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Committee of European Banking Supervisors

Group Treasury

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CP 19 Second Part of CEBS's Technical Advice to the European Commission on Liquidity Risk Management

The Royal Bank of Scotland welcomes the opportunity to respond to the above-named paper which was published on June 17th 2008.

Our detailed comments are set out on the following pages but we are in broad agreement with the recommendations set out in the paper. In summary the process is fourfold:

- A bank must be able to readily determine its contractual liquidity position.
- A bank should then overlay that view with assumptions about normal behaviour
- It should then undertake stress testing by reviewing how the normal assumptions change under the various stress scenarios.
- Given the results of the stress tests, the bank can assess its current level of liquidity provision, establish the cost of contingency arrangements and compare that cost of insurance and the associated liquidity risk levels to its risk appetite and profitability goals.

With this information available, the Board can agree with senior management the strategy the bank is to adopt. The CEBS principles support this approach, and we believe they will assist financial institutions, regulators and central banks to maintain robust liquidity policies, procedures and systems in both normal times and in times of stress.

We welcome the close alignment of the CEBS recommendations to the principles set out in the BCBS paper. As a global bank we would wish to see similar regulation across jurisdictions thereby keeping costs to a minimum.

If you have any questions on our submission please contact my self or Bill Rickard (+44 (0)20 7085 6387 (bill.rickard@rbs.com)

Yours faithfully

Ron Huggett, Deputy Group Treasurer Royal Bank of Scotland Group



Recommendation 1 – The Board of Directors should define a liquidity risk strategy and set management policies that are suited to the institution's level of liquidity risk, its role in the financial system, its current and prospective activities, and its level of risk tolerance. The Board should have a clear view of the risks implied by its degree of reliance on maturity transformation, and should ensure that an adequate level of long-term funding is in place. Its strategy and policies should consider both normal and stressed times and should be reviewed regularly, including (at a minimum) when there are material changes. Senior management should define adequate processes to implement these strategies and policies.

Agreed. It is important that the tolerance level is understood at all levels of the bank.

Banking remains, at its basic level, the business of borrowing short and lending long. In expressing liquidity risk tolerance a bank will therefore be balancing prudence against profitability which is clearly an issue of the utmost importance to the Board. There is an ongoing challenge to articulate the risk tolerance in such a way that all levels of management can readily comprehend the trade off between risk taking and profit making.

Recommendation 2 - Institutions should have in place an adequate internal liquidity cost/benefit allocation mechanism – supported where appropriate by a transfer pricing mechanism – which provides appropriate incentives regarding the contribution of liquidity risk of the different business activities. This mechanism should incorporate all costs of liquidity (from short to long term, including contingent risk).

We agree that all parties should recognise the cost of liquidity in both normal and stress situations. However, the provision of an internal charging mechanism for liquidity costs and benefits should be approached carefully to ensure that it encourages the right behaviour and does not, for example, create an atmosphere of internal cost avoidance. Furthermore there is a question as to how the potential cost of a liquidity stress event should be taken into account. A central pool of liquidity will be held against a number of possibly mutually exclusive outcomes. Allocating the cost therefore becomes an "interesting" exercise if it is to be seen as equitable across all the businesses involved. It also has the potential to generate a small industry if not done well. Charging is only one way, after all, to encourage the right behaviour.

The provision of internal charging has two further implications:

- The increased liquidity charges will be passed onto customers which, in turn, requires the industry as a whole to educate customers regarding how liquidity issues impact product pricing.
- The need to ensure the relevant tax authorities, where applicable, recognise cross border charging of liquidity as a justifiable expense.

Recommendation 3 – The organisational structure should be tailored to the institution and should provide for the segregation of duties between operational and monitoring functions, in order to prevent conflict of interests. Special attention should be granted to the powers and responsibilities of the unit in charge of providing funds. All time horizons, from intraday to long-term, should be considered when tasks are allocated, as they entail different challenges for liquidity risk management. The institution should have sufficient well-trained staff, adequate resources, proper coordination and overview, and independent internal control and audit functions.

Agreed

Recommendation 4 - All institutions should be aware of the strategic liquidity risk and liquidity risk management at the highest level of the group, and have adequate knowledge of the liquidity positions of members of the group and the potential liquidity flows between different entities in normal and stressed times, taking into account all potential market, regulatory, and other constraints.



Whilst we agree with the principle and agree that intra bank flows must be tracked and controlled, we would highlight the possibly conflicting goals of regulators and globally managed banks in the management of liquidity. The former are mandated to protect depositors in their jurisdiction whilst the latter are seeking to support depositors throughout their global operations. Regulators are therefore more likely to want local pools of liquidity whilst global banks may wish to hold a central pool of liquidity which can be moved to units in temporary need. If banks are prevented from moving liquidity around their organisation by unreasonable regulatory constraints there is a danger of creating trapped pools of liquidity, with the possibility that the bank is unable to support, say, a subsidiary which is suffering a (temporary) liquidity problem. In such an event there is the danger that the problem spreads to the rest of the bank thereby creating the very crisis which the regulation is trying to avoid.

We believe the problem is not insurmountable if regulators establish a form of

understanding on how global banks are to be regulated – e.g. via "colleges of regulators" – and if global banks are prepared to articulate the contingency plans in respect of cross border support.

It is probably worth making a distinction between jurisdictions whose currencies are readily traded and those where the liquidity of the currency is lower.

- In normal circumstances banks might reasonably expect that forex flows freely for the major currencies and that this continues even if there is a bank specific event. That is not to say a bank should take no notice of large cross currency exposures and have a policy for the levels of such exposures with which it feels comfortable. In assessing the currency(ies) in which the bank might hold its stock of liquidity, the bank is likely to rely more heavily on assets denominated in the freely traded currencies. It is true that in certain *market* events even the major currencies may not trade smoothly but, again, in such circumstances the private and public sectors will need to work together to tackle the crisis.
- "For the less well traded currencies it might be more prudent to mitigate liquidity risk through self sustainability, rather than place overreliance on centrally held group resources which are potentially restricted in their availability due to a mixture of geopolitical, regulatory and financial market constraints." We do accept that local circumstances must be taken into account particularly for the less frequently traded currencies.

Recommendation 5 - Institutions should have appropriate IT systems and processes that are commensurate with the complexity of their activities and the techniques they use to measure liquidity risks and related factors. The adequacy of the IT systems should be reviewed regularly.

Agreed.

Developing IT to support accounting, internal management information (including liquidity and funding needs) and regulatory reporting is important but can be expensive and take time where new demands are made and/or new products are developed. Nonetheless the necessity of having adequate IT support for regular reporting is well recognised. We would make one point: where regulators seek additional information, over and above that deemed necessary by the business, the regulator needs to demonstrate the cost/benefit of the additional information requirement and give the industry time to develop the IT systems to support the request.

Recommendation 6 – The liquidity of an asset should be determined based not on its trading book/banking book classification or its accounting treatment, but on its liquidity-generating capacity. Supervisory distinctions between the trading and banking books should not have a major or undue impact on liquidity management.



We agree with this. It is important, however, to reflect on what constitutes the highest quality of liquid asset. In considering this, the authorities must recognise that eligibility as collateral at central banks in both normal and stressed times will be a consideration.

Recommendation 7 - When using netting agreements, institutions should consider and address all legal and operational factors relating to the agreements, in order to ensure that the risk mitigation effect is assessed correctly in all circumstances.

Recommendation 8 - The liquidity risk due to documentation risk and possible implicit support should be taken into account in the overall liquidity risk management framework. In particular, covenants in contracts for complex financial products, such as those related to securitisation and/or 'originate to distribute' business, should be identified and addressed explicitly in liquidity policies. Institutions should consider whether SPV's/conduits should be consolidated for liquidity management purposes. The related liquidity risk should be determined by stress tests and addressed in an appropriate Contingency Funding Plan. Institutions' liquidity management should consider explicitly the extent to which contingent liquidity risk should be addressed by readily available liquidity reserves as opposed to other counterbalancing capacity. Covenants linked to supervisory actions or thresholds should be strongly discouraged.

We agree that liquidity risk arising from off balance sheet commitments whether explicit or implicit are an essential part of the data collection process for liquidity risk management. We believe IT systems should be built to accommodate that information. They can then be collected readily as part of the "contractual" data collection process and assumptions overlaid as the normal and stress positions are assessed. To that end we do not see that such exposures are any different from on balance sheet exposures.

Recommendation 9 - In order to ensure sound collateral management institutions should:

- have policies in place to identify and estimate their collateral needs as well as all collateral resources, over different time horizons;
- understand and address the legal and operational constraints underpinning the use of collateral, including within control functions;
- have an overall policy, approved by senior management, that includes a conservative definition of collateral and specifies the level of unencumbered collateral that should be available at all times to face unexpected funding needs;
- implement these policies and organise collateral management in a way that is suited to the operational organisation.

Collateral is used in a variety of ways e.g.:

- to support settlement systems
- in repo/reverse type transactions
- to reduce credit exposure on e.g. derivative transactions
- · to support central bank facilities
- as a buffer of liquidity

It is clear that a bank must be able to identify what collateral is available to generate liquidity in times of stress in the same way it must be aware of any collateral calls that occur in such times.

Recommendation 10 - Institutions should have systems that adequately reflect the procedures and processes of different payment and settlement systems in order to ensure effective



monitoring of collateral, at the legal entity level as well as at the regional or group level, depending on the liquidity risk management in place.

See Recommendation 11

Recommendation 11 - Regardless of whether institutions use net or gross payment and settlement systems, they should manage intraday liquidity on a gross basis, due to the time necessary to have cash available and collateral posted.

Intra day exposures are supported by collateral placed into settlement systems and controlled by close monitoring of payments through the settlement systems. The amount of collateral required is based on exposure to the flows of a group of counterparties allowing for the off-setting nature of the portfolio effect and the market best practices (e.g. in the UK 50% of the values need to be processed by noon and 75% by 2.30pm). Whilst this can increase and decrease during the day, a bank should utilise experience of the normal flows, the communication processes with relationship managers and clients to forecast large intra payment needs (i.e. have processes in place to manage peaks), and have controls to ensure the exposure to any one counterparty does not exceed intra day limit for that counterparty. This latter ensures that, if one counterparty were to become insolvent intra day, the contagion impact is restricted to the agreed intra day credit limit and not the totality of all payments processed on behalf of that counterparty during the day.

It is clear that a bank will have a minimum need for collateral to support its settlement activity and that this should be seen as separate from any liquidity buffer held against stress events. However, banks may choose to put more collateral into the payments systems than the minimum it needs to support the systems to enable fast processing of larger payments particularly where market conditions are running normally. There is a danger of forcing banks to treat ALL collateral in payment systems as ring-fenced i.e the minimum it needs plus discretionary amounts. If this happens banks may look to minimise collateral in settlement systems and this could slow down the settlement process.

This risk could be further exacerbated if banks look to recover the cost of intra day liquidity through charging those counterparties who are, for example, time sensitive

Para 128 is particularly unclear and we believe should be reworked to make the above clear.

Recommendation 12 - Institutions should adopt an operational organisation to manage short-term (overnight and intraday) liquidity within the context of strategic longer-term objectives of structural liquidity risk management. Institutions should also set up continuous monitoring and control of operations, assign clearly defined responsibilities, and establish adequate back-up procedures to ensure the continuity of operations. Special attention should be paid to monitoring sources of unexpected liquidity demands under stressed conditions.

See Recommendation 11

Recommendation 13 - Institutions should verify that their internal methodology captures all material foreseeable cash inflows and outflows, including those stemming from off-balance sheet commitments and liabilities. They should assess the adequacy of their methodology to their risk profiles and risk tolerance. Internal methodologies should be tested regularly according to predefined policies. If assumptions or expert opinions are used, they should also be assessed regularly. These reviews should be documented adequately and their results communicated to senior management.

Agreed

Recommendation 14 - Institutions should conduct liquidity stress tests that allow them to assess the potential impact of extreme but plausible stress scenarios on their liquidity positions and their current or contemplated mitigants. They should regularly project cash



flows under alternative scenarios of various degrees of severity, taking into account both market liquidity (external factors) and funding liquidity (internal factors). To provide a complete view of various risk positions, stress testing of other risks may be usefully considered in constructing 'alternative liquidity scenarios'. When assessing the impact of these scenarios on their cash flows, institutions should rely on a set of reasonable assumptions that should be reviewed regularly. The results of stress tests should be reported to senior management and used to adjust internal policies, limits, and contingency funding plans when appropriate.

Before any stress test can be undertaken a bank must first collect data on a contractual basis from across all its businesses. Once that has been done the bank should set out how it expects normal behaviour to impact the resulting liquidity risk. These normal assumptions should be clearly documented and can be based on historical data – since, by definition, they represent for customers, for example, what they have done previously. Stress testing will then take those normal assumptions and tailor them to the particular stress scenario being tested. Some stress information can be readily based on historical observation – e.g. volatility of the value of collateral – whilst others will, of necessity, be based on subjective assumptions. The important thing is that the normal assumptions are used as a starting base and the movement away from the norm is recorded together with the underlying argument for the move in the particular stress scenario.

Stress testing of more likely scenarios helps design contingency plans. For example, a one or two notch downgrade of long term credit ratings will highlight additional collateral calls under contractual arrangements and require the bank to consider what business lines continue to make sense.

More severe stress testing is linked to the level of liquidity risk tolerance a bank might have. For example, in stressing a run on retail deposits a bank might decide it will have a liquidity buffer sufficient to meet, say, a 1% daily outflow over a 1 month period but not a 2% per day buffer. Another extreme example might be that it will hold a buffer equal to 50% of wholesale funds maturing in the next x number of days but not 75% etc.

One other advantage of running such stress tests is to determine whether the position is improving or worsening.

Recommendation 15 - Institutions should have adequate contingency plans, both for preparing for, and for dealing with a liquidity crisis. These procedures should be tested regularly in order to minimise delays resulting from legal or operational constraints, and to have counterparties ready to be involved in any transaction.

In testing liquidity contingency plans banks need to be careful (particularly in the current climate) that they do not send the wrong messages to the market. For example, sales of liquid assets or utilisation of credit lines – particularly with central banks - could indicate to the market that the bank has a problem. It may be better, in some instances, for the central bank to coordinate a contingency rehearsal as has happened for some operational risks.

Recommendation 16 - Liquidity buffers are of utmost importance in time of stress, when an institution has an urgent need to raise liquidity within a short timeframe and normal funding sources are no longer available or do not provide enough liquidity. These buffers should be sufficient to enable an institution to weather liquidity stress during its defined 'survival period' without requiring adjustments to its business model.

Liquid asset values can reduce in a market event, no matter what the quality of the assets is. This also needs to be factored in when evaluating the value of the liquidity buffer.

Regulators should recognise that some assets can be regarded as liquid in many scenarios but only a very few will be liquid in all circumstances.



- An illiquid asset is placed in the maturity ladder at its final maturity date, whereas a proportion
 of the value of a liquid one will be brought forward in the ladder usually to the very short
 term: overnight to 1 week. The remainder of the asset's value will be left at its final maturity
 date
- As stress tests are undertaken so the "haircut" might be increased to recognise the increasing "forced sale risk".
- In extreme scenarios the only buyer or repo counterparty left to a bank will be the central bank. This implies that the extent to which an asset is acceptable as collateral by central banks will influence what a bank includes in its liquidity buffer. Therefore, if it is not clear what will be eligible (in market stress events, in particular) it becomes more difficult for a bank to manage its liquidity buffer cost effectively.

It is also worth pointing out that any liquidity generated by sale or repo of the liquidity buffer must be capable of being used in any of the jurisdictions in which the bank operates. Where this is not the case – in countries with "non fungible currencies", for example, or where regulation prevents ready cross border funds flow - a bank will be forced to hold a local pool of liquidity.

Recommendation 17 - Institutions should actively monitor their funding sources to identify potential concentrations, and they should have a well diversified funding base. Potential concentrations should be understood in a broad sense, encompassing concentrations in terms of providers of liquidity, types of funding (secured vs. unsecured), marketplaces, and products, as well as geographic, currency, or maturity concentrations.

Again we agree with this proposal. It is important in our view that a bank recognises what capacity it has in normal times and then reviews how that capacity will change in the differing stress scenarios it undertakes. From that analysis a bank should be able to determine if it is overly reliant on anyone source of funds when assessing its liquidity risk tolerance and then to take steps to reduce that risk.

Recommendation 18 - Institutions should have policies and procedures that provide for the disclosure of adequate and timely information on their liquidity risk management and their liquidity positions, both in normal times and stressed times. The nature, depth, and frequency of the information disclosed should be appropriate for their different stakeholders (liquidity providers, counterparties, investors, rating agencies, and the market in general).

There is a need to balance public disclosure of quantitative information with confidentiality. In setting regulatory quantitative measures it is recognised that one size does not fit all and therefore the publication of any quantitative measure is open to misinterpretation. Furthermore, in stressed conditions a bank's contingency plan will expected to make use liquidity buffers to supply liquidity. If a bank is forced to publish how it has used those buffers there is the possibility that observers assume that the bank has a problem. The buffer then becomes the minimum level of liquid assets it must have – i.e. the liquidity buffer is no longer liquid!

Recommendation 19 - Supervisors should have methodologies for assessing institutions' liquidity risk and liquidity risk management. Appropriate resources should be allocated specifically to supervising liquidity risk and how it is managed by institutions.

Recommendation 20 - When setting priorities for the supervision of liquidity risk, supervisors should take into account:

- the liquidity risk profiles of institutions, in order to apply a proportionate approach to their supervision; and
- the level of systemic risk that they present.



Recommendation 21 - When assessing an institution's liquidity risk profile, supervisors should pay special attention to the institution's process for identifying all liquidity risks and – at a minimum – to its reliance on wholesale sources of funding, the concentration of funding sources, the level of maturity transformation, the position within a group, and, more generally, its business profile, risk tolerance, and stress resistance. The overall exposure to other risks and its possible negative impact on the level of liquidity risk should be analysed in conjunction with the institution's funding profile. Special attention should be paid to collateral management.

Recommendation 22 - Supervisors should verify the adequacy and effective implementation of the strategies, policies, and procedures setting out institutions' liquidity risk tolerance and risk profiles, and ensure that they cover both normal and stressed times.

Recommendation 23 - When assessing the quality of liquidity risk management, supervisors should pay particular attention to the adequacy of the institution's liquidity risk insurance, especially for stressed situations. Supervisors should pay particular attention to the marketability of assets and the time that the institution would actually need to sell or pledge assets (taking into account the potential role of central banks).

Recommendation 24 - Supervisors should verify that institutions have dedicated policies and procedures in place for crisis management. Supervisors should pay particular attention to the existence of appropriate stress-tests, the composition and robustness of liquidity buffers, and the effectiveness of contingency funding plans. In particular, supervisors should verify that robust and well-documented stress tests are in place and that their results trigger action. The Assumptions used should be appropriate and sufficiently conservative, and regularly reviewed. Supervisors should check that contingency funding plans build on the stress tests exercises and are regularly tested.

Recommendation 25 - Supervisors should consider whether their quantitative supervisory requirements, if any, could be supplemented or replaced by reliance on the outputs of institutions' internal methodologies, providing that such methodologies have been adequately assessed and provide sufficient insurance to supervisors.

Recommendation 26 - Under the proportionality principle, supervisors may consider their standardised regulatory approach (if they have one), as a key element in the internal liquidity risk management of less sophisticated institutions.

Recommendation 27 - When using internal methodologies for supervisory purposes, supervisors should assess the adequacy of governance, the soundness of methodologies, conservatism, completeness, the timeliness of reviews, the robustness of stress testing, and resilience to liquidity crises, taking into account external constraints on the transferability of liquidity and the convertibility of currencies.

Recommendation 28 - Supervisors should have at their disposal precise and timely quantitative and qualitative information which allows them to measure the liquidity risk of the institutions they supervise and to evaluate the robustness of their liquidity risk management.

Recommendation 29 – The supervisors of cross-border groups should coordinate their work closely, in particular within the colleges of supervisors, in order to better understand the groups' liquidity risk profiles.

Recommendation 30 - Supervisors should use all the information at their disposal in order to require institutions to take effective and timely remedial action when necessary. They should explore the possibility of having tools that provide them with early warnings, facilitating preventive supervisory action.



Whilst we broadly agree with the above 12 recommendations we would add one other comment. Regulators will have a unique view of how banks manage liquidity across their jurisdiction and will also be able to discuss that with regulators from other jurisdictions. From that information they should be able to determine best practice and to apply a "comply or explain" approach when challenging banks who they believe to have sub-optimal policies.