Liquidity Risk Management

Current Issues and Themes

TOM DAY, SENIOR DIRECTOR

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1 Stage Setting

Liquidity or Solvency?

Liquidity Crisis Hampers Financial Rebound

by CHRIS ARNOLD

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Morning Edition

Octo

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Is This a Liquidity Crisis or an Insolvency Crisis?

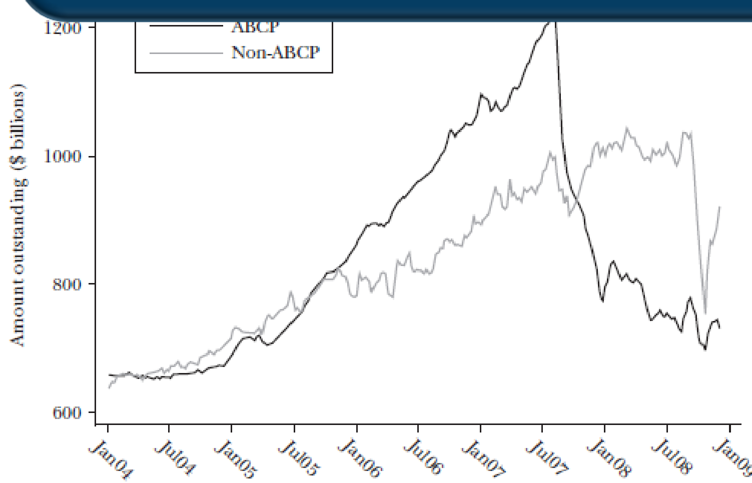
Nouriel Roubini is a genuine expert on the difference between illiquidity and insolvency: he wrote a whole book on the subject, at least as it applies to countries. And now he's attempting to diagnose the present credit crunch as an insolvency crisis rather than a liquidity problem. The thing is, telling the difference is always more of an art than a science. And from my point of view, a lot of what Roubini

ity

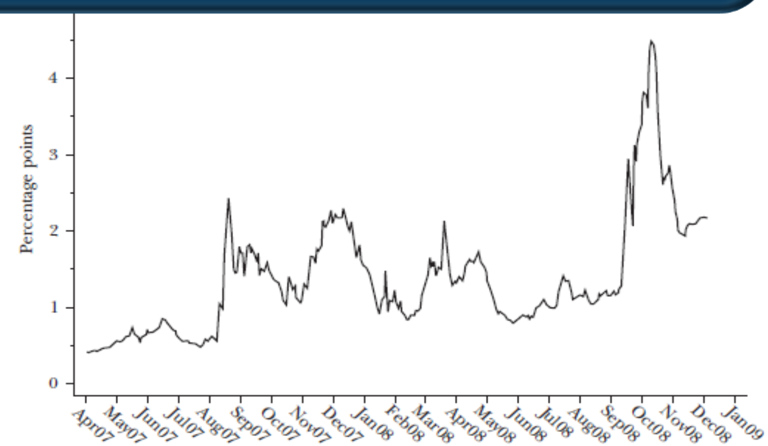
"The problem of moral hazard can perhaps be most effectively addressed by prudential supervision and regulation that **ensures** that financial institutions manage their liquidity risk effectively in advance of the crisis." (emphasis added)

– Ben Bernanke, May 2008, Sea Island Resort and Spa

Figur
Outs
Pape



Source: Federal Reserve Board.



Source: Bloomberg.
Note: The line reflects the TED spread, the interest rate difference between the LIBOR and the Treasury bill rate.

Moody's ANALYTICS

Market and Retail Runs: BSC, IndyMac, MS, WB, WMI, C

BSSC N

Deposi

UK FSA Cash Lock-Up Requirement (summary from FRB notes)

- Imposed a $6.4B cash lockup requirement, which was communicated as a

Steven Meier of State Street testified to the FCIC: "I would say the counterparties are a first line of defense, and we don't want to go through that uncomfortable process of having to liquidate collateral."[8] William Dudley of the New York Fed told the FCIC, "At the first sign of trouble, these investors in tri-party repo tend to run rather than take the collateral that they've lent against. . . . So high-quality collateral itself is not sufficient when and if an institution gets in trouble."[9]

My conversation might not have been exactly clear, but it sounds as if the bank is proposing to divest a large amount of assets ($300B) without recourse (funding ??) with a concurrent capital raise (source ? ?).

The liquidity details in the email below from our examiner ... details were already provided to you this evening by John ... general economic info to see liquidity details.

Chris

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billion on June 30, 2008, but declined to $6.53 billion

$$LCR_T = \frac{HQLA_T}{StressOutflow_{T \to t+30}}$$

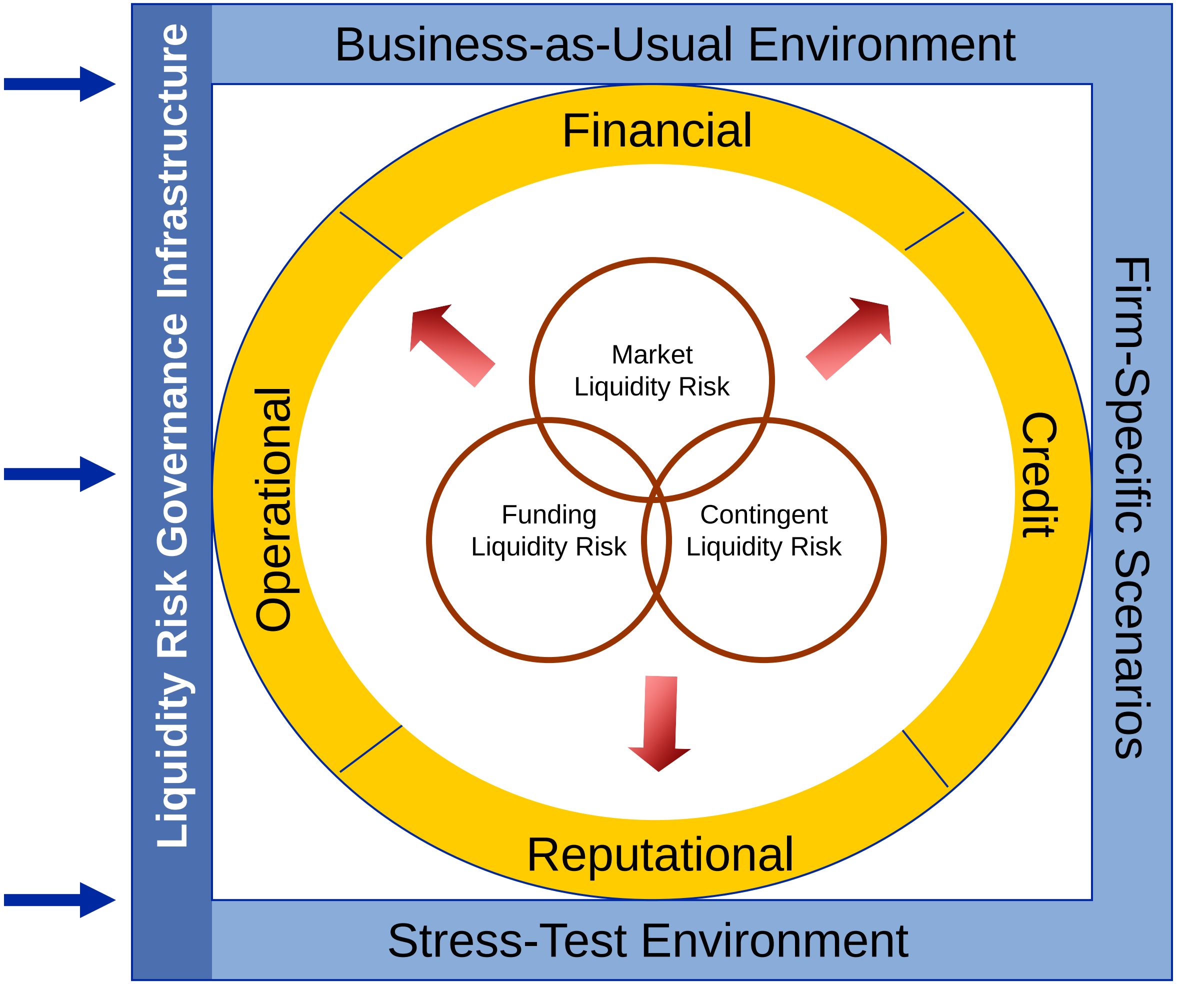
Risk Integration and Cross-Over Challenges

- Banks' funding activities and liquidity management will be the focus of increased regulator attention in coming years
- Beyond the Liquidity Coverage Ratio ("LCR") and Net Stable Funding Ratio ("NSFR"), other regulatory initiatives will influence funding and liquidity risk management, including:
  - Recovery and Resolution Plans (i.e., "Living Wills");
  - Bail-in and Contingent Convertible Capital;
  - Regulation and Supervision of Global Systemically Important Financial Institutions ("G-SIFIs"); and
  - Basel III Capital, Liquidity, and Leverage Requirements; International "Convergence?" (after FSA ring-fencing Wachovia B/D….etc?)
- Implementation of the LCR and NSFR will pose a variety of operational, modeling, technology, and market-related challenges for banks as they develop and amend their funding strategies and liquidity management frameworks for dynamic, "real-time" analysis

Effective Liquidity Risk Management Requires a Holistic Perspective

What is your Liquidity Risk IQ?

Effective liquidity risk management begins with the establishment of a comprehensive and strong internal governance process for identifying, measuring and controlling liquidity risk exposure. The LRM infrastructure naturally considers business-as-usual, firm-specific scenarios and stress-test environments. The LRM process considers not only market and funding risks, but how risks are interconnected and can “compound” in ways that create elevated levels of risk and potential exposure. Measures of liquidity risk must be based on both structural condition and prospective (i.e., forward-looking) cash-flow measures.



Hurdles to Meet Sound Practice

PRODUCT

Data sufficiency, mapping, filling, granularity and enrichment

» To coincide with frequency requirements and product-level complexities

» Must include fast and efficient FTP processes with correct level of aggregation. Aggregation rules must start bottom-up.

FIRM/ENTERPRISE

Legal Entity

» Complexity of firm structure due to tax and regulatory arbitrage needs. This is a significant regulatory issue that needs thoughtful systems design up-front

COUNTERPARTY and COLLATERAL

Collateral and counterparty detail

» At what stage of the project life cycle is this requirement presented? Given current gaps, this is often a phase-2 or phase-3 item; however, depends on current-state benchmark

THIRD PARTY DATA PROVIDERS

Market data and information

» Need to couple internal data with the requisite market data feeds. No internal LRM solution exists in isolation.

COMPUTE DEMANDS AND SCALEABILITY

Frequency

» Compute times and reporting

– End of day v. intraday (expectation is intraday)

– When and how to “kill” a trading desk or activity

» Need is for automated dashboard and workflow for this process

– Dynamic charges on a near real-time basis

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Current Questions

1) The recent IMF GFSR makes strong warnings about rising interest rate risk and challenges in market liquidity. At a time when IRR is rising, banks are repositioning out of AFS - to lower pro-forma AOCI hits (helps capital) - and place into longer duration non-Level 1 or Level 2a/2b HQLA assets. Is this intent?

2) FNMA and FHLMC currently Level 2a assets, and 15% haircut, whereas GNMA are Level 1 assets. Over the summer, some banks were repositioning based on this distinction. Does the FRB need to alter rule on PSE in US since GSEs top-tier owner is the US Government?

3) Under the LCR, the FHLB's lines (CLFs) will get no HQLA credit, even though FHLBs have to lend through resolution (note: can play with haircuts)
   – Expect FHLBs to develop new cancelable advances against CLFs. Banks will window dress at quarter-end

4) Idiosyncratic and systemic Liquidity risk events are digital, whereas credit, market and interest rate are more apt to statistical analysis. FRB is moving to macroeconomic liquidity stress scenarios, whereas much more expert judgment is called for
   - Integrated CCAR and CLAR should apply more judgment to determine if unencumbered asset liquidity buffers will be available post-stress. Example: Deposit outflows calibrated on firm-specific data, where surge deposits and disintermediation has never occurred. Stat vs. SME.

5) Impact of rules on market liquidity. Dealers holding far less in inventory. Will impact market liquidity (already has to some degree). Expect hedge funds et al may step in more active fashion (Blackrock and PIMCO?)

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