Transaction Banking
Citi Academy
For Financial Institutions Professionals
"When you’re in the Transaction Banking business, there is always something to learn."
We’ve boiled it down to four core competencies that are critical for success as a contributor in a financial services organization:

1. Regulatory Change
2. AML, Compliance and Risk Management
3. Global Trade
4. Treasury and Payments
Basel III and Deposits

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Today’s Speakers

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• Transaction Banking Academy is the leading global provider of professional training for the transaction banking sector

• Its tutors are acknowledged experts with recent, real-world experience of transaction banking and treasury

• The academy offers a wide range of standard courses covering most aspects of transaction banking

• Custom courses can quickly be developed for specific bank requirements

• Training can be delivered on-site or through webinars like this one

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1. Introduction to Basel III
2. The New Liquidity Standard
3. Challenges for Banks - and Responses
4. Citi Solutions
5. Questions and Answers
1. Introduction to Basel III
Some Background on Basel III

Basel III is a comprehensive package of financial regulation.

- Basel III is an agreement among supervisors, not a regulation itself
- No global enforcement body exists
- Each country determines how rules apply in their own jurisdiction
- Yet there is strong pressure to implement Basel III homogeneously
- Broad principles have been worked out
- Some finer points are yet to be decided
Basel III Will Make Banks Less Likely to Fail

Basel III increases capital requirements and introduces a global liquidity standard.

Increases
capital
requirements

Introduces
liquidity
standard
Basel III Raises **Capital** Requirements

- Strengthens definition of capital
- Increases minimum risk-weighted capital requirement from 2% to 4.5%
- Adds capital conservation buffer (2.5%)
- Adds systemic surcharge for Global Systemically Important Banks
- Increases requirements for trading book
- Introduces leverage ratio as backstop
Basel III Introduces a Global **Liquidity** Standard

Essentially, there are two main elements to the liquidity standard.

1. Measure liquidity risk
2. Mitigate liquidity risk
   a) Hold buffer against short-term outflows (Liquidity Coverage Ratio)
   b) Avoid short-term wholesale funding (Net Stable Funding Ratio)
2. The New Liquidity Standard
The New Liquidity Standard

The new liquidity standard measures and mitigates liquidity risk.

**Measurement**

- Establish contractual maturities for assets and liabilities
- Adjust contractual schedule to reflect expected outflows and inflows under stress
- Result is net expected outflow over each time period
- Focus is on net outflow over next 30 days

**Mitigation**

- Liquidity Coverage Ratio (LCR): banks will be required to hold buffer of liquid assets equal to 100% of net short term outflow
- Net Stable Funding Ratio (NSFR): banks will be required to limit the reliance that they can place on short-term wholesale non-operational funding
Longer-term (more than 30 days) liabilities do not pose significant liquidity risks.

Is funding repayable or callable within 30 days? 0%

No

Outflow factor

No liquidity risk since there can be no outflow within 30 days
Banks are required to distinguish between two types of short-term deposits.

**Operational Deposits**
- Include general working capital and cash held by depositors for transactional purposes.
- Basel III considers operational cash to be ‘stickier’ than non-operational cash, in the sense that companies are likely to maintain operational deposits with their primary transaction bank(s).
- Bank has to hold liquid assets equal to **25%** of operational deposits.

**Non-Operational Deposits**
- Include other cash balances not immediately required by the depositor’s business.
- More likely to be used to chase yield and to manage counterparty risk via the diversification of investment.
- Susceptible to run, if credit rating of the bank taking the deposit deteriorates.
- Bank has to hold liquid assets equal to **40%** of non-operational deposits.
Operational deposits are “sticky” and likely to be rolled over at maturity.

- Is funding repayable or callable within 30 days?  
  - Yes

- Is deposit an operational deposit?  
  - Yes

Outflow factor: 25%

Operational deposits include cash held by depositors for transactional purposes in cash management or custody accounts.
Measuring Liquidity Risk (3)

Non-operational short-term wholesale funding poses the most liquidity risk.

- Is funding repayable or callable within 30 days?
  - Yes
    - Is deposit an operational deposit?
      - Yes
      - No
        - Non-operational accounts are risk-sensitive; depositors are likely to run if bank’s credit rating deteriorates
  - No
    - Outflow factor: 40%
Measuring Liquidity Risk – Summary

Overall, liquidity risk depends on maturity and type of liabilities.

Is funding repayable or callable within 30 days?

- Yes
  - Is deposit an operational deposit?
    - Yes: 25%
    - No: 40%

- No: 0%
The Liquidity Coverage Ratio

The LCR requires banks to hold a buffer against net short-term outflows under stress.

Expected outflow over next 30 days

Expected inflow over next 30 days

Net outflow

\[ \text{LCR} \]

100% buffer against net short-term outflow

**Basel**: A bank must notify its regulator immediately if its LCR has fallen, or is expected to fall below 100%

**US**: If a bank’s LCR is < 100% for three consecutive business days, the banking organization must submit a liquidity compliance plan.
Both US and EU Have Accelerated Implementation of LCR

The US starts higher than the EU and finishes earlier.
The Net Stable Funding Ratio

The NSFR limits the reliance on short-term unstable wholesale funding.

The NSFR will be introduced as a minimum standard from 1 January 2018.
The NSFR is one of the Basel Committee’s key reforms to promote a more resilient banking sector.

- The NSFR complements the LCR but has a separate objective: it requires banks to maintain a sound funding structure.
- It is defined as the amount of available stable funding relative to the amount of required stable funding. This ratio should be equal to at least 100% on an on-going basis.
- Its time horizon extends to one year.
- The NSFR consists primarily of internationally agreed upon definitions and calibrations. Some elements, however, remain subject to national discretion to reflect jurisdiction-specific conditions.
- The minimum requirement is to be implemented from 1 January 2018; until then, an observation period is in place and some revisions to the NSFR might take place.
- The NSFR must be reported no less than quarterly. However, supervisors can authorize a lower reporting frequency on the basis of the individual situation of particular bank.
3. Challenges for Banks - and Responses
What Do Banks Need to Do?

To comply with the new liquidity standard, banks will have to undertake a number of projects.

- As part of **measuring** their liquidity risks, banks need to take a number of actions:
  - Ensure that the relevant data are collected in banks’ IT systems
  - Analyse the behavior of depositors and investors
  - Keep track of liquid assets
  - Quantify the level of operating balances in depository accounts
  - Report relevant data to the authorities where the bank operates

- As part of **mitigating** liquidity risk, there are equally a number of steps to be taken, including:
  - Managing the composition of the bank’s liabilities
  - Maintaining relationships with investors and rating agencies
  - Managing the maturity of the bank’s assets

For the purposes of today’s webinar, we will only look at managing the bank’s funding.
Reliance on unstable, short-term liabilities creates significant buffer requirements.

Is funding repayable or callable within 30 days?

- No:
  - Outflow factor: 0%
  - Amount of liability: 0
  - Buffer requirement: 0

- Yes:
  - Is deposit an operational deposit?
    - No:
      - Outflow factor: 40%
      - Amount of liability: $1,000
      - Buffer requirement: $400
    - Yes:
      - Outflow factor: 25%
      - Amount of liability: 0
      - Buffer requirement: 0

Total:
- Outflow factor: $1,000
- Amount of liability: $400
- Buffer requirement: $400
Managing Liabilities Reduces Liquidity Requirements (2)

Introducing some long-term liabilities reduces buffer requirements.

<table>
<thead>
<tr>
<th>Is deposit an operational deposit?</th>
<th>Outflow factor</th>
<th>Amount of liability</th>
<th>Buffer requirement</th>
</tr>
</thead>
<tbody>
<tr>
<td>No</td>
<td>0%</td>
<td>$250</td>
<td>0</td>
</tr>
<tr>
<td>Yes</td>
<td>25%</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>No</td>
<td>40%</td>
<td>$750</td>
<td>$300</td>
</tr>
</tbody>
</table>

Total: $1,000

Yes funding repayable or callable within 30 days?
Managing Liabilities Reduces Liquidity Requirements (3)

Using operational accounts to raise short-term liabilities further reduces buffer requirements.

Is funding repayable or callable within 30 days?

- **No**
  - Outflow factor: 0%
  - Amount of liability: $250
  - Buffer requirement: 0

- **Yes**
  - Is deposit an operational deposit?
    - **Yes**
      - Outflow factor: 25%
      - Amount of liability: $500
      - Buffer requirement: $125
    - **No**
      - Outflow factor: 40%
      - Amount of liability: $250
      - Buffer requirement: $100

Total:
- $1,000
- $225
Basel III vis-à-vis Correspondent Deposits

- To further complicate matters, country regulations (e.g., Canada) may state that unsecured funding sourced from other financial institutions is assigned a 100% outflow rate (Fed: while these deposits may meet some of the operational requirements, historically they are not stable during stressed liquidity events and therefore are assigned a 100% outflow rate)
  - Various US banks have written to the Fed requesting clarification of the US LCR explanation, voicing their concerns that excluding correspondent banking from operational deposits would be costly, and limit their cross-border business

- However, the latest Basel document (Frequently Asked Questions, published in April 2014, http://www.bis.org/publ/bcbs284.pdf) states that symmetry should exist between banks:
  - Question: “How should a bank determine whether or not a deposit it has placed at another financial institution is an operational deposit?”
  - Response: “The same methodology applied in paragraphs 93–104 for operational deposit outflows should also be applied to determine if deposits held at another financial institution are operational deposits and receive a 0% inflow. If the bank receiving the deposit classifies the deposit as operational, the bank placing it should also classify it as an operational deposit”

The overriding principles appear to be:

1. Is the maturity of the deposit more than 30 days? If yes, then the outflow factor is zero, regardless of depositor

2. If the maturity of the deposit is less than 30 days, then question becomes: “Is the deposit in an operational account?”

3. If yes, a further question would need to be asked: "Is the depositor another bank?

4. If the answer to this question is yes, then Basel requires that the receiving bank and the depositing bank treat the deposit in the same way

Basel clearly wants to avoid the possibility that the receiving bank counts the deposit as operational (outflow factor 25%) while the depositing bank counts the deposit as non-operational — such asymmetric treatment would create the impression that the system as a whole has more liquidity than really would be available in a stress scenario
Summary

The mix of funding matters!

- Basel III introduces a global liquidity standard for the first time
- This standard requires banks to measure and mitigate their liquidity risk
- In particular, banks are required to hold a buffer of liquid assets sufficient to meet the expected net outflow of funds in a stressed environment over a 30-day horizon
- The shorter the term and the less “sticky” the liabilities, the higher the buffer requirement
- Shifting the mix of funding to longer-term (more than 30 days maturity) and to operational accounts can reduce buffer requirements and free up space on the balance sheet for higher yielding assets
- Banks are introducing new incentives for relationships and deposits that help to improve their liquidity ratios
4. Citi Solutions
Deposits – Traditional View

- Focus on deposit growth
- Product placement driven by client need and balance characteristics
- Broad range of deposit products to hold clients’ various types of cash
- Deposit pricing driven by product type, economic value, relationship value

Drivers of Deposit Value

Relationship Value

Economic Value

Product/Balance Characteristics
Deposits – Evolving View

The traditional measures . . .
- Product placement driven by client need and balance characteristics
- Broad range of deposit products to hold clients’ various types of cash

Plus…
- Regulatory value
  - Deposit’s contribution to liquidity coverage ratio
  - LCR contribution is a function of:
    - Operating vs. non-operating classification
    - Tenor (e.g., greater than 30 days)
    - Client segment

Results in:
- Increased emphasis on deposit mix, rationing on the deposit side of the balance sheet, growing balances with attractive LCR value
- Deposit pricing driven by product type, economic value, relationship value and additionally, regulatory value
Managing Deposit Portfolios

Focusing on operating relationships

- Clearing, custody, and cash management arrangements generate transaction flow
- Level of transaction flow determines operating vs. non operating balances
- Emphasis on expanding operating relationships to support incremental balance activity
- Non-operating balances may still have value but should expect lower yields
  - Note that low regulatory value has been assigned to non-operating deposits of FIs, both banks and non-banks

Reviewing deposits based on relationship

- Balance sheet rationing expands beyond assets (loans) to include liabilities (deposits)
- Client-level balances and pricing based on context of overall relationship
- Retention of deposits with low/no LCR value will be balanced against total relationship return

Aligning price with priorities

- Adjusting deposit pricing to align with economic, relationship, and regulatory value
- Re-pricing becomes a continuous, BAU event as relationships and events evolve and to manage capacity
- Short-term cash spikes will be accommodated from major relationships but will likely come with little yield
New products and product enhancements to:

- Expand operating relationships
- Attract LCR-accretive balances
- Transform existing relationships to improve value and overall returns
Product Innovation – 31-Day Notice Account

Overview

- 31-Day Notice Account – a deposit account that requires 31 days’ notice to withdraw (“call”) funds
  - Booked as a 31-day time deposit whose maturity extends daily. On any given day, account balances have a remaining life of 31 days until notice of withdrawal is provided.
  - Upon withdrawal notice, current maturity date becomes final maturity date for the called funds
- Premature withdrawal before the 31-day notice period is completed is not permissible
- Offers enhanced yield on balances before they are called and a market-driven one-month rate on balances that have been called

Attributes

- Currently available in the US, in USD, only
- Minimum investment of $25 million
- Looking to expand beyond the US/USD
- A possible alternative for clients who continuously roll over time deposits or have excess liquidity that can be locked up to enhance yield

LCR Considerations

- Balances in the 31 Day Notice Account always have a tenor of 31 days or more and fall outside LCR framework.
- The 31-day notice period is not breakable
Overview

- Earnings Credit Rate (ECR) program allows clients to enhance return on idle cash by using balances to offset transaction services fees
  - An ECR is the rate applied to a client’s non-interest bearing account balances
  - This soft dollar credit value is then applied to offset transaction services fees
- Ability to offset cash management fees in the US and Western Europe, as well as custody fees in the US
- Expanding ECR program to include additional geographies and fee types (e.g., standby letter of credit fees, WorldLink fees)

Attributes

- Currently available in the US (in USD) and rolling out in Western Europe (in USD, EUR, & GBP)
- Provides a competitive return on idle balances and access to daily liquidity while reducing hard-dollar expenses

LCR Considerations

- Establishes direct link between transaction flows and operating balances
- Symmetric treatment would be required for operating balances
Product Innovation – Citibank Online Investments

Overview

- A global, secure, web-based investment portal offering a wide variety of short-term investment choices, depending on account location
- Centralized global investing: TDs in 19 currencies & 30 countries. Access to 150+ money market funds
- Single sign-on through CitiDirect Online Banking
- View rates, initiate trades, receive trade confirmation, access reports

Recent Expansion

- Money Market Fund exposure analytics: timely and comprehensive summary of consolidated counterparty exposures across MMF holdings, with ability to perform what-if scenarios and identify potential risks
- MMF account alternatives: omnibus, nominee, and fully disclosed options now available
- Robust reporting of positions and exposures in one set of online reports

Strategic Considerations

- Expand off-balance sheet options to provide clients with an alternative to traditional bank deposits
- Enable clients to better monitor and manage counterparty exposures
5. Questions and Answers
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Citi works with its clients in greenhouse gas intensive industries to evaluate emerging risks from climate change and, where appropriate, to mitigate those risks.

efficiency, renewable energy and mitigation