Circular 2015/2
Liquidity risks - banks

Qualitative liquidity risk management requirements and quantitative liquidity requirements

March 2015
Circular 2015/2
Liquidity risks – banks

Qualitative liquidity risk management requirements
and quantitative liquidity requirements

1 Table of Contents
   I. Title page pg. 1
   II. Circular 2015/2 pg. 2

2 Other Languages
   DE: FINMA-RS 2015/2 Liquiditätsrisiken Banken 3.7.2014

Unofficial translation issued in March 2015
Circular 2015/2
Liquidity risks - banks

Qualitative liquidity risk management requirements and quantitative liquidity requirements

Reference: FINMA circ. 15/2 "Liquidity risks – banks"

Issued: 3 July 2014

Entry into force: 1 January 2015

Concordance: previously FINMA circ. 13/6 "Liquidity - banks" of 1 January 2013

Legal bases: FINMASA Article 7(1)(b) BA Article 2(2)
LiqO Articles 1(2), 3, 5, 6, 7, 8, 9, 10, 14, 15(2), (3) and (4), 15a, 15b, 15c, 15d, 15e, 16, 17, 17a, 17b, 17c, 17d

Appendix 1: Application of unwinding / settlement mechanism and treatment of SLB/repo transactions

Addressees

<table>
<thead>
<tr>
<th>BA</th>
<th>ISA</th>
<th>SESTA</th>
<th>CISA</th>
<th>AMLA</th>
<th>OTHER</th>
</tr>
</thead>
<tbody>
<tr>
<td>x</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>x</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Banks, Fin. groups & conglomerates, Insurers, Intermediaries, Stock exchanges & participants, Securities Dealers, Fund management company, SICAV, Limited partnerships for CIS, Managers domestic CIS, Other intermediaries, SRO, SRO Supervised, Audit agencies, Rating agencies.
Table of Contents

<table>
<thead>
<tr>
<th>I.</th>
<th>Objective</th>
<th>margin no.</th>
</tr>
</thead>
<tbody>
<tr>
<td>II.</td>
<td>Qualitative requirements for liquidity risk management management</td>
<td>2-103</td>
</tr>
<tr>
<td>A.</td>
<td>Scope</td>
<td>2-7</td>
</tr>
<tr>
<td>B.</td>
<td>Principles</td>
<td>8-10</td>
</tr>
<tr>
<td>a)</td>
<td>The principle of proportionality</td>
<td>8</td>
</tr>
<tr>
<td>b)</td>
<td>Ensuring a bank’s continuous solvency</td>
<td>9-10</td>
</tr>
<tr>
<td>C.</td>
<td>Government, control and steering functions</td>
<td>11-29</td>
</tr>
<tr>
<td>a)</td>
<td>Liquidity risk tolerance</td>
<td>11-12</td>
</tr>
<tr>
<td>b)</td>
<td>Liquidity risk management strategy</td>
<td>13-26</td>
</tr>
<tr>
<td>c)</td>
<td>Allocating liquidity risks to business activities</td>
<td>27-29</td>
</tr>
<tr>
<td>D.</td>
<td>Risk measurement and management systems</td>
<td>30-50</td>
</tr>
<tr>
<td>a)</td>
<td>Processes used to identify, measure, manage and monitor liquidity risks</td>
<td>30-38</td>
</tr>
<tr>
<td>b)</td>
<td>Managing liquidity risks within and across significant legal entities, business lines and currencies</td>
<td>39-46</td>
</tr>
<tr>
<td>c)</td>
<td>Intraday liquidity requirements</td>
<td>47-49</td>
</tr>
<tr>
<td>d)</td>
<td>Assets held abroad</td>
<td>50</td>
</tr>
<tr>
<td>E.</td>
<td>Liquidity risk mitigation</td>
<td>51-71</td>
</tr>
<tr>
<td>a)</td>
<td>Limit system</td>
<td>51-58</td>
</tr>
<tr>
<td>b)</td>
<td>Funding diversification</td>
<td>59-62</td>
</tr>
<tr>
<td>c)</td>
<td>Liquidity reserve to mitigate short-term deterioration in the bank’s liquidity situation</td>
<td>63-71</td>
</tr>
</tbody>
</table>
## Table of Contents

<table>
<thead>
<tr>
<th>Section</th>
<th>Margin Nos.</th>
</tr>
</thead>
<tbody>
<tr>
<td>F. Stress tests</td>
<td>72-90</td>
</tr>
<tr>
<td>G. Contingency funding plan</td>
<td>91-103</td>
</tr>
<tr>
<td>III. Quantitative requirements (Liquidity Coverage Ratio, LCR)</td>
<td>104-349</td>
</tr>
<tr>
<td>A. Scope of application</td>
<td>104-110</td>
</tr>
<tr>
<td>B. LCR calculations</td>
<td>111-112</td>
</tr>
<tr>
<td>C. Explanations on Category 1, 2a and 2b assets</td>
<td>113-138</td>
</tr>
<tr>
<td>D. Characteristics of HQLA</td>
<td>139-150</td>
</tr>
<tr>
<td>E. Operational requirements for managing HQLA</td>
<td>151-165</td>
</tr>
<tr>
<td>F. Requirements for an adequate diversification of Category 2 assets</td>
<td>166-168</td>
</tr>
<tr>
<td>G. Unwinding / settlement</td>
<td>169-173</td>
</tr>
<tr>
<td>H. Cash outflows - explanations on Appendix 2 of the LiqO</td>
<td>174-286</td>
</tr>
<tr>
<td>a) Deposits from retail clients</td>
<td>174-206</td>
</tr>
<tr>
<td>b) Unsecured funding provided by corporate or wholesale clients</td>
<td>207-248</td>
</tr>
<tr>
<td>c) Derivative and other transactions</td>
<td>249-271</td>
</tr>
<tr>
<td>d) Credit and liquidity facilities</td>
<td>272-281</td>
</tr>
<tr>
<td>e) Customer short positions covered by other customers’ collateral</td>
<td>282-285</td>
</tr>
<tr>
<td>f) Other contractual cash outflows within 30 days</td>
<td>286</td>
</tr>
<tr>
<td>I. Cash inflows - explanations on Appendix 3 of the LiqO</td>
<td>287-298</td>
</tr>
<tr>
<td>a) General requirements</td>
<td>287-294</td>
</tr>
<tr>
<td>b) Secured financing transactions</td>
<td>295</td>
</tr>
</tbody>
</table>
**Table of Contents**

c) Operational deposits placed with other financial institutions and deposits placed to the centralized institution of an institutional network of cooperative banks  
margin nos. 296-297

d) Derivatives  
margin no. 298

J. **Fulfillment of the LCR in Swiss francs**  
margin nos. 299-320
a) Considering additional foreign-currency HQLA  
margin nos. 303-314
b) Considering additional Category 2a HQLA in Swiss francs beyond the 40 percent ceiling  
margin nos. 315-320

K. **LCR by significant foreign currency**  
margin nos. 321-325

L. **Temporary breaches of the LCR minimum requirements under extraordinary circumstances**  
margin nos. 326-335

M. **Liquidity statement**  
margin nos. 336-341

N. **Definition of specific, lower cash outflow and/or higher cash inflow rates for intra-group cash flows**  
margin nos. 342-349
I. Objective

This circular clarifies the requirements stipulated in the Liquidity Ordinance regarding the minimum qualitative requirements for liquidity risk management and the quantitative requirements regarding the liquidity coverage ratio (LCR). The reporting requirements regarding the Net Stable Funding Ratio (NSFR) and other monitoring metrics will be established at a later point in time.

II. Qualitative requirements for liquidity risk management

A. SCOPE

The qualitative requirements for liquidity risk management must be met at both the group level and the single entity level. The following exemptions apply:

a. Group entities in Switzerland, provided it is ensured contractually and/or in their articles of incorporation that the group’s holding company always has access to all relevant information and documents required to assess the group’s liquidity position at the single entity level;

b. Banks which are part of a central organization as described in Article 17 Banking Ordinance (BO, SR 952.02), provided these have ensured contractually and/or in their articles of incorporation that the central institute always has access to all relevant information and documents required to assess the liquidity position of the member banks at the single entity level; or

c. Foreign branches in Switzerland, if these have been exempted from the LCR requirements by FINMA, if the foreign parent company is subject to comparable qualitative requirements for liquidity management and provided these have ensured contractually and/or in their articles of incorporation that the foreign parent company always has access to all relevant information and documents required to assess the foreign branch’s liquidity position in Switzerland.

In all cases, it must be ensured that the free transfer of funds and collateral is not restricted.

The board of directors and executive board of a group entity or of a bank which is part of a central organization shall be responsible for ensuring that the parent company and the central organization respectively, fulfills the qualitative requirements for managing liquidity risk for the group entity or the bank which is part of a central organization.
B. PRINCIPLES

a) The principle of proportionality
The requirements stipulated in the second chapter of this circular depend on the bank’s size as well as the type, scope, complexity and riskiness of its business activities. Certain clauses in the second chapter refer to the principle of proportionality, which exempts smaller banks from specific requirements.

b) Ensuring a bank's continuous solvency
The bank must have a liquidity risk management framework in place that is well integrated into the bank-wide risk management processes.

The primary objective of the liquidity risk management framework is to ensure that the bank is in a position to address its liquidity obligations on a continuous basis, specifically in a period of bank-specific and/or market-wide liquidity stress where the secured and unsecured funding possibilities are limited.

C. GOVERNMENT, CONTROL AND STEERING FUNCTIONS

a) Liquidity risk tolerance
The board of directors shall define the bank’s liquidity risk tolerance, reviews this regularly (at least annually), ensures that the executive board implements the provisions for the liquidity risk tolerance and that all relevant employees have a clear understanding of the liquidity risk tolerance.

The liquidity risk tolerance is the basis for the bank-internal liquidity risk management strategy, the liquidity-related directives and the risk steering and control processes.

b) Liquidity risk management strategy
The bank’s executive board or a committee reporting directly to it establishes and implements the liquidity risk management strategy in accordance with the defined liquidity risk tolerance. It needs to ensure that all relevant employees have a clear understanding of the liquidity risk management strategy. The liquidity risk management strategy includes the issuance of directives and/or guidelines covering liquidity management and funding.

Where applicable, the bank’s executive board includes the following in the liquidity risk management strategy:

a. the degree of centralization of liquidity management;
b. structures and procedures around liquidity risk management, specifically the establishment of risk steering and control processes;
c. the composition and maturity profiles of assets, liabilities and off-balance sheet positions;
d. the allocation of liquidity risks to various business activities;
e. intraday liquidity management;
f. collateral management;
g. limit-setting and escalation procedures;

h. diversification of funding sources and concentration limits;

i. the size and composition of a liquidity reserve consisting of liquid assets which can be sold or used as collateral in times of stress;

j. the procedures needed to design, approve, run and review stress tests and their underlying assumptions;

k. the contingency funding plan

The adequacy of the above items need to be reviewed at least on a yearly basis.

c) Allocating liquidity risks to business activities

The bank establishes a liquidity transfer pricing system which is adequate considering the bank’s refinancing structure to allocate liquidity costs, benefits and risks to the relevant business activity. The transfer prices must be used to manage the bank’s business activities and to price both on and off-balance sheet transactions. The anticipated holding periods of assets and their market liquidity need to be considered in the calculation of liquidity transfer prices. Appropriate assumptions must be made for contingent cash flows.

The liquidity transfer pricing system must be managed and monitored by a unit independent of the trading and market department. The applicable transfer prices need to be transparent to the relevant employees. Transfer pricing systems must be comparable and consistent across the banking group. The adequacy of the transfer prices must be assessed regularly.

Based on the Principle of Proportionality (margin no. 8), banks may decide to refrain from implementing a liquidity transfer pricing system. The rationale behind the decision must be documented.

D. RISK MEASUREMENT AND MANAGEMENT SYSTEMS

a) Processes used to identify, measure, manage and monitor liquidity risks

To identify and measure risks, the bank’s risk steering and controlling processes include comprehensive liquidity risk measurement systems tailored to its needs. These systems must be integrated in the bank’s liquidity management strategy and its contingency funding plan and include:

a. a liquidity overview for different time horizons which compares the expected cash inflows and outflows. Fluctuations of cash flows due to the normal course of business must be considered. Any underlying assumption for the expected cash inflows and outflows must be documented and

b. a liquidity reserve which consists of unencumbered, high quality liquid assets which can be used to mitigate a short-term deterioration in the bank’s liquidity situation. The respective requirements are addressed in margin nos. 63-71.

The risk steering and controlling processes include:

a. an effective contingency funding plan which is linked to the stress events defined in margin no. 84;

b. a limit framework and controls in accordance with the defined risk tolerance;
c. provisions to ensure that the incentives for business units to take risks are consistent with the resulting liquidity risks for the bank as a whole;

36

d. guidelines to manage the access to well-diversified funding sources and tenors; and

37

e. IT systems and qualified personnel to ensure the timely measurement, monitoring and reporting of liquidity positions in comparison to the defined limits.

38

b) Managing liquidity risks within and across significant legal entities, business lines and currencies

Banks with significant business activities and/or legal entities abroad

a. must manage and monitor liquidity risks regardless of its organizational structure and degree of centralization of liquidity management; however, a minimum level of central oversight is required;

40

b. must ensure that all legal entities have access to liquidity in times of liquidity shortages;

41

c. if appropriate, establishes internal limits applicable between group entities;

42

d. establishes internal agreements regarding the provision of liquidity support between group entities; and

43

e. assesses whether there are any legal, regulatory or operational restrictions which could impair the transferability of liquidity and unencumbered assets within the group.

44

Banks with significant assets or liabilities in foreign currencies and considerable mismatches in both the tenors and currencies of these assets and liabilities must establish adequate tools and measures to manage the liquidity in these material foreign currencies. This includes for every material currency a separate liquidity overview, separate stress tests and specific measures in the contingency funding plan.

45

Banks with material liquidity risks in foreign currencies as described in margin no. 45 must be in a position to recognize changes in the liquidity of foreign currency swap markets and in the currency convertibility and take appropriate actions. Sudden changes in foreign currency swap markets which sharply widen currency mismatches as well as unexpected price volatilities must be integrated into the stress test.

46

c) Intraday liquidity requirements

The Bank must be able to demonstrate that it is in a position to reliably estimate and manage an intraday liquidity stress event. Banks must perform adequate stress tests which simulate such events.

47

The tools and resources used to manage and monitor intraday liquidity must be tailored to the bank’s risk profile, its business activities and its importance to the financial sector. It should be taken into consideration whether the bank directly participates in payment or settlement systems, whether it participates via correspondent or custodian banks or whether it provides correspondent or custodian services to other banks, firms or systems.

48

If a small bank can demonstrate and document that it is not exposed to substantial risks regarding intraday payment operations, it does not need to implement an intraday liquidity risk management framework beyond the normal measures.
d) **Assets held abroad**
Banks with material business activities and/or legal entities abroad must be in the position to assess their access rights to assets held abroad and inform FINMA during stress situations within a reasonable period of time of these rights.

**E. LIQUIDITY RISK MITIGATION**

a) **Limit system**
Limits must reflect the results from the stress tests, be set so that they are an operationally effective management tool and aligned with the established liquidity risk tolerance.

Banks must clearly define and document processes around:

a. the authority to set or change limits;

b. limit breaches;

c. escalation of limit breaches;

d. the approval of limit breaches by the executive board; as well as;

e. Mitigating actions and remediation of limit breaches.

Ongoing monitoring of limits must be done by a unit which is independent of the trading and market departments.

b) **Funding diversification**
Banks must take appropriate measures to limit and monitor the concentration of funding sources and tenors. Funding diversification should occur across short, medium and long term tenors, depositor types, investors, counterparties, instrument types, markets and currencies. Banks should set limits for the above criteria.

Small banks not active in capital markets and trading or those which do not refinance themselves in the money and capital markets or through institutional investors as well as subsidiaries of foreign banks which finance themselves through the group’s pool of funds are exempted from these requirements.

The Bank must regularly assess how quickly liquidity can be generated from each relevant funding source in a stress situation.

Banks, which fund themselves in money or capital markets through institutional investors such as other banks, insurance companies, hedge funds, money market funds, pension funds or other large corporations must assess the consequences of losing an important funding source and take the appropriate precautionary measures.
c) **Liquidity reserve to mitigate short-term deterioration in the bank’s liquidity situation**

Banks must ensure that their liquidity reserve is sufficiently large and is composed of sustainable assets and:

a. takes into consideration the bank’s business model, the risks of its balance sheet and off-balance sheet transactions, the liquidity of its assets and liabilities, the extent of existing financing gaps and the funding strategies;

b. is aligned with the established risk tolerance and is adequately diversified;

c. is aligned with the bank’s liquidity needs resulting from the stress tests, and

d. takes into consideration the relevant jurisdictions, currencies and corresponding risks.

Banks must prudently value their assets and conservatively estimate haircuts to market values. Specifically, they must consider that asset values may deteriorate in stress situations and/or that selling or borrowing assets may be restricted or impossible. The value of assets and haircuts must be reviewed regularly.

The bank must ensure that the assets in the liquidity reserve are not subject to legal, regulatory or operational restrictions. Assumptions with regards to the transferability of assets or collateral must be transparently documented.

The bank must assess whether counterparties and central banks will accept the assets as collateral in secured funding transactions during a stress situation.

The organizational unit responsible for liquidity management must have exclusive access to the assets in the liquidity reserve in case of liquidity shortages.

F. **STRESS TESTS**

The bank must:

a. regularly perform stress tests at all relevant levels in order to identify, quantify and analyze the impact of possible extreme liquidity stress events on cash inflows, outflows and the bank’s liquidity position;

b. adequately define stress test parameters regarding the design, methods, scenario types, scenario severity, time horizons, types of shocks and frequency of testing;

c. explain and document its choice of stress test. Moreover, the stress tests must be reviewed on a regular basis and after a stress event has occurred to ensure that the test remains appropriate and relevant for the bank.

If a small bank can demonstrate and document that the international LCR scenario is appropriate given the bank’s liquidity risks, it may use this scenario as a stress test, provided it is calibrated for different time horizons and is adjusted to reflect the institution’s specific characteristics.
The stress test results must be adequately documented and used for the following:

a. alignment of the established liquidity risk tolerance with the liquidity risk situation;

b. alignment of the level and composition of the liquidity reserve;

c. integration in the limit-setting process;

d. integration in the process of allocating liquidity risk to various business activities,

whereby small banks as defined in margin no. 29 are exempted from fulfilling margin no. 81.

The executive board shall be closely involved in the liquidity stress testing process. The board of directors must be regularly informed, at least on a yearly basis, of the stress test results. The stress test results support the executive board in its assessment of the need for risk mitigating actions according to margin nos. 77-82.

Banks must define their stress tests and the underlying assumptions. Banks covered in margin no. 76 are exempted from this requirement. Stress tests must also include extreme scenarios which are unlikely but nonetheless plausible.

With the exception of the banks covered in margin no. 76, banks must take the following aspects into consideration:

a. The severity of the stress events are based on historical events, case studies on liquidity crisis and/or hypothetical models defined by internal and/or external experts. In doing so, it must be taken into consideration that liquidity shortfalls are often extreme situations with unexpected liquidity outflows and funding consequences. Therefore, the parameters of the stress events must be calibrated as conservative as possible.

b. The scenarios must cover all of significant liquidity risks the bank is exposed to.

c. The stress scenarios must specifically consider the link between increased liquidity needs, less liquid funding markets and deposit withdrawals.

d. The stress scenarios must take both short and long-term liquidity shortfalls into consideration.

Banks exposed to intraday payment risks must take these intraday liquidity risks into consideration in their stress tests.

G. CONTINGENCY FUNDING PLAN

Banks must have a comprehensive and effective contingency funding plan for acute liquidity shortfalls. The contingency funding plan is closely integrated into the bank’s ongoing analysis of liquidity risk.

The contingency funding plan must include:
a. appropriate early warning indicators which can identify the emergence of increased vulnerabilities in the bank’s liquidity position or funding possibilities, allowing the bank to respond accordingly;

b. emergency triggers and a structured, multi-tiered escalation process depending on the severity of the liquidity crisis;

c. liquidity generating and liquidity saving measures and their priority. The measures should be conservative estimates and depend on the escalation level as well as the type and severity of the stress event;

d. operational procedures to transfer liquidity and assets across jurisdictions, group entities, and systems, taking into consideration any transfer restrictions;

e. a clear definition of roles and the allocation of authorities, rights and duties to all functions involved;

f. clear procedures, decision-making processes and reporting duties with the aim of providing a timely and ongoing flow of information to senior management. The issues requiring escalation to senior management must be clearly defined;

g. a clearly defined communication plan which ensures a transparent, consistent and regular flow of information to internal and external parties in a stress situation.

In case of serious liquidity problems, FINMA must be informed immediately.

The contingency funding plan must be tested and updated on an annual basis. The test must include all elements of the contingency funding plan. The executive board must be informed of the test results.

The contingency funding plan must be integrated into the bank’s business continuity plans.

Banks must adequately document the components of the contingency funding plan covered in margin nos. 91-99.

III. Quantitative requirements

(Liquidity Coverage Ratio, LCR)

A. SCOPE OF APPLICATION

The LCR must be met at both stand-alone legal entity level and group level. Banks that are part of a central organization as described in Article 17 BO are exempt, provided they have ensured contractually and/or in their articles of incorporation that the group’s central institute has access to all relevant information and documents anytime, which allows it to assess the liquidity position of the member banks at the stand-alone legal entity level. It must be ensured that no limitations exist as far as the free transfer of liquidity and collateral are concerned.

The consolidation for the purpose of the LCR is the same as the one applied for the purpose of the capital adequacy regulation (Article 7 Capital Adequacy Ordinance [CAO, SR 952.03]).
The consolidation method for the purpose of the LCR is the same as the one applied for the purpose of the capital adequacy regulation (Article 8 CAO).

The financial statements specified in FINMA circular 15/1 “Accounting – Banks” are relevant for the purpose of the LCR.

Banks which calculate the eligible and required capital at stand-alone legal entity level according to an international accounting standard which was approved by FINMA (cf. FINMA circ. 13/1 “Eligible equity capital – banks”, margin no. 156), should use the same accounting standard to calculate the LCR.

Non-consolidated entities (such as joint ventures or minority interests without any control in any other manner) must be included in the scope of consolidation for LCR purposes if the group is the most important source of liquidity for the relevant entity during stress periods.

If the group has a subsidiary that is a bank and other subsidiaries which are not financial institutions and if the holding company of this group is unsuitable for the purposes of banking supervision, then only the bank as subsidiary, but neither the group as a whole nor the holding company on a stand-alone legal entity level, must meet the LCR requirements.

B. LCR CALCULATION

In general, the LCR as per Article 14(2)(a) of the Liquidity Ordinance (LiqO, SR 952.06) is calculated by capturing all of the LCR-relevant positions as defined in Articles 15a, 15b and 16 and Appendices 2 and 3 to LiqO in all currencies translated into Swiss francs. With the exception of aspects described in Articles 17 and 17a LiqO, HQLA are eligible in the LCR as per Article 14(2)(a) LiqO, regardless of their currency composition.

More detailed calculation instructions are included in the Guidelines (formulas for the application of the limits for Category 2a and 2b assets, for the inclusion of additional assets in foreign currencies, additional Category 2a assets, the unwind/settlement mechanism, etc.).

C. EXPLANATIONS ON CATEGORY 1, 2A AND 2B ASSETS

“Coins and bank notes” as per Article 15a(1)(a) LiqO are not equal to the definition of “liquid assets” as per FINMA circ. 15/1 “Accounting – Banks” margin nos. A2-3f.

Specifically current account balances due from banks, postal cheque account balances or clearing balances with banks which are considered to be “liquid assets” pursuant to FINMA circ. 15/1 “Accounting – Banks” margin nos. A2-3f must be recorded as cash inflows for LCR purposes if the relevant criteria are fulfilled, but do not qualify as HQLA.

The following applies to the calculation of the central bank reserves held at the SNB and the treatment of the SNB minimum reserves pursuant Article 15a(1)(b) LiqO:

a. the SNB minimum reserves must be deducted from any central bank reserves held at SNB;
b. if the central bank reserves held at SNB are negative after the SNB minimum reserves have been deducted, this amount must be deducted from the coins and bank notes balance;

c. if the coins and bank notes balance becomes negative after the amount stipulated in margin no. 116 has been deducted, this amount must be recorded as cash outflow.

Multilateral development banks referred to in Article 15a(1)(c)(8) LiqO are defined according to Appendix 1 of the FINMA circular 2008/19 "Credit risks – banks".

Bonds issued by the Emissionszentrale für gemeinnützige Wohnbauträger (issue center for the construction of housing) may be recorded as Level 1 assets if they fulfill the requirements stipulated in Article 15d LiqO.

As per Articles 15a(1)(c)(3) and 15b(1)(a)(3), bonds issued by Swiss cantons are to be considered as the following:

a. Category 1 assets if they have a rating that equals rating class 1 or 2 according to the FINMA concordance table by a rating agency recognized by the FINMA, and if they fulfill the requirements stipulated in Article 15d LiqO;

b. Category 2a assets if they have a rating that equals rating class 3 according to the FINMA concordance table by a rating agency recognized by the FINMA, and if they fulfill the requirements stipulated in Article 15d LiqO;

c. not as HQLA if they have a rating that equals rating class 4 or worse according to the FINMA concordance table by a rating agency recognized by the FINMA or are not rated at all.

Cantonal banks which have an unlimited or limited cantonal guarantee for liabilities may not consider as HQLA bonds issued by the canton which acts as guarantor for this particular cantonal bank.

As per Article 15b(1)(a)(3), bonds issued by Swiss cities, communities or the Emissionszentrale der Schweizer Gemeinden (ESG) (issue center for Swiss communities) must be considered as follows:

a. Category 2a assets if they have a rating that equals rating class 1 to 3 according to the FINMA concordance table by a rating agency recognized by the FINMA, and if they fulfill the requirements stipulated in Article 15d LiqO;

b. not as HQLA if they have a rating that equals rating class 4 or worse according to the FINMA concordance table by a rating agency recognized by the FINMA or are not rated at all.

If industrial corporations issue bonds through a specialized financing subsidiary which also provides financial services for the corporation (but which does not hold a banking license in Switzerland or abroad), these bonds may be considered as Category 2a assets if they fulfill the requirements stipulated in Article 15d LiqO.

Should these financing subsidiaries hold a banking license in Switzerland or abroad, such bonds may not be considered as HQLA.
Covered bonds are Category 2a assets if they are under a special law regulation which subjects such bonds to special public supervision for the protection of the unit holders and if they fulfill the requirements of Article 15d LiqO.

Precious metal holdings are not considered as HQLA.

Common equity shares may be considered as Category 2b assets as per Article 15b(5) and (6) LiqO if:

a. they are exchange traded and cleared centrally; and

b. the common equity share portfolio is well-diversified across different sectors; and

c. the common equity shares are denominated in Swiss francs or in the currency of the jurisdiction where liquidity risk is taken; and

d. the common equity shares are a constituent of the Swiss Market Index (SMI); or in the case of non-Swiss common equity shares

e. where the shares are held by a non-Swiss subsidiary or branch in order to mitigate liquidity risks in this entity of such particular entities and these shares are constituents of a stock index which the foreign regulator considers to be eligible as Category 2b assets.

D. CHARACTERISTICS OF HQLA

Apart from the criteria for Category 1 and 2 assets described in Articles 15a and 15b LiqO, the bank, when selecting HQLA, cumulatively takes into consideration the following factors, which could influence whether liquidity can be obtained reliably in a market:

a. They are traded in large, deep and active markets characterized by a low level of concentration;

b. They have to be a proven record as a reliable source of liquidity in repo or spot markets, even during stressed market conditions. In particular:
   • In the case of Category 2a assets, the increase in haircut in a repo transaction must not exceed 10 percentage points or the maximum decline of price in spot markets must not exceed 10 percent over a 30 day period of stressed market conditions or since the first issuance date;
   • In the case of common equity shares, the increase in haircut in a repo transaction must not exceed 40 percentage points or the maximum decline of price in spot markets must not exceed 40 percent over a 30 day period of stressed market conditions or since the first issuance date;

c. The price is determined by market participants and is easy to determine in the market or can be calculated via a simple formula using inputs that are publicly available and is not based on complex model-based assumptions;

d. They are listed at a Swiss FINMA-regulated stock exchange or at a foreign stock exchange which is regulated by a foreign regulator;
The HQLA categories applied and published by the SNB may be used for the HQLA categorization of SNB repo-eligible securities.

A bank may assume that the SNB repo-eligible securities fulfill HQLA characteristics stipulated in margin nos. 140-147.

If a foreign regulator has a catalogue or a register of eligible assets or if it has defined exact criteria which assets are eligible for the LCR, margin nos. 140-147 do not need to be considered for such foreign assets.

**E. OPERATIONAL REQUIREMENTS FOR MANAGING HQLA**

A bank must have of processes and appropriate systems in place to be able to sell HQLA or to utilize it in a simple repo transaction at all times. A bank must exclude from its stock of HQLA any assets where it does not have the operational capability to monetize them under a 30-calendar-day liquidity stress scenario.

The stock of HQLA must fulfill the following operational requirements:

a. HQLA must be unencumbered. Unencumbered means free of legal, regulatory, contractual or other restrictions on the ability to sell the assets within the next 30 calendar days or to utilize them in a simple repo transactions.

b. HQLA must be under the control of the function charged with managing the liquidity of the bank. This function must have the continuous authority, and legal and operational capability to sell the HQLA within the next 30 calendar days or to utilize them in a simple repo transaction.

c. HQLA may not be used for hedging or trading strategies or to credit enhance structured transactions or to cover operational costs. However, the market risks associated with the HQLA may be hedged. In this case, the cash outflow that would arise if the hedge were to be closed out early needs to be deducted from the market value of these HQLA.

d. A bank must have an overview of legal entities, geographical locations, currencies and custodial or bank accounts where HQLA is being held. The overview needs to be regularly updated.

e. A bank must assess whether the HQLA held in foreign entities is subject to any transfer restrictions due to regulatory, legal, tax, accounting or other reasons. HQLA held in foreign entities must not be included in the stock of HQLA at consolidated level if:
   - they exceed the entities’ next cash outflows but they are not freely transferable at consolidated level in times of liquidity stress, or
   - they are held in a legal entity without market access, unless the HQLA can be freely transferred to another group entity in times of liquidity stress.
f. A bank must exclude HQLA from its stock of HQLA if the fire-sale prices were to cause a breach of the capital adequacy requirements.

g. HQLA held in foreign group entities may be considered as HQLA at consolidated level up to the net cash outflow of the foreign group entity, provided the net cash outflow of the foreign group entity are considered at consolidated level.

h. Assets may be considered as part of the stock of HQLA if:
   • they have been received in reverse repo, securities financing and collateral swap transactions and have not been rehypothecated, and are legally and contractually freely available to the bank;
   • they are pre-positioned, deposited or pledged with central banks, a central clearing house or another public institution but have not been used to generate liquidity ("excess collateral"), whereas assets with the highest liquidity must be captured as exceeding first; or
   • they have been received as collateral for derivative transactions that are not segregated and are legally able to be rehypothecated, provided the bank records an appropriate outflow for the associated risks.

F. REQUIREMENTS FOR AN ADEQUATE DIVERSIFICATION OF CATEGORY 2 ASSETS

The stock of Category 2 assets as per Article 15b LiqO must be adequately diversified with regards to asset types, issue and issuer types and maturities and the diversification must be reviewed regularly.

If a bank is very exposed to the Swiss mortgage market due to its business model and if a large portion of its Category 2a assets consist of Swiss Pfandbriefe (mortgage bonds), as part of its risk control (FINMA circ. 08/24 "Supervision and internal control – banks") it must assess the correlation risk (wrong-way risk) between its exposure to the Swiss mortgage market and its stock of HQLA.

Small banks must avoid inappropriate concentrations on specific securities.

G. UNWINDING / SETTLEMENT

Through the unwinding/settlement mechanism the stock of Category 1 and 2a assets is relevant which is available after the secured financing transactions have matured. Therefore, such transactions do not impact the calculation of the LCR in regard to the stock of HQLA and to the net cash outflows.

Moreover, through the unwinding/settlement mechanism the stock of HQLA relevant for the limit of 40 percent as per Article 15c(1)(c) LiqO, the total of 75 percent as per Article 16(2) LiqO, as well as amounts relevant for the LCR by currencies as per Articles 17 and 17a LiqO is impacted in the same way by secured financing transactions as any other secured financing transaction maturing within 30 calendar days.

Secured financing transactions which include the swap of HQLA as per Article 15e LiqO and currency swaps with a residual maturity of more than 30 calendar days may be unwound/settled if these transactions are with the SNB and have a termination notice period of less than 30 calendar days.
Collateral which the bank has lent to clients to cover short positions must be treated like secured financing transactions.

The application of the unwinding/settlement mechanism and the treatment of collateralized financing transactions is based on Appendix 1.

H. CASH OUTFLOWS - EXPLANATIONS ON APPENDIX 2 OF THE LIQO

a) Deposits from retail clients
Deposits of retail clients are deposits placed by natural persons.

For LCR purposes, retail client deposits include demand deposits and term deposits maturing within 30 days. Deposits which are irrevocably pledged for more than 30 calendar days do not need to be included.

If a deposit has been actively cancelled and if it matures within 30 calendar days, the outflow should be captured as "other contractual cash outflows" under item 13 of Appendix 2 of the LiqO.

Liabilities from derivative transactions are explicitly excluded from this definition.

Stable deposits are deposits which are fully insured by the Swiss deposit insurance scheme or by a foreign deposit insurance scheme or by an equivalent guarantee from a central government and which either

a. are a component of an established client relationship that makes deposit withdrawal highly unlikely, or
b. are held in a transactional account.

An established client relationship is given if the depositor meets at least one of the following criteria:

a. the depositor has an active relationship with the bank for at least 24 months;
b. the depositor has a long-term borrowing relationship with the bank (mortgage loans or other long-term loans); or
c. the depositor has at least three other products with the bank other than loans (e.g. EC card, credit card, Pillar 3a account, etc.).

Transactional accounts are salary accounts, private accounts and/or other accounts which are offered in connection with a majority of the following services: payment orders, use of automated teller machines, cheques, debit and credit cards, home banking and which offer an overdraft possibility. Pure securities accounts are not transactional accounts.

The Swiss deposit insurance scheme can be taken into account up to CHF 6 billion per institution.

The following priority order is to be applied for the allocation of the deposits insured by the Swiss deposit insurance scheme: Stable deposits, including deposits from small business customers take first priority, followed by deposits from other corporate and wholesale clients.
If deposits in foreign subsidiaries or foreign branches are subject to an especially secure deposit insurance scheme, the LCR outflow rates that the national regulator requires for these deposits can be applied to these deposits. Such deposits must fulfill the requirements stipulated in margin nos. 178-185 as well as the following criteria:

a. the insurance scheme is based on a system of pre-funding via the periodic collection of levies on banks which insured deposits;

b. the scheme has adequate means of ensuring ready access to additional funding in the event of a large call on its reserves, e.g. an explicit and legally binding guarantee from the government, or a standing authority to borrow from the government; and

c. access to insured deposits is available to depositors in a short period of time once the deposit insurance scheme is triggered.

If deposits in foreign subsidiaries or foreign branches are subject to a deposit insurance scheme, the respective provisions of the foreign regulator must be taken into consideration when calculating the insured portion.

Less stable deposits are deposits which do not meet stable deposit criteria.

Deposits with a contractual residual maturity of more than 30 calendar days but which could be withdrawn within 30 days (explicit or implicit termination/withdrawal right under special circumstances, termination options, etc.) may not be considered deposits maturing within a 30-day horizon if the bank imposes a penalty for withdrawing the deposits, thus making their withdrawal sufficiently unlikely. The penalty must comprise of the following:

a. the loss of outstanding interests from the effective date of the termination until the end of the contract;

b. early termination penalty in favor of the bank for fixed interest transactions and

c. at least 200 basis points on the deposit.

If a portion of the deposit can be withdrawn without incurring a penalty as per margin nos. 194-197, only that portion should be treated as a deposit maturing within 30 days.

If a bank allows a depositor to withdraw such deposits despite a clause that says the depositor has no legal right to withdraw, the entire category of these funds would then have to be treated as demand deposits. Should a bank allow such an exceptional withdrawal only in case of hardship, the entire category of deposits would not need to be treated as demand deposits.

Metal accounts should normally be treated in the same way as normal savings or demand deposits with the exception where a client issues a sale order in respect of a specified amount of the precious metal concerned and the metal accounts are settled physically and the client receives the corresponding cash payment or credit on a clearing account always only after the bank has sold the precious metal position at the price achieved. This must be customary practice, and in addition the client may not in fact have any contractual entitlement to cash payment at the precious metal price fixed, in which case the liquidity risk has been transferred in full to the client.
For deposits greater than CHF 1.5 million, the following treatment applies:

a. deposits of up to CHF 100,000 may be recorded as insured deposit provided the total upper limit of CHF 6 billion has not been exceeded (cf. margin no. 186).

b. a further CHF 1.4 million may be recorded as less stable deposits from retail clients; and

c. any deposits of more than CHF 1.5 million must be recorded as high-value deposits in the liquidity statement.

Medium-term notes and other debt instruments may be treated as deposits from retail clients if they are sold exclusively to retail clients and are held in retail accounts. It must be ensured that they cannot be bought and held by parties other than retail clients.

If medium-term notes and other debt instruments are designed as bearer shares, it must be ensured that they are only sold to retail clients at issuance.

b) Unsecured funding provided by corporate or wholesale clients

Funds provided by corporate and wholesale clients are deposits from legal entities including independent assets, such as trusts and foundations.

Unsecured means that the funds are not collateralized by legal rights to specifically designated assets owned by the bank in case of bankruptcy, insolvency, liquidation or resolution.

Obligations related to derivative contracts are explicitly excluded from this definition.

Unsecured wholesale funding provided by corporate and wholesale clients is defined as any funding that is callable within 30 calendar days or that has its earliest possible contractual maturity date within this time horizon (such as maturing term deposits and unsecured debt securities) as well as funding with an undetermined maturity and funds which the client is able to call without any penalty as per margin nos. 194-197 and which causes a repayment of the funds within the 30 calendar day time horizon.

Small business customers are non-financial legal entities with a total credit volume (on a consolidated basis where applicable) and a total funding (on a consolidated level where applicable) of less than CHF 1.5 million. The credit volume and funding should be considered separately; netting is not allowed. Consolidated level means that all companies under common control ("group of small companies") have to be considered as a single creditor or debtor. The bank can treat such deposits like deposits from retail clients if they have similar characteristics as deposits from retail clients.

Funding from associations or charity foundations may be treated like deposits from retail clients if the association or the charity foundation fulfills the requirements for small business customers as set out in margin no. 211.

The separation of deposits into operational and non-operational should be done after the counterparty type has been determined.
“Operational deposits” are deposits from corporate or wholesale clients that are generated from clearing, custody and cash-management services, where

a. one of the following definitions is met:
   • a clearing relationship refers to a service arrangement that enables customers to transfer fund or securities indirectly through direct participants in domestic settlement systems to final recipients;
   • custody services include the provision of services related to safekeeping of securities, the management of securities and reporting or the facilitation of the operational and administrative elements of related activities on behalf of customers; or
   • cash-management services include the provision of products and services which enable the customers to manage their cash flows as well as their assets and liabilities and conduct financial transactions necessary to the customer’s ongoing operations;

b. the services are provided in the course of an established relationship and the customer is reliant on the bank to perform these services;

c. the services do not consist of prime brokerage or correspondent banking services;

d. the customer is not able to withdraw deposits which are legally due within the 30-day time horizon without impacting its normal banking activities;

e. the services are provided under a legally binding agreement; and

f. the deposits are held in specifically designated accounts (such as current cash management or security settlement accounts) and are priced without giving an economic incentive to the customer to leave any excess funds on these accounts.

Any funds that could be withdrawn and would still leave enough funds to fulfill these clearing, custody bank and cash management activities do not qualify as operational deposits.

The bank has to establish an internal model to quantify and substantiate the minimum balances of operational deposits maintained by customers for their clearing, custody and cash management activities. For this purpose, the bank may use the average account turnover in the past as an indicator.

The internal model as per margin no. 225 must take into account the complexity as well as the type and scope of the bank’s business activities.

The internal model as per margin no. 225 must be approved by FINMA.

If a small bank is unable to quantify portion of operational deposit via an internal model, the following applies, depending on the counterparty:

a. For non-financial corporates, central governments, central banks, subordinated local authorities and other public sector entities and multilateral development banks: 80 percent of their deposits are not operational;

b. For financial institutions which are not banks and for all other legal entities and corporate clients: 90 percent of their deposits are not operational;
c. For banks: 100 percent of their deposits are not operational.

An institutional network of cooperative banks is a group of legally autonomous banks with a statutory framework of cooperation with common strategic focus and brand where specific functions are performed by central institutions or specialized service providers. An outflow rate of 25 percent can be given to the amount of deposits of member institutions with the central institution that:

a. are placed due to statutory minimum deposit requirements, which are registered at regulators;

b. serve the statutory protection scheme against insolvency or illiquidity of the institutional network; or

c. fulfill the requirements for operational deposits as per margin nos. 214-223.

All other deposits of member institutions with the central institution as well as all deposits from correspondent banking activities with the central institution do not qualify for the 25 percent outflow rate and are considered deposits from financial institution with an outflow rate of 100 percent.

An outflow rate that normally applies to less stable deposits of retail clients (10 percent) may be applied to deposits in vested benefit funds and Pillar 3a accounts if:

a. the bank’s vested benefit foundation, bank or investment foundation itself has invested the funds with the respective bank;

b. such funds can only be withdrawn by the natural person but not by the foundation within 30 calendar days; and

c. the deposits are explicitly assigned to the natural person.

Pledged Pillar 3a deposits and other pledged deposits must not be recorded as an outflow if they are pledged for more than 30 calendar days through the underlying transaction.

Item 2.5 in Appendix 2 LiqO ("all other legal entities") includes fiduciaries, beneficiaries, conduits and special purpose entities, companies affiliated to the bank and other legal entities. For LCR purposes, the terms fiduciaries and beneficiaries are defined as follows:

a. a fiduciary is a legal entity which is authorized to manage assets on behalf of a third party. This includes asset management companies, hedge funds and other collective investment schemes; an

b. a beneficiary is a legal entity which receives or is entitled to receive benefits under a will, an insurance policy, a pension scheme, an annuity, a trust or a foundation with the exception of small charity foundations as per margin no. 212 and vested benefit, bank or investment foundations as per margin nos. 237-240 or based on another type of contract, such as a Personal Investment Company (PIC).

The treatment of trusts, foundations or PICs as "deposits provided by other legal entities" or as "deposits provided by non-financial corporates" depends on the beneficiaries. If the beneficiary of a trust, a foundation or a PIC is an individualized natural person or several natural persons related to each other (family offices, family trusts), the deposits of such trusts, foundations or PICs may be recorded as "deposits pro-
vided by non-financial corporates". Deposits of other trust structures, especially of those with the purpose of managing collective investments, are considered to be "deposits provided by other legal entities".

Outflows from deposits provided by affiliated entities of the bank must be recorded as "other legal entities", except if the funds are provided as part of an operational relationship as per margin nos. 214-223, represent a deposit in an institutional network as per margin nos. 232-235 or the funds are provided by affiliated entities that are non-financial corporates.

"Affiliated entities" according to margin no. 246 are defined as entities which are not part of the group created by the bank itself but which are under common control of an entity which is above the bank and part of the group structure, in line with FINMA circ. 15/1 "Accounting – Banks" (Appendix 7).

Unsecured debt instruments include all of the debt securities issued by the bank and maturing within 30 calendar days, except for medium-term notes and those debt instruments which have been sold exclusively to retail clients and which fulfill the criteria of margin no. 205.

c) Derivative and other transactions
The net cash outflow from derivatives is based on the expected contractual cash inflows and outflows. The following applies:

a. cash inflows and outflows may be calculated on a net basis by counterparty, only where a valid master netting agreement exists;

b. options should be assumed to be exercised if they are "in the money" for the option buyer and this is possible from a contractual point of view;

c. the calculation must exclude outflows due to market valuation changes of the derivative (margin no. 262) and outflows due to valuation changes of collateral (margin no. 267); and

d. where derivatives are collateralized with HQLA, the cash outflows must 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. In doing so, the bank must be legally entitled and operationally capable to re-use the collateral in new cash raising transactions once the collateral is received. It has to be ensured that inflows and assets are not double counted.

"Other transactions" as per Appendix 2 LiqO, items 5.2 - 5.7, are defined as derivative-like structures such as structured products. Secured refinancing transactions, including securities lending and borrowing are excluded.

If the bank is contractually obliged to post additional collateral in derivatives, financing transactions and other contracts in case of a downgrade of its long-term credit rating up to 3 notches (Appendix 2 LiqO, item 5.2), the bank must record this additional collateral as cash outflow (outflow rate of 100 percent).

Margin no. 255 (outflow rate of 100 percent) also applies if the counterparty is entitled to demand early repayment of existing liabilities or the drawdown of contingent facilities instead of additional collateral upon the bank’s downgrade of up to 3 notches.
If the posting of additional collateral, the early repayment of existing liabilities or the drawdown of contingent facilities is connected to a downgrade of the bank’s short-term credit rating, it needs to be assumed that this will also trigger a downgrade in the long-term credit rating as per mapping “Swiss and International Standardized Approach” published with FINMA circ. 08/19 “Credit Risks - Banks”.

The impact of downgrade shall consider all types of margin collateral and contractual triggers which change rehypothecation rights for non-segregated collateral.

Should the bank hold excess non-segregated collateral that could contractually be called at any time by the counterparty (Appendix 2 LiqO, item 5.3), the bank must record the total amount of this collateral as a cash outflow (outflow rate of 100 percent).

If the bank contractually owes collateral to the counterparty on transactions for which the counterparty has not yet demanded the posting of such collateral (Appendix 2 LiqO, item 5.4), the bank must record the total amount of this collateral as a cash outflow (outflow rate of 100 percent).

If the bank holds non-segregated HQLA collateral which the counterparty can substitute for non-HQLA assets without the bank’s consent (Appendix 2 LiqO, item 5.5), the bank must record the total amount of this collateral as a cash outflow (outflow rate of 100 percent).

The net cash outflow from derivatives or other transactions due to market valuation changes may be determined using a look-back approach or an internal model (Appendix 2 LiqO, item 5.6). For the look-back approach, 100 percent needs to be applied to the largest absolute net 30-day collateral flow realized during the preceding 24 months.

The criteria to quantify the net cash outflows from derivatives or other transactions due to market valuation changes based on an internal model are the following:

a. when using a scenario-based approach, the stress assumptions applied must cover at least the extent of the LCR scenario;

b. when using a VaR model-based approach, the confidence level must be at least 98 percent and a holding period of a minimum of 30 calendar days. For the look-back approach a data history of at least 24 months must be considered. If the data history is not available or if an alternative approach is used, the bank must make conservative estimates which align with the extent of the LCR scenario.

Small banks can estimate the net cash outflow from derivatives or other transactions due to market valuation changes (margin nos. 262-265).

If the bank provides and receives non Category 1 collateral for derivatives and other transactions to/from the same counterparty (Appendix 2, item 5.7), it must record 20 percent of the value of all such posted collateral net of collateral received on a counterparty basis as cash outflow in order to secure any market valuation changes.

When calculating the outflow for potential market valuation changes as per margin no. 267, the following applies:
a. the collateral received may only be deducted if it is not subject to any restrictions on re-use or rehypothecation;

b. the 20 percent outflow rate is calculated based on the notional amount required to be posted as collateral after any other haircuts have been applied that my be applicable to the collateral category; and

c. any collateral held in a segregated margin account can only be used to offset outflows that are associated with payments that are eligible to be offset from that same account.

d) Credit and liquidity facilities

For the purpose of LCR, credit and liquidity facilities are defined as explicit contractual agreements or obligations to extend funds at a future date to retail, corporate or wholesale customers. These facilities only include contractually irrevocable, committed or conditionally revocable agreements to extend funds.

The undrawn portion of the credit and liquidity facilities is calculated net of any HQLA which has been posted as collateral by the counterparty to secure the facilities or that the counterparty is contractually obliged to post when the counterparty will draw down the facility after application of the respective haircuts. The bank must be legally entitled and operationally capable to re-use the collateral in new cash raising transactions once the facility is drawn, and there is no undue correlation between the probability of drawing the facility and the market value of the collateral.

General working capital facilities for corporate customers are considered as credit facilities.

The obligation to make additional payments to central mortgage bond institutions (Pfandbriefzentralen) must be captured as a credit facility (Appendix 2 LiqO, item 8.1.3).

Small banks may record all facilities as credit facilities.

For the purpose of LCR, liquidity facilities are defined as committed, undrawn back-up facilities which are explicitly provided to refinance maturing debt obligations of a customer and which the customer may only use if the customer is unable to rollover that debt in financial markets. In addition, the following applies:

a. the amount of the commitment to be treated as a liquidity facility equals the amount of the currently outstanding debt issued by the customer maturing within a 30 day period that is backstopped by the facility;

b. any additional capacity of the facility is treated as a committed credit facility; and

c. in case of a syndicated facility, only the proportionate share is treated as a liquidity facility.

Notwithstanding the provisions in margin nos. 274, 277-280, any facility provided to hedge funds, money market funds, special purpose funding vehicles or other vehicles used to finance bank assets should be captured in their entirety as liquidity facility.
e) Customer short positions covered by other customers’ collateral
Non contractual obligations where customer short positions are covered by other customers’ collateral represent contingent liabilities, for which

a. the bank internally matches the client assets against other clients’ short positions;

b. the collateral does not qualify as Category 1 or 2 assets; and

c. the bank may be obligated to find additional resources of funding for these positions in the event of client withdrawals.

f) Other contractual cash outflows within 30 days
Committed, irrevocable outflows in the next 30 calendar days arising from forward-starting transactions are treated as outstanding liabilities.

I. CASH INFLOWS - EXPLANATIONS ON APPENDIX 3 OF THE LIQO

a) General requirements
Only contractual cash inflows expected in the next 30 calendar days from outstanding receivables, including interest payments, may be considered as cash inflows, provided that

a. there is neither a default nor an impairment;

b. the bank does not expect a default nor an impairment due to default risks for these receivables in the next 30 calendar days in line with FINMA circ.15/1 “Accounting – Banks”; and

c. the cash inflows are not conditional.

Committed, irrevocable inflows in the next 30 calendar days arising from forward-starting transactions are also considered as outstanding receivables as per margin 287.

If there is a specific or a collective allowance for credit losses of X percent on the credit portfolio, only 100 - X percent of the cash inflows from this particular credit portfolio which is contractually due in the next 30 calendar days may be considered as cash inflow.

Demand deposits with other domestic banks or with banks in other countries which introduced the LCR according to the rules issued by the Basel Committee may be recorded as cash inflows if no default or impairment is expected for these receivables within the next 30 calendar days.

Cash inflows should only be considered at the latest possible date. Cash inflows from loans that have no specific maturity should not be included. The same applies to loans which mature within the next 30 calendar days which are part of a framework credit agreement with a residual maturity of more than 30 calendar days. No assumptions should be applied as to when maturity would occur. Excepted from this are overdrafts on current accounts which may be recorded as a cash inflow.
b) **Secured financing transactions**

A margin loan is a collateralized loan extended customers for the purpose of taking leveraged trading positions. The ownership of the collateral received is transferred to the bank and the bank may re-use the securities received. If the collateral received has already been pledged and the bank has no right to reuse it, this loan is not considered a margin loan for LCR purposes.

c) **Operational deposits placed with other financial institutions and deposits placed to the centralized institution of an institutional network of cooperative banks**

The definition of operational deposits which the bank holds at other financial institutions for clearing, custody and cash-management purposes equals the one provided in margin nos. 214-223.

If a bank is not able to distinguish operational deposits from non-operational deposits, 90 percent of the deposits held at other financial institutions must be recorded as operational deposits.

d) **Derivatives**

Margin nos. 249-251 also apply for the calculation of net cash inflows from derivatives. When derivatives are collateralized by HQLA, 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.

J. **FULFILLMENT OF THE LCR IN SWISS FRANCS**

Margin nos. 303-320 only apply to the coverage of the net cash outflows in Swiss francs as per Article 14(2)(b) LiqO without considering net cash outflows in foreign currencies.

In general, net cash outflows in Swiss francs need to be covered by HQLA in Swiss francs.

Banks may not simultaneously use additional foreign currency HQLA (margin nos. 303-314) and additional Category 2 HQLA in Swiss francs (margin nos. 315-320) to cover net cash outflows in Swiss francs.

The use of additional Category 2 HQLA in Swiss francs (margin nos. 315-320) is limited to those banks which, due to their business model, have foreign currency liabilities of less than 5 percent of the total of liabilities and, in case of commercial banks, whose domestic loans make up more than 50 percent of their total assets (“domestic bank”) or which do not have adequate organizational structures and processes to measure, manage and monitor their foreign currency risks.

a) **Considering additional foreign currency HQLA**

Foreign currency HQLA to cover net cash outflows in Swiss francs is limited to securities denominated in the four primary foreign currencies (British pound, euro, Japanese yen and US dollar) and in the secondary foreign currencies (Danish crowns, Norwegian crowns, Swedish crowns, Singapore dollars).

The conditions for being able to use the exception-to-policy rule for the use of additional foreign currency HQLA are the following:

a. the bank must have adequate organizational structures and processes to measure, manage and monitor its foreign currency risks; and
b. the bank takes into consideration that the ability to convert foreign currencies and the access to the relevant currency markets may not exist under stress conditions and that abrupt exchange rate changes could significantly increase existing currency mismatches. The bank must therefore estimate the convertibility of the foreign currencies into Swiss francs in times of liquidity stress. In this context, the depth of the foreign exchange swap markets in order to convert assets into the required liquidity in Swiss francs during times of liquidity stress needs to be assessed.

Additional requirements the banks must fulfill when considering additional foreign currency HQLA are the following:

a. due to the foreign currency risks additional haircuts apply over and above the HQLA category haircuts to foreign currency HQLA which is used to cover net cash outflows in Swiss francs which exceeds the threshold of 25 percent of the net cash outflow in Swiss francs. Category 1 assets denominated in primary foreign currencies must be considered first, followed by the ones denominated in secondary foreign currencies, followed by Category 2a assets in the same order. The additional haircuts are defined as follows:
   - HQLA denominated in primary foreign currencies (margin no. 303) receive an additional haircut of 8 percent and
   - HQLA denominated in secondary foreign currencies (margin no. 303) receive an additional haircut of 10 percent;

b. Foreign currency HQLA which are used to cover the net cash outflow in Swiss francs may be recognized up to 40 percent of net cash outflows in Swiss francs. This ceiling applies after the consideration of the haircuts and after the unwinding/settlement of secured financing transactions which mature within 30 calendar days and which involve the exchange of Category 1 and 2a HQLA;

c. Foreign currency HQLA is limited to Category 1 and Category 2a HQLA;

d. Foreign currency HQLA which is used to cover net cash outflow in Swiss francs must be considered in the relevant asset category in Swiss francs when determining the ceiling for Category 2a and 2b assets according to Article 15c(2)(c) LiqO; and

e. The stock of foreign currency HQLA must be disclosed separately in the liquidity statement.

b) Considering additional Category 2a HQLA in Swiss francs beyond the 40 percent cap

A pre-condition for applying the exception-to-policy rule to consider additional Category 2a assets in Swiss francs is an effective limitation of risks involved. The bank must be able to adequately measure, monitor and limit any concentration risks, price risks as well as monetization risks related to the holding these additional Category 2a assets.

Additional requirements the banks must fulfill when considering additional Category 2a HQLA in Swiss francs are the following:

a. Category 2a assets which exceed the ceiling of 40 percent, as determined in art. Article 15c(2)(c) LiqO, are subject to an additional haircut of 5 percent, leading to a total discount of 20 percent;
b. Category 2a assets (including the additional assets) are eligible up to 60 percent of the total stock of HQLA;

c. the additional Category 2a assets above the 40 percent ceiling must be rated at least AA and must be eligible as collateral for regular money market transactions with the SNB; and

d. Category 2b assets continue to be limited to 15 percent of the total stock of HQLA prior to adding the additional Category 2a HQLA in Swiss francs.

K. LCR BY SIGNIFICANT FOREIGN CURRENCY

The bank must monitor the LCR in all significant currencies in order to react to any currency mismatches between the HQLA and the net cash outflows in times of stress. The monitoring using the LCR by significant foreign currency must include at least the following:

a. a regular internal reporting to management or a committee reporting directly to management; and

b. the clear presentation of differences between results from internal (stress) models used to manage foreign currencies and results from the LCR by significant foreign currency.

The duty to calculate the LCR by significant currencies applies to the highest consolidation level. Banks without a group structure must calculate the LCR by significant currencies at the stand-alone legal entity level.

A currency is considered significant if significant liquidity risks exist in that currency. Significant liquidity risks in a currency exist if the liabilities in all maturity bands for the relevant currency make up more than 5 percent of the total balance sheet liabilities.

L. TEMPORARY BREACHES OF THE LCR MINIMUM REQUIREMENTS UNDER EXTRAORDINARY CIRCUMSTANCES

"Extraordinary circumstances" could be a severe idiosyncratic event, an event caused by an international or the Swiss financial market stress or a combined event.

"Temporary" means that the breach of the minimum requirements is restricted to the duration of the extraordinary circumstances.

Should a bank breach the LCR minimum requirements, it must immediately:

a. inform FINMA of the breach;

b. provide FINMA with an assessment of the liquidity situation, including the factors which have caused the breach in the LCR;
c. provide FINMA with measures which will be taken in order to meet the minimum requirements again quickly; and

d. explain to FINMA by when the LCR requirements will again be met.

Should the bank’s plan, that shows which measures will be taken in order to meet the minimum requirements again, be insufficient, FINMA may demand that the bank lowers its liquidity risks, increases its HQLA and strengthens the overall management of its liquidity risks.

Depending on its risk assessment, FINMA may require intra-month reporting of the LCR reports. Daily or weekly LCR reports need to enable FINMA to adequately and thoroughly assess the bank’s liquidity situation. Intra-month reports are usually due on the day after the cut-off date.

If a breach of the LCR minimum requirement is expected, margin nos. 328-334 apply accordingly.

**M. LIQUIDITY STATEMENT**

All data must be recorded at the reference date. From liquidity point of view settlement date accounting should be applied.

All positions necessary to calculate the LCR should be measured according to FINMA circ. 15/1 “Accounting – Banks”.

HQLA which are to be valued at market values are the exception (Articles 15a(3) and 15b(4) and (6) LiqO). The valuation at market value must also include broken-period interest.

Instead of measuring HQLA at market values, the principle of the lower of cost or market values may be applied.

The calculation of net cash outflows and inflows from derivatives should be done according to margin nos. 249-253 and 298.

Positions in foreign currencies are to be converted using the spot rate at the reference date of the liquidity statement.

**N. DEFINITION OF SPECIFIC, LOWER CASH OUTFLOW AND/OR HIGHER CASH INFLOW RATES FOR INTRA-GROUP CASH FLOWS**

The consideration of cash outflows and inflows between the parent company and any directly and indirectly held subsidiaries within the same group is limited to the calculation of the LCR of the parent company on stand-alone legal entity basis.

For cash outflows and inflows between the parent company and the subsidiaries within the same group, the following outflow and inflow rate apply:
a. In general, an outflow rate of 100 percent is applicable to all intra-group cash outflows (Appendix 2 LiqO, item 15) and an inflow rate of 100 percent for all intra-group cash inflows (Appendix 3 LiqO, item 7);

b. In exceptional cases, a look-through approach may be applied for back-to-back transactions between the parent company and the subsidiary. This approach may be applied if the cash flow due to the guarantee provided by the parent company is only triggered if there is a specific underlying transaction of the subsidiary with a third party which causes such outflow.

The look-through approach as per margin no. 345 must be approved by FINMA.

For the purpose of LCR, back-to-back transactions are defined as transactions where the parent company assumes the liquidity risks of the directly or indirectly held subsidiaries within the same group due to its central treasury management approach. For back-to-back transactions, the parent company may use the inflow/outflow rates defined in Appendices 2 and 3 LiqO (look-through approach).

Secured finance transactions between a parent company and directly or indirectly held subsidiaries within the same group are unwound/settled if they involve the exchange of HQLA and mature within 30 calendar days.

Should a foreign regulator restrict cash outflows for a subsidiary or a branch of a Swiss bank (ring-fencing) or for a Swiss subsidiary or branch of a foreign bank, or if there is such a threat, FINMA is entitled to reduce the intra-group cash inflows up to 0 percent.
Appendix 1
Unwinding / settlement mechanism and secured financing transactions

A. Treatment of repos and secured securities lending\(^1\) maturing within 30 calendar days:\(^2\)

<table>
<thead>
<tr>
<th>Counterparty</th>
<th>Cash outflow rate</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Transactions conducted with the SNB or another central bank, of which:</strong></td>
<td></td>
</tr>
<tr>
<td>- backed by Category 1 assets</td>
<td>Unwound / settled</td>
</tr>
<tr>
<td>- backed by Category 2 assets – excluding equity shares(^3)</td>
<td>Unwound / settled</td>
</tr>
<tr>
<td>- backed by Category 2 assets – equity shares(^3)</td>
<td>0% Article 15e(4)</td>
</tr>
<tr>
<td>- backed by non-HQLA</td>
<td>0%</td>
</tr>
<tr>
<td><strong>Transactions not conducted with a central bank, of which:</strong></td>
<td></td>
</tr>
<tr>
<td>- backed by Category 1 assets</td>
<td>Unwound / settled</td>
</tr>
<tr>
<td>- backed by Category 2 assets – excluding equity shares(^3)</td>
<td>Unwound / settled</td>
</tr>
<tr>
<td>- backed by Category 2 assets – equity shares(^3):</td>
<td></td>
</tr>
<tr>
<td>- conducted with the domestic sovereign, multilateral development banks or domestic public sector entities risk-weighted 0% or 20%</td>
<td>25%</td>
</tr>
<tr>
<td>- not concluded with the domestic sovereign, multilateral development banks or domestic public sector entities risk-weighted 0% or 20%</td>
<td>50%</td>
</tr>
<tr>
<td><strong>Transactions not conducted with a central bank that are backed with non-HQLA, of which:</strong></td>
<td></td>
</tr>
<tr>
<td>- conducted with the domestic sovereign, multilateral development banks or domestic public sector entities risk-weighted 0% or 20%</td>
<td>25%</td>
</tr>
<tr>
<td>- not concluded with the domestic sovereign, multilateral development banks or domestic public sector entities risk-weighted 0% or 20%</td>
<td>100%</td>
</tr>
</tbody>
</table>

---

\(^1\) Includes secured SLB transactions, i.e. the borrower has an unlimited right of disposal over the securities received. As per margin no. 163, secured SLB transactions with limited transfer of right of disposal must not be considered as HQLA.

\(^2\) For transactions with the SNB which include a contractual termination provision, the notice period is relevant when determine the remaining maturity.

\(^3\) According to Article 15bIRI LiptO.
Appendix 1
Unwinding / settlement mechanism and secured financing transactions

B. Treatment of reverse repos and secured securities lending\(^4\) maturing within 30 calendar days.\(^5\)

<table>
<thead>
<tr>
<th>Counterparty</th>
<th>Cash outflow rate</th>
</tr>
</thead>
<tbody>
<tr>
<td>Transactions where the collateral is not re-used to cover short positions, of which:</td>
<td></td>
</tr>
<tr>
<td>Transactions conducted with the SNB, of which:</td>
<td></td>
</tr>
<tr>
<td>- backed by Category 1 assets</td>
<td>Unwound / settled</td>
</tr>
<tr>
<td>- backed by Category 2 assets – excluding equity shares(^6)</td>
<td>Unwound / settled</td>
</tr>
<tr>
<td>- backed by Category 2 assets – equity shares(^6)</td>
<td>Unwound / settled</td>
</tr>
<tr>
<td>- Margin lending backed by non-HQLA</td>
<td>Unwound / settled</td>
</tr>
<tr>
<td>- backed by non-HQLA</td>
<td>Unwound / settled</td>
</tr>
<tr>
<td>Transactions conducted with other counterparties, of which:</td>
<td></td>
</tr>
<tr>
<td>- backed by Category 1 assets</td>
<td>Unwound / settled</td>
</tr>
<tr>
<td>- backed by Category 2 assets – excluding equity shares(^6)</td>
<td>Unwound / settled</td>
</tr>
<tr>
<td>- backed by Category 2 assets – equity shares(^6)</td>
<td>50%</td>
</tr>
<tr>
<td>- Margin lending backed by non-HQLA</td>
<td>50%</td>
</tr>
<tr>
<td>- backed by non-HQLA</td>
<td>50%</td>
</tr>
</tbody>
</table>

\(^4\) Includes secured SLB transactions, i.e. the borrower has an unlimited right of disposal over the securities received. As per margin no. 163, secured SLB transactions with limited transfer of right of disposal must not be considered as HQLA.

\(^5\) For transactions with the SNB which include a contractual termination provision, the notice period is relevant when determine the remaining maturity.

\(^6\) According to Article 15bRI LiqO.
Appendix 1

Unwinding / settlement mechanism and secured financing transactions

B. Treatment of reverse repos and secured securities lending maturing within 30 calendar days:

<table>
<thead>
<tr>
<th>Transactions where the collateral is re-used to cover short positions, of which:</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>- backed by Category 1 assets</td>
<td>0%</td>
</tr>
<tr>
<td>- backed by Category 2 assets – excluding equity shares</td>
<td>0%</td>
</tr>
<tr>
<td>- backed by Category 2 assets – equity shares</td>
<td>0%</td>
</tr>
<tr>
<td>- Margin lending backed by non-HQLA</td>
<td>0%</td>
</tr>
<tr>
<td>- backed by non-HQLA</td>
<td>0%</td>
</tr>
</tbody>
</table>

C. Treatment of collateral swaps which mature within 30 calendar days:

<table>
<thead>
<tr>
<th>Counterparty</th>
<th>Reference in LiqO</th>
<th>Cash outflow rate</th>
<th>Cash inflow rate</th>
</tr>
</thead>
<tbody>
<tr>
<td>Borrowed collateral where the collateral is not re-used to cover short positions, of which:</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>- Category 1 assets are lent and Category 1 assets are borrowed</td>
<td>15e</td>
<td>Unwound / settled</td>
<td>Unwound / settled</td>
</tr>
<tr>
<td>- Category 1 assets are lent and Category 2 assets excluding equity shares are borrowed</td>
<td>15e</td>
<td>Unwound / settled</td>
<td>Unwound / settled</td>
</tr>
<tr>
<td>- Category 1 assets are lent and Category 2 assets equity shares are borrowed</td>
<td>Appendix 3, 1.3</td>
<td>50%</td>
<td></td>
</tr>
<tr>
<td>- Category 1 assets are lent and non-HQLA are borrowed</td>
<td>Appendix 3, 1.6</td>
<td>100%</td>
<td></td>
</tr>
<tr>
<td>- Category 2 assets excluding equity shares are lent and Category 1 assets are borrowed</td>
<td>15e</td>
<td>Unwound / settled</td>
<td>Unwound / settled</td>
</tr>
<tr>
<td>- Category 2 assets excluding equity shares are lent and Category 2 assets excluding equity shares are borrowed</td>
<td>15e</td>
<td>Unwound / settled</td>
<td>Unwound / settled</td>
</tr>
</tbody>
</table>

7 For transactions with the SNB which include a contractual termination provision, the notice period is relevant when determine the remaining maturity.
8 According to Article 15b(5) LiqO.
## Appendix 1

<table>
<thead>
<tr>
<th>Description</th>
<th>Appendix</th>
<th>Percentage</th>
</tr>
</thead>
<tbody>
<tr>
<td>Category 2 assets excluding equity shares are lent and Category 2 assets equity shares borrowed</td>
<td>Appendix 3, 1.2</td>
<td>35%</td>
</tr>
<tr>
<td>Category 2 assets excluding equity shares are lent and non-HQLA borrowed</td>
<td>Appendix 3, 1.5</td>
<td>85%</td>
</tr>
<tr>
<td>Category 2 assets equity shares are lent and Category 1 assets are borrowed</td>
<td>Appendix 2, 3.5</td>
<td>50%</td>
</tr>
<tr>
<td>Category 2 assets equity shares are lent and Category 2 assets excluding equity shares are borrowed</td>
<td>Appendix 2, 3.3</td>
<td>35%</td>
</tr>
<tr>
<td>Category 2 assets equity shares are lent and Category 2 assets equity shares are borrowed</td>
<td>Appendix 2/3, 3.1/1.1</td>
<td>0% 0%</td>
</tr>
<tr>
<td>Category 2 assets equity shares are lent and non-HQLA are borrowed</td>
<td>Appendix 3, 1.3</td>
<td>50%</td>
</tr>
<tr>
<td>Non-HQLA are lent and Category 1 assets are borrowed</td>
<td>Appendix 3, 3.7</td>
<td>100%</td>
</tr>
<tr>
<td>Non-HQLA are lent and Category 2 assets excluding equity shares are borrowed</td>
<td>Appendix 3, 3.6</td>
<td>85%</td>
</tr>
<tr>
<td>Non-HQLA are lent and Category 2 assets equity shares are borrowed</td>
<td>Appendix 2, 3.5</td>
<td>50%</td>
</tr>
<tr>
<td>Non-HQLA are lent and non-HQLA are borrowed</td>
<td>Appendix 2/3, 3.1/1.1</td>
<td>0% 0%</td>
</tr>
</tbody>
</table>

**Borrowed collateral where the collateral is re-used to cover short positions, of which:**

<table>
<thead>
<tr>
<th>Description</th>
<th>Appendix</th>
<th>Percentage</th>
</tr>
</thead>
<tbody>
<tr>
<td>Category 1 assets are lent and Category 1 assets are borrowed</td>
<td>Appendix 2/3, 4.1/1.1</td>
<td>0% 0%</td>
</tr>
<tr>
<td>Category 1 assets are lent and Category 2 assets excluding equity shares are borrowed</td>
<td>Appendix 3, 2</td>
<td>0%</td>
</tr>
<tr>
<td>Category 1 assets are lent and Category 2 assets equity shares are borrowed</td>
<td>Appendix 3, 2</td>
<td>0%</td>
</tr>
<tr>
<td>Category 1 assets are lent and non-HQLA are borrowed</td>
<td>Appendix 3, 2</td>
<td>0%</td>
</tr>
<tr>
<td>Category 2 assets excluding equity shares are lent and Category 1 assets are borrowed</td>
<td>Appendix 2, 4.2</td>
<td>15%</td>
</tr>
</tbody>
</table>
### Appendix 1

<table>
<thead>
<tr>
<th>Description</th>
<th>Appendix</th>
<th>Percentage 1</th>
<th>Percentage 2</th>
</tr>
</thead>
<tbody>
<tr>
<td>Category 2 assets excluding equity shares are lent and</td>
<td>Appendix 2/3, 4.1.1.1</td>
<td>0%</td>
<td>0%</td>
</tr>
<tr>
<td>Category 2 assets excluding equity shares are borrowed</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Category 2 assets excluding equity shares are lent and</td>
<td>Appendix 3, 2</td>
<td></td>
<td>0%</td>
</tr>
<tr>
<td>Category 2 assets equity shares are borrowed</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Category 2 assets equity shares are lent and non-HQLA are borrowed</td>
<td>Appendix 3, 2</td>
<td></td>
<td>0%</td>
</tr>
<tr>
<td>Category 2 assets equity shares are lent and Category 1 assets are borrowed</td>
<td>Appendix 2, 4.4</td>
<td>50%</td>
<td></td>
</tr>
<tr>
<td>Category 2 assets equity shares are lent and Category 2 assets excluding</td>
<td>Appendix 2, 4.3</td>
<td>35%</td>
<td></td>
</tr>
<tr>
<td>equity shares are borrowed</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Category 2 assets equity shares are lent and Category 2 assets equity shares</td>
<td>Appendix 2/3, 4.1.1.1</td>
<td>0%</td>
<td>0%</td>
</tr>
<tr>
<td>are borrowed</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Category 2 assets equity shares are lent and non-HQLA are borrowed</td>
<td>Appendix 3, 2</td>
<td></td>
<td>0%</td>
</tr>
<tr>
<td>Non-HQLA are lent and Category 1 assets are borrowed</td>
<td>Appendix 2, 4.6</td>
<td>100%</td>
<td></td>
</tr>
<tr>
<td>Non-HQLA are lent and Category 2 assets excluding equity shares are</td>
<td>Appendix 2, 4.5</td>
<td>85%</td>
<td></td>
</tr>
<tr>
<td>borrowed</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Non-HQLA are lent and Category 2 assets equity shares are borrowed</td>
<td>Appendix 2, 4.4</td>
<td>50%</td>
<td></td>
</tr>
<tr>
<td>Non-HQLA are lent and non-HQLA are borrowed</td>
<td>Appendix 2/3, 4.1.1.1</td>
<td>0%</td>
<td>0%</td>
</tr>
</tbody>
</table>
The information contained herein is of a general nature and is not intended to address the circumstances of any particular individual or entity. Although we endeavor to provide accurate and timely information, there can be no guarantee that such information is accurate as of the date it is received or that it will continue to be accurate in the future. No one should act on such information without appropriate professional advice after a thorough examination of the particular situation.

© 2015 KPMG Holding AG/SA, a Swiss corporation, is a member of the KPMG network of independent firms affiliated with KPMG International Cooperative (“KPMG International”), a Swiss legal entity. All rights reserved. Printed in Switzerland. The KPMG name and logo are registered trademarks.