Basel Committee Revises Basel III Liquidity Coverage Ratio

January 17, 2013

The Basel Committee has made significant **revisions** to the Basel III Liquidity Coverage Ratio ("**LCR**"). The revised LCR standards allow banks to use a broader range of liquid assets to meet their liquidity buffer and relax some of the run-off assumptions that banks must make in calculating their net cash outflows. The revised standards also clarify that banks may dip below the minimum LCR requirement during periods of stress. The Basel Committee expects national regulators to implement the LCR on a phased-in basis beginning on January 1, 2015. The Basel Committee will also press ahead with its review of the Basel III Net Stable Funding Ratio ("**NSFR**").

While the Federal Reserve has expressed its intent to implement some version of the LCR and other Basel III liquidity standards in the United States, the scope, timing and nature of U.S. implementation is currently unclear. This memorandum and the accompanying tables explore key aspects of the revised LCR standards and issues relating to their implementation in the United States.

Overview of the LCR

The Basel Committee published the original LCR standards in December 2010 as part of the Basel III reform package.[1] As shown by the formula below, the LCR generally requires a bank's stock of unencumbered high-quality liquid assets to equal or exceed 100% of its total net cash outflows over a 30-day period. At a press conference, Basel Committee Chairman Stefan Ingves noted that under the revised LCR standards, the average LCR of the world's largest banks would be approximately 125%.[2]

$$\frac{\textbf{High-Quality Liquid Assets}}{\textbf{Total } \textit{Net} \textbf{ Cash Outflows Over 30-Day Stress Period}} \geq 100\%$$

The LCR standards define what instruments constitute high-quality liquid assets (summarized by the table in **Annex A**) and prescribe standardized liquidity run-off rates that a bank must use to calculate its total net cash outflows over the 30-day stress period (summarized by the table in **Annex B**). The types of liquidity pressures that the LCR standards envision a bank experiencing during the stress period include, among others:

- withdrawals by customers from retail and wholesale deposit accounts;

[1] Basel Committee, *Basel III: International framework for liquidity risk measurement, standards and monitoring* (Dec. 2010), available **here**.

[2] According to a 2012 Basel Committee quantitative impact study ("**QIS**"), under the original LCR standards and assuming banks were to make no changes to their liquidity risk profile or funding structure, as of December 2011, the weighted average LCR for the 102 Group 1 banks (*i.e.*, internationally active banks with Tier 1 capital in excess of €3 billion) that participated in the QIS would have been 91%, while the weighted average LCR for the 107 Group 2 banks (*i.e.*, all other banks) that participated in the QIS would have been 98%. *See* Basel Committee, *Results of the Basel III monitoring exercise as of 31 December 2011* (Sept. 2012), available **here**.

- reduction in unsecured wholesale funding, short-term secured funding and funding through structured financing facilities;
- the need to post additional collateral as a result of a downgrade in the bank's external credit rating and changes in the market value of a bank's derivatives; and
- drawdowns by customers of committed credit and liquidity facilities.

Some banks and national regulators criticized the original LCR standards for their narrow definition of high-quality liquid assets, their aggressive liquidity run-off assumptions for purposes of calculating total net cash outflows, and their potential to adversely affect lending activity at a time when certain financial systems are still experiencing strains.[3] The revised LCR standards address a number of these concerns.

High-Quality Liquid Assets

The LCR standards divide high-quality liquid assets—the numerator of the LCR—into Level 1 Assets and Level 2 Assets. Level 1 Assets are intended to encompass the highest quality and most liquid assets and are generally limited to cash, certain central bank reserves and marketable securities issued or guaranteed by a sovereign or other governmental or quasi-governmental entity that receives a 0% or a very low risk weight under International Basel II's standardized approach for credit risk.[4] Level 2 Assets include comparatively riskier and less liquid public sector securities and certain private sector securities. After the application of certain haircuts, Level 2 Assets can account for no more than 40% of a bank's total high-quality liquid assets.

Eligibility Criteria: Only "unencumbered" assets may be included in a bank's stock of high-quality liquid assets. "Unencumbered" means free of legal, regulatory, contractual or other restrictions on the ability of the bank to liquidate, sell, transfer or assign the asset. According to the Basel Committee, the "unencumbered" requirement means that an asset should not be pledged (either explicitly or implicitly) to secure, collateralize or credit-enhance any transaction, nor should it be designated to cover operational costs such as rents and salaries.

Assets received as collateral in reverse repo, securities financing and derivatives transactions may be included in a bank's high-quality liquid assets, provided that the collateral is legally and contractually available for the bank's use (*i.e.*, may be rehypothecated) and any necessary adjustments are made to the bank's inflows and outflows. Assets received by a bank pursuant to its counterparty's rehypothecation of such assets, however, may not be included in the bank's high-quality liquid assets if the beneficial owner of the assets has the contractual right to withdraw those assets during the 30-day stress period. High-quality liquid assets that have been pre-positioned or deposited with, or pledged to, the central bank or a public sector entity ("**PSE**"),[5] but have not been used to generate liquidity, may be included in the bank's stock of high-quality liquid assets.

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[3] *See, e.g.*, Daniel K. Tarullo, Governor, Board of Governors of the Federal Reserve System, Statement Before the U.S. Senate Committee on Banking, Housing, and Urban Affairs (Jun. 6, 2012), available **here** (expressing concerns regarding the original LCR standards, including with respect to the narrow definition of high-quality liquid assets, liquidity run-off rates that tended to overstate certain types of liquidity risks, liquidity risks associated with trading activities that rely upon large amounts of short-term wholesale funding and the usability of the high-quality liquid asset buffer during a liquidity crisis).

[4] International Basel II refers to Basel Committee, *International Convergence of Capital Measurement and Capital Standards: A Revised Framework* (Jun. 2006), available **here**.

[5] As set out in International Basel II, PSEs include: (i) regional governments and local authorities; (ii) administrative bodies responsible to central governments, regional governments or local authorities and other non-commercial undertakings owned by governments or local authorities; and (iii) commercial undertakings owned by central governments, regional governments or local authorities.

An asset meeting the technical criteria for Level 1 or Level 2 Assets could still be excluded from high-quality liquid assets if regulators determine that the asset cannot be easily and immediately converted into cash in private markets at little or no loss of value.[6] According to the Basel Committee, with the exception of Level 2B Assets as defined below, high-quality liquid assets should "ideally" be eligible at central banks for intraday liquidity needs and overnight liquidity facilities.[7]

In addition, certain operational requirements apply to a bank's stock of high-quality liquid assets, including that the stock must be controlled by the function charged with managing the bank's liquidity (*e.g.*, the treasurer) and that the bank must possess the operational capacity to sell and monetize the assets during periods of stress. The revised LCR standards also require a bank's stock of high-quality liquid assets to be diversified among the eligible asset classes, but they provide only limited guidance as to what levels of concentration national regulators should view as problematic.

Broadening the Definition of High-Quality Liquid Assets: Under the original LCR standards, private sector Level 2 Assets were limited to senior corporate debt securities and covered bonds that, among other eligibility criteria, have an external credit rating of AA- or higher. The revised LCR standards expand the scope of private sector securities that are eligible for inclusion in Level 2 Assets. Specifically, Level 2 Assets are further divided into Level 2A Assets, which include Level 2 Assets under the original LCR standards, and a new set of Level 2B Assets.[8] Under the revised LCR standards, Level 2B Assets are subject to larger haircuts than Level 2A Assets and can count for no more than 15% of a bank's total high-quality liquid assets; they must also be included in the 40% cap on Level 2 Assets. Level 2B Assets include:

- certain residential mortgage-backed securities ("**RMBS**") with an external credit rating of at least AA, provided that neither the securities nor the underlying assets have been issued or originated by the banking organization itself or any of its affiliates;
- certain "plain-vanilla," senior corporate debt securities (including commercial paper) that do not meet the Level 2A requirements but have an external credit rating between A+ and BBB- or, in the absence of an external credit rating, a corresponding internal rating for probability of default (PD) purposes; and
- certain exchange-traded common equity.

Neither the corporate debt securities nor the common equity may be issued by a financial institution or any of its affiliates. Covered bonds, although qualifying for inclusion in Level 2A Assets, do not appear on the list of qualifying Level 2B Assets.

Although the addition of Level 2B Assets generally broadens the scope of what constitutes high-quality liquid assets, the extent of that expansion will be determined by the precise eligibility criteria for each type of Level 2B Asset. In some cases, those criteria may be quite restrictive. For instance, for RMBS to

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[6] To assist national regulators in making this type of determination, the LCR standards set forth some general characteristics of high-quality liquid assets, which relate to their level of risk, ease and certainty of valuation, level of correlation with risky assets, being listed on a developed and recognized exchange and certain market-related characteristics.

[7] The Basel Committee, however, noted that central bank eligibility does not by itself constitute the basis for categorizing an asset as a high-quality liquid asset.

[8] The Basel Committee noted that national regulators may choose whether to recognize Level 2B assets as high-quality liquid assets at their discretion. Of course, implementation of *any* Basel Committee standard is at the discretion of national regulators. The fact that the Basel Committee expressly characterized the Level 2B category as discretionary, however, may imply an expectation that some jurisdictions will choose to implement the narrower definition of high-quality liquid assets under the original LCR standards.

qualify as Level 2B Assets, the underlying mortgages must be "full recourse"—*i.e.*, in the event of foreclosure, the borrower remains fully liable for any shortfall between the value of the mortgage and the amount recouped on the sale of the property. However, mortgages issued in a number of U.S. states, including California, are generally considered to be non-recourse.[9]

A more detailed summary of assets that qualify as high-quality liquid assets under the revised LCR standards can be found in **Annex A**.

Total Net Cash Outflows and Liquidity Run-Off Assumptions

A bank's total *net* cash outflows—the denominator of the LCR—is generally the difference between the bank's total expected cash outflows and total expected cash inflows during the 30-day stress period, as shown by the formula below. The LCR standards prescribe uniform assumptions regarding the effect of the liquidity stress period on a bank in the form of run-off and inflow rates across various classes of assets and liabilities.

Expected cash *outflows* are generally calculated by multiplying the outstanding balances of various types of on- and off-balance sheet liabilities by their assumed run-off or draw-down rates during the 30-day stress period. Expected cash *inflows* are generally calculated by multiplying the outstanding balances of various types of contractual receivables by the rates at which counterparties are assumed to make payments to the bank during the 30-day stress period. Total expected cash inflows cannot exceed 75% of total expected cash outflows. This cap on expected cash inflows effectively sets a floor on a bank's stock of high-quality liquid assets at 25% of the bank's total expected cash outflows.

Total Net Cash Outflows = Total Expected Cash Outflows – the lesser of { **Total Expected Cash Inflows** ***or*** **75% of Total Expected Cash Outflows** }

In the revised LCR standards, the Basel Committee has relaxed a number of liquidity run-off assumptions. Among the key changes are the following:

- ***Retail Deposits*:** The assumed run-off rate for stable retail deposits protected by robust, pre-funded deposit insurance schemes may be reduced, at a jurisdiction's option, from 5% to **3%**.
- ***Deposits and Other Unsecured Funding from Certain Wholesale Customers*:** Deposits and other unsecured funding from sovereigns, central banks, PSEs, multilateral development banks ("**MDBs**") and *non-financial* corporate customers that are not categorized as small business customers generally have an assumed run-off rate of **20%** if the entire amount of the deposit is fully insured. Other deposits and unsecured funding from such customers have an assumed run-off rate of **40%**. Under the original LCR standards, a 75% run-off rate generally applied to deposits from such customers.
- ***Inter-Bank and Inter-Financial Institution Credit and Liquidity Facilities*:** The original LCR standards required a bank to assume that, during the 30-day stress period, banks and financial

[9] *See* Andra C. Ghent & Marianna Kudlyak, *Recourse and Residential Mortgage Default: Theory and Evidence from U.S. States*, (Federal Reserve Bank of Richmond Working Paper No. 09-10R, 2011), available **here**. The authors summarize the mortgage foreclosure procedures and anti-deficiency statutes in the 50 states and the District of Columbia and classify 11 states (Alaska, Arizona, California, Iowa, Minnesota, Montana, North Carolina (for purchase mortgages only), North Dakota, Oregon, Washington and Wisconsin) as non-recourse states.

institutions would draw down the full amount (100%) of the undrawn portion of any committed *credit* or *liquidity* facilities provided to them by the bank. In contrast, under the revised LCR standards, financial institutions, including prudentially regulated banks, are assumed to draw down only **40%** of committed *credit* facilities provided to them by the bank. Furthermore, prudentially regulated banks are assumed to draw down only **40%** of committed *liquidity* facilities provided to them by the bank, but *liquidity* facilities provided by the bank to other types of financial institutions are still assumed to be fully drawn down (100%). With respect to the undrawn portion of any committed *liquidity* facilities that a bank provides to non-financial corporate customers, sovereigns, central banks, PSEs and MDBs, the revised LCR standards reduce the assumed drawdown rate from 100% to **30%**. The asymmetrical treatment between a banking organization's assumed outflows arising from committed credit and liquidity facilities it has extended and the assumed inflows from such facilities extended to it by other institutions remains: the assumed inflow rate is **0%**.

- ***Secured Funding Transactions with Home Country Central Banks*:** A bank's home country central bank is assumed to maintain all secured funding transactions through which it provides funding to the bank. In other words, a **0%** run-off rate applies to such transactions under the revised LCR standards.

A more detailed summary of the liquidity run-off and inflow assumptions under the revised LCR standards can be found in **Annex B**.

Dipping Below 100% LCR During Periods of Stress

Some banks and national regulators criticized the original LCR standards for potentially exacerbating liquidity problems during periods of stress by requiring banks to maintain a 100% LCR precisely when market participants would be withdrawing funds and liquidity sources would be drying up. In response, the Basel Committee clarified in a January 2012 press release that, subject to regulatory supervision, it would be appropriate for banks to dip into their stock of high-quality liquid assets such that their LCRs fall below 100% during periods of stress.[10] The revised LCR standards reiterate the Basel Committee's January 2012 statement by noting that a bank could use its stock of high-quality liquid assets during periods of either idiosyncratic or systemic stress, and more generally encouraging national regulators to take into account a number of firm-specific and market-wide factors when evaluating how to respond when a bank's LCR falls below 100%.

Phased-In Implementation Schedule

The revised LCR standards provide for a phased-in implementation of the LCR beginning on January 1, 2015. In the first year, banks would be required to maintain an LCR of 60%. The required LCR would climb by 10 percentage points each year until it is fully implemented at 100% on January 1, 2019.

***Year*:**	**2015**	**2016**	**2017**	**2018**	**2019**
***LCR*:**	**60%**	**70%**	**80%**	**90%**	**100%**

[10] Press Release, Basel Committee, Basel III liquidity standard and strategy for assessing implementation of standards endorsed by Group of Governors and Heads of Supervision (Jan. 8, 2012), available **here**.

Application of the LCR

The revised LCR standards address a number of issues relating to the application of the LCR, including, among other things, frequency of calculation and reporting, application to cross-border banking groups and application to banks that have liquidity needs in multiple currencies.

Frequency of Calculation and Reporting: According to the Basel Committee, the LCR should be used on an ongoing basis to help monitor and manage liquidity risk. The LCR should be reported to national regulators at least monthly, with the operational capacity to increase the frequency to weekly or even daily in stressed situations at the discretion of the regulator. The time lag in reporting should be as short as feasible and ideally should not surpass two weeks. In addition, banks should notify their regulators immediately if their LCR has fallen, or is expected to fall, below 100%.

Cross-Border Banking Groups: The Basel Committee expects certain variations in the implementation of the LCR standards in different jurisdictions. When calculating the LCR on a consolidated basis, a cross-border banking group should apply the liquidity parameters adopted in the ***home*** jurisdiction to all legal entities being consolidated *except* for the treatment of retail or small business deposits, which should follow the relevant parameters adopted in ***host*** jurisdictions in which the entities (*i.e.*, branches or subsidiaries) operate.[11]

Liquidity Needs in Multiple Currencies: While the LCR is expected to be met and reported in a single currency, the Basel Committee expects banks to be able to meet their liquidity needs in each currency and maintain high-quality liquid assets consistent with the distribution of their liquidity needs by currency. According to the Basel Committee, the currencies of a bank's high-quality liquid assets should be similar in composition to the operational needs of the bank. The Basel Committee stated that banks and their regulators should not assume that currencies will remain transferable and convertible in a stress period, even for currencies that in normal times are freely transferable and highly convertible.

Other Aspects of the Revised LCR Standards

Alternative Options for High-Quality Liquid Asset Eligibility: The revised LCR standards include several alternative approaches for determining which assets can be used to satisfy the LCR in jurisdictions where the supply of high-quality liquid assets denominated in the domestic currency would not be large enough to meet the aggregate demand of banks with significant exposures in that currency. High-quality liquid assets denominated in a foreign currency used to cover domestic currency liquidity needs would be subject to minimum haircuts for foreign exchange risk to the extent such assets exceeded a specified threshold. The Basel Committee expects these alternative approaches to apply to a limited number of currencies and jurisdictions.

Monitoring Tools: Building upon tools introduced in the original LCR standards, the revised LCR standards provide a set of monitoring tools for national regulators to assess banks' liquidity risk. Among other things, the Basel Committee calls on national regulators to monitor:

- a bank's contractual maturity mismatch profile;

[11] According to the Basel Committee, this approach would enable the stressed liquidity needs of legal entities of the group (including branches) operating in host jurisdictions to be more suitably reflected, given that deposit run-off rates in host jurisdictions are more influenced by jurisdiction-specific factors such as the type and effectiveness of deposit insurance schemes in place and the behavior of local depositors. Notwithstanding this general principle, the Basel Committee noted that home requirements for retail and small business deposits should apply to the relevant legal entities (including branches) operating in host jurisdictions where: (i) there are no host requirements for retail and small business deposits in the particular jurisdictions; (ii) those entities operate in host jurisdictions that have not implemented the LCR; or (iii) the home supervisor decides that home requirements should be used that are stricter than the host requirements.

- the concentration of a bank's funding in significant counterparties, instruments, currencies and maturities;
- the amount of unencumbered assets available to a bank that could be used as collateral to raise additional high-quality liquid assets or secured funding in secondary markets, or that are eligible at central banks;
- a bank's LCR as converted into various currencies that are significant for the bank; and
- market-wide, financial sector and bank-specific high frequency market data.

U.S. Implementation of the LCR

While the Federal Reserve has expressed its intent to implement some version of the LCR and other Basel III liquidity standards in the United States, the scope, timing and nature of U.S. implementation is currently unclear.

Potential Scope of Application

In its proposals to implement the enhanced prudential standards under the Dodd-Frank Act's systemic risk regulation framework, the Federal Reserve stated that it intends to propose rules that would apply the LCR and other Basel III quantitative liquidity standards to:

- *all or a subset* of U.S. bank holding companies with total consolidated assets of at least $50 billion and U.S. nonbank financial companies that are designated as systemically important by the Financial Stability Oversight Council (collectively, "**U.S. SIFIs**");[12] and
- the U.S. operations (including U.S. branches and agencies) of *all or a subset* of foreign banking organizations with $50 billion or more in combined U.S. assets.[13]

Moreover, in their joint proposals to implement the Basel III capital standards in the United States, the Federal Reserve, OCC and FDIC also stated that they "expect to propose rules to implement the Basel III liquidity provisions in a separate rulemaking."[14] This suggests that the U.S. banking agencies may also be considering whether to apply the Basel III liquidity standards more broadly to other U.S. banking organizations that are not subject to the Dodd-Frank Act's systemic risk regulation framework.

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[12] *See* Federal Reserve, *Enhanced Prudential Standards and Early Remediation Requirements for Covered Companies*, 77 Fed. Reg. 594, 605 (Jan. 5, 2012) ("In addition to the enhanced liquidity risk management requirements of this proposal, the [Federal Reserve] intends to implement the second stage of establishing a regulatory liquidity framework for covered companies through one or more future proposals that would require covered companies (*or a subset of covered companies*) to satisfy specific quantitative liquidity requirements that are derived from, or consistent with, the international liquidity standards incorporated into Basel III." (emphasis added)).

A Davis Polk memorandum on the Federal Reserve's proposed enhanced prudential standards for U.S. SIFIs is available here.

[13] *See* Federal Reserve, *Enhanced Prudential Standards and Early Remediation Requirements for Foreign Banking Organizations and Foreign Nonbank Financial Companies*, 77 Fed. Reg. 76,628, 76,643 ("The [Federal Reserve] intends through future separate rulemakings to implement the quantitative liquidity standards included in the Basel III Accord for the U.S. operations of *some or all* foreign banking organizations with $50 billion or more in combined U.S. assets, consistent with the international timeline" (emphasis added).).

Davis Polk's memorandum and accompanying visuals on the Federal Reserve's proposed enhanced prudential standards for large foreign banking organizations are available here.

[14] *See* Federal Reserve, OCC, FDIC, *Regulatory Capital, Implementation of Basel III, Minimum Regulatory Capital Ratios, Capital Adequacy, Transition Provisions, and Prompt Corrective Action*, 77 Fed. Reg. 52,792, 52,796, n.11 (Aug. 30, 2012).

Davis Polk's memorandum and accompanying visuals on the U.S. Basel III proposals are available here.

The LCR and the Federal Reserve's Proposed Liquidity Risk Management Standards

Assuming the Federal Reserve implements the LCR in the United States, it remains to be seen how the LCR would interact with the liquidity risk management standards in the Federal Reserve's proposed Dodd-Frank enhanced prudential standards for large U.S. and foreign firms.

There are fundamental differences between the Basel Committee's LCR and the Federal Reserve's proposed internal stress testing and related liquidity buffer requirements for large U.S. and foreign firms. Whereas the former prescribes one-size-fits-all liquidity run-off assumptions that a bank must use to calculate the size of its liquidity buffer, the latter would require a firm to, among other things, conduct internal liquidity stress tests that are tailored to its capital structure, risk profile, complexity, activities, size and other relevant characteristics, and to use the results of these stress tests to determine the size of its liquidity buffer. Similarly, whereas the LCR standards require a bank to apply prescribed haircuts to certain assets when calculating its stock of high-quality liquid assets, the Federal Reserve's proposals merely instruct a firm to discount the fair market value of assets that are part of its liquidity buffer to reflect any credit risk and market volatility.

Notwithstanding these differences, the Basel Committee does appear to contemplate the coexistence of the LCR standards and firm-specific internal liquidity stress tests. It explained that the LCR is only intended to be a minimum liquidity requirement for banks. The Basel Committee stated that banks are expected to conduct their own internal stress tests to assess the level of liquidity they should hold beyond this minimum and construct their own scenarios that are tailored for their specific business activities. According to the Basel Committee, internal liquidity stress tests should incorporate longer time horizons than the 30-day period mandated by the LCR.

The LCR and the Dodd-Frank Act's Ban on Reliance on External Credit Ratings

The revised LCR standards rely on or refer to external credit ratings in a number of instances, including in defining Level 2A and Level 2B Assets[15] and in requiring a bank to calculate the amount of collateral that it would need to post as a result of a three-notch downgrade of the bank's external credit rating. Section 939A of the Dodd-Frank Act requires all references to external credit ratings be removed from federal agencies' regulations and replaced with alternative standards of creditworthiness. It remains to be seen precisely how Section 939A would affect any U.S. implementation of the LCR.

In proposed and final rules to implement the Basel Committee's capital standards, the U.S. banking agencies have generally relied on the non-ratings based definition of "investment grade" established by the OCC to distinguish between investment-grade and non-investment grade securities.[16] The OCC's investment grade standard, developed to comply with Section 939A of the Dodd-Frank Act, largely focuses on a bank's own determination of the creditworthiness of a borrower or counterparty.[17]

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[15] Consistent with the original LCR standards published by the Basel Committee in December 2010 and the *proposed* LCR standards published by the Basel Committee in December 2009, the revised LCR standards would permit a bank to include in its stock of high-quality liquid assets certain corporate bonds that are internally rated as having a probability of default corresponding to a certain external credit rating, but *only* where such instruments do *not* have an external credit rating. *See e.g.*, Basel Committee, *International framework for liquidity risk measurement, standards and monitoring, Consultative Document* (Dec. 2009), available here.

[16] *See* Davis Polk memorandum and accompanying visuals on the U.S. Basel III proposals, available here.

[17] Under the OCC's standard, to determine whether a security is "investment grade," banks must determine that the probability of default by the obligor is low and the full and timely repayment of principal and interest is expected. To comply with the new standard, banks may not rely exclusively on external credit ratings, but they may continue to use such ratings as part of their determinations. A bank should supplement any consideration of external ratings with due diligence processes and additional analyses that are appropriate for the bank's risk profile and for the size and complexity of the instrument. In other words, a security rated in the top four rating categories by a nationally recognized statistical rating organization is not automatically deemed to satisfy (*cont.*)

While the OCC's investment grade standard may be useful in making a binary distinction between investment-grade and non-investment grade instruments, it does not appear to support the more granular distinctions that are necessary to fully implement the revised LCR standards. For example, the definitions of Level 2A and Level 2B assets under the revised LCR standards further distinguish between highly-rated investment grade instruments (*i.e.*, those with an external credit rating of AA- or higher) and non-highly-rated investment grade instruments (*i.e.*, those with an external credit rating of between A+ and BBB-).

Basel Committee's Upcoming Policy Agenda

Along with the revised LCR standards, the Basel Committee also announced further work on liquidity and funding. In 2013, the Basel Committee plans to analyze the interaction between the LCR and the provision of central bank facilities. It also plans to develop liquidity disclosure requirements and market-based liquidity measures.

Between now and 2015, the Basel Committee intends to prioritize its review of the NSFR, which was introduced in the December 2010 Basel III liquidity framework alongside the LCR. The NSFR aims to ensure that banks maintain a stable asset-liability profile over a one-year time horizon. Basel Committee Chairman Stefan Ingves reiterated that the NSFR would go into effect in 2018, as originally contemplated by the Basel Committee. It remains to be seen, however, whether the Basel Committee will ultimately permit the NSFR to be implemented on a phased-in basis, a move that would be consistent with the revised LCR standards.

In addition to its ongoing work on liquidity, the Basel Committee announced, towards the end of 2012, that it will complete the specifications of the Basel III leverage ratio and publish related reporting requirements ahead of the leverage ratio's introduction as a disclosure item in 2015. The Basel Committee is also expected to issue detailed proposals and undertake a quantitative impact study in connection with its ongoing fundamental review of the trading book capital rules.

More generally, the Basel Committee stated that it will continue to strengthen its peer review program to monitor the implementation of Basel reforms in individual jurisdictions. The Basel Committee will also continue to examine the "comparability of model-based internal risk weightings" under its capital framework and the "appropriate balance between the simplicity, comparability and risk sensitivity" of such framework.

(*cont.*)
the OCC's investment grade standard. *See* OCC, *Alternatives to the Use of External Credit Ratings in the Regulations of the OCC*, 77 Fed. Reg. 35,253 (Jun. 13, 2012), available here.

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Annex A Revised Basel III Liquidity Coverage Ratio: Overview of High-Quality Liquid Assets

Level 1 Assets (***No limit*** *on proportion of high-quality liquid assets*)	**Haircut**
Coins and banknotes	**0%**
Central bank reserves (including required reserves), to the extent that the central bank policies allow them to be drawn down in times of stress.[18]	
Marketable securities representing claims on or guaranteed by sovereigns, central banks, public sector entities ("**PSEs**")[19], the Bank for International Settlements, the International Monetary Fund, the European Central Bank and European Community, or multilateral development banks ("**MDBs**"). *Eligibility criteria:* ▪ assigned a **0%** risk weight under International Basel II's standardized approach for credit risk;[20] ▪ traded in large, deep and active repo or cash markets characterized by a low level of concentration; ▪ a proven record as a reliable source of liquidity in the markets (repo or sale) even during stressed market conditions; and ▪ not an obligation of a financial institution or any of its affiliated entities.	
Sovereign and central bank debt securities with **> 0%** risk weight under International Basel II's standardized approach for credit risk are also eligible for inclusion in Level 1 Assets where: ▪ they are issued in domestic currencies in the bank's home country or the country in which the liquidity risk is being taken; and ▪ they are issued in foreign currencies, but only up to the amount of the bank's stressed net cash outflows in that specific foreign currency stemming from the bank's operations in the jurisdiction where the bank's liquidity risk is being taken.	

[18] Central bank reserves would include overnight deposits with the central bank, and term deposits with the central bank that: (i) are explicitly and contractually repayable on notice from the depositing bank; or (ii) that constitute a loan against which the bank can borrow on a term basis or on an overnight but automatically renewable basis (only where the bank has an existing deposit with the relevant central bank). Other term deposits with central banks are generally not eligible for inclusion in high-quality liquid assets.

[19] As set out in International Basel II, PSEs include: (i) regional governments and local authorities; (ii) administrative bodies responsible to central governments, regional governments or local authorities and other non-commercial undertakings owned by governments or local authorities; and (iii) commercial undertakings owned by central governments, regional governments or local authorities.

[20] International Basel II refers to Basel Committee, *International Convergence of Capital Measurement and Capital Standards: A Revised Framework* (Jun. 2006), available here.

Level 2 Assets (*Capped at **40%** of total high-quality liquid assets*)	**Haircut**
Level 2A Assets	
Marketable securities representing claims on or guaranteed by sovereigns, central banks, PSEs or MDBs. *Eligibility criteria:* ▪ assigned a **20%** risk weight under International Basel II's standardized approach for credit risk; ▪ traded in large, deep and active repo or cash markets characterized by a low level of concentration; ▪ a proven record as a reliable source of liquidity in the markets (repo or sale) even during stressed market conditions (*i.e.*, maximum decline of price not exceeding 10% or increase in haircut not exceeding 10 percentage points over a 30-day period of significant liquidity stress); and ▪ not an obligation of a financial institution or any of its affiliated entities.	**15%**
"Plain-vanilla," senior corporate debt securities (including commercial paper) and covered bonds. *Eligibility criteria:* ▪ not issued by a financial institution or any of its affiliated entities (in the case of corporate debt securities); ▪ not issued by the bank itself or any of its affiliated entities (in the case of covered bonds) ▪ a long-term external credit rating of **AA- or higher** or, in the absence of a long term rating, a short-term rating equivalent in quality or, in the absence of an external credit rating, a corresponding internal rating for probability of default (PD) purposes; ▪ traded in large, deep and active repo or cash markets characterized by a low level of concentration; and ▪ a proven record as a reliable source of liquidity in the markets (repo or sale) even during stressed market conditions (*i.e.*, maximum decline of price or increase in haircut over a 30-day period of significant liquidity stress not exceeding 10%).	

Level 2 Assets (*Capped at **40%** of total high-quality liquid assets*)	**Haircut**
Level 2B Assets (*Capped at **15%** of total high-quality liquid assets*)	
Residential mortgage-backed securities ("**RMBS**"). *Eligibility criteria:* ▪ not issued by and the underlying assets have not been originated by the bank itself or any of its affiliated entities; ▪ a long-term external credit rating of **AA or higher** or, in the absence of a long term rating, a short-term rating equivalent in quality; ▪ traded in large, deep and active repo or cash markets characterized by a low level of concentration; ▪ a proven record as a reliable source of liquidity in the markets (repo or sale) even during stressed market conditions (*i.e.*, maximum decline of price not exceeding 20% or increase in haircut not exceeding 20 percentage points over a 30-day period of significant liquidity stress); ▪ underlying asset pool is restricted to residential mortgages and does not contain structured products; ▪ underlying mortgages are "full recourse'' loans (*i.e.*, in the case of foreclosure the borrower remains liable for any shortfall in sales proceeds from the property)[21] and have a maximum loan-to-value ratio of 80% on average at issuance; and ▪ securitizations are subject to risk-retention regulations, which require issuers to retain an interest in the assets they securitize.[22]	**25%**
"Plain-vanilla," senior corporate debt securities (including commercial paper). *Eligibility criteria:* ▪ not issued by a financial institution or any of its affiliated entities; ▪ a long-term external credit rating of **between A+ and BBB-** or, in the absence of a long term rating, a short-term rating equivalent in quality or, in the absence of an external credit rating, a corresponding internal rating for probability of default (PD) purposes; ▪ traded in large, deep and active repo or cash markets characterized by a low level of concentration; and ▪ a proven record as a reliable source of liquidity in the markets (repo or sale) even during stressed market conditions (*i.e.*, maximum decline of price not exceeding 20% or increase in haircut not exceeding 20 percentage points over a 30-day period of significant liquidity stress).	**50%**

[21] A number of U.S. states are generally considered to be non-recourse states. *See* Andra C. Ghent & Marianna Kudlyak, *Recourse and Residential Mortgage Default: Theory and Evidence from U.S. States* (Federal Reserve Bank of Richmond Working Paper No. 09-10R, 2011), available here. The authors summarize the mortgage foreclosure procedures and anti-deficiency statutes in the 50 states and the District of Columbia and classify 11 states (Alaska, Arizona, California, Iowa, Minnesota, Montana, North Carolina (for purchase mortgages only), North Dakota, Oregon, Washington and Wisconsin) as non-recourse states.

[22] The U.S. banking agencies, together with the SEC, Federal Housing Finance Agency and Department of Housing and Urban Development, have proposed, but not yet finalized, risk-retention regulations. *See*, *Credit Risk Retention*, 76 Fed. Reg. 24,090 (Apr. 29, 2011), available here.

Level 2 Assets (*Capped at **40%** of total high-quality liquid assets*)	**Haircut**
Level 2B Assets (*Capped at **15%** of total high-quality liquid assets*)	
Common equity shares. *Eligibility criteria:* ▪ not issued by a financial institution or any of its affiliated entities; ▪ exchange traded and centrally cleared; ▪ a constituent of the major stock index in the home jurisdiction or where the liquidity risk is taken, as decided by the supervisor in the jurisdiction where the index is located; ▪ denominated in the domestic currency of a bank's home jurisdiction or in the currency of the jurisdiction where a bank's liquidity risk is taken; ▪ traded in large, deep and active repo or cash markets characterized by a low level of concentration; and ▪ a proven record as a reliable source of liquidity in the markets (repo or sale) even during stressed market conditions (*i.e.*, maximum decline of price not exceeding 40% or increase in haircut not exceeding 40 percentage points over a 30-day period of significant liquidity stress).	**50%**

Annex B Revised Basel III Liquidity Coverage Ratio: Liquidity Run-Off and Inflow Assumptions and Comparison with the Original LCR Standards

Total Expected Cash Outflows

Type of Cash Outflow	Run-Off Rate	Change from Original LCR
Retail Deposits[23]		
Demand deposits and term deposits with maturity of 30 days or less[24]		
▪ Stable deposits fully insured[25] by a robust, *pre-funded* deposit insurance scheme	**3%**[26]	New category; lowers run-off rate from 5%
▪ Stable deposits fully insured by other deposit insurance schemes	**5%**	
▪ Less stable deposits (potentially including uninsured deposits, high-value deposits, deposits from sophisticated or high net-worth individuals, Internet deposits and foreign currency deposits)	**10%**[27]	
Unsecured Wholesale Funding		
Demand deposits, term deposits with maturity of 30 days or less and other unsecured funding from small business customers		
▪ Stable deposits	**5%**	
▪ Less stable deposits and other funding sources	**10%**	

[23] Retail deposits are defined as deposits placed with a bank by a natural person. Deposits placed by legal entities, sole proprietorships or partnerships are captured in the wholesale funding categories.

[24] Cash outflows related to retail term deposits with a residual maturity or withdrawal notice period of greater than 30 days are excluded from total expected cash outflows if the depositor has no legal right to withdraw deposits within the 30-day horizon of the LCR, or if early withdrawal results in a significant penalty that is materially greater than the loss of interest.

[25] Deposit balances up to the deposit insurance limit can be treated as "fully insured" even if a depositor has a balance in excess of the deposit insurance limit. Any amount in excess of the deposit insurance limit is to be treated as "less stable."

[26] National regulators may choose to apply a run-off rate of 3% to stable deposits in their jurisdictions that are fully insured by a robust, pre-funded deposit-insurance scheme.

[27] Under the revised LCR standards, national regulators are expected to develop additional categories with higher run-off rates as necessary to apply to types of potentially less stable retail deposits in their jurisdictions, with a minimum run-off rate of 10%.

Type of Cash Outflow	Run-Off Rate	Change from Original LCR
Operational deposits generated by clearing, custody and cash management activities[28]		
▪ Insured portion of operational deposits	**5%**	
▪ Uninsured portion of operational deposits	**25%**	
Deposits from cooperative banks in an institutional network	**25%**	
Deposits and other unsecured funding from sovereigns, central banks, PSEs, MDBs and non-financial corporate customers that are not categorized as small business customers		
▪ Deposits in which the entire amount of the deposit is fully insured	**20%**	Lowers run-off rate from 75%
▪ Other deposits and extensions of unsecured funding	**40%**	
All other deposits and unsecured funding sources from other institutions, including banks, securities firms, insurance companies, fiduciaries, beneficiaries, conduits, special purpose vehicles and affiliated entities of the bank All notes, bonds and other debt securities issued by the bank are included in this category, *unless* such instruments can only be bought and held by retail or small business customers, in which case they can be treated in the appropriate retail or small business customer deposit category.	**100%**	
Secured Funding *(including securities financing transactions)*		
Transactions with bank's home country central bank secured by any assets	**0%**	New category; lowers run-off rate for transactions secured by assets other than Level 1 Assets
Transactions with any counterparty secured by Level 1 Assets	**0%**	
Transactions with any counterparty secured by Level 2A Assets	**15%**	

[28] Any excess balances that could be withdrawn and would still leave enough funds to fulfill these clearing, custody and cash management activities do not qualify for the 5% or 25% run-off rate.

Type of Cash Outflow	Run-Off Rate	Change from Original LCR
Transactions with a bank's home country sovereign, MDBs, or home country PSEs with a 20% or lower risk weight, where such transactions are secured by assets *other than* Level 1 and Level 2A Assets	**25%**	
Other transactions secured by RMBS eligible for inclusion in Level 2B Assets	**25%**	New category; lowers run-off rate from 100%
Other transactions secured by other Level 2B Assets	**50%**	New category; lowers run-off rate from 100%
All other secured funding transactions	**100%**	
Other Cash Outflows *(including cash outflows generated by derivatives, credit and liquidity facilities)*		
Derivatives and Other Collateralized Transactions		
▪ Net derivatives cash outflows, calculated using the bank's existing valuation methodologies[29]	**100%**	
▪ Under the bank's financing transactions, derivatives and other contracts, the amount of collateral that would be *posted by* the bank for, or contractual cash outflows associated with, any three-notch downgrade of the bank's external credit rating	**100%**	
▪ Collateral *posted by* the bank to cover market valuation changes on derivatives and other transactions	**Largest absolute net 30-day collateral flow realized during the preceding 24 months**	New methodology

[29] Derivative cash flows may be calculated on a net basis (*i.e.*, inflows can offset outflows) by counterparty, only where a valid master netting agreement exists. Banks should exclude from derivative cash flow calculations those liquidity requirements that would result from increased collateral needs due to market value movements or falls in value of collateral posted, which are separately addressed. Where derivative payments are collateralized by high-quality liquid assets, cash outflows should be calculated net of any corresponding cash or collateral inflows that would result, all other things being equal, from contractual obligations for cash or collateral to be provided *to* the bank, if the bank is legally entitled and operationally capable to re-use the collateral in new cash raising transactions once the collateral is received.

Type of Cash Outflow	Run-Off Rate	Change from Original LCR
▪ Non-Level 1 Assets *posted by* the bank as collateral to secure derivative and other transactions, net of collateral received on a counterparty basis	**20%**	
▪ Collateral contractually due from the bank but not yet demanded by the counterparty	**100%**	New category
▪ Excess non-segregated collateral *held by* the bank that could be called at any time by the counterparty	**100%**	New category
▪ Collateral *held by* the bank in the form of high-quality liquid assets for which the counterparty could substitute assets that are not high-quality liquid assets without the bank's consent	**100%**	New category
Asset-Backed Securities and Structured Financing Facilities		

▪ Amount of asset-backed securities, covered bonds and other structured financing instruments maturing within the 30-day period, where such instruments are issued by the bank itself
▪ Debt instruments (*e.g.*, asset-backed commercial paper) that are issued through special purpose vehicles:
  ▪ Amount maturing within the 30-day period; and
  ▪ Amount of assets that could potentially be returned pursuant to embedded options in financing arrangements that allow for the return of assets or potential liquidity support.
	100%	

Undrawn Portion of Committed[30] Credit and Liquidity Facilities[31]		
▪ Undrawn portion of committed credit and liquidity facilities to retail and small business customers	**5%**	

[30] Credit and liquidity facilities are defined as explicit contractual agreements or obligations to extend funds at a future date to retail or wholesale customers. In this context, committed facilities refer to those that are irrevocable.

[31] A liquidity facility is defined as any committed, undrawn back-up facility that would be utilized to refinance the debt obligations of a customer in situations where such a customer is unable to rollover that debt in financial markets (*e.g.*, pursuant to a commercial paper program, secured financing transactions, or obligations to redeem units). The amount of the commitment to be treated as a liquidity facility is the amount of the currently outstanding debt issued by the customer (or proportionate share, if a syndicated facility) maturing within a 30-day period that is backstopped by the facility. The portion of a liquidity facility that is backing debt that does not mature within the 30-day period is excluded from the definition of liquidity facility. Any additional capacity of the facility (*i.e.*, the remaining commitment) would be treated as a committed credit facility.

General working capital facilities for corporate entities (*e.g.*, revolving credit facilities in place for general corporate or working capital purposes) are classified as credit facilities, not liquidity facilities.

Type of Cash Outflow	Run-Off Rate	Change from Original LCR
▪ Undrawn portion of committed *credit* facilities to non-financial corporate customers, sovereigns, central banks, PSEs and MDBs	**10%**	
▪ Undrawn portion of committed *liquidity* facilities to non-financial corporate customers, sovereigns, central banks, PSEs, and MDBs	**30%**	Lowers run-off rate from 100%
▪ Undrawn portion of committed credit and liquidity facilities extended to banks subject to prudential supervision	**40%**	New category; lowers run-off rate from 100%
▪ Undrawn portion of committed *credit* facilities to other financial institutions, including securities firms, insurance companies, fiduciaries and beneficiaries	**40%**	New category; lowers run-off rate from 100%
▪ Undrawn portion of committed *liquidity* facilities to other financial institutions including securities firms, insurance companies, fiduciaries, and beneficiaries	**100%**	
▪ Undrawn portion of committed credit and liquidity facilities to other legal entities, including special purpose vehicles and other entities not included in the previous categories	**100%**	
▪ Any contractual lending obligations to financial institutions not captured in other categories	**100%**	
Other Contingent Funding Obligations[32]		
Trade finance obligations[33]	**0 – 5%**	New category
Other contingent funding obligations	**National discretion**	
Customer short positions covered by other customers' collateral that are not high-quality liquid assets	**50%**	New category

[32] The revised LCR standards state that national regulators are expected to work with supervised institutions in their jurisdictions to determine the run-off rates for other contingent funding obligations, which may be either contractual or non-contractual. Non-contractual contingent funding obligations include associations with, or sponsorship of, products sold or services provided that may require the support or extension of funds in the future under stressed conditions.

[33] The revised LCR standards provide that with respect to contingent funding obligations stemming from trade finance instruments, national regulators can apply a relatively low run-off rate (5% or less). Trade finance instruments consist of trade-related obligations directly underpinned by the movement of goods or the provision of services, such as: documentary trade letters of credit, documentary and clean collection, import bills, and export bills; and guarantees directly related to trade finance obligations, such as shipping guarantees.

Type of Cash Outflow	Run-Off Rate	Change from Original LCR
Other contractual cash outflows within the 30-day period (e.g., dividends, contractual interest payments), *excluding* operational costs	**100%**	

Total Expected Cash Inflows[34]

Type of Inflow	Inflow Rate	Change from Original LCR
Maturing reverse repos, securities borrowing and similar agreements, including collateralized margin lending to customers[35]		
▪ Secured by Level 1 Assets	**0%** (*i.e.*, assume rollover)	
▪ Secured by Level 2A Assets	**15%**	
▪ Secured by RMBS eligible for inclusion in Level 2B Assets	**25%**	New category; lowers inflow rate from 100%
▪ Secured by other Level 2B Assets	**50%**	New category; lowers inflow rate from 100%
▪ Collateralized margin lending to customers secured by assets that are *not* high-quality liquid assets	**50%**	New category; lowers inflow rate from 100%
▪ Secured by assets that are *not* high-quality liquid assets	**100%**	
Credit and liquidity facilities provided *to* the bank	**0%** (*i.e.*, assume no drawdown)	

[34] When considering its available cash inflows, the bank should only include contractual inflows (including interest payments) from outstanding exposures that are fully performing and for which the bank has no reason to expect a default within the 30-day period. Contingent inflows are not included in total expected cash inflows.

[35] If collateral obtained through reverse repo, securities borrowing or collateral swaps that mature within the 30-day period is rehypothecated and is used to cover short positions that could be extended beyond 30 days, a bank should assume that such reverse repo or securities borrowing arrangements will be rolled-over and will not give rise to any cash inflows (**0%**), reflecting its need to continue to cover the short position or to re-purchase the relevant securities.

Type of Inflow	Inflow Rate	Change from Original LCR
Operational deposits placed by the bank at other financial institutions for clearing, custody and cash management activities	**0%**	
Deposits placed by the bank at the central institution of a network of cooperative banks	**0%**	
Other secured and unsecured transactions		
▪ Amounts due from retail and small business customers that are fully performing and contractually due within the 30-day period	**50%**[36]	
▪ Amounts due from sovereigns, MDBs, PSEs and non-financial corporate customers, other than amounts due with respect to any of the above-mentioned categories	**50%**[37]	
▪ Amounts due from financial institutions and central banks, *other than* amounts due with respect to any of the above-mentioned categories	**100%**	
Net derivative cash inflows, calculated using the bank's existing valuation methodologies[38]	**100%**	
Other contractual cash inflows	**National discretion**	

[36] The revised LCR standards assume that banks will receive all payments from retail and small business customers that are fully performing and contractually due within a 30-day period. At the same time, however, banks are assumed to continue to extend loans to retail and small business customers, at a rate of 50% of contractual inflows. This results in a net inflow of 50% of the contractual amount.

[37] The revised LCR standards assume that banks will receive all payments (including interest payments and installments) from wholesale customers that are fully performing and contractually due within the 30-day period. In addition, banks are assumed to continue to extend loans to wholesale clients, at a rate of 0% of inflows for financial institutions and central banks, and 50% for all others, including non-financial corporate customers, sovereigns, MDBs, and PSEs. This results in an inflow percentage of 100% for financial institution and central bank counterparties and 50% for non-financial wholesale counterparties.

[38] Derivative cash flows may be calculated on a net basis (*i.e.*, inflows can offset outflows) by counterparty, only where a valid master netting agreement exists. Where derivatives are collateralized by high-quality liquid assets, cash inflows should be calculated net of any corresponding cash or contractual collateral outflows that would result, all other things being equal, from contractual obligations for cash or collateral to be posted by the bank, given these contractual obligations would reduce the stock of high-quality liquid assets.