

U.S. Banking Industry Liquidity Update



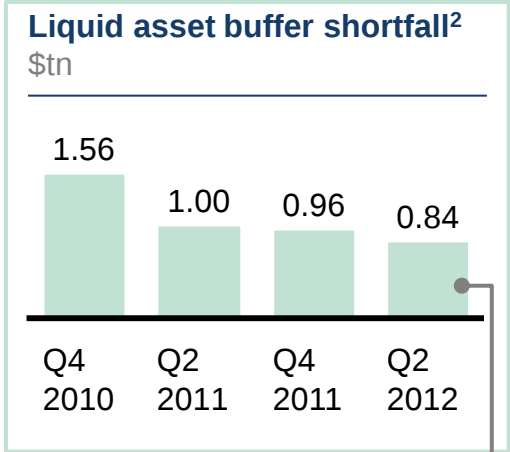
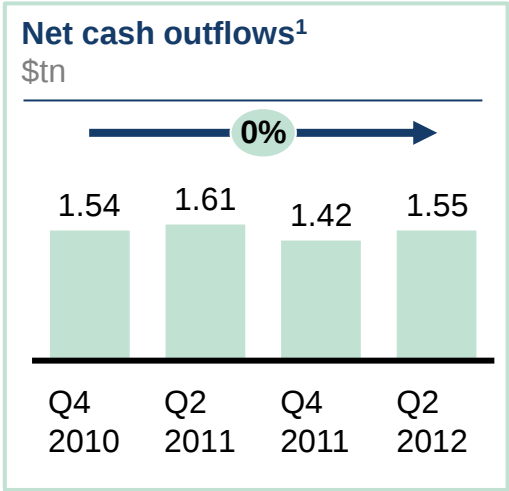
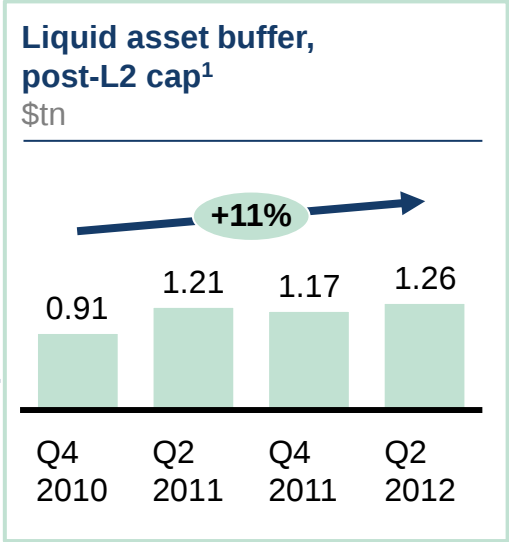
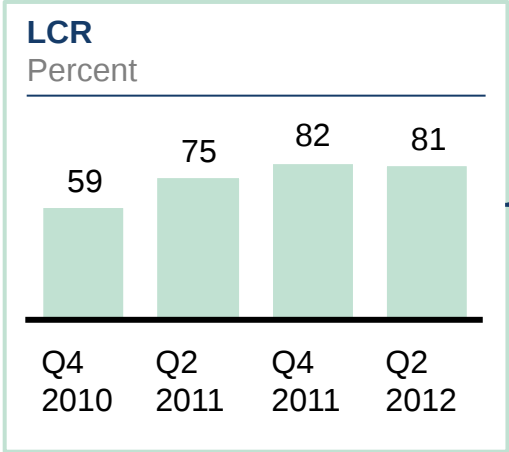
December 14, 2012

Updated US banking industry LCR analysis

Liquidity benchmarking results

- **We have gathered proprietary bank data covering multiple time periods from eleven Owner Banks of The Clearing House (“Participating Banks”) representing ~ \$9.2 trillion or 53% of U.S. total industry assets, with the latest available period Q2 2012 and earliest available Q4 2010.** With this data we are able to track the progress of the industry’s LCR over time as well as identify key drivers of any changes.
- **The current U.S. industry shortfall is ~ \$840 billion.** Eight of the eleven Participating Banks in this study have an LCR shortfall as of Q2 2012.
- **However, over time, the U.S. banking industry average LCR ratio has increased significantly, while the LCR shortfall has decreased, indicating that the industry is more liquid today than at almost any point since Q4 2010.** The U.S. banking industry average LCR has changed from 59% in Q4 2010 to 81% in Q2 2012. During this period the total U.S. banking industry liquid asset buffer shortfall has decreased by ~ \$700 billion, from ~ \$1.5 trillion in Q4 2010 to ~ \$840 billion in Q4 2012.
- **Part of the improvement in LCR results from increases primarily in excess reserves held at the Federal Reserve and also from Treasury holdings, which total 12% of total bank assets industry-wide. While this trend may, in part, reflect prudent liquidity management in view of uncertainty surrounding liquidity requirements, much of the LCR improvement is a result of strong deposit growth and reduced loan growth as reflected in the Federal Reserve Flow of Funds data. If excess reserves plus Treasury holdings were to return to historical levels, the LCR could be expected to decrease and the liquid asset buffer shortfall could be expected to increase.**
- **We have tested the sensitivity of the LCR to potential recalibrations. Several changes previously suggested by The Clearing House Association (in its publication *The Basel III Liquidity Framework: Impacts and Recommendations*) would increase the industry average LCR to above 100% and more than eliminate the liquid asset buffer shortfall.** Some notable changes and sensitivities include:
 - Reducing the outflow assumptions for credit and liquidity lines to financials, currently treated at 100%, to a 10% outflow would increase the industry average LCR by about 20% and reduce the liquid asset buffer shortfall by about \$300B;
 - Calibrating wholesale deposit run-off rates to crisis levels on a category-by-category basis would increase the LCR by about 20% and reduce the shortfall by about \$375B;
 - Increasing the assumptions around less stable retail deposit outflows from a 10% to 20% run-off rate would reduce the industry average LCR by about 3% and increase the shortfall by more than \$30B;
 - Reducing stable retail outflow assumptions from a 5% to 3% run-off rate would increase the industry average LCR by about 2% and reduce the shortfall by about \$40B;
 - Removing the cap on level 2 high-quality assets would increase the industry average LCR by about 7% and reduce the shortfall by about \$100B; and
 - Treating undrawn Federal Home Loan Bank commitments as high-quality liquid assets would increase the industry average LCR by about 7% and reduce the shortfall by about \$50-150 billion.

U.S. industry LCR has increased since 2010, but a liquid asset buffer shortfall of ~\$800bn remains



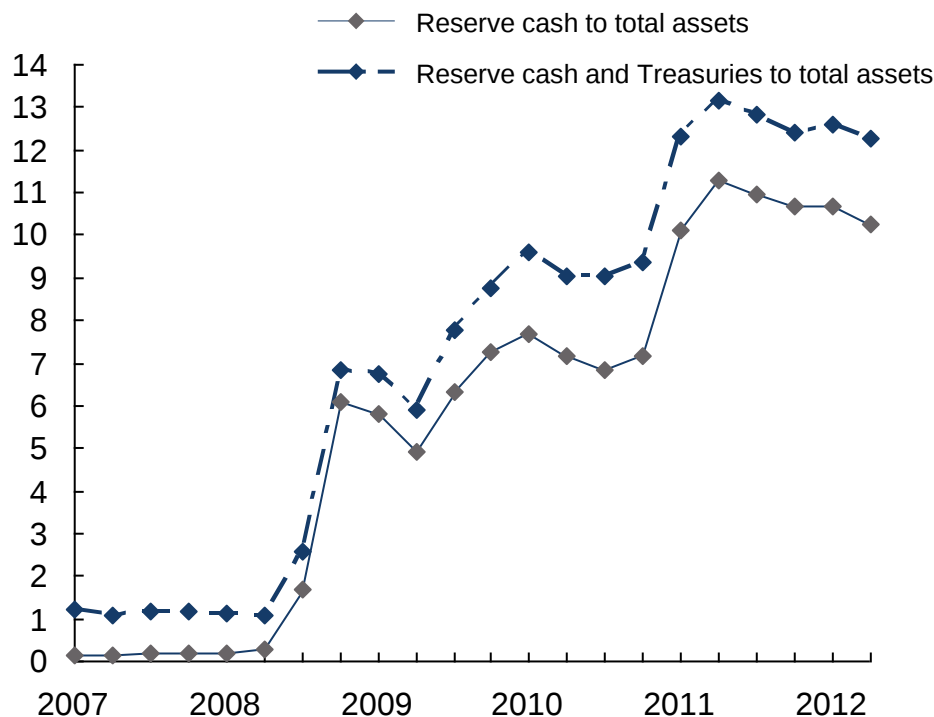
Industry shortfall has decreased by ~720B

1 The industry LCR, liquid asset buffer, and net outflow were computed using all Participating Banks in the sample including those with a liquid asset surplus.
2 The shortfall did not include Participating Banks with a liquid asset surplus, given that the excess liquidity of these Participating Banks is not fungible across the industry. Participating Banks comprise 53% of the U.S. industry by assets. Industry shortfall is calculated by scaling the total shortfall from eleven Participating Banks by 1.90.

Participating Banks are holding above 12% of total assets today as reserve cash and Treasuries, both of which increase the observed LCR

Central bank reserve cash to total assets and Treasuries to total assets for the U.S. industry

Percent

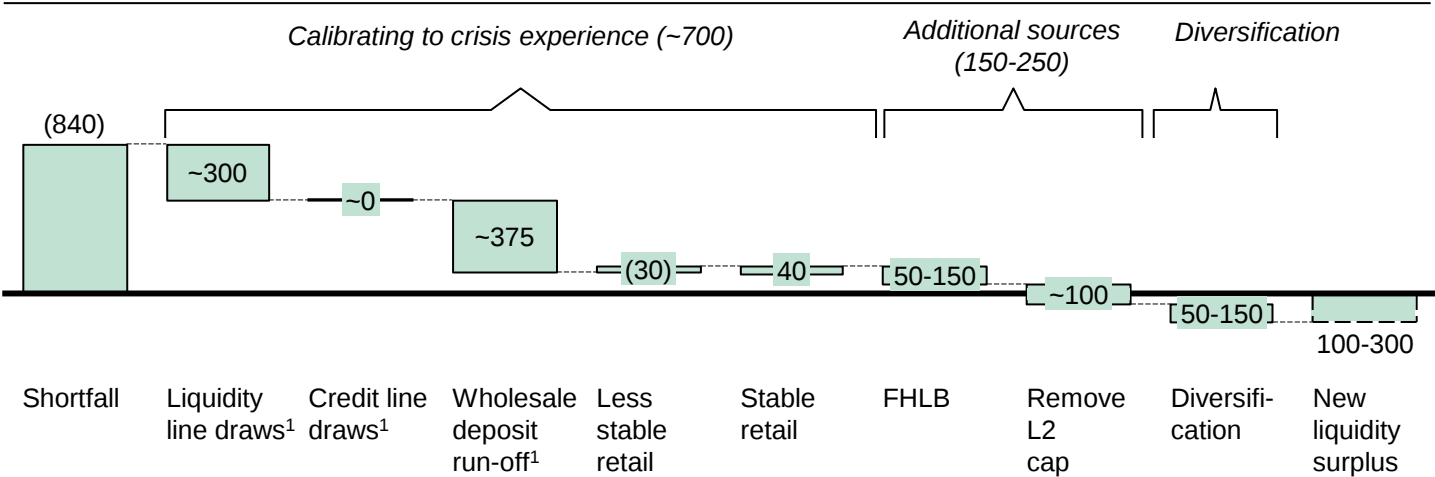


- Participating Banks are holding more than 12% of total assets as reserve cash and Treasuries
- Much of the LCR improvement is a result of the strong deposit growth and reduction in loan demand that has occurred over the past few years. If the LCR were computed with historical levels of cash and Treasuries to total Participating Bank assets, the average LCR of Participating Banks could be expected to decline, and the liquid asset buffer shortfall at the industry level could be expected to increase

Sensitivity analysis of LCR shortfall to TCH recommendations

U.S. industry liquid asset buffer shortfall (as of 2Q 2012)

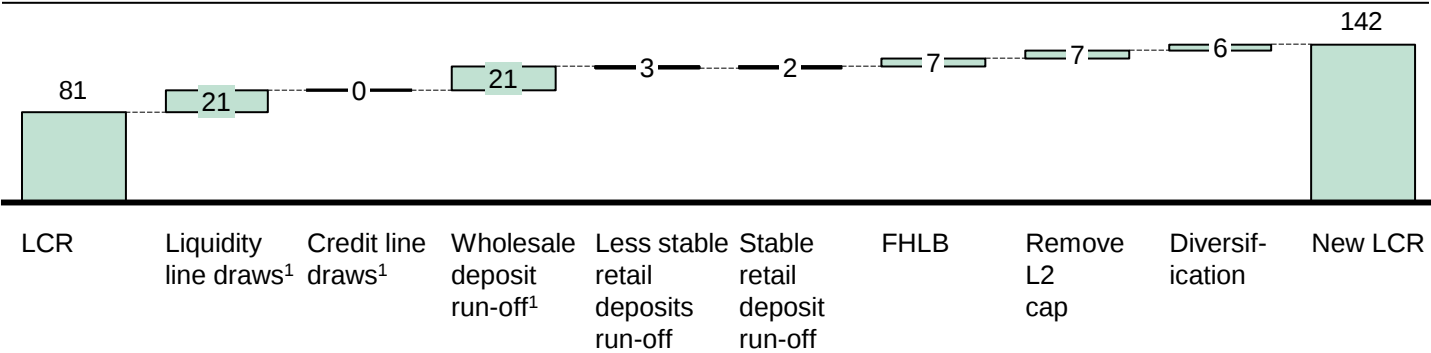
\$ billions



▪ The shortfall waterfall tracks the **shortfall reduction for the Participating Banks Q2 2012 data** that had shortfalls, **scaled up by asset size** to an industry level

Weighted average LCR ratio (as of 2Q 2012) of eleven Participating Banks

Percent



¹ Impact calculated by applying worst-case behavior per LCR category from any bank to all banks in place of LCR-assigned factors; worst-case behavior as reported by TCH in *The Basel III Liquidity Framework: Impacts and Recommendations*, available from <http://theclearinghouse.org/index.html?f=073043>.