps or risk-weight adjustments can be used to curb excessive buildup in vulnerable sectors.

Asset-price bubble describes a situation where the price of an asset, such as housing or equities, rises far above its fundamental value, driven by speculative demand and easy credit. Bubbles can inflate systemic risk because many institutions hold similar assets, and a burst can cause simultaneous losses, eroding capital and triggering credit contraction.

Credit-to-GDP gap is a metric that compares the current credit-to-GDP ratio with its long-run trend. A large positive gap indicates that credit has expanded faster than the economy, potentially signalling overheating and heightened systemic risk. Central banks monitor the gap to calibrate the timing and size of countercyclical buffers.

Early warning indicator (EWI) is a statistical or judgment-based signal that suggests a rising probability of financial instability. EWIs can be based on macro-variables (e.G., Credit growth, asset-price appreciation), market-based measures (e.G., Credit spreads), or supervisory data (e.G., Non-performing loan ratios). Effective use of EWIs enables pre-emptive macroprudential action.

Macroprudential indicator (MPI) is a quantitative measure used to assess systemic risk and guide policy decisions. MPIs may include leverage ratios, funding concentration indices, or interbank exposure metrics. By tracking MPIs over time, supervisors can detect emerging vulnerabilities and adjust policy tools accordingly.

Systemic risk buffer is an additional capital requirement imposed on institutions identified as systemically important, above the standard minimum. The buffer reflects the extra loss-absorbing capacity needed to offset the institution's systemic footprint. The size of the buffer is often determined by a scoring methodology that incorporates size, interconnectedness, substitutability, and complexity.

Liquidity risk buffer is a regulatory requirement that obliges banks to hold a cushion of high-quality liquid assets above the baseline LCR. The buffer is designed to protect against liquidity shocks that are more severe than those covered by the standard ratio. For example, a 10% liquidity risk buffer would require banks to hold liquid assets equal to 110% of projected net cash outflows under the stress scenario.

Macroprudential stress test is a stress-testing exercise that evaluates the resilience of the financial system as a whole, rather than focusing on individual institutions. It typically involves a top-down approach that models the impact of macro-shocks on the balance sheets of banks, insurers, and other key players, and aggregates the results to assess systemic outcomes such as capital shortfalls or liquidity gaps.

Cross-border supervision is the coordination among supervisory authorities in different jurisdictions to monitor and regulate multinational financial institutions. Effective cross-border supervision is crucial for managing systemic risk that transcends national boundaries, as failures can propagate through global funding networks and foreign exposures. Mechanisms such as Memoranda of Understanding (MoUs) and joint inspections facilitate information sharing and coordinated action.

Financial market infrastructure (FMI) encompasses the institutions that provide the backbone for the operation of financial markets, including payment systems, securities clearinghouses, and central counterparties (CCPs). FMIs are critical to systemic stability because they ensure the efficient settlement of transactions and mitigate counterparty risk. Disruptions to FMIs can amplify systemic shocks, as seen during the 2008 crisis when clearing houses faced heightened margin calls.

Central counterparties (CCPs) are entities that interpose themselves between buyers and sellers in derivative and securities transactions, becoming the buyer to every seller and the seller to every buyer. By centralising and managing counterparty risk, CCPs reduce the likelihood of cascading defaults. However, CCPs themselves can become sources of systemic risk if they lack sufficient resources or if their risk models underestimate extreme market moves.

Margin requirements are collateral obligations imposed on market participants to cover potential losses on positions. In the context of CCPs, initial margin protects against future exposure, while variation margin covers current exposure. Raising margin requirements during periods of heightened volatility can enhance system resilience but may also increase liquidity pressure on participants.

Recovery plan outlines the steps a financial institution will take to restore its financial position after a severe shock, before formal resolution is required. Recovery plans typically include capital raising actions, asset sales, and restructuring measures. Supervisors assess the credibility of recovery plans as part of the broader resolution framework.

Resolution authority is the public body empowered to intervene in a failing financial institution, implement resolution measures, and coordinate the use of tools such as bail-in of creditors, asset transfer, or bridge

financing. The authority's mandate includes preserving critical functions, protecting taxpayers, and maintaining market confidence.

Bridge financing provides short-term capital to a failing institution to enable an orderly wind-down while longer-term solutions are arranged. Bridge financing can be supplied by the central bank or a designated resolution fund, and is typically accompanied by strict conditions to limit moral hazard.

Liquidity injection is a central bank operation that supplies additional liquid assets to the banking system, often through open-market purchases, discount window lending, or emergency facilities. While liquidity injections can alleviate immediate funding stress, they must be calibrated to avoid creating incentives for risk-taking or distorting market pricing.

Macro-prudential toolkit comprises the set of instruments available to supervisors to address systemic vulnerabilities. The toolkit includes capital buffers, liquidity standards, leverage caps, loan-to-value limits, sectoral risk-weight adjustments, and macro-stress testing. Effective use of the toolkit requires a clear policy framework, transparent communication, and a willingness to adjust measures as conditions evolve.

Policy communication plays a pivotal role in shaping market expectations and behaviour. By clearly articulating the rationale, timing, and conditions for macroprudential actions, authorities can influence risk-taking incentives, reduce uncertainty, and enhance the credibility of interventions. Over-communication, however, can lead to market distortion, so a balance must be struck.

Risk-based supervision focuses on the identification and monitoring of material risks within institutions, rather than applying uniform rules. Supervisors allocate resources proportionally to the risk profile of each entity, using tools such as risk dashboards, on-site inspections, and data analytics. Risk-based approaches improve efficiency and help detect emerging systemic threats early.

Data aggregation involves the collection and consolidation of large volumes of supervisory data from individual institutions to produce system-wide indicators. High-frequency data on exposures, funding structures, and market positions enable timely monitoring of systemic risk. However, challenges include ensuring data quality, protecting confidentiality, and managing the technical complexity of large-scale analytics.

Macro-financial linkages describe the interactions between the real economy and the financial sector. For instance, a slowdown in economic growth can increase loan defaults, eroding bank capital, while a credit crunch can further depress investment and consumption. Understanding these linkages is essential for designing macroprudential policies that address feedback loops.

Feedback loop is a process whereby an initial shock in one part of the system triggers reactions that amplify the original disturbance. Positive feedback loops can lead to spiralling crises, such as when falling asset prices force margin calls, prompting fire-sales that push prices lower still. Macroprudential tools aim to break such loops by introducing stabilising mechanisms.

Financial cycle refers to the cyclical pattern of credit expansion, asset-price inflation, and subsequent contraction that often precedes broader macroeconomic cycles. The financial cycle can be more volatile

than the business cycle and may lead the economy into recession if unchecked. Monitoring the financial cycle helps authorities time macroprudential interventions appropriately.

Macro-prudential surveillance is the ongoing process of observing, analysing, and interpreting systemic risk indicators to inform policy decisions. Surveillance activities include data collection, model development, scenario analysis, and the publication of risk assessments. Effective surveillance requires coordination across monetary, fiscal, and supervisory domains.

Risk-weighted capital buffer is an additional capital requirement that varies with the risk profile of a bank's assets. Unlike the flat leverage ratio, a risk-weighted buffer takes into account the differing risk weights assigned to various exposure types, allowing for more granular calibration of capital adequacy.

Dynamic provisioning involves setting aside provisions for loan losses based on forward-looking criteria, such as projected credit losses under adverse scenarios. By building up reserves during good times, banks create a cushion that can be released during downturns, smoothing earnings and reducing procyclical pressure on capital.

Capital conservation buffer is a mandatory capital reserve that banks must maintain above the minimum regulatory requirement. The buffer is intended to ensure that banks can absorb losses while continuing to operate. During periods of stress, banks may draw down the buffer, but they must rebuild it when conditions improve.

Liquidity stress test evaluates a bank's ability to meet its cash-flow needs under severe but plausible liquidity shocks. The test typically models a rapid outflow of deposits, a rise in funding costs, and a decline in the market value of liquid assets. Results guide supervisory actions such as imposing liquidity buffers or revising funding strategies.

Funding concentration index quantifies the degree to which a bank's funding relies on a limited number of sources or instruments. High concentration can increase vulnerability to market disruptions, as the loss of a single funding source may create a liquidity shortfall. Supervisors monitor concentration indices to detect emerging funding risks.

Banking union is a framework that integrates banking supervision, resolution, and deposit insurance across multiple jurisdictions, typically within a monetary union. The European Banking Union is an example, featuring a single supervisory mechanism, a common resolution authority, and a shared deposit-insurance scheme. Banking unions aim to reduce cross-border regulatory arbitrage and strengthen systemic resilience.

Deposit insurance protects depositors against losses up to a statutory limit if a bank fails. While deposit insurance helps maintain confidence and prevent bank runs, it can also create moral hazard if depositors become indifferent to bank riskiness. Designing appropriate coverage limits and premiums is a key policy challenge.

Liquidity risk management involves strategies and tools that banks use to ensure they have sufficient cash or liquid assets to meet obligations. Practices include maintaining diversified funding sources, conducting regular cash-flow forecasting, holding high-quality liquid assets, and establishing contingency funding

plans. Effective liquidity risk management reduces the likelihood of systemic spillovers.

Stress-testing framework outlines the methodology, scenarios, and assumptions used in conducting stress tests. The framework defines the governance structure, data requirements, model validation procedures, and reporting standards. A robust framework enhances the credibility of results and facilitates comparability across institutions.

Macro-prudential governance refers to the institutional arrangement through which macroprudential policies are designed, approved, and implemented. Governance structures may involve a dedicated macroprudential committee, coordination between the central bank and financial supervisory authority, and clear mandates that delineate responsibilities.

Regulatory arbitrage occurs when market participants exploit differences in regulatory regimes across jurisdictions to reduce compliance costs or increase risk-taking. Arbitrage can undermine the effectiveness of macroprudential tools and lead to the buildup of systemic risk in less-regulated corners of the market. International coordination seeks to minimize arbitrage opportunities.

Macro-prudential coordination is the collaborative effort among domestic and international authorities to align policies, share information, and jointly address systemic vulnerabilities. Coordination mechanisms include the Financial Stability Board, the International Monetary Fund, and regional supervisory colleges. Effective coordination helps prevent policy gaps and conflicting actions.

Financial stability board (FSB) is an international body that monitors and makes recommendations about the global financial system. The FSB coordinates the development of regulatory, supervisory, and macroprudential policies, and publishes assessments of systemic risk. Its work informs national authorities in shaping their own stability frameworks.

Systemic importance score is a quantitative metric that aggregates multiple dimensions of systemic relevance, such as size, interconnectedness, substitutability, and complexity. Institutions with scores above a threshold are designated as systemically important, triggering additional supervisory requirements. Scoring methodologies differ across jurisdictions but share common principles.

Macro-prudential stress scenario design involves selecting shock variables, determining their magnitude, and specifying the transmission mechanisms that link macro variables to financial institution balance sheets. Scenario design must balance plausibility with the need to capture tail-risk events, and often incorporates expert judgment alongside statistical techniques.

Liquidity coverage ratio calibration refers to the process of setting the parameters that define the LCR, such as the composition of high-quality liquid assets, the stress horizon, and the assumed cash-flow outflows. Calibration aims to reflect realistic stress conditions while avoiding excessive burdens on banks.

Network-analysis tools are analytical methods used to map and assess the structure of financial interconnections. Tools include graph theory measures (e.g., Degree centrality, betweenness centrality), clustering algorithms, and contagion simulation models. By revealing critical nodes and pathways, network analysis informs supervisory focus and mitigation strategies.

Systemic risk indicator dashboard aggregates a range of quantitative measures into a visual platform that allows supervisors to monitor trends, detect anomalies, and assess the overall health of the financial system. Dashboards may display leverage trends, funding concentration, credit-to-GDP gaps, and market-based risk premia, among other metrics.

Macro-prudential policy transmission describes the channels through which macroprudential tools affect the real economy. Transmission mechanisms include changes in bank lending standards, adjustments in risk-taking incentives, and alterations in market expectations. Understanding transmission is essential for calibrating the intensity of policy actions.

Policy spillover effects arise when a macroprudential measure implemented in one jurisdiction or sector influences behaviour in another. For example, a tightening of loan-to-value ratios in a major economy may shift credit demand to neighbouring markets, potentially creating new vulnerabilities. Anticipating spillovers helps avoid unintended consequences.

Stress-test model validation is the process of verifying that the quantitative models used in stress testing accurately capture relevant risk dynamics. Validation involves back-testing model outputs against historical events, sensitivity analysis, and independent review. Robust validation ensures that stress-test results are credible and actionable.

Liquidity stress-testing horizon defines the time period over which liquidity shocks are simulated, commonly ranging from a few days to several weeks. The choice of horizon influences the severity of projected cash-flow mismatches and the required size of liquidity buffers. Longer horizons capture more gradual funding drains, while shorter horizons focus on acute market freezes.

Capital conservation buffer phase-in describes the gradual implementation schedule for the buffer, allowing banks to build up capital over time. Phasing in the buffer reduces the risk of sudden capital constraints that could impair lending. The schedule may be linked to macro-economic indicators, such as credit growth rates.

Macro-prudential impact assessment evaluates the effectiveness of a policy after implementation, examining whether it achieved its intended objectives and what side effects emerged. Impact assessments use empirical analysis, such as difference-in-differences studies, to compare outcomes before and after the policy change.

Liquidity risk appetite is the level of liquidity risk that a bank is willing to accept in pursuit of its business objectives. Setting a risk appetite involves senior management defining limits on cash-flow mismatches, funding concentration, and reliance on market funding. The risk appetite guides internal risk-management policies and supervisory expectations.

Resolution funding mechanism provides the financial resources necessary to execute a resolution plan, including bridge financing, asset purchase facilities, and guarantees. Mechanisms may be funded through a dedicated resolution fund, contributions from the banking sector, or central-bank support. Adequate funding ensures that resolution can proceed without delay.

Macro-prudential risk dashboard is a real-time monitoring tool that displays key systemic risk indicators, policy levers, and market signals. The dashboard enables decision-makers to track the evolution of risk and to trigger pre-defined actions when thresholds are breached. Integrating data from multiple sources enhances situational awareness.

Cross-border liquidity risk emerges when banks rely on funding from foreign markets, exposing them to exchange-rate fluctuations and foreign-regulatory constraints. During global stress events, cross-border liquidity can evaporate quickly, amplifying domestic funding pressures. Supervisors monitor cross-border exposures to gauge vulnerability.

Liquidity stress-testing methodology outlines the steps for constructing cash-flow scenarios, estimating outflows, and assessing the adequacy of liquid assets. The methodology specifies assumptions about deposit withdrawals, wholesale funding roll-off, and market-price shocks. Consistency in methodology across institutions enables comparability.

Macro-prudential early-warning system combines statistical models, expert judgment, and real-time data to generate alerts when systemic risk indicators deteriorate. Early-warning systems may incorporate machine-learning algorithms to detect nonlinear patterns. Timely alerts support proactive policy adjustments.

Financial stability report is a periodic publication that presents an assessment of the health of the financial system, summarises recent developments, and outlines policy actions. The report communicates findings to market participants, investors, and the public, enhancing transparency and accountability.

Liquidity stress-testing frequency determines how often banks must conduct liquidity stress tests, ranging from quarterly to semi-annual cycles. Higher frequency provides more up-to-date information but increases operational burden. Regulators balance the need for timely insight with the costs of testing.

Systemic risk measurement framework integrates multiple approaches – such as network analysis, market-based risk measures, and macro-economic indicators – to produce a composite view of systemic vulnerability. The framework may assign weights to each component, reflecting their relative importance in the specific jurisdiction.

Macro-prudential policy coordination forum is a regular meeting of senior officials from the central bank, financial supervisory authority, and treasury to discuss systemic risk issues and align policy responses. The forum facilitates information sharing, joint analysis, and consensus-building on macroprudential actions.

Liquidity contingency plan outlines the steps a bank will take to secure additional funding in a crisis, including the identification of potential lenders, the activation of credit lines, and the sale of liquid assets. The plan is tested through drills and updated regularly to reflect changes in market conditions.

Systemic risk mitigation strategy comprises a set of actions designed to reduce the likelihood or impact of systemic events. Strategies may involve strengthening capital buffers, limiting concentration risk, enhancing transparency, and improving resolution mechanisms. A comprehensive approach addresses both the build-up of risk and the capacity to absorb shocks.

Regulatory capital buffer is an additional capital requirement imposed by regulators to increase resilience beyond the minimum Basel standards. Buffers may be calibrated to the systemic importance of an institution, the level of risk in its portfolio, or the overall macro-financial environment.

Liquidity risk governance establishes the roles, responsibilities, and oversight structures within a bank to manage liquidity risk effectively. Governance includes board oversight, senior-management accountability, and clear reporting lines to ensure that liquidity risk is identified, measured, and controlled.

Macro-prudential policy calibration involves adjusting the size, scope, and timing of tools to achieve the desired impact on systemic risk while minimizing side effects. Calibration requires quantitative analysis, scenario testing, and stakeholder consultation to ensure that the policy is proportionate and effective.

Financial stability supervisory review is a periodic evaluation conducted by the supervisory authority to assess the adequacy of the regulatory framework, the effectiveness of macroprudential tools, and the resilience of the financial system. The review may result in recommendations for reforms or adjustments to policy.

Liquidity risk assessment methodology provides a structured approach for evaluating the likelihood and consequences of liquidity shortfalls. The methodology includes identifying funding sources, quantifying cash-flow mismatches, stress testing under various scenarios, and determining the adequacy of liquidity resources.

Systemic risk stress test extends the conventional stress-testing approach by incorporating feedback effects, contagion pathways, and macro-economic linkages. The test evaluates how shocks to a subset of institutions or markets can propagate through the system, potentially leading to widespread distress.

Macro-prudential policy implementation timeline defines the schedule for introducing, adjusting, or withdrawing tools. Timelines may be pre-announced to provide market certainty, or they may be discretionary to retain flexibility in response to rapidly evolving risks.

Liquidity risk monitoring dashboard provides real-time metrics on funding gaps, asset-liability mismatches, and market-price movements. The dashboard enables risk managers to detect early signs of stress and to trigger pre-defined mitigation actions.

Systemic risk contagion model simulates the spread of distress across a network of financial institutions, incorporating direct exposures, indirect channels, and behavioural responses. The model helps identify critical nodes, estimate the magnitude of potential losses, and evaluate the effectiveness of containment measures.

Macro-prudential risk-adjusted return measures the profitability of a bank after accounting for systemic risk contributions. By internalising the cost of systemic risk, banks are incentivised to adopt less risky business models and to maintain higher loss-absorbing capacity.

Liquidity stress-testing governance outlines the oversight responsibilities for the design, execution, and review of liquidity stress tests. Governance structures typically involve the board, risk-management

committees, and senior management, ensuring independence and rigor.

Macro-prudential policy communication strategy defines the messaging, channels, and timing for announcing policy actions. A clear strategy helps manage market expectations, reduces uncertainty, and enhances the credibility of interventions.

Systemic risk monitoring framework integrates data collection, indicator analysis, scenario modelling, and governance processes to provide a comprehensive view of systemic vulnerabilities. The framework supports decision-making by highlighting emerging threats and guiding policy responses.

Liquidity buffer sizing methodology calculates the appropriate amount of high-quality liquid assets to hold, based on projected cash-flow mismatches, stress-scenario assumptions, and regulatory requirements. The methodology may incorporate stochastic modelling to capture a range of possible outcomes.

Macro-prudential policy effectiveness evaluation uses statistical techniques to assess whether a tool achieved its intended outcomes, such as reducing credit growth volatility or lowering leverage. Effectiveness studies inform future policy design and help allocate resources efficiently.

Systemic importance assessment evaluates an institution's contribution to financial stability using a set of criteria, often including size, interconnectedness, substitutability, and complexity. The assessment determines whether additional supervisory measures, such as higher capital buffers, are warranted.

Liquidity risk mitigation techniques include diversifying funding sources, extending funding maturities, maintaining a robust asset-liability management framework, and establishing credit-line arrangements. Techniques are tailored to the institution's business model and risk profile.

Macro-prudential policy trigger is a predefined condition, such as a credit-to-GDP gap exceeding a threshold, that activates a macroprudential tool. Triggers provide transparency and objectivity, helping markets anticipate policy moves and reducing the likelihood of surprise.

Financial stability assessment methodology combines quantitative indicators, qualitative analysis, and expert judgment to evaluate the health of the financial system. The methodology may incorporate stress-test results, macro-financial linkages, and governance reviews.

Liquidity risk data collection standards specify the granularity, frequency, and format of data that banks must report to supervisors for liquidity risk monitoring. Standardised data improves comparability, facilitates aggregation, and enhances the accuracy of systemic risk dashboards.

Macro-prudential policy coordination protocol outlines the steps for joint decision-making among domestic agencies and with international partners. The protocol defines information-sharing mechanisms, joint analysis procedures, and the allocation of responsibilities for implementation.

Systemic risk early-warning indicator threshold sets the level at which a risk indicator, such as the leverage ratio, triggers heightened supervisory attention. Thresholds are calibrated based on historical experience, statistical analysis, and the specific characteristics of the banking sector.

Liquidity risk stress-scenario calibration adjusts the assumptions used in stress testing to reflect current market conditions, ensuring that scenarios remain relevant and challenging. Calibration may involve updating volatility estimates, funding-cost projections, and asset-price shock magnitudes.

Macro-prudential policy exit strategy defines the conditions under which a tool will be scaled back or removed, such as the normalization of credit growth or the reduction of systemic risk indicators. An exit strategy provides clarity to markets and helps avoid abrupt policy reversals.

Financial stability macro-prudential framework integrates the institutional mandate, governance structure, analytical tools, and policy instruments that collectively aim to preserve systemic resilience. A well-designed framework supports proactive risk identification, timely intervention, and effective coordination.

Liquidity coverage ratio stress-testing horizon typically adopts a 30-day period, reflecting the timeframe over which banks must demonstrate the ability to meet cash-outflows under stressed conditions. The horizon aligns with the regulatory definition of the LCR and ensures consistency across institutions.