Regulatory Reform: A Scorecard

Stephen G. Cecchetti & Kermit L. Schoenholtz

www.moneyandbanking.com
The Five Pillars of Regulatory Reform
Making sure reform does not wither!

1. **Capital**: Requirements & levels are up, but not enough
2. **Liquidity**: One requirement is enough ⇒ LCR
3. **Resolution**: Progress, but framework remains untested
4. **Central Clearing**: Need sufficient safeguards
5. **Systemic Regulation**: Very early days
## Capital Requirements

### Table 1: Comparing Basel III and Basel II Risk-weighted Capital Requirements for the Largest Systemic Banks: Impact of Basel III Capital Definition

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Source: [Basel Committee on Banking Supervision](https://www.bis.org/) (2010) and authors’ calculations.
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The reason capital requirements are 10+ times higher than before the crisis is because they were so low!
Capital Levels

Figure 1: Risk-Weighted and Unweighted Capital Ratios
Fully phased-in Basel III definitions

Capital levels are up:
Risk-Weighted: +6.6pp
Leverage: +3.0pp

Basel Committee Quantitative Impact Study (QIS) estimated ratio of common-equity tier 1 capital to risk-weighted assets or tier 1 capital to total assets. Data from 2011 to 2016 are from a consistent sample of 92 large internationally active banks with capital in excess of €3 billion.
Capital: Is it enough?

- Strong banks lend more and lend better!
- Social costs of higher equity are overstated (at current levels)
- TLAC is an admission that requirements are too low
- Leverage ratio guards against getting risk-weights wrong
Capital: Is it enough?

- Strong banks lend more and lend better!
- Social costs of higher equity overstated (at current levels)
- TLAC is an admission that requirements are too low
- Leverage ratio guards against getting risk-weights wrong
- **Solution:** Raise equity requirements substantially

  IMF and FRB Minneapolis $\Rightarrow$ 20+% risk-weighted.
Liquidity Requirements

- LCR: Match **runnable** liabilities with **liquid** assets
- NSFR: Fund **illiquid** assets with **stable** liabilities
Liquidity Requirements:
Simple Case

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Simplifying assumptions
1) no off balance sheet exposures
2) assets either perfectly liquid or illiquid
3) liabilities either totally runnable or stable
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1) no off balance sheet exposures
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\[
\text{LCR: } \text{Liquid} \geq \text{Runnable} \\
\text{NSFR: } \text{Illiquid} \leq \text{Stable}
\]
Liquidity Requirements: Simple Case

- LCR  Liquid – Runnable ≥ 0
- NSFR Stable – Illiquid ≥ 0

Identity  Total Assets = Total Liabilities ⇒

Liquid + Illiquid = Runnable + Stable

Liquid – Runnable = Stable – Illiquid

Simple Case: LCR & NSFR are identical!
LCR implies a shadow NSFR

- Rigorous HQLA ⇒ higher implied req. stable funding
- Higher run-off rates ⇒ lower implied avail stable funding

We only need one liquidity requirement: Adjust the LCR!
Central Clearing

• Progress:
  US: 80% interest rate & credit derivatives in CCPs
  Globally: 76% interest rate swaps are in CCPs

  Gross notional exposure fallen by half!

• New risks: CCPs themselves
Central Clearing: The Risks

- CME has $30+ trillion of gross notional outstanding
  - Margin: 0.50%
  - Guarantee fund: 0.02%
  - CME’s contribution: 0.0007%

- CFTC stress tests: CCPs passed two-thirds of time

- Key vulnerability: still no resolution/recovery regime (and instant recovery is what will be needed)

Should we be worried?
Systemic Regulation

- Financial stability is a common resource (non-excludable but rival)
- Agents can deplete stability through hidden actions
- Require dynamic macroprudential policy
- Long list of tools
  (countercyclical capital, sectoral risk weights, LTVs, concentration & fx limits,....)
Systemic Regulation

• Adjusting tools is NOT:
  • Primarily about managing credit cycles
  • Leaning against asset price booms

• Focus of macropru: **maintaining resilience**

• Stress tests are the most powerful tool

  Requires global coordination!
Is the system resilient enough?

- **Capital**: Equity requirements need to be **higher** (combined with shift to activity-based regulation)
- **Liquidity**: Need **one**, not two requirements
- **Resolution**: Assure global institutions can be resolved
- **Central Clearing**: Ensure sufficient safeguards
- **Systemic Regulation**: We need metrics, models, tools, governance structures, & international coordination
The Five Pillars of Regulatory Reform

Let's make sure that regulatory reform does not wither!
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# Liquidity Requirements: General Case

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Off-balance sheet exposures: \( \text{OBS}_L \) and \( \text{OBS}_N \)
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Off-balance sheet exposures: \( \text{OBS}_L \) and \( \text{OBS}_N \)

**LCR binds if and only if:**

\[ OA + \text{OBS}_L > \text{OL} + \text{OBS}_N \]
LCR versus NSFR

- LCR $\Rightarrow$ NSFR:
  - Low level of 1 to 12 month unsecured funding
  - High level of 35% risk-weight loans
  - High level of loan commitments and liquidity facilities
  
  **Retail, Mortgage and Universal Banks**

- NSFR $\Rightarrow$ LCR
  - High level of 1 to 12 month unsecured funding
  - Low level of 35% risk-weight loans
  - High level of long-dated derivatives
  
  **Wholesale Banks**