

Special Topics

Recent Developments in the Austrian Banking System's Liquidity Situation and the International Regulatory Debate

Stefan W. Schmitz,
Florian
Weidenholzer¹

Given the tense situation in international money markets, the Austrian Financial Market Authority (FMA) and the Oesterreichische Nationalbank (OeNB) stepped up their liquidity monitoring in October 2008, requiring banks to submit reports on their liquidity situation on a weekly basis. Article 70 para 1 no 1 Federal Banking Act (BWG) provides the legal basis for this requirement, giving the FMA the right to request at any time for the purpose of monitoring credit institutions to present reports in specified form and layout. The new liquidity report is a supervisory and not a regulatory instrument and is without prejudice to the qualitative and quantitative requirements as well as the reporting requirements of Article 25 Federal Banking Act. The regulatory initiatives at the international level are discussed in the second chapter of this article.

1 Recent Developments in the Austrian Banking System's Liquidity Situation

1.1 Key Features of the New Liquidity Report

The new liquidity report is based on the conceptual analyses provided in Schmitz and Ittner (2007) and features some key advantages compared with the reporting requirements specified under Article 25 BWG.

- The report is submitted on a weekly instead of a monthly basis. The higher frequency and faster availability enables a timely supervisory

analysis at the micro- and macroprudential level even in times of high volatility in the international money market.

- It is forward-looking; the reporting banks are required to report expectations and/or projections over a horizon of six months.² The reports pursuant to Article 25 BWG are, by contrast, based on past averages of the reported euro liabilities and eligible liquid assets and are therefore backward looking.
- The new report is based on flow data rather than stock data. The reporting institutions are obliged to report expected inflows and outflows of funds as well as the expected counterbalancing capacity in four maturity buckets.
- While the provisions of Article 25 BWG are limited to liabilities and eligible liquid assets in euro, the new liquidity report also includes cash flows and liquid assets denominated in U.S. dollars, Swiss francs, pound sterling, Japanese yen and a basket of “other currencies.” The credit institutions are required to complete the tables for all currencies in which they are exposed to material liquidity risk.
- The new liquidity report has a considerably higher granularity. All in all, more than 30 items are reported per maturity bucket and currency, while Article 25 BWG refers to only the actual holdings of Liquidity 1 and Liquidity 2 funds as well as

¹ Oesterreichische Nationalbank, Financial Markets Analysis and Surveillance Division, stefan.schmitz@oenb.at, and On-Site Banking Inspections Division, florian.weidenholzer@oenb.at.

² The weekly liquidity reports were optimized in November 2009. This study covers data up to November 2009. Additional items and the fifth maturity bucket “6 to 12 months” were added to further supplement the information content of the reports.

the assessment bases for the relevant minimum requirements.

In addition, the introduction of the new liquidity reports has had several positive side-effects. Despite a fairly short period for preparation, banks were able to fully meet the new reporting requirements. This achievement can be taken as proof of the reporting banks' high standard of liquidity risk management and the flexibility of their underlying information systems. Moreover, the new report has significantly enhanced communication between the competent supervisors and liquidity risk managers, which, in turn, has increased the depth of the analysis in liquidity monitoring at both the micro- and macroprudential level.

1.2 Structure of the New Liquidity Report

The new liquidity report consists of three basic elements: expected cash inflows (comprising 9 subitems), expected cash outflows (comprising 13 subitems) and expected counterbalancing capacity per maturity bucket (comprising 10 subitems). Hence, the report includes only flow data, as it does not cover liquid assets (stocks) but inflows that may be generated therefrom (including haircuts). The net funding gap (the difference between total inflows and total outflows) per maturity bucket, the cumulated net funding gap (total net funding gaps across all maturity buckets) and the cumulated counterbalancing capacity at the end of each maturity bucket form the central basis for the supervisory analysis.³

In the explanatory notes on the weekly liquidity report, the banks are

asked to provide conservative expectations and/or projections.⁴ Under normal market conditions, a negative net funding gap per maturity bucket and, as a result, a negative cumulated net funding gap can be expected; in other words, the banks' conservative expectations combined with their macroeconomic task of maturity and liquidity transformation may result in expected cash outflows exceeding expected cash inflows in the banks' liquidity reports. To hedge against this liquidity risk, the banks hold liquid assets from which they can generate – even under conservative assumptions – sufficient additional cash inflows if need be in order to close the net funding gap in each maturity bucket.

1.3 Considerable Improvement in Liquidity Situation since November 2008

The following analysis of Austrian banks' liquidity situation covers the period from November 14, 2008, to November 6, 2009, and is based on data aggregated across all currencies and reporting banks.

Chart 1 displays the indexed time series of expected cash inflows, expected cash outflows (both cumulated over six months) as well as the cumulated net funding gap and cumulated counterbalancing capacity at the end of the six months between November 14, 2008, and November 6, 2009.

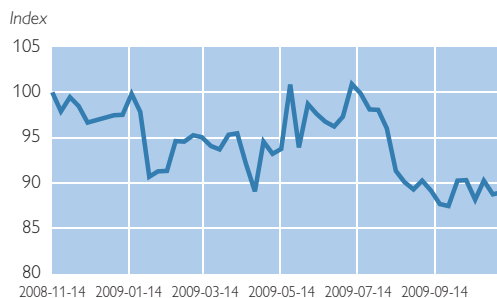
Expected inflows dropped by 11%, and expected outflows decreased considerably more sharply by 18.2%. The cumulated net funding gap subsequently shrank across all maturity buckets by 59.4%, while the cumulated

³ The cumulated counterbalancing capacity at the end of each maturity bucket is the amount of liquidity available at the end of the maturity bucket after closing the expected net funding gap.

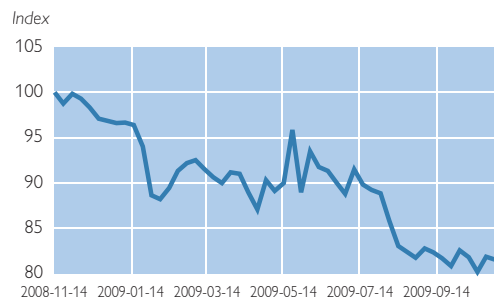
⁴ The explanatory notes to the weekly liquidity report have also been specified in greater detail in the optimization process. The new rules will become effective as at November 12, 2009, i.e. after the period of analysis this article is based on.

Development of the Austrian Banking System's Liquidity Situation between November 14, 2008, and November 6, 2009

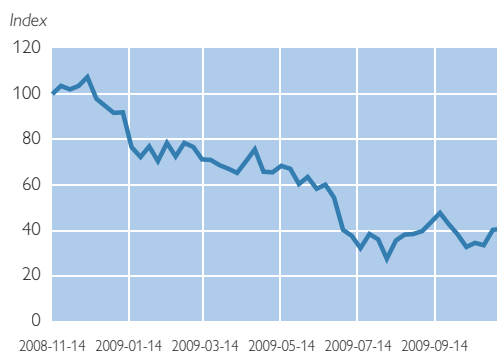
Expected Cash Inflows (Cumulated over 6 months)



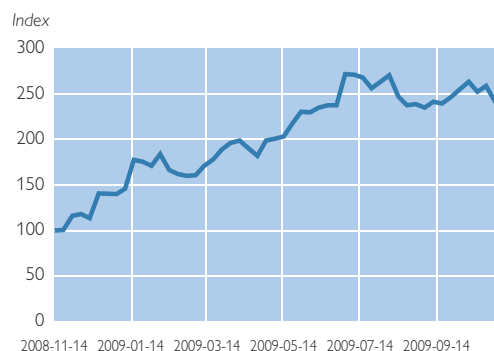
Expected Cash Outflows (Cumulated over 6 Months)



Cumulated Net Funding Gap (over 6 Months)



Cumulated Counterbalancing Capacity after 6 Months



Source: OeNB. Index value: November 14, 2008 = 100

counterbalancing capacity after six months increased by 134.1%. Assuming a stable liquidity situation of the Austrian banking system despite global market turbulence in November 2008,⁵ liquidity risk diminished notably as liquidity buffers rose significantly.

There are several reasons for these favorable developments. As tensions in the international financial system started to ease and the government provided guarantees for newly issued bank bonds available under the Financial Market Stability Act, the number of bank issues increased markedly. Banks also raised their liquidity buffers intermittently by up to 20%. Finally, the Eurosystem's long-term refinancing operations (e.g. 12-month tenders) and foreign exchange swaps offered in con-

cert with other central banks contributed substantially to improving the liquidity situation in the European banking system and the euro money market.

Still, the financial turmoil has left visible marks in the structure of cash inflows and cash outflows as well as in the composition of the counterbalancing capacity. The share of due claims on credit institutions as a percentage of inflows dropped from 42.2% to 34.5%. Likewise, the share maturing interbank deposits as a percentage of outflows shrank from 42.7% to 35.4%. On the one hand, the decline in refinancing via the money market indicates lower liquidity risk tolerance on the part of Austrian banks, on the other hand, it is also indicative of the remaining tension in the international money markets. At

⁵ See OeNB (2008) pp. 54.

the same time, the share of issues as a percentage of inflows rose from 2.8% to 5.4%; since Austrian banks have largely fulfilled their financing plans for 2009, this share has since dropped back to 3.1%. A decline in financing via central banks also mirrored the improving situation in the money market. The share of tender repayments in cash outflows dropped from 6.4% to 1%, with the Eurosystem's 12-month tender operations accounting for a sizeable contribution of some 2.5 percentage points, however. The composition of the counterbalancing capacity improved to some extent, as the share of liquidity that can be generated from AAA-rated assets expanded strongly from 1.2% to 14.2%, whereas the share of somewhat less liquid assets (e.g. BBB-rated assets, credit claims) contracted from 26.9% to 23.1%. Owing to their lower liquidity and credit risk tolerance, banks have clearly used the liquidity provided by the OeNB through long-term refinancing operations to invest in AAA-rated assets (e.g. government-guaranteed bank bonds) to a greater extent. The share of collateral pledged to central banks contracted only slightly from 55% to 53% even though it had temporarily risen to 60.6%.

2 International Developments in Liquidity Regulation

At the EU level, the European Commission is working out new provisions for credit institutions' liquidity risk management. These provisions will include, in particular, qualitative liquidity risk management requirements and, if necessary, uniform minimum quantitative requirements. At the time of

writing, no details were available about the minimum requirements to be set out in the Capital Requirements Directive (CRD). However, several working groups (particularly, the Committee of European Banking Supervisors (CEBS), which works at the European level in close concert with the Basel Committee on Banking Supervision) were already preparing the substance of the planned changes.

On March 5, 2007, the European Commission issued a Call for Advice (CfA No. 8), commissioning CEBS to conduct a survey of the various regulatory frameworks adopted by the EU Member States for different types of credit institutions and investment firms, including the treatment of subsidiaries and branch offices. It was found that the approaches to limiting liquidity risk in the European Economic Area (EEA) differed from country to country throughout the region and are currently under review in many countries.

Furthermore, the European Commission requested in-depth analyses of the role of collateral management, netting agreements and the differentiation between the banking book and the trading book in liquidity risk management as well as of the differentiation between market risk and funding liquidity risk,⁶ the use and structure of internal models and the influence of payment and settlement systems on liquidity risk management.

On the basis of these requirements and the experience gained from the liquidity crisis, which was at this point already in full swing, CEBS drew up 30 high level principles (i.e. recommendations) for liquidity risk management.

⁶ *Market liquidity risk is the risk that a position cannot be offset or unwound without generating a significant impact on the market price. Funding liquidity risk is the present or future risk that credit institutions are not capable of meeting their payment obligations at the date due without suffering major losses.*

These principles include 18 recommendations for credit institutions and 12 recommendations for supervisory authorities. Meanwhile, the Basel Committee on Banking Supervision, which comprises representatives not only from EEA members but also from the U.S.A., Canada, Switzerland and Japan, prepared a revised version of its "Sound Practices for Managing Liquidity in Banking Organisations," originally published in 2000, and published it under the title "Principles for Sound Liquidity Risk Management and Supervision"⁷ in September 2008. The two bodies cooperated closely in producing these documents, setting out the following principles:

- Credit institutions should have in place adequate liquidity risk management frameworks suitable in both normal and stressed conditions, which feature an appropriate diversification of refinancing sources, adequate liquidity buffers, severe stress tests scenarios and regularly tested contingency plans.
- Liquidity risk management should be based on a strategy and a level of risk tolerance established by senior management that is in accordance with the financing profile of a credit institution, its current and future business model and the quality of its existing risk management framework.
- Any sources of liquidity risk, including potential intraday liquidity requirements, deterministically uncertain cash flows and liquidity requirements arising from off-balance sheet commitments.

- Internal liquidity risk management frameworks should adequately map potential regulatory barriers to the cross-border transfer of liquidity or collateral.⁸
- In addition, senior management is called upon to establish responsibilities and processes that are consistent with long-term objectives and offer adequate incentives.

The European Commission incorporated the results of the two aforementioned documents in its proposal to amend Directives 2006/48/EC and 2006/49/EC, which has since been adopted by the European Parliament and the European Council.⁹ The new provisions are to be implemented in all EU Member States by end-October 2010 and enter into force as at end-2010.

The amendments exclusively comprise qualitative liquidity risk management requirements. In accordance with the recommendations made by the Basel Committee and CEBS, the directives, in addition to the aforementioned points, stipulate that

- credit institutions have in place strategies, processes and systems in liquidity risk management to ensure that they maintain adequate levels of liquidity buffers;
- the aforementioned strategies, processes and systems comprise mechanisms for adequately allocating liquidity costs, advantages and risks;
- credit institutions distinguish between pledged and unencumbered assets that are available at all times,

⁷ *BIS (2008)*.

⁸ *See ECB (2007 and 2008)*.

⁹ *Directive 2009/111/EC of the European Parliament and the Council of 16 September 2009 amending Directives 2006/48/EC, 2006/49/EC and 2007/64/EC as regards banks affiliated to central institutions, certain own funds items, large exposures, supervisory arrangements and crisis management.*

in particular during emergency situations;

- credit institutions consider different liquidity risk mitigation tools – limit system, liquidity buffers, an adequately diversified funding structure – to be able to withstand a range of different stress events;
- credit institutions conduct stress tests that comprise market- and institution-specific as well as combined scenarios and also account for off-balance sheet items and contingent liabilities.

In contrast to Article 25 BWG, the provisions of the new directive do not specify the level of liquidity or liquid assets banks must maintain, neither do they define uniform methods for measuring liquidity risk for regulatory purposes. The definition of such minimum liquidity ratios continues to be a national responsibility.

Compliance with these new provisions must be examined under the supervisory review process and will not be part of the Internal Capital Adequacy Assessment Process (ICAAP).

In addition to these legislative initiatives, CEBS and the Basel Committee are working to further harmonize regulatory requirements at the European and international levels. On the basis of an ECB study on the state of implementing liquidity risk stress testing and contingency funding planning, CEBS drew up criteria for the composition of required liquidity buffers. The key objective of these guidelines is to make banks conduct stress tests to assess whether their liquidity buffers are also sufficient under stressed conditions. The guidelines stipulate that credit institutions must hold sufficient liquid funds to withstand at least a four-week

stress scenario (general market crisis, name crisis and a combined scenario) to be defined by the respective institution. Under acute stress, a credit institution must remain liquid for at least one week. Moreover, the guidelines define criteria as to the extent to which and in which scenarios assets are considered as liquid and thus may be assigned to the liquidity cushion.¹⁰

Conclusions

Analyzing the data provided by the weekly liquidity report introduced in November 2008 shows that the liquidity situation of the Austrian banking system has improved significantly since November 2008. This positive trend can be traced to several factors: improving conditions in the international financial system, government guarantees for bank bonds, the Eurosystem's measures to combat the crisis and Austrian banks' lower liquidity risk tolerance. At the same time, efforts towards creating uniform international liquidity risk management standards have progressed. As at end-2010, uniform liquidity risk management requirements will become legally binding at the European level. It has been agreed that apart from applying qualitative requirements, stress tests should be used to specify the level of necessary liquidity buffers. Furthermore, an ongoing debate is currently under way on the extent to which uniform minimum requirements should be applied. Thanks to its structure and flexibility, the liquidity report introduced in Austria provides a good basis for both intra-institutional and supervisory stress tests and hence can be a useful tool in future regulatory initiatives.

¹⁰ See CEBS (2009).

References

- BIS – Bank for International Settlements. 2008.** Principles for Sound Liquidity Risk Management and Supervision. Basel Committee on Banking Supervision. September.
- CEBS – Committee of European Banking Supervisors. 2008.** Second Part of CEBS's technical advice to the European Commission on Liquidity Risk Management.
- CEBS – Committee of European Banking Supervisors. 2009.** Consultation Paper on Liquidity Buffers and Survival Periods. CP 28.
<http://www.c-eb.org/getdoc/8ed674fc-d767-4eed-b0c2-ac6f65b92d04/CP28-on-Liquidity-Buffers.aspx> (as retrieved on November 30, 2009).
- ECB – European Central Bank. 2007.** The liquidity risk management of banks. In: EU Banking Structures. October. 32–36.
- ECB – European Central Bank. 2008.** Report on EU banks' liquidity stress tests and contingency funding plans.
<http://www.ecb.int/pub/pdf/other/eubanksliquiditystressstesting200811en.pdf> (as retrieved on November 30, 2009).
- OeNB – Oesterreichische Nationalbank. 2008.** Financial Stability Report 16. December 2008.
- Schmitz, S.W. and G.E. Wood (Eds.). 2006.** Institutional Change in the Payments System and Monetary Policy. Routledge. London.
- Schmitz, S.W. and A. Ittner. 2007.** Why central banks should look at liquidity risk. In: Central Banking XVII (4). May. 32–40.