

July 29, 2008

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Mr. Arthur G. Angulo  
Co-Chairmen, Working Group on Liquidity  
Basel Committee on Banking Supervision  
Bank for International Settlements  
Centralbahnplatz 2  
CH-4002 Basel  
Switzerland



Re. *Principles for Sound Liquidity Risk Management and Supervision, June 2008* –Draft for consultation

Dear Sirs:

This letter is submitted in response to the Basel Committee’s consultation draft *Principles for Sound Liquidity Risk Management and Supervision* (“the consultation paper”). This letter is based on discussions with members of the IIF’s Working Group on Conduits and Liquidity Risk Issues and our Task Force on Home/Host Implementation Issues.

In summary, Institute members are in agreement with the main thrust of the sound practices set forward in the consultation paper while voicing some concerns, arranged by reference to the relevant principles. A few general comments regarding the text precede the discussion of specific issues.

For a further discussion of many of the specific technical matters raised in the consultation paper, we refer to the recently published *Final Report of the IIF Committee on Market Best Practices* (July 2008), which incorporates and updates the recommendations of the Institute’s *Principles of Liquidity Risk Management* (March 2007).

We are pleased that the consultation paper is very constructive and appears generally consistent directionally with the liquidity-risk management views expressed in the IIF’s reports on liquidity, and that the principles contained in the text, if adopted, should contribute to harmonization of practice, both in the industry and among supervisors. We particularly applaud the recognition of the need to focus on each bank’s own liquidity-risk profile and management models, rather than external quantitative standards. However, a concern is that each of the seventeen high-level principles contains many sub-principles and clarification is needed as to the principles-based intent of this paper and the scope of such sub-principles to avoid overly prescriptive interpretation that would lead to inappropriate “micro” regulation.

## General comments

A fundamental point that cannot be overemphasized is that any new liquidity regulation or supervisory approaches should be harmonized to the maximum extent across all the major markets. This is, of course, the point of the Basel process, but we stress our view that international harmonization should be among the highest long-term priorities of all authorities working on these issues. While we realize that the BCBS cannot override local regulations, we consider that its efforts could provide leadership in the elimination, at least over time, of remaining blanket quantitative liquidity tests. It is very important, in the interest of efficiency from the firms' point of view, in the interest of effectiveness of regulation and in the interest of reducing liquidity issues in the system generally that there not be major differences of regime across the major systems and currencies.

We find very positive paragraph 6 of the consultation paper, stating that implementation should be based on "the size, nature of business and complexity of a bank's activities." This is consistent with the position taken in the IIF reports on liquidity-risk management, which stressed that liquidity risk, by its nature, is specific to the business mix and circumstances of each firm and is not easily susceptible to simple, one-size-fits-all measurement or management.

We were, however, concerned to read in the same paragraph that, "the Basel Committee fully expects banks and national supervisors to implement the revised principles promptly and *thoroughly*" (emphasis added). While prompt implementation of appropriate liquidity-risk management solutions by each firm where they are not already in place is clearly important in light of recent market events, and called for by the IIF's July 2008 report, the suggestion both of this language and of the imperative tone of much of the discussion may lead individual line supervisors or even agencies to impose them without the flexibility that is essential in effective liquidity-risk management. While we do not believe this is the Committee's intent, we do believe the risk is real. We would advocate a rigorous "Pillar 2" type of dialogue on liquidity-risk issues, which would enable firms to explain their own approach to the various issues raised in the consultation paper and in the IIF reports. While we believe supervisors should challenge firms' explanations against this report and indeed the Institute's own recommendations, we also urge avoidance of detailed implementation of the language of the report on a rote basis.

The draft principles are targeted, of course, at each regulated firm's management of its own liquidity risks; however, as the recent turmoil has amply demonstrated, liquidity problems have a market-wide, as well as a firm-specific dimension. Recognition of both dimensions is important, and, as further discussed in the 2008 and 2007 IIF reports, the market-wide dimension requires an expanded role for central banks. While it continues to be the case that banks must do rigorous liquidity-risk management and not count inappropriately on central bank facilities (particularly lender-of-last-resort facilities aimed at individual firms in need), it is also the case that, in a market-based, post-crisis system, firms will necessarily need to be able to understand and plan for the role of

central banks in providing generally available facilities aimed at facilitating the liquidity of the market as a whole.<sup>1</sup>

A very fundamental point is that management of liquidity risk through the amassing of liquidity “buffers” of liquid assets and available collateral has a cost, both to the firm, and, indirectly to the overall liquidity and credit capacity of the system. It would be possible to envision a system of highly liquid institutions that would be protected from all but the most extreme risks, but could not generate enough income to remunerate their capital. It is especially important at a time when markets must be rebuilt and credit to the real economy must be sustained that the cost trade-offs of liquidity-risk management be explicitly recognized. We note that the *Second Part of CEBS’s Technical Advice to the European Commission on Liquidity Risk Management* (17 June 2008) does include useful recognition of this need for balance at several points.

We are pleased to note that at several points the consultation draft takes into account that it is appropriate to differentiate material or significant businesses or exposures. We are concerned, however, that some of the language could be clearer that materiality is always an issue. At certain points, it seems to say that “all” positions or exposures, etc., should be captured, but this is neither practical nor necessary nor proportionate in many cases. Insufficient stress on the distinction between material and non-material issues could lead to important modeling, IT and practical challenges with little or no added value. As a matter of resource allocation and risk-based management, there is a clear need to focus on material exposures. Each firm should define materiality as appropriate in its own context, subject, of course, to rigorous supervisory review.

#### Governance of liquidity risk management (Principles 2-4)

*Principle 2* states that “a bank should clearly articulate a liquidity risk tolerance that is appropriate for its business strategy and its role in the financial system.” This principle is congruent with some of the most important findings of the IIF reports on liquidity and we share the conviction that banks must rise to the challenge this principle represents. We want, however, to make a few observations that are important to the understanding of this principle. First, with respect to liquidity risk, a firm’s risk tolerance may change depending on market conditions. Provided change is congruent with the firm’s liquidity-risk and risk-management strategies and practices, this is entirely appropriate and necessary. Second, while banks, especially major banks, must clearly be accountable for their “role in the financial system,” which is to say, the nature and effects of their business activity in the system, and while part of the point of regulation is to create systemic incentives that might not otherwise be strong enough taking a narrow focus on each firm’s own interests, firms cannot be expected to internalize systemic risk to an

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<sup>1</sup>Paragraph 125 is certainly correct about being realistic about cash available against central bank facilities, and about not relying on central banks’ altering the terms on which central bank facilities would be available. On the other hand, as the recent IIF report advocates, it would make a substantial contribution to management of market-liquidity issues for there to be “constructive clarity” about market-focused liquidity facilities (as opposed to lender-of-last-resort lending for specific institutions).

unlimited extent. There is a difficult balancing to be done here, but while each firm should have a duty to take into account systemic issues in its liquidity-risk management, firms cannot be held responsible for the system as a whole.

*Principle 4* requiring firms to incorporate liquidity costs relating to governance of liquidity risk management is generally consistent with the IIF reports; however, a cautionary note must be added that there will, in many cases, be substantial difficulty in complying with the detailed discussion of paragraphs 19 and 20 with respect to the quantification of costs, benefits and risks, and while the principle sets out appropriate goals, reasonable flexibility will be required by supervisors in evaluating how banks go about meeting this principle. Furthermore, in many instances, liquidity costs, benefits, and risks can only be considered and reflected qualitatively and not quantified and incorporated explicitly; thus, the term “incorporate” may be somewhat misleading and interpretation may be needed to assure proper understanding of the scope of this principle. In this regard, it is important to keep in mind that both costs and risks may be much harder to establish in flush times; indeed, one of the problems before July 2007 was that liquidity had so little cost that it became difficult to use it as a lever for internal discipline; thus a good deal of judgment is required in meeting the goals of the principle.

#### Measurement and management of liquidity risk (*Principles 5-12*)

We generally agree with the framework of *Principle 5*, which requires banks to have “sound process for identifying, measuring, monitoring and controlling liquidity risk” but note that firms need to make reasonable, risk-based decisions on where to focus their resources, based on a materiality analysis, as discussed above. Moreover, *Principle 5* should expressly recognize the advantages of a diversified funding base (see discussion of *Principle 7*).

Paragraph 23 correctly identifies a number of issues that need to be considered; however, the wholesale/retail distinction may be too simplistic for some purposes. The point might be better focused on “core” or “relationship” deposits, rather than just “retail” deposits, because there is certainly a range of commercial and business deposits that may be very stable and as “sticky” as retail deposits. Indeed, as a related matter, paragraph 69 stresses the importance of developing relationships with investors.

Paragraph 32 is concerning in referring to “potential non-contractual obligations.” The word “obligations” will be, in many cases, conclusory and does not suggest the fact that decisions to take actions that are not mandated by contract is highly judgmental and dependent upon the facts and circumstances that may arise when an issue comes up. We are concerned that the term “obligations” may prejudice significant risk-transfer and consolidation issues. This is not to say that liquidity-risk planning and stress testing should not take such possibilities into account; indeed, they must, as discussed in the IIF reports. It may be that there are programs “where the bank considers such support critical to maintaining ongoing access to funding,” and under those circumstances, which should become apparent in each bank’s own analysis, perhaps the word “obligation” is correct.

In general, however, it is a matter of evaluating contingencies that might lead to a judgment in favor of supports being taken, rather than something to which the term “obligation” can apply in its usual meaning.

The discussion of Special Purpose Vehicles (SPV) at paragraphs 35 to 37 states that firms “should decide, on a case by case basis, whether it is more appropriate to include an SPV’s inflows (maturing assets) and outflows (maturing liabilities) in its own liquidity planning on a gross/consolidated basis or net/solo basis.” The suggestion that firms should consider measuring these types of liquidity risks on a gross or consolidated basis with the rest of its balance sheet may be misleading. Contingent liquidity risk related to such exposures has to be managed, controlled and mitigated but consolidating on- and off- balance sheet risk exposures is not a risk-based approach because positions that are already on balance sheets would be combined in a single report with positions that generally have a remote chance of having to be combined. At worst, this route should only be considered in analysis of circumstances when there is an elevated chance that this could occur (i.e., not under normal course of business but under extreme stressed conditions). As discussed in the IIF reports, there are more effective ways to recognize and manage this risk.

We agree on the need for “early warning indicators” as discussed at paragraphs 51 through 53, but believe that the phrase, “cause an assessment and potential response by management,” is susceptible to over-interpretation. Focus should be on elevation of concerns and thoughtful assessment of them, but the actions to be taken, if any, need to reflect the particular facts and circumstances, and substantial room must be left for management judgment.

Related to *Principle 6* is the issue discussed in the recent IIF reports of “trapped pools of liquidity”: the fact that surplus collateral or funding may be available in national systems but not available to firms on a group-wide basis for legal, regulatory or practical reasons. While it may not be possible in present circumstances for a variety of reasons entirely to eliminate this problem, it would be constructive to build a consensus that liquidity resources needed for local purposes should be analyzed on a “minimum necessary” basis to free up to the greatest extent possible global pools of collateral or funding to protect against liquidity crisis and contagion in the global system, consistent with the recognition by paragraph 56 of the consultation paper, the recent FSF report and many other statements that group-wide management of liquidity risk has become essential (see page 72 of the recent IIF report).

We are concerned that paragraphs 58 and, especially, paragraph 59, take a one-sidedly negative view of intra-company liquidity and funding. While the pressures and issues discussed in this paragraphs are real and, of course, need to be taken into account in firms’ planning and stress testing, the ability of a group to move resources among branches and subsidiaries will often be an important source of strength, one that should be recognized and supported (within appropriate prudential bounds). Indeed, as shown by the 2007 IIF liquidity report, group resources, if effectively available and not blocked in one entity or another, can contribute substantially to the group’s ability to mitigate

liquidity strains as they arise. In other words, the paper should encourage, rather than restrict the ability of firms to borrow from entities that have excess liquidity on an intrabank basis. Reduction of barriers to the transfer of liquidity enhances the ability of firms to perform effective liquidity-risk management and reduces risk in the system overall. In addition to facilitating liquidity-risk management and increasing the flexibility and resilience of the firm's liquidity response, other benefits of more open intra-company funding would include lower third-party credit exposures, reduced capital requirements, reduced usage of unused funding capacity and more effective balance-sheet management.

*Principle 7*, is correct in focusing on the need for a funding strategy that provides effective diversification of funding sources.<sup>2</sup> However, as is often the case with broad liquidity principles, care must be taken in practice. Under some circumstances, a mechanistic focus on diversification – which is undoubtedly desirable – could result in a diminution of a firm's market participation, and thus of market liquidity, or negative signals that might be misinterpreted. As in so many other cases, judgment is required in application of the principle.

Paragraphs 66 and 67 are generally correct in the conservatism that they advise; however, we would caution that firms must consider, depending on market conditions, whether testing market access could have an adverse effect on market perceptions.

*Principle 8* addresses intraday risks, which are not addressed in the IIF reports on liquidity-risk management. While the discussion under *Principle 8* is generally helpful, it should be noted that many aspects of management of intraday risk is in effect a separate discipline requiring detailed operational and credit knowledge and will be managed by different groups within a firm, in coordination as a policy and operational matter with funding-risk management issues management groups. This point is only noted as a practical matter for supervisory exercises, as intraday policies will often be stated separately from general liquidity-risk policies.

In *Principle 9*, as a minor matter of language, we note that in most cases the physical location of collateral is not an issue; rather, what matters is in what custody or settlement system the collateral is held and what operational and timing requirements or other conditions would apply to pledging it to relevant pledgees.

Paragraph 88 discusses the assessment of the liquidity of “tied” assets and paragraph 124 lists some general characteristics that tend to increase the liquidity of a given asset. In both instances, it should be explicitly recognized that a firm's capability and capacity to fund these assets on a secured basis is another key determinant of the degree of liquidity of these assets. Other recent consultation papers from other public sector entities explicitly recognize this point.

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<sup>2</sup>Indeed, many firms have experienced direct and very tangible benefits from diversification of funding sources in the recent market turmoil. Liquidity diversification benefits have held up quite well, and performed better than certain apparent credit diversification benefits, which were shown to be susceptible to greater-than-anticipated correlations.

Paragraph 92, which accompanies *Principle 10*, states that “the results of regular stress testing should form the basis for taking remedial or mitigating actions to limit the bank’s exposures, build up liquidity buffers and adjust its liquidity profile to fit its risk tolerance”. We note that the term “buffer” is elastic and there is a need to reach a better common understanding of what is a liquidity buffer, as discussed further with respect to *Principle 12*.

Additionally, it should be noted that, for conservation of resources and risk-management prioritization, firms should generally be expected to conduct stress tests on a solo basis at the unit level (as opposed to the parent level) if meaningful lessons can be learned that would otherwise be missed when considering that unit in the context of the parent stress test, or when required by regulators. The extent to which this is likely to be meaningful will depend on the degree to which the unit operates independently from the parent and whether it receives or places most of its funds from/with third parties, not internal group units. The more integrated the unit is, the less meaningful separate stress tests will be.

As paragraph 97 indicates, judgment plays an important role in the design of stress tests. It also plays an important role in the evaluation and use made of stress tests. As discussed at some length in the recent IIF report, stress testing should be flexible and based on a creative dialogue between the risk and liquidity-management departments and senior management to explore possible outcomes, including from severe scenarios that would under most circumstances be implausible. It is important to note that good stress testing must include the possibility that it may be appropriate not to take specific action in response to a stress test, provided that it is evaluated carefully. We are concerned that the suggestion that severe scenarios should not be “discounted” could be misinterpreted to mean that such tests need obligatorily to be acted upon as well as analyzed. Such an interpretation would be highly damaging to the ability to conduct exploratory stress testing within firms.

Paragraph 134, referring to “specific and meaningful actions to mitigate” issues, raises the same concern.

*Principle 11*, with respect to Contingency Funding Plans (CFP), is generally appropriate and helpful; however, we would note that, contrary to the implication of paragraph 109, CFPs are essentially an analytical document and while it may be useful to identify when and how each of the relevant actions may be activated, room must certainly be left for judgment as to how to apply measures if a crisis actually occurs. The scope and manner of various possible actions under the CFP should certainly be considered, but locking in mandatory priorities or procedures “detailing when and how each of the actions can and should be activated” could lead to serious problems in a real event. The same point comes up in paragraph 113. Although it is appropriate to designate clear roles in decision-making on liquidity disruptions, there should not be any suggestion that prescriptive actions can or should be defined in advance of a crisis.

Paragraph 115 is perhaps misplaced and might better be included in the discussion of stress testing rather than CFPs.

With regard to *Principle 12*, the concept of liquidity “cushions” is fundamental but has proven difficult to define precisely. Close attention is warranted, however, given the importance of the “cushion” or “buffer” concept in the FSF and other recent official-sector pronouncements. The discussion under *Principle 12* is helpful as a point of departure, but we believe that, before the concept becomes fully useful as a prudential matter, even on a principles basis, more refinement and discussion will be necessary.<sup>3</sup>

As a general matter, “cushions” would be built up in benign conditions and drawn down in stressful times, when it would be difficult to build up, but these (counter)cyclical effects should be given more attention to avoid undue pressures in times when buffers are being drawn down.

We consider the use of the term “insurance” in *Principle 12* and paragraph 121 unfortunate and possibly misleading. As discussed at length in the IIF reports, firms need to have access to liquidity to meet their rigorously analyzed needs; however, describing those resources as “insurance” may overlook the cost-benefit trade-offs and reasonably prudent assessment within the firm’s risk tolerance that are in fact required. This is in fact recognized in paragraph 122 but we are concerned that the principle may nonetheless be overstated.

Assets available for “cushion” purposes would typically be cash and unencumbered, highly liquid assets available to meet unanticipated excess by either sale or pledging, under a variety of liquidity stress scenarios. Recent markets have, of course, affected assumptions about what can be considered liquid for these purposes, and have also shown the importance of central bank liquidity facilities in extraordinary conditions.

As a matter of normal liquidity-risk management, assets deemed liquid before their contractual maturities are given haircuts to recognize sale risk. “Cushion” assets would be expected to be assets that are normally expected to be highly liquid, with stable haircuts under most or all possible scenarios. Yet the “cushion” so understood could be very restricted indeed. It should not rule out other assets’ being given liquidity value under normal or less-extreme stressful conditions. It is appropriate to make a distinction between assets that are sufficiently liquid in all conditions and those that are liquid in many but perhaps not all conditions that are available to help manage liquidity. The firm’s liquidity-risk appetite should recognize these distinctions, assigning the highest price to the scarcer buffer assets.

There is, however, clearly a risk of setting the liquidity-cushion test at such a demanding level as to be incompatible with the firm’s overall appropriate profitability goals, or to make it uneconomic to participate in the very activities that sustain the liquidity of the overall market, or to maintain an orderly and conservative but realistic liquidity ladder.

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<sup>3</sup>The recent Bank of England discussion draft on “What constitutes a reliably liquid asset in the market?”, for example, is helpful, but needs more discussion and debate with the industry.

While *Principle 10* and paragraph 122 perhaps recognize this, it should be made clearer that firms have clear strategic trade-offs to be made, within reasonable but not absolute prudential bounds. Moreover, there may be multiple constraints given different scenarios; what one can consider liquid under one scenario may not be as liquid under different, more severe scenarios. The firm may therefore set its risk tolerance differently under the various scenarios.

Similarly, although paragraph 122 alludes to the point, liquidity-buffer planning cannot be open-ended as to time; rather, it must be structured around sustaining liquidity for a planned “survival” period. Paragraph 122 refers to the duration of stresses, but these cannot be infinite.

As discussed in the IIF’s recent report, liquid assets may be held for many purposes and not all such assets need to be managed as “a ‘liquidity cushion’ or buffer” (page 55).

### Public disclosure (*Principle 13*)

We generally agree with the view that firms should provide appropriate quantitative and qualitative information as part of their disclosure policies, as described in *Principle 13* and paragraph 128. However, we remain cautious with respect to the idea of providing quantitative information about liquidity *positions*, which can be misinterpreted and, in fact, exacerbate developing weaknesses.

In addition, while firms should develop appropriate disclosures to give the market a sense of their liquidity-management practices, the IIF’s recent report advises against any reliance on formulaic quantitative information as presented in a number of Recommendations and Considerations for the Official Sector, holding fast to the concept that “there are no simple metrics or ex-ante quantitative measures that can provide adequate liquidity safeguards or adequate disclosure for internal or regulatory requirements” (page 55).”

Paragraph 129, first bullet, suggests disclosure of the “liquidity risk tolerance articulated by the board of directors.” Depending on how this might be interpreted, this would raise some of the same concerns as the idea of disclosing liquidity positions. Certainly, a quantitative statement of risk tolerance could place a firm, especially a smaller bank, in a very difficult position depending on market conditions. More broadly, risk tolerance is an important element of strategy and policy, and disclosure in anything other than the most general directional terms could have serious implications for a firm’s strategy. On this as on other disclosure points, it is important to distinguish liquidity risk (focused on cash flows) from credit and market risk (focused on revenues). Liquidity risk appetite is both qualitatively different and harder to describe; moreover, a firm’s liquidity, strategy, position and resilience can all be negatively affected by public disclosures depending on sentiment and interpretation, in ways not true of other disclosures. Of course, positions and liquidity risk tolerance issues are appropriate for disclosure to and discussion with supervisors, but public disclosures are not necessarily useful to the public or helpful from

either a systemic or a firm viewpoint, and must be approached with great caution (cf. paragraph 23).

Additionally, if adopted, *Principle 13* seems to require a greater amount of information and data to be submitted to supervisors and disclosed to the public. We believe it is important to clarify that the information and data to be disclosed must be proportionate to the risk profile of each firm and the materiality of potential impacts. This information is best garnered from a firm's own liquidity-risk management process, rather than based on prescriptive measures or pre-set disclosure templates that may not correspond to the risks or business model of the firm. Supervisors can then evaluate the appropriateness of this process and the reported liquidity positions.

#### The role of supervisors (*Principles 14-17*)

Among other Considerations for the Official Sector for regulators and supervisors presented in the recent IIF report, the Consideration presented below essentially mirrors the discussion on the role of supervisors as presented in the following principles, but, nonetheless, it is important to stress the importance of good home/host coordination in the supervision of a firm's liquidity management. This is well recognized, particularly in paragraph 143, but the point bears emphasis in any case. Good home/host coordination is a necessary complement to the consultation paper's and the FSF's appropriate emphasis on the need for liquidity risk management at the group level.

Home and host supervisors should work together to evaluate a firm's integrated liquidity positions as well as strategies, policies, procedures, and practices related to the management of global liquidity. Supervisors should check that the firm has an effective system in place to measure, monitor, and control liquidity risk and has an appropriate liquidity contingency plan on a consolidated basis and, where required by regulation or deemed appropriate by the Board of Directors, for each legal entity. As needed, supervisors should leverage the firm's internal risk reporting to obtain sufficient and timely information to evaluate the firm's level of liquidity risk. (Consideration for the Official Sector III.H; page 62).

*Principle 15* recommends that supervisors, as a sound practice, "should supplement their regular assessments of a bank's liquidity risk management framework and liquidity positions by monitoring a combination of internal reports, prudential reports and market information," While we agree with this view, we note the level of difficulty sometimes involved for those in risk management to request more frequent and non-standard reporting formats during stressed circumstances, particularly in conjunction with requests for important amounts of information by other parties (e.g., rating agencies, investors). Moreover, it will often make sense – especially for large institutions – to waive the standardized reports where they exist, as the internal reports will generally be more readily available, meaningful and useful because they are incorporated in the management process. Of course, any such waiver would imply supervisory review and approval or acceptance of the robustness of internal management and reporting systems.

*Principle 16* calls for supervisors to "intervene to require effective and timely remedial action by a bank to address deficiencies in its liquidity risk management processes or

liquidity position.” We are concerned that requiring the bank to operate with higher levels of capital does not solve a potential liquidity problem. Requiring more capital should explicitly be seen as a kind of “ultimate measure” to be used on a Pillar 2 basis only if all other required actions have not been executed by the bank. This is implied by the last bullet of paragraph 140, but we are concerned that the exceptional and remedial character of requiring additional capital is not clearly emphasized, though the fact that capital is not a solution for liquidity is recognized.

*Principle 17* is constructive and helpful but communications with, and potential actions by, rating agencies also need to be taken into account.

We thank you for your consideration of these issues raised in conjunction with the consultation period of this consultation paper.

We stand ready to meet with you to discuss any aspect of this letter, and would look forward to the opportunity to meet with the Basel Committee Working Group on Liquidity or representatives thereof prior to the finalization of the *Principles for Sound Liquidity Risk Management and Supervision*.

Should you have any questions about this letter, please contact the undersigned (dschraa@iif.com; +1 202 857 3312) or Seth Oppenheim (soppenheim@iif.com; +1 202 682 6447).

Very truly yours,

A handwritten signature in black ink, appearing to read "David Schraa", with a long horizontal flourish extending to the right.

David Schraa