PRINCIPLES FOR THE MANAGEMENT OF CONCENTRATION RISK

Concentration risk can be defined as any single (direct and/or indirect) exposure or group of exposures with the potential to produce losses large enough to threaten an institution's health or its ability to maintain its core business.

Concentration risk arises from:

- 1. large (possibly connected) individual exposures the definition of connected for these purposes needs to be sufficiently broad to capture exposures which are connected through, for example, common ownership/management/ guarantors. This kind of concentration may be broadly covered, in particular in institutions which use quantitative modeling techniques, via granularity adjustments in the context of Pillar 2 measures, and
- 2. significant exposures to groups of counterparts whose likelihood of default is driven by common underlying factors, for example:
 - economic sector.
 - geographical location,
 - currency,
 - credit risk mitigation measures (including, for example, risks associated with large indirect credit exposures to a single collateral issuer).

GUIDANCE FOR CREDIT INSTITUTIONS

CR1: Credit institutions should have clear policies and key procedures ultimately approved by the Board of Directors in relation to exposure to concentration risk.

Credit institutions should have a clear and transparent concentration risk policy, as part of the broader credit risk process, which is clearly and properly documented and approved by the Board and management committees. It should be subject to regular review to take account of changes in risk appetite and the business environment.

When devising their policies and procedures and when carrying out their review, institutions should bear in mind the guidelines on internal governance (refer to Appendix I of this Banking Rule).

CR2: Credit institutions should have appropriate internal processes to identify, manage, monitor and report concentration risk which are suitable to the nature, scale and complexity of their business.

Institutions should have internal processes that identify, measure and monitor concentration risk encompassing, for example:

- individual large exposures to a single counterparty, connected counterparties and related clusters the definition of connected for these purposes needs to be sufficiently broad to capture exposures which are connected through, for example, common ownership/management/guarantors/syndication techniques,
- exposures to counterparties in the same economic sector or geographic region, or
- credit risk mitigation (CRM) techniques, collateral type or single protection seller.

For more complex businesses and for sophisticated institutions, this might also encompass common or correlated risk factors that reflect more subtle or situation-specific factors that require more sophisticated analysis for measurement and control. These concentrations may reflect correlations in underlying risk factors or exposure to common factors that are embedded in financial structures and may only become apparent in stress situations (see below).

CR3: Credit institutions should use internal limits, thresholds or similar concepts, as appropriate, having regard to their overall risk management and measurement.

Institutions should establish, as appropriate, a set of limits, thresholds or similar concepts for credit risk management. Procedures should be in place for the utilisation of such limits, thresholds or similar concepts, ensuring that the degree of credit risk stipulated by the Board or management committees is not exceeded.

Institutions should carry out analyses of the credit portfolio, including estimates of its trends, and should take account of the results of these analyses in setting and verifying the adequacy of the procedures and limits, thresholds or similar concepts for credit risk management.

The following sets out some examples for the expression of limits, thresholds or similar concepts:

- Size of top `x´ large exposures relative to relevant numeraire (e.g. balance sheet/own funds/net profit numeraire);
- Size of top `x´ connected exposures relative to relevant numeraire;
- Size of key sectoral/geographical concentrations relative to relevant numeraire;
- As contributory factors in any economic capital models: Portfolio concentration ratios, Diversity scores, Concentration curves, Gini coefficients¹; Portfolio correlations and variance/ covariance measures.

¹ Gini coefficient can be used to measure any form of uneven distribution. It is a number between 0 and 1, where 0 corresponds with complete risk homogeneity (where every exposure has the same risk) and 1 corresponds with absolute concentration (where one exposure carries all the risks, and the other exposures have zero risks).

CR4: Credit institutions should have adequate arrangements in place for actively monitoring, managing and mitigating concentration risk against agreed policies and limits, thresholds or similar concepts.

Monitoring should be incorporated into the institution's usual risk management and reporting systems and be undertaken sufficiently frequently to reflect the nature of the business(es) and at a sufficiently senior level within the institution.

Given that concentration risk, by its nature, tends to relate to aggregation of risk, it is essential that appropriate oversight is exercised by the Board of Directors ultimately at a strategic level.

If issues of concern are identified by the monitoring activity, an institution's management should consider those issues and the appropriate response. Management responses might, for example, include but are not limited to:

- proceeding to a more detailed review of the risk environment in the particular sector(s),
- applying additional stress tests and scenario analyses,
- reviewing with greater intensity the economic performance of existing borrowers,
- reviewing approval levels for new business, or
- regularly reviewing risk mitigation techniques, their value and their legal enforceability.

Having assessed an issue, an institution's management may conclude that it is appropriate to take mitigating action. For example, one or more of the following might be considered appropriate:

- reducing limits or thresholds on risk concentrations,
- adjusting new business acquisition to address undue concentrations,
- transferring credit risk to other parties, buying protection from other parties (examples include credit derivatives, collateral, guarantees, sub-participation, assignment) or selling down either directly or as part of securitization transactions, or
- allocating additional internal capital (see CR5 below).

CR5: Credit institutions should assess the amount of internal capital which they consider to be adequate to hold against the level of concentration risk in their portfolio.

Credit institutions should undertake this assessment as part of their ICAAP in a transparent way. In doing so, they should take account of a range of relevant factors, including the quality of their risk management and other internal systems and controls, ability to take effective management action to adjust levels of concentration risk and the implications of stress-testing and scenario analysis.

While the role of capital therefore needs to be assessed within this broader context, and keeping in mind that the weight attached to the different factors will vary from

institution to institution, the expectation is that the higher the levels of concentration, the greater the onus will be on institutions to demonstrate how they have assessed the implications in terms of internal capital.

GUIDANCE FOR SUPERVISORS

The authority has deemed appropriate to include in this Annex the guidance for supervisors as issued by CEBS in order to provide licence holders with information as to how the authority intends to review the management of concentration risk by credit institutions

CR6: The authority will collect sufficient information from credit institutions on which to base its assessment.

This information should come from a variety of sources, both on-site and off-site.

Off-site supervision (i.e. desk analysis) allows the authority to draw on a combination of published financial information on institutions, standardised supervisory and statistical returns (e.g. as used for reporting individual large exposures and sectoral analysis) and where relevant, specifically designed questionnaires for thematic purposes.

On-site supervision enables the authority to:

- (i) make first-hand assessments of the quality of an institution's policies and procedures and how effectively the institution manages and controls concentration risk, including management of risk mitigation techniques, and
- (ii) verify as necessary the accuracy of reported data. The authority will usually have quantitative and qualitative methods for conducting such on-site assessments.

This information will assist the authority to assess individual institutions in relation to their peers.

CR7: The scope of application of the authority's assessment of concentration risk is that used for the Supervisory Review Process (SRP).

Where necessary, the authority will also have the discretion to apply an assessment at the level of individual entities.

CR8: The authority may use quantitative indicators, where appropriate, within its Risk Assessment System to assess degrees of concentration risk.

The authority can build up these indicators based on the set of limits, thresholds or similar concepts defined internally by credit institutions (see CR3). It may also develop its own models and tools such as indicators based on the existing regular reporting from

credit institutions, including the reporting of large exposures or geographical/sectoral risks against regulatory capital.

These indicators may be used within the authority's risk assessment systems to carry out peer comparisons and identify outliers.

CR9: The supervisory review should encompass not only quantitative aspects but also the qualitative and organisational aspects of concentration risk management.

The authority recognises that the assessment and management of concentration risk does not only rely on quantitative modelling techniques but also on qualitative factors e.g. the expertise of people with regard to the identification and management of risks in individual sectors or sub-sectors.

CR10: The authority can draw on stress tests performed by credit institutions to assess the impact of specific economic scenarios on concentrated portfolios.

The authority will use the results of stress testing to assess the full extent to which adverse economic conditions impact on highly connected or correlated exposures.

CR11: The authority will pay particular attention to those credit institutions which are highly concentrated by customer type or specialized nature of product.

In doing so, the authority notes that such credit institutions should not necessarily be assumed to be more risky in comparison with larger and/or more complex institutions doing the same business given the possible existence of comparative advantages such as expertise and local knowledge. At the same time, however, it will be relatively more important in such circumstances for supervisors to consider whether such institutions have adequately assessed the role of capital in conjunction with other relevant factors such as expertise and local knowledge.