

**FIRST PART OF CEBS'S TECHNICAL ADVICE TO THE EUROPEAN
COMMISSION ON LIQUIDITY RISK MANAGEMENT:
SURVEY OF THE CURRENT REGULATORY FRAMEWORKS ADOPTED BY
THE EEA REGULATORS**

INTRODUCTION

1. On 5 March 2007, the European Commission issued a Call for Advice (No. 8) asking CEBS to provide technical advice on liquidity risk management. The Call for Advice was split into two parts:
 - a) An updated survey of the regulatory frameworks adopted by the Member States and the three EEA countries. The survey should be conducted in the light of market developments and should include specific information regarding any different treatments provided for specific types of credit institutions and/or investment firms. Furthermore, CEBS was asked to identify regulatory and supervisory approaches adopted in respect of branches and subsidiaries and, in particular, to clarify the underlying reasons and objectives that drive the different approaches in relation to the allocation of tasks and responsibilities for branches and subsidiaries.
 - b) A deeper analysis of the following issues:
 - further consideration of variables that may significantly affect liquidity risk management, in particular, collateral management, use of different types of collateral, the impact of covenants on net liquidity positions, netting agreements, the distinction between banking and trading books and the analysis of concentration of liquidity sources in order to align supervisory approaches with market practices;
 - the interaction of funding liquidity risk and market liquidity risk;
 - the use of internal methodologies by sophisticated firms and by credit rating agencies; and
 - the impact of payment and settlements systems design and relevant increased interdependencies.

CEBS was also asked to identify any other areas and problems that appear not to be adequately addressed by the current regulatory framework at the EU level.

2. CEBS was invited to provide the survey referred to in point (a) by July 2007 and the report referred to in point (b) by January 2008. The call for advice is posted on the CEBS website under <http://www.cebs.org/Advice/documents/CfAonLiquidityRiskManagement20070315.pdf>.
3. This report, which has been produced by the Groupe de Contact's Liquidity Task Force (LiqTF), provides the survey referred to in point a). It is in three parts. The first part draws together the key messages and themes which emerge from the discussion of the responses to the stock take. The second part summarises the results of the responses; while the third part contains the detailed individual country responses from the 27 EU and 3 EEA members¹.

CONTEXT

4. The Groupe de Contact last looked in detail at approaches to the supervision of banks' liquidity in August 2000. Since then there has been a major change in the membership of the EU, the number of Member States increasing from 15 to 25 countries in May 2004 and then to 27 countries in January 2007. Enlargement has served to highlight the increasing challenge posed by core domestic banks becoming subsidiaries of parents abroad. This issue applies across a number of EU countries but is particularly apparent among many of the enlargement countries, where 68.1 % of total banking assets are foreign controlled (compared to 16.3 % within the Euro zone) and institutions owned by a parent located in other EU Member States have a market share of 60 %.² Most of the acquired banks are universal banks funded predominantly by local deposits. They are usually a source of liquidity within cross-border banking groups, and rooted in banking systems not previously integrated with international financial markets.
5. During the same period there have also been significant structural market developments such as a shortening of the time horizons for payment obligations; the use of more market-based and potentially more volatile funding sources; and increased pooling of liquidity and cross border use of collateral. At the same time although day-to-day liquidity management is still mostly done in a decentralised way, there has been an increasing move towards the centralisation of liquidity

¹ CEBS received 34 responses in total: the Czech Republic, Greece and the UK returned separate responses regarding their liquidity regimes for banks, investment firms and, in the case of the UK, building societies.

² ECB report on EU Banking Structures (October 2006)

policies, procedures, limits and contingency plans within groups operating on a cross-border basis.

6. The Banking Supervision Committee (BSC) of the European Central Bank (ECB) has been closely observing these structural developments. Its first analysis was conducted in 2002, and this was followed by another report in 2004. In November 2005, it considered the challenges the current regulatory framework will face in the medium and long-term, identifying four topics that deserved further consideration – "the international dimension of liquidity management; the potential problems posed by regulatory fragmentation; the industry' appetite for the recognition of internal liquidity management models; and the role played by stress testing". An ad hoc task force of the BSC's Working Group on Developments in Banking (WGDB) has been giving further consideration to these issues and its report is due to be published in the Autumn.
7. Work on liquidity risk management has also been conducted in a number of international fora such as the Joint Forum. More recently the Basel Committee on Banking Supervision (BCBS) has set up a Working Group on Liquidity Issues that is mandated to conduct an analysis of national approaches across its member states.
8. The industry itself has also recently done some extensive work on the development of principles for liquidity risk management (Institute of International Finance – IIF, European Banking Federation – EBF). There will be a discussion with the industry on these principles and developments in the area of liquidity risk management as part of the work on the second part of the Call for Advice.
9. Against this background, the LiqTF is closely coordinating its work with the BCBS. Both groups have, for example, used basically the same questionnaire for their stock takes to collect the information needed for their analyses. To avoid unnecessary duplication, the LiqTF is also drawing as appropriate on authoritative sources of work such as those of the BSC's WGDB, the Joint Forum and the BCBS.

REGULATORY FRAMEWORK FOR LIQUIDITY RISK IN THE EEA

10. The Capital Requirements Directive (CRD) has introduced in Annex V, point 10 of Directive 2006/48/EC an explicit requirement for institutions to have in place (a) policies and procedures for the management of liquidity risk and (b) contingency plans to deal with liquidity crises. Except for EEA branches, the CRD contains no further details. While most national authorities have long-established frameworks for supervising liquidity, there are at present no explicitly agreed guidelines

within the EEA covering the supervision of liquidity. Most if not all national authorities, however, appear to recognise the Basel Sound Practices for Liquidity Risk Management Paper (2000) as an authoritative source of reference.

DEFINITION OF LIQUIDITY RISK: REGULATORY AIMS

11. Asked about the underlying aims of national requirements, a range of replies was received. A quarter of the responses explicitly referred to the aim that credit institutions should be able to meet payment obligations when they fall due. Another quarter of responses explicitly mentioned survival to a fixed horizon and a similar number of responses implicitly did so. The majority of responses mentioned adherence to best practices. Other individual responses included references to: fulfilment of Pillar 2 requirements; preparation of rules for normal operations as a “going concern” and in a “liquidity crisis”; protection of depositors; and promotion of stable financial and capital markets. As many liquidity regimes aim for both qualitative and quantitative objectives several of the objectives can be applicable simultaneously. For example, specified quantitative requirements can be meant particularly to ensure a certain survival period, but at the same time also contribute to one or more of the other (qualitative) objectives. This means that in many cases it is not a matter of “either/or” but “as well as”.
12. Asked if the underlying aims included addressing specific market failures, only 2 countries expressly replied “yes”. One of these regimes covers interest rate risk and “market conditions”, and the other aims at mitigating market frictions that may prevent a solvent bank from attracting sufficient funds. A majority replied “no”, although the responses implied that they too address market failures in the context of other aspects of liquidity risk management such as stress testing, contingency funding plans, alternative scenarios and lender of last resort. In this respect differences were perceptible between the (narrow) perspective of respondents that are solely banking supervisory authorities and the (broader) perspective of respondents that are central banks or integrated regulatory authorities.
13. Further discussion identified that while there might be some differences of nuance/emphasis, countries could subscribe to the following broad aims of liquidity supervision:
 - at a micro-supervisory level, that institutions should have adequate liquidity risk management which enables them to meet their payment obligations when they fall due at any time at reasonable cost. This would be consistent with the definition of liquidity risk used by the Joint Forum, namely “the risk that an

institution will not be able efficiently to meet both expected and unexpected current and future cash flow needs without affecting either daily operations or the financial condition of the firm” ; and

- at a macro-supervisory level, that financial stability is not put in jeopardy by the inadequacy of the liquidity risk management of credit institutions.

REGULATORY REQUIREMENTS FOR LIQUIDITY RISK AT THE NATIONAL LEVEL

(i) When they were introduced and recent changes

14. Supervisory frameworks have been in place at the national level for varying periods, with the earliest dating from 1979 and the latest having only been revised in 2007. While a third of countries have not updated their frameworks, more than half have reviewed their liquidity regulations, although in most cases any resulting changes were not considered material. Five countries, however, have been (or are) implementing significant amendments to their liquidity regimes. One now allows firms to use internal measurement and management approaches, including models. The second has recently introduced explicit quantitative (liquidity ratios) and qualitative requirements whilst allowing banks to use outputs from their own models in the calculation of the standardized ratios. The third has introduced standardized reporting of liquidity ratios and mandatory liquidity limits, while allowing the usage of internal models for calculating the ratios. The fourth has more explicitly articulated qualitative requirements, updated the reporting scheme and included the option for credit institutions to report internal management information on liquidity on a consolidated basis. The fifth, finally, is introducing standardized reporting of liquidity ratios and mandatory minimum limits for these ratios.

15. Details of the updates include: the addition of derivative transactions, foreign subsidiaries, new qualitative requirements, preclusion of intra-group transactions, new quantitative requirements (mismatch instead of stock approach), liberalisation clause (usage of own internal model), deeper focus on on-site examinations and off-site analysis, recognition of foreign currencies, definition of liquid assets and list of acceptable collateral.

(ii) Scope of application

- ***To credit institutions and investment firms***

16. According to the summary of the answers, one-third of respondents make no differences between credit institutions' and investment firms' liquidity risk regimes. Of the countries that have indicated that their regimes differ: in some cases it is because the investment firms are not subject to any liquidity requirement; some other countries have different regulations and even different supervisory authorities; and other countries have some differences in their requirements.

- ***To credit institutions of different types and sizes***

17. A clear majority of countries apply the same supervisory requirements to all credit institutions irrespective of size and type, branch or subsidiary, but paying proper attention to the proportionality principle. Only four countries explicitly draw a distinction between the types or legal form of the credit institution: one distinguishes between large and small institutions, another applies a mismatch approach to most firms but applies a stock approach to large retail deposit-takers, another distinguishes between mortgage lenders and other credit institutions, and the fourth distinguishes between local banks and branches of overseas banks. Some countries mentioned exceptions to the general application of the host supervisory regime to foreign branches. Host supervisors are prepared to allocate the task of supervision to the home supervisory authorities through a "global concession" agreed through bilateral arrangements where the home regime is considered to deliver broadly equivalent outcomes to the host regime.

- ***Consolidation versus solo***

18. Only one country indicated that it supervises solely at the consolidated level. Although more than two-thirds of regimes look at both consolidated and solo levels, the focus of the balance of countries is on applying liquidity requirements regimes at the solo level only. In most countries consolidation is restricted to firms belonging to the financial sector, excluding insurance companies belonging to the group.

19. One main reason for consolidated supervision, either as a general rule or on a case-by-case basis, is transparency. The rationale is to be able to assess an individual bank's liquidity risk management against the background of the group's liquidity management and/or to identify potential risks that might arise within the group and have repercussions on the individual institution. Another reason is the acknowledgement that supervisors should take into account that a number of groups already manage liquidity risk on a centralized basis. Besides, one respondent stated that the consolidated approach is more consistent with the general philosophy underlying Pillar 2. In addition, one respondent referred to the

rationale behind Article 69 of Directive 2006/48/EC and offers the option to waive the application of the liquidity requirements at a solo level provided compliance with the requirements at group level is ensured.

20. On the other hand, one respondent referred to the division of tasks indicated by Art. 41 of Directive 2006/48/EC, in relation to the restriction to solo supervision. Another respondent stated that as a predominantly host country there was no need for consolidated supervision.

- ***Large exposure limitations***

21. In respect to liquidity risk management in the medium term (up to 1 year) over half of the countries do not impose limits on intra-group exposures while about a quarter reported that they apply limits to short-term intra-group exposures. As far as the long term is concerned, almost half the countries noted that they apply limits to other intra-group exposures and these could possibly create some limitations in relation to unrestricted cross-border transfer of long-term funds between entities in a group. Some respondents observed that limits could be waived if cross-border firms are subject to broadly equivalent supervision. Especially with regard to the existing exemptions, the responses suggest that large exposure limits are, in general, not a relevant problem for banking groups when it comes to liquidity risk management but that restrictions may arise in the context of long term cross-border exposures.

(iii) Centralised versus decentralised

22. Countries were asked to comment on the risk management practices of their institutions (NB: this will be discussed directly with the industry as part of phase 2 of the LiqTF's work). Most of the countries replied that centralised administration of a group-wide liquidity position (on consolidated basis) was the most common, particularly observed in the Nordic area, but that there was a significant continuum as to the levels of centralisation. For example, risk principles, policies, limits, contingency plans, measurement methods etc. were commonly centralised, as was the central monitoring of overall liquidity exposure, and the securing of long-term funding for the group. On the other hand, day-to-day liquidity management, although building on the institution/group-wide policies but calibrated locally and endorsed by local management, was often decentralised, reflecting the nature of the institution in question and driven by factors – such as cost efficiency, the chosen business model, size, local regulatory and legal factors, and the sophistication of the IT platform - which may make a more decentralised approach more robust under certain circumstances. This picture is consistent with the findings of the BSC in its report

“Banking Supervision Committee Liquidity Risk Management Of Cross-Border Banking Groups In The EU ”.

23. Some differences in the level of centralisation were observed between cross-border banks and banks operating nationally and between liquidity management of branches and subsidiaries. Banks operating nationally and cross-border branches tend to have more centralised approaches than in cross-border banking groups with foreign subsidiaries. Other cross-border groups offer much more autonomy to local subsidiaries in terms of the development or local calibration of liquidity procedures or policies and endorsed by local management. Geographical areas or markets (EU, USA, emerging markets, time zones) and currencies (convertible, non-convertible, Euro-area) affect the organisation of liquidity management as well.

24. Rationales included:

For centralised management	For decentralised management
<ul style="list-style-type: none"> • More efficient utilisation of group's liquid assets • Obtaining funding on more favourable terms (economies of scale) • Ensure group-wide consistency and coordination in crisis • Advantage of adding central management resources and expertise to local knowledge • More transparent liquidity management for the assessments of investors and rating agencies • Counterparty risk management 	<ul style="list-style-type: none"> • Business strategy • To increase the responsibility of the local managers • The local staff know the local market better and could be better placed to evaluate risks, maximum utilisation of local funding • In a crisis situation each subsidiary is self-sufficient • Decentralized liquidity risk management systems could be less vulnerable in case of operational risk incidents. • Barriers to cross-border collateral pooling, restrictions on transfer of funds caused by the specifics of national supervisory frameworks. • Subsidiaries of a systemic character, especially those with a high proportion of local retail deposits, might need support from the local authorities - thus the level of requirements on the quality or risk mgt have to be sound and comprehensive, and be able to operate on a stand-alone basis

25. One relevant topic relating to centralised or decentralised liquidity management is the question of conditions regarding the location of liquid assets and/or restrictions regarding the transferability of assets within a (cross-border) group. This question is predominantly an issue for countries applying quantitative requirements at a consolidated level. Presently, only NL indicated requirements on the convertibility and transferability of assets that are included in the consolidated calculation of available assets. The question also touches upon the differences in defining "liquid assets" (see paragraph 27). Both issues will be further analysed in connection with part 2 of the Call for Advice.

DETAILS OF REGULATORY REQUIREMENTS AS AT 2007

26. The following sets out the responses received to those stock take questions posed regarding quantitative and qualitative approaches. In considering these responses in more detail, it became apparent that the use of terminology such as 'qualitative' and 'quantitative' could be misleading and, at best, an oversimplification. The following section therefore needs some opening explanation. Although a third of respondents indicated they apply a qualitative rather than quantitative approach, most of these do in fact collect liquidity data, monitor profiles and would if necessary challenge/intervene on the basis of a quantitative assessment. Further, all countries indicated they required liquidity to be subject to stress-testing. The distinguishing feature between those reporting a quantitative approach and those reporting a qualitative approach appears to be the extent to which supervisors/supervisory rules are prescriptive in setting the assumptions and targets to be used by institutions and those which place more reliance on the use of internal models/methodologies. It may therefore be concluded that both categorisations could be viewed as being on a continuum rather than being either/or.

Approach to quantitative requirements

27. This section considers regimes that require institutions to observe specific liquidity ratios. Of the two-thirds of countries that set such requirements, there are various approaches, ranging from the application of mismatch limits (11 countries), stock ratios (4 countries), combined mismatch/stock (5 countries), and separate mismatch and stock applied according to type of institution (1 country). In relation to the treatment of mismatches according to contractual maturity or behavioural cash flows, most of those countries that apply a

mismatch approach allow behavioural adjustments³ to be made, some pre-determined by the supervisors and others by the institutions themselves.

The remaining third of countries do not set supervisory limits/apply quantitative requirements per se but nevertheless expect institutions to use their own approaches to arrive at their assessment of mismatch positions, including allowing for behavioural factors, which are then subject to supervisory review.

28. When asked what assets are eligible as marketable/liquid assets, a majority of respondents have indicated that eligibility requirements/provisions apply to the recognition of assets. Most supervisors list eligible types of assets whilst a minority apply also/instead a set of overriding or minimum liquidity criteria which assets must satisfy in order to be deemed liquid.

All respondents accept cash in hand and freely convertible foreign currency as eligible assets. In addition to that there is a large variety of assets accepted by one or more of the respondents.

29. In this context stock approaches, maturity mismatch approaches and mixed approaches have to be distinguished. If a stock approach is applied the "eligible assets" are those assets taken into account in the numerator of the ratio. If a pure maturity mismatch approach is applied, only projected incoming cash flows are taken into consideration. If a mixed approach is applied, the sum of specified "eligible" assets and projected incoming cash flows in the relevant period has to match the requirements for that period (horizon). Eligible assets are valued at market value or nominal value, with or without haircut.

Approach to Qualitative Requirements

30. This section relates to those non-quantitative requirements which supervisors expect institutions to comply with, such as policies, adequacy of internal controls, contingency planning, stress testing, etc. Only a small number of countries expressly mentioned the Basel paper on "Sound Practices for Managing in Banking Organisations" but in subsequent discussion the LiqTF acknowledged that this paper sets out the key elements of any qualitative requirements. The majority of supervisors require that institutions have a documented liquidity policy in place, including currency management, contingency arrangements and internal limits. The remainder of supervisors, whilst not formally requiring a documented liquidity policy, expect or encourage institutions to have an

³ Includes assumptions about: undrawn overdraft/loan facilities; roll-over of retail and wholesale deposits; haircuts on certain marketable assets; early repayment of fixed term lending; pipeline transactions; committed funding inter-bank.

appropriate written policy in place. No supervisor indicated that supervisory approval of the policy is required, with the exception of one country in the context of accepting the use of an institution's own procedures under recently introduced regulations. Several countries, however, encourage or require entities to redefine their policy where deemed necessary; and almost all review liquidity policies during the course of examinations and on-site inspections/visits or as part of a Pillar 2 review. It is generally accepted that ultimate responsibility for policy approval rests with the Boards of institutions.

31. The inference can be drawn that there is a significant degree of agreement between supervisors about qualitative requirements and the need for proportionality and acknowledgment that, compared with any supervisory measurement framework, it is in the interest of banks to develop their own methodologies (or behavioural assumptions) for measuring and monitoring liquidity.

Stress testing and scenario analysis

32. All countries require institutions regardless of their regimes (quantitative/qualitative/mix) to apply stress tests as part of their process of liquidity management. The majority of supervisors do not set obligatory/explicit scenarios for institutions but expect them to apply appropriate scenarios based on their own risk profile. Based on the responses, there is a general expectation that institutions will apply both bank specific and market wide scenarios.

Time horizons

33. There is a range of practices in relation to the mismatch/stock approach, with a third of countries requiring reports to cover 1 month onwards, and another third requiring variously from 1 week onwards, 1 month only, and placing the onus on institutions to use their own approaches. Asked whether they took a '**survival period**' approach, less than a quarter responded in the affirmative.

Foreign currencies

34. The majority of supervisors do not set specific requirements for foreign currencies and instead focus on the adequacy of the processes for internal management. Most of these require reporting of liquidity positions in domestic/foreign currencies together and then foreign currencies in aggregate. One third of supervisors, however, treat foreign currencies (especially non-convertible currencies, for which some require more detailed reporting) differently when calculating supervisory ratios.

Use of internal models/methodologies

35. Regardless of whether a more or less prescriptive approach is taken to setting supervisory requirements, most countries expect institutions to develop their own methodologies/models in order to have a more advanced approach to managing liquidity than would be provided by any standardised supervisory framework. Indeed, some of those countries which have chosen not to set regulatory limits appear implicitly to rely more heavily on the numerical outputs of these internal approaches. However, one country is introducing an internal model approach for its big firms which will be the subject of validation by the supervisory authority. Another country recently introduced a mixed approach in which standardized quantitative ratios are calculated combined with the option that the banks are allowed to use outputs from their internal models as inputs to the ratio.

Liquidity reporting

36. Almost all countries have specific liquidity reporting requirements for credit institutions. In general, all credit institutions including the branches of foreign banks are subject to these reporting regimes, although some countries waive the latter requirements where global concessions have been agreed. In contrast, only a limited number of countries require liquidity reporting by investment firms. All are designed to monitor underlying liquidity positions, two thirds of which are used to monitor compliance with quantitative requirements on the basis of the standardized reporting schemes. The reporting consists of relatively similar information on (liquid) assets, maturity mismatches and contingent assets and liabilities that are used in the process of calculating supervisory liquidity ratios (either binding or monitoring ratios). Although the general building blocks of the reporting schemes are quite similar, there is considerable variation in the degree of detail, the definitions of the reported items, the extent to which institutions are allowed to apply their own (behavioural) assumptions and haircuts to the

reported items and the level of aggregation of positions in different currencies vary considerably across jurisdictions. In a number of jurisdictions, institutions can comply with the reporting regime through the submission of internally used management information instead of the standardised reporting scheme; and in others supervisors ask institutions to detail modelling assumptions. In three countries, regular reports are required on the qualitative features of liquidity risk management.

37. The reporting frequency is typically monthly (20 countries) and/or quarterly (12 countries), extending to semi annually (1 country) and daily (1 country), with the option of increasing the frequency under certain conditions in some countries.

SUMMARY

38. Since the last stock-take was undertaken, the EU has expanded significantly from 15 to 27 countries. This expansion has highlighted the issues and challenges posed by a high proportion of domestic core banks being owned by foreign parent banks – in particular, these relate to balancing the need for local liquidity to be held against predominantly local retail deposits, set against mobility and centralisation of liquidity, especially in relation to banking systems not previously integrated with international financial markets.

39. In terms of regulatory frameworks, only a few countries have made major changes to their regimes. Although there are significant variations in detail, there is a considerable degree of commonality in respect of qualitative expectations. In relation to quantitative requirements, there appears on the face of it a one third/two thirds split in approaches. The main distinction appears to be between those countries which are prepared to place more reliance on the outcome of internal methodologies while other countries apply supervisory limits based on pre-determined methodologies (albeit in some cases allowing for behavioural adjustments). In this sense, one can view quantitative and qualitative approaches as being part of a continuum.

40. In relation to the aims of liquidity supervision, there appears to be broad agreement at both the micro and macro supervisory levels.

OUTLOOK

41. This survey provides a "snapshot" of the current supervisory regimes for liquidity risk management. A number of the questions touched upon in this report will be subject to a deeper analysis in connection with the work on the second part of the Commission's Call for Advice which is due by end of January 2008 (for details see paragraph 1). As indicated above this applies, for example, to the issue of centralized vs. decentralized liquidity risk management and to restrictions on the location of liquid assets.
42. In providing the requested advice on these issues and other topics like internal models/methodologies it will be crucial to gain a deeper understanding of current market practices especially via early and on-going contacts with representatives of the different types of institutions ranging from large, sophisticated banks with cross-border connections to small institutions with only local or regional business.
43. Another aspect of the future work will be close alignment with the work conducted by the Basel Working Group on Liquidity.