Basel III—a set of comprehensive reform measures aimed at strengthening the regulation, supervision, and risk management of the banking sector—is having a profound impact on the way banks view capital and deposits from investors. The new regulations are being implemented gradually by 2019, but the effects of the provisions are already being felt in the market as banks have started to adapt their behavior in line with the new rules. Several ratios intended to bolster bank balance sheets and liquidity are upsetting the balance of supply and demand in the short-term fixed income sector.

Background

The Basel Committee on Banking Supervision is the primary global standard-setter for the prudential regulation of banks and provides a forum for cooperation on banking supervisory matters. Its mandate is to strengthen the regulation, supervision and practices of banks worldwide with the purpose of enhancing financial stability. Originally published in 2010, Basel III sets an international regulatory framework for banks.

The reforms raise both the quality and quantity of the regulatory capital base and enhance the risk coverage of the capital framework. They are underpinned by a leverage ratio that serves as a backstop to the risk-based capital measures and is intended to constrain excess leverage in the banking system. Working alongside these capital requirements are liquidity requirements reinforced through robust supervisory standards. Overall, these standards establish minimum requirements and are aimed at promoting an international level playing field for regulation.

Basel III measures aim to:

- Improve the banking sector’s ability to absorb shocks arising from financial or economic stress
- Improve risk management and governance
- Strengthen banks’ transparency and disclosures

Main focus of the reform

As banks work to comply with the reform, the short-term fixed income markets are one of the first to feel the effects of the new age of banking regulation because of the desire to extend the tenor of wholesale funding while also adjusting capacity for liquid deposits.

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1 Generally those with $250 billion or more in total consolidated assets or $10 billion or more in on-balance sheet foreign exposure.
### Implementation

#### BASEL III IMPLEMENTATION TIMELINE

<table>
<thead>
<tr>
<th>Year</th>
<th>Liquidity Coverage Ratio</th>
<th>Net Stable Funding Ratio</th>
<th>Leverage Ratio</th>
</tr>
</thead>
<tbody>
<tr>
<td>2015</td>
<td>Minimum: 60% U.S. Minimum: 80%</td>
<td></td>
<td>Public disclosures begin</td>
</tr>
<tr>
<td>2016</td>
<td>Minimum: 70% U.S. Minimum: 90%</td>
<td></td>
<td>Final rules to be released</td>
</tr>
<tr>
<td>2017</td>
<td>Minimum: 80% U.S. Minimum: 100%</td>
<td></td>
<td>Full compliance begins</td>
</tr>
<tr>
<td>2018</td>
<td>Minimum: 90%</td>
<td></td>
<td>Full compliance begins</td>
</tr>
<tr>
<td>2019</td>
<td>Minimum: 100%</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Note: All dates on the above timeline are as of January 1

The Liquidity Coverage Ratio implementation timeline could differ across jurisdictions. The Basel rules state that banks should be 60% compliant by 2015 and fully compliant by 2019. The Federal Reserve (Fed) proposal is more stringent, requiring that U.S. firms be 80% compliant by 2015 and fully compliant by 2017.

The Fed’s proposal would apply to all internationally active banking organizations and to systemically important, non-bank financial institutions.

### Understanding Key Ratios

#### LIQUIDITY COVERAGE RATIO (LCR)

The objective of the LCR is to promote the short-term resilience of banks’ liquidity risk profiles. It specifically seeks to ensure that banks have a 30 day supply of cash and high-quality assets to account for possible outflows under stressed scenarios.

\[
LCR = \frac{\text{Stock of High Quality Liquid Assets (HQLA)}}{\text{Total Net cash outflows over the next 30 days}} \times 100 > 100
\]

HQLA: should be unencumbered in times of stress and, in most cases, eligible for central bank operations
- **LEVEL 1**: No haircut – Includes cash, sovereign bonds, and central bank reserves
- **LEVEL 2A**: Subject to a 15% haircut – Includes certain government, covered, or corporate bonds
- **LEVEL 2B**: Subject to 25-50% haircut – Includes lower-rated corporates, RMBS, and some equities

Total net cash outflows: total cash inflows minus total cash outflows in a stressed scenario for 30 days

As seen below, deposit types have different run-off rates due to their projected stability. This means that banks will have to hold different levels of HQLA for each type of deposit. For example, operating accounts from corporations are less punitive for banks to offer when compared to non-operating accounts from financial institutions, which are known to be more volatile in times of market stress.

#### NET CASH OUTFLOWS – DEPOSIT RUN-OFF FACTORS

<table>
<thead>
<tr>
<th>SECTOR</th>
<th>OPERATING</th>
<th>NON-OPERATING</th>
</tr>
</thead>
<tbody>
<tr>
<td>Corporates/Public Sector</td>
<td>25%</td>
<td>40%</td>
</tr>
<tr>
<td>Financial Institutions</td>
<td>25%</td>
<td>100%</td>
</tr>
</tbody>
</table>

Sources: The Federal Reserve, Basel Committee on Banking Supervision
**NET STABLE FUNDING RATIO (NSFR)**

The NSFR is defined as the amount of available stable funding relative to the amount of required stable funding. This ratio aims to ensure that a bank has sufficient long-term funding to cover long-term commitments. The stability of these liabilities is based on both the funding tenor and the funding type and counterparty.

\[
\text{NSFR} = \frac{\text{Available amount of stable funding}}{\text{Required amount of stable funding}} > 100
\]

**Available stable funding:** the portion of capital and liabilities expected to be reliable over the time horizon considered by the NSFR, which extends to one year.

**Required stable funding:** a function of the liquidity characteristics and residual maturities of the various assets held by the institutions as well as those of its off-balance sheet exposures.

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**LEVERAGE RATIO**

The Basel Leverage Ratio framework aims to prevent banks from having an overreliance on leverage. This ratio is meant to be a supplementary measure to risk-based capital requirements.

\[
\text{Leveraged Ratio} = \frac{\text{Capital measure}}{\text{Exposure measure}}
\]

**Capital measure:** equals Basel III Tier 1 Capital

**Exposure measure:** a total leverage exposure measure that includes the following:

- On-balance sheet assets
- Off-balance sheet derivative exposures
- Off-balance sheet financing transaction exposures
- Off-balance sheet unfunded lending commitments
- Off-balance sheet stand-by letters of credit or other guarantees

Depending on jurisdiction, leverage ratios can have slightly different rules and implementation framework. The Supplementary Leverage Ratio (SLR) is the U.S. banking agencies’ version of the Basel III Leverage Ratio. In addition to the stipulations from the Basel rules, the SLR requires the eight U.S. bank holding companies that have been identified by the Financial Stability Board as global systemically important banks and their U.S. insured depository institution subsidiaries to maintain an SLR in excess of 5%.

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**Market Impact**

<table>
<thead>
<tr>
<th>SUPPLY DYNAMICS</th>
<th>DEMAND DYNAMICS</th>
</tr>
</thead>
</table>
| **Liquidity Coverage Ratio** | • Banks are discouraged from providing certain types of credit and liquidity facilities for CP, ABCP and Municipal VRDNs, which decreases supply  
| | • Banks are discouraged from issuing short-term debt that matures within 30 days  
| | • The types of deposits that banks are willing to accept is changing due to different run-off rates for different account types – Operating accounts are more attractive than non-operating accounts and corporate cash is more attractive than financial institution cash  
| | • Incentive to offer stable deposits and issue medium-to-long-term debt  
| | • Makes higher risk loans provided by banks more punitive, potentially reducing the supply of credit |
| **Net Stable Funding Ratio** | • Discouraged depositors seek other alternatives to park cash  
| | • Incentive to offer stable deposits and issue medium-to-long-term debt  
| | • Makes higher risk loans provided by banks more punitive, potentially reducing the supply of credit |
| **Leverage Ratio** | • Issuers seek alternative financing structures  
| | • Makes it more expensive for banks to issue standby purchase agreements or other guarantees on bond issuance  
| | • Could result in a contraction in the repo and derivatives markets |

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**Summary**

As banks work to streamline their balance sheets to be in compliance with Basel III, many areas of the market will be impacted. The different elements of the Basel ratios will lead to adjustments in the supply and demand landscape for fixed income securities. The fact that banks have less appetite for certain types of deposits is forcing short-term investors to consider alternative homes for their assets.

We welcome the opportunity to advise on the implications of the changes impacting short-term markets both broadly and with respect to Basel III. Should you have any further questions, please contact your Morgan Stanley Investment Management Relationship Manager.
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2 As of October 31, 2018.

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