Auditing Risk, Capital and Liquidity in the Dodd-Frank Era
Agenda

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Significant regulatory changes may lead to a more complex Basel II/III calculations…

### Key Aspects

#### Basel III Capital
- **Replaces current Basel I / II capital calculation methodology**
  - Stricter definition of capital; higher amount of deductions applied to Common Equity Tier1
  - Streamlines and simplifies Tier 1 & Tier 2 capital eligibility criteria; Tier 3 abolished
  - Higher minimum thresholds, and buffers as applicable (countercyclical buffer and supplementary leverage ratio only applicable to Advanced approaches banks; SIFI criteria is pending)

#### Standardized Approach (credit)
- **Replaces current Basel I Risk Weighted Assets calculation methodology**
  - Eliminates references to external credit ratings (across all Basel III approaches)
  - Adopts a more risk sensitive methodology for various asset classes, i.e. collateral netting for counterparty exposures, SSFA for securitization, Loan-to-Value based risk-weight % for mortgages, etc.

#### Advanced Approach (credit)
- **Establishes the floor for Advanced Approaches Banks (Collins Amendment)**

#### Market Risk
- **Replaces current (B1) Market Risk Rules**
  - Introduces new risk charges that increase Risk Weighted Assets estimates – Stressed VaR, Incremental Risk, and Comprehensive Risk
  - Banking book treatment for securitizations in trading book

### Standardized Approach Banks¹

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### Systemically Important Financial Institution

1. **Standardized Banks**: All banking entities, except Bank Holding Companies < $500 M
2. **Advanced Approach Banks**: $250 B in total assets or $10 B in foreign exposure (excl. insurance subsidiaries); others may opt-in
3. **Market Risk Banks**: trading portfolio > $1 B, or >10% of total assets
4. **Systemically Important Financial Institution**

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**Additionally, Liquidity Risk is being addressed by the regulators**
Applicability of the regulations vary by size/type of banking entity

**Advanced Approaches Banks**

- **Bank Holding Company (BHC)**
  - Advanced Approaches
  - Basel III Capital
    - Supplementary leverage ratio
    - Countercyclical buffer

- **Savings and Loan Holding Company (SLHC)**
  - Advanced Approaches
  - Basel III Capital
    - Supplementary leverage ratio
    - Countercyclical buffer

- **Depository Institution (DI)**
  - Advanced Approaches
  - Basel III Capital
    - Supplementary leverage ratio
    - Countercyclical buffer

**Total Assets**

- **> 250 B**
  - Advanced Approaches
  - Basel III Capital

- **> 50 B**
  - Enhanced Prudential Regulation (EPR)
    - Early remediation
    - Liquidity stress test, etc.
  - Capital Plan
  - Resolution Plan & Credit Exposure Report
  - Additional Disclosures
    - Stress Test

- **> 10 B**
  - Stress Test

- **> 500 MM**
  - Basel III Capital
  - Standardized Approach
  - Market Risk¹

- **> 0**
  - Basel III Capital
  - Standardized Approach
  - Market Risk¹

¹Both standardized and advanced approaches banks are required to comply with the Market Risk rule if their trading assets and trading liabilities are >= $1 B or 10% of total assets

Note: Above regulations will also generally apply to foreign banks

**Basel III Regulations**
- Standardized Approach Banks
- Advanced Approaches Banks

**Other Related Regulations**
- Basel III Capital
- Market Risk¹
- Enhanced Prompt Corrective Action (PCA) thresholds
While implementation timelines are short, additional implementation complexities are introduced.
Understanding Transition timelines

**Long transition timeline to allow banks to adapt to these changes**

Many banks have already announced strategic actions to mitigate adverse capital impacts from Basel III and intend to meet targets in advance of deadlines.

*The countercyclical buffer is only applicable to advanced approach banks; The systemically important financial institution (SIFI) surcharge is not addressed in the U.S. Basel III capital NPR, but is intended for systemically important banks*
## Understanding the key impacts…

### Market risk
- Significant retooling of existing market risk aggregation platforms
- Processes to establish trading/banking book exposures
- New infrastructure and challenging data requirements for treating securitizations
- Changes in disclosure templates for reporting

### Basel III capital
- Technical deductions and adjustments that can be cumbersome
- Additional processes/ handoffs/expertise
- New thresholds dictating strategies (e.g., managing down Mortgage Servicing Rights)

### Standardized approach
- Advanced approach banks will be required to perform both the standardized and advanced approaches in parallel
- Underestimated impact on data, infrastructure, and process (especially for treatment of mortgages and securitization)
- Additional data sourcing requirements (e.g., for evaluating counterparty credit-worthiness)

### Advanced approaches
- Significant and potentially challenging data requirements
- New infrastructure will be required to calculate CVAs
- New methodologies will need to be developed to assess an exposure’s credit-worthiness
- New procedures are required to monitor key counterparty information
- Reworking of calculator infrastructure
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OCC - Emphasis of a Strong Internal Audit (IA)...

Recognition of the significant growing challenges facing Internal Audit (IA)

- Complexity and velocity of risk facing the banking system have increased
- New bank products and markets are more complex
- Enterprise and line of business risk management have greatly expanded

Emphasis on large banks with significant impact to the economy and capital markets

- Must build and maintain a “Strong” IA function
- Not sufficient to have a “Satisfactory” IA function
Attributes of a Strong Internal Audit (IA)

- Proactive, anticipatory and systematically focus
  - Anticipates and effectively responds to changing risk profile
  - Drives strengthening of controls and/or risk management practices
- Highly effective in effecting change
  - Timely identification of control weaknesses and/or excessive risk exposures
  - Seek/identify the root causes
  - Ensure appropriate corrective action
- Attains highest level of respect and stature within the organization
  - Status confirmed by actions and attitudes of the Board and Management
- Other key attributes
  - Robust Board and Audit Committee Engagement/Oversight
  - Strong IA Management
  - Competent IA Staff
  - Highly Effective IA processes/reporting
BCBS has recently issued comprehensive guidance

### I. Supervisory expectations relevant to the IA function

1. Independent assurance
2. Independent of the audited activities
3. Professional competence
4. Act with Integrity (Professional Ethics)
5. (Board) Approved internal audit charter
6. Inclusion of all activities and entities (including outsourcing)
7. Coverage of regulatory interest
8. Permanency of the internal audit function
9. Responsibilities of the board and senior management
10. Responsibilities of the audit committee
11. Management of the internal audit department (Head of IA)
12. Reporting lines of the IA function
13. Relationship between IA, compliance and risk management
14. Consistency of IA approach across the group
15. Outsourcing of internal audit activities

### II. Relationship of the supervisory authority with the IA function

16. Enhanced communication

### III. Supervisory assessment of the IA function

17. Assessment of the IA function
18. Reporting and requirement for remedial actions
19. Evaluation of bank’s risk profile
20. Supervisory action
Basel II Implementation has provided valuable learning...

### Basel II observations

- Need for an end-to-end implementation perspective, covering business, data, technology, process, analytics, and reporting
- Need for overarching project management office (PMO) to manage scope, complexity, and regulatory uncertainty
- Prevent “silod” implementation, which can result in:
  - Limitations to cross-functional collaboration
  - Misalignment of objectives between business and technology
  - Lack of ownership and accountability for “requirements”
- Need for upfront anticipation of data quality and general ledger reconciliation challenges

### Implications for broader capital and liquidity rules

- Critical to consider establishing a top-down, end-to-end view of the program for all stakeholders (business, risk, treasury, reporting)
- Basel II domain expertise, understanding of industry/peer bank approaches, and regulatory trends in the PMO can be important
- Communication strategy should address the “core” and “extended” stakeholders
  - Training and education is an integral part of communications
- A structured approach to planning and governance is important, including:
  - Early focus on data definitions, data governance and data quality
  - Define target business-as-usual/sustainability model

Source: Deloitte & Touche LLP analysis
Evolving regulatory landscape

- Effective **controls**, adequate **governance** & project management processes, **validation mechanisms** and thorough **documentation**
- **Board** and **senior management review, oversight and approval** of controls, processes and documentation
- **Validation** and **independent review** of risk measurement and stress testing models and supporting model risk management framework
- Risk management processes frequently **monitored** and **tested** by **independent control** areas and internal, as well as external, auditors
- **Robust internal controls** governing capital adequacy process components
- **Periodic full review** of internal controls by internal audit
- **New risk governance requirements** in light of Dodd-Frank and Enhanced Prudential Supervision standards
### Current Status

- Internal audit activities geared toward project implementation and gap closure, as opposed to overall integrity of Basel II computations and supporting risk management

- Staff familiar with Basel II requirements not necessarily been redeployed into independent review

- Quality of independent review

- While no U.S. bank is yet “live” on Basel II:
  - Investors, analysts and rating agencies mainly focus on Basel III estimates
  - Basel III estimates are also a key component of the Capital Plan (CCAR)

### Evolving Expectations

- Increased focus on quality of independent review as banks near completion of the parallel run

- Supervisory concerns about sufficiency of resourcing and depth of review.

- Independent reviews should be holistic and sufficiently integrated to the Basel II program

- Independent review will find the gaps and inconsistencies and raise credible challenge

- Basel III estimates expected to be accurate, comparable with other financial information
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Recognize some of the key challenges of Internal Audit…

• Complexity of rules may make Audit planning a challenge

• Keeping pace or staying current with dynamic regulatory environment

• Span of rules touches multiple aspects of the organization, e.g., Risk, Finance, Treasury, Technology, etc.

• Ability to grasp the big picture and maintain clarity and focus
Challenges may be addressed by key elements of an effective Framework...

- Reflects clear and consistent top-down view

- Incorporates the native/unique organizational setup/characteristics of the organization

- Takes into account the operating model components in context of the regulatory regime’s impact to each organization

- Provides a consistent 360 degree view across the organization

- Accelerates audit program roll-outs to support multiple regulatory regimes
A top-down view of a company’s unique organizational structure:

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- An organization is represented by multiple business functions
- Each business function is unique and serves a specific role within the organization
An Operating Model is a blueprint for classifying key business processes that impact the regulatory regime

- Under the regulatory lens, the operating model of a business function is represented by multiple components
- Risks are associated with the key processes and governance activities within each component of the Operating Model
Business processes consume data and are supported by Information Technology

- The preparation and validation of data is required for consumption
- A robust technology infrastructure provides business support and captures, moves, and transforms data for consumption
Establish a 360 degree view across the organization

- Identify key risks associated with business, data, IT processes and governance activities across the organization
- Leverage framework to roll-out audit plan for other regulatory reforms
Understand the necessary controls for governance, business process, data and IT across the organization ...

<table>
<thead>
<tr>
<th>Process</th>
<th>Control Objective</th>
<th>Control ID</th>
<th>Control Name</th>
<th>Control Activities/Details or Action Plan to Implement</th>
</tr>
</thead>
<tbody>
<tr>
<td>Business Process</td>
<td>Data is received timely</td>
<td>1.01</td>
<td>Source System Data Delivery Monitoring</td>
<td>Compare actual incoming actual monthly list of source systems to expected source systems to identify missing or new source systems</td>
</tr>
<tr>
<td>Data</td>
<td>Data for consumption conforms, is complete, is consistent, and is fit for use</td>
<td>1.02</td>
<td>Monitor Data Quality</td>
<td>Monitor the Data Quality dashboard to identify potential data issues</td>
</tr>
<tr>
<td>Technology</td>
<td>Access to capital calculation application is reviewed for appropriateness</td>
<td>1.03</td>
<td>Access to Application Review</td>
<td>Review and approve user access quarterly. This includes steps to maintain and approve the security matrix which lists the different roles within the application and the access rights for each role and individual access based on the role assigned per the security matrix</td>
</tr>
<tr>
<td>Governance</td>
<td>Capital calculation results are accurate or reasonable</td>
<td>1.04</td>
<td>Review and sign-off of management reports</td>
<td>Summary and management level control and exception reporting is reviewed and signed-off by management. Issues that cannot be addressed through the established business processes will be escalated to management by way of reports</td>
</tr>
</tbody>
</table>

**Governance**
- Roles and responsibilities of oversight organizations are clearly defined
- Documentation for reviews and sign-off is maintained
- Policy reviews and updates are defined

**Business Process**
- Validation of capital calculation results are performed
- Independent review and validation of models is well documented
- Updates to changing calculation rules/logic are implemented

**Data**
- Consistent and timely delivery of data is monitored
- Support for General Ledger adjustments are provided
- Rationale behind the defaulting of risk data parameters is documented

**Information Technology**
- Access to systems and applications are restricted to the appropriate individuals
- Backups of programs and data is performed according to schedule
- Data production jobs are scheduled and monitored for successful completion
Closing thoughts

• The impact of the evolving regulatory landscape and added layer of complexity around implementation timelines present key challenges for Internal Audit (IA) planning

• The OCC’s emphasis on a strong IA function in conjunction with the BCBS issued guidance puts additional pressure on organizations to maintain a robust IA structure that can effectively play a critical role in achieving regulatory compliance

• Valuable lessons learned from implementations of previous reforms, current focus of regulatory changes and supervisory expectations can be leveraged to provide further insights

• Key elements of an effective framework can help address the audit planning challenges and can be leveraged for other regulatory audit plans
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