Basel III: Overview of Requirements, Challenges, and Implications
Basel III Executive Summary

- Regulatory reforms still under development globally
- Careful planning remains vital to capital planning
- Boards to be more engaged in all aspects of capital & liquidity planning
- Focus on higher quality and quantity of capital will generate additional regulatory scrutiny
Lessons Learned from the Financial Crisis

Broad Interrelated Themes

- Interconnectedness of the global financial system leads to the domino effect

- System dynamics - how the global financial system responds to shocks

- Assessing and modifying incentives can be an effective tool in reducing risks

- Transparency levels the playing field and can help prevents surprises and shocks

- Central banks should monitor and respond early to asset bubbles
From Basel II to Basel III
Additional Regulation Gives Way to Stronger Capital & Liquidity Planning

**Basel II**

- **Pillar I**
  - Minimum Capital Requirements

- **Pillar II**
  - ICAAP / Supervisory Review Process

- **Pillar III**
  - Disclosure

**Basel III**

- Increased quality, consistency and transparency of a bank’s capital base.
- Stronger risk coverage of a bank’s capital framework.
  - Introduces a leverage ratio as a supplementary measure to Basel II.
  - Capital buffers that can be drawn upon in periods of stress.
  - A global minimum liquidity standard for internationally active banks
  - Potential for additional supervisory measures.

**Greater rigor managing Capital & Liquidity**

- Decreased levels and quality of capital unable to absorb systemic trading, and credit losses
- Complex transactions between SIFI
- Significant contraction of liquidity and credit availability in U.S.
- World economies affected by contraction in global liquidity and credit availability
<table>
<thead>
<tr>
<th></th>
<th>Basel II</th>
<th>Basel III</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>General Definition</strong></td>
<td>Primarily common equity with deductions for Expected Credit Losses (ECL), Securitization Exposures.</td>
<td>Additional deductions to Tier 1 Capital for Deferred Tax Assets (DTA), minority interest, investments into other financial institutions.</td>
</tr>
<tr>
<td><strong>Tier 1 Capital</strong></td>
<td>All other forms of capital with certain deductions.</td>
<td>Additional deductions to Tier 2 Capital.</td>
</tr>
<tr>
<td><strong>Market Risk</strong></td>
<td>VaR + Specific Risk VaR + Specific Risk not captured by VaR models.</td>
<td>VaR + Stress VaR + IRC + CRM + 15% of Specific Risk</td>
</tr>
<tr>
<td><strong>Credit Risk</strong></td>
<td>Counterparty Risk estimated using Internal &amp; External Credit Ratings.</td>
<td>Stressed EEPE</td>
</tr>
<tr>
<td><strong>Operational Risk</strong></td>
<td>No change</td>
<td>Increased margin periods</td>
</tr>
<tr>
<td><strong>Minimum Ratios</strong></td>
<td>Tier 1 Capital Ratio- 4%</td>
<td>Tier 1 Capital Ratio- 6%</td>
</tr>
<tr>
<td></td>
<td>Total Capital Ratio- 8%</td>
<td>Total Capital Ratio- 8%</td>
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<td></td>
<td></td>
<td>Conservation buffer- 2.5%</td>
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<tr>
<td></td>
<td></td>
<td>Countercyclical buffer- 0%-2%</td>
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<tr>
<td></td>
<td></td>
<td>SIFI buffer- not calibrated yet</td>
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<tr>
<td></td>
<td></td>
<td>Leverage Ratio- 3% proposed</td>
</tr>
</tbody>
</table>
Basel III - Paving the Way for Stronger Capital Planning

- Raises the quality, consistency, and transparency of a bank’s capital base
- Risk coverage of a bank’s capital framework will be strengthened
- Introduces a leverage ratio as a supplementary measure to Basel II
- Measures to promote build up of capital buffers in good times that can be drawn upon in periods of stress
- Introduces global minimum liquidity standard for internationally active banks
- Need for additional capital, liquidity or other supervisory measures to reduce externalities created by SIFI
Basel III Capital Requirements

• Tier 1 (Going Concern) Capital Components
• Tier 2 (Gone Concern) Capital

Changes from Basel II
• Tier 3 Capital excluded
• Expanded Inclusion of Minority Interest
• Hybrid Capital excluded from capital calculations
• Deferred Tax Assets (DTA) now fully excluded
• Deductions from capital of some items are now risk-weighted at 1250%

This list is not intended to be comprehensive
Basel III – Introducing Liquidity Requirements

- **Liquidity Coverage Ratio:**
  - Stock of high-quality liquid assets / Total net cash outflows over the next 30 calendar days
  - Minimum requirement = 100%
  - Ensures that the bank has adequate level of assets to meet liquidity needs over the next 30 days

- **Net Stable Funding Ratio:**
  - Available amount of stable funding / Required amount of stable funding
  - Minimum requirement = 100%
  - Establishes minimum acceptable amount of stable funding based on asset and activity characteristics of an institution over a period of 1 year
Basel III - Buffer Requirements

- **Capital Conservation Buffer**
  - Comprises of tier 1 components
  - Minimum of 2.5% above the regulatory requirements
  - Ensures banks build up capital buffers outside periods of stress which can be drawn down as losses are incurred

- **Countercyclical Buffer**
  - To be monitored and implemented by National Jurisdictions
  - Will be enforced when the national authority deems that excess credit growth is leading towards system-wide risk
  - Requirements will be between 0 and 2.5% of risk-weighted assets, when finalized
  - Aims to ensure that banking sector capital requirements take account the macro-financial environment in which banks operate
# Additional Risk Requirements

The "new" leverage ratio  

<table>
<thead>
<tr>
<th>The “new” leverage ratio</th>
<th>SIFI Ratio</th>
</tr>
</thead>
<tbody>
<tr>
<td>Average of the monthly leverage ratio over the quarter</td>
<td>Systemically Important Financial Institutions</td>
</tr>
<tr>
<td>Based on the Basel III definition of tier 1 and total regulatory capital</td>
<td>Additional buffer requirements for “too large to fail” institutions</td>
</tr>
<tr>
<td>Total exposure generally follows the accounting measure of exposure</td>
<td>Not yet calibrated</td>
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<tr>
<td>Proposed minimum of 3%</td>
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<tr>
<td>Will be monitored by national authorities semi-annually</td>
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</tbody>
</table>
Basel III introduces more rigor and strengthens the linkage between Risk, Capital & Liquidity.
Basel III - Transition Time

● Planned to be implemented from 2013 – 2019

● Deadline of transposition into national law: 1st January 2013

● Transition time to be used by the Committee to monitor consequences of these new standards on the economy
### U.S. Basel III Framework Timeline

<table>
<thead>
<tr>
<th>Category</th>
<th>Timeline</th>
</tr>
</thead>
<tbody>
<tr>
<td>Market Risk</td>
<td>New regulations entry into force from 31/12/2011 (with some exceptions from 31/12/2010).</td>
</tr>
<tr>
<td>Operational Risk</td>
<td>CEBS requirements entry into force from 31/06/2010</td>
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<tr>
<td>Counterparty Risk</td>
<td>Entry into force from 31/12/2012 (new definition of netting sets from 31/12/2010)</td>
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<tr>
<td>Concentration Risk</td>
<td>Conversion of CRD II completed from 31/10/2010, New regulations entry into force from 31/12/2010</td>
</tr>
</tbody>
</table>
| Liquidity Risk - Liquidity Coverage Ratio | Observation period begins  
Observation period begins  
minimum standard introduction  
minimum standard introduction |
| Liquidity Risk - Net stable funding ratio | Observation period begins  
minimum standard introduction  
minimum standard introduction |
| Minimum Common Equity Capital Ratio (a) | 3.5%  
4.0%  
4.5%  
5.125%  
5.75%  
6.375%  
6.0%  
5.5%  
5.0%  
4.5%  
4.0%  
3.5%  
2.5%  |
| Capital Conservation Buffer (b)   | 0.625%  
1.25%  
1.875%  
6.0%  
5.5%  
5.0%  
4.5%  
4.0%  
3.5%  
2.5%  |
| Minimum common equity + capital conservation buffer (a+b) | 3.5%  
4.0%  
4.5%  
5.125%  
5.75%  
6.375%  
6.0%  
5.5%  
5.0%  
4.5%  
4.0%  
3.5%  
2.5%  |
| Capital eligibility – deductions and prudential filters | 20%  
40%  
60%  
80%  
100%  
To be eliminated from the capital from 2013 during a 10 years horizon period |
| Capital eligibility – capital instruments not eligible within the non-core tier 1 or tier 2 | |
| Minimum capital Tier 1 (c)        | 4.5%  
5.5%  
6.0%  
5.5%  
5.0%  
4.5%  
4.0%  
3.5%  
2.5%  |
| Minimum Total Capital (d)         | 8.0%  
8.0%  
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| Minimum Total Capital + conservation buffer (d+b) | 8.0%  
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8.0%  |
| Leverage ratio                    | Supervisor monitoring  
Parallel run (1 Jan 2013-1 Jan 2017)  
Final adjustment  
Pillar 1 migration |

**Legend:**
- Transition Period
- Target Value

New regulations entry into force from 31/12/2011 (with some exceptions from 31/12/2010).

CEBS requirements entry into force from 31/06/2010.

Entry into force from 31/12/2012 (new definition of netting sets from 31/12/2010).

Conversion of CRD II completed from 31/10/2010, New regulations entry into force from 31/12/2010.

**Legend:**
- Transition Period
- Target Value

Parallel run (1 Jan 2013-1 Jan 2017) Disclosure begins from 1 Jan 2015

Final adjustment

Pillar 1 migration
### ASPAC/EMA Basel III Framework Timeline

<table>
<thead>
<tr>
<th>Period</th>
<th>Market Risk</th>
<th>Operational Risk</th>
<th>Counterparty Risk</th>
<th>Concentration Risk</th>
<th>Liquidity Risk - Liquidity Coverage Ratio</th>
<th>Liquidity Risk - Net stable funding ratio</th>
<th>Minimum Common Equity Capital Ratio (a)</th>
<th>Capital Conservation Buffer (b)</th>
<th>Minimum common equity + capital conservation buffer (a+b)</th>
<th>Minimum capital Tier 1 (c)</th>
<th>Minimum Total Capital (d)</th>
<th>Minimum Total Capital + conservation buffer (d+b)</th>
<th>Leverage ratio</th>
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<tbody>
<tr>
<td>1 Jan 2011</td>
<td>New regulations enter into force from 31/12/2011 (with some exceptions from 31/12/2010).</td>
<td>CEBS requirements entry into force from 31/06/2010</td>
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<td>Conversion of CRD II completed from 31/10/2010, New regulations entry into force from 31/12/2010</td>
<td>Observation period begins</td>
<td>Observation period begins</td>
<td>3.5% - 4.0%</td>
<td>0.625% - 1.25% - 1.875%</td>
<td>3.5% - 4.0% - 4.5% - 5.125% - 5.75% - 6.375%</td>
<td>4.5% - 5.5%</td>
<td>8.0% - 8.0%</td>
<td>8.0% - 8.0% - 8.0% - 8.625% - 9.25% - 9.875%</td>
<td>Supervisor monitoring</td>
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<td>1 Jan 2018</td>
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<td>1 Jan 2019</td>
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</tbody>
</table>

Notes:
- **Leverage ratio**:
  - Supervisor monitoring
  - Parallel run (1 Jan 2013-1 Jan 2017) Disclosure begins from 1 Jan 2015
  - Final adjustment
  - Pillar 1 migration

Entry into force from 31/12/2012 (new definition of netting sets from 31/12/2010).
Timeline for capital surcharges for SIFIs

• Global systemically important banks (G-SIBs) will face additional CET1 capital requirements of between 1% and 2.5%
• This will be phased in parallel with capital conservation and counter-cyclical buffers over 2016-2019
• Banks that materially increase their systemic importance could face an additional 1% surcharge
Synthesis of Basel III Framework

Capital
- Strengthening quality, consistency and transparency of capital
- Solving all risks
- Controlling leverage
- Introducing buffers (capital conservation and counter-cyclical buffers)

Liquidity
- Setting a short term ratio: liquidity coverage ratio (LCR)
- Setting a long term ratio: Net stable funding ratio (NSFR)

System Risk
- Encouraging the use of clearing houses for OTC derivatives
- Setting higher requirements of capital stock for exposures between financial institutions
- Considering an additional capital charge for SIFI
Gradual introduction of tighter criteria if compared with the actual regulation with regard to the capital eligibility, for example:
- No limits computation of common shares; exclusion from the “core capital” of the saving and preferred shares
- Deductions for significant investment (>10%),
- Shortfall deductions of devaluation amount with respect to the expected loss
- Exposure deductions on own shares

Eligible instruments

<table>
<thead>
<tr>
<th>Eligible instruments</th>
<th>Eligible instruments</th>
</tr>
</thead>
<tbody>
<tr>
<td>Today</td>
<td>from 2013 (transition period/grandfathering)</td>
</tr>
</tbody>
</table>
Regulation Reform Impacts on the Capital Adequacy (continued)

Higher RWA Requirements for Market and Credit Risk

Pillar 1 risk

2010

- Credit risk
- Market
- Operational

Pillar 1 risk

2011

- Stressed VaR
- Incremental risk
- Securitization

Pillar 1 risk

2012

- CVA
- Wrong-way risk
- AVC
Higher Capital and Liquidity Requirements

- **Total capital (min. 8%)**
- **Tier 1 capital (min. 6%)**
- **Tier 2 capital (min. 8%)**
- **Common equity (min. 4.5%)**
- **Liquidity Coverage (>100%)**
- **Net Stable Funding (>100%)**
- **Leverage ratio (>3%)**

**0-2.5% Countercyclical buffer (common equity)**

**2.5% Conservation buffer (common equity)**

**Total Tier 1 + Tier 2 capital (min. 8%)**

**Total Tier 1 capital (min. 6%)**

**Common equity (min. 4.5%)**

**Liquidity ratios**

- NA
- 2010
- 2015
- 2018
- 2018
Regulatory Framework: Complexity and Uncertainty

Standard setting bodies

Financial Stability Board
- Policy maker regulation analysis, valuating the coherence with respect the G20 agenda
- G20 Country Monitoring

International Monetary Fund
- Macroeconomic indicator monitoring
- Promotion of the stability of the exchange rates
- Monitoring the public financial stability to national level

BASEL
Primary focus on prudential requirements

IOSCO
Primary focus on market conduct

IASB
Accounting Standards

European Systemic Risk Council (macro-prudential)

ECB
European Systemic Risk Board (ESRB)
European Commission

Committees of Supervisors (micro-prudential) ----> ESAs

Committee of European Banking Supervisors (CEBS) ----> EBA
European Insurance Authority (CEIOPS) ----> EIOPA
European Securities Authority (CESR) ----> ESMA

National banking supervisors
National insurance supervisors
National securities supervisors

National Regulator

Central Bank
Insurance sector control
Market monitoring

Regulator/International institutions:
- To assure financial stability to an international level
- To individuate the weak areas
- To assure the development of a solid regulatory framework

Regulator/European institution:
- To allow the application of the European regulation to a national level
- To define guidelines for some discretionary choices with regard to national level regulation

Regulator/national institution:
- To formalize guidelines of intervention to be coherent with the G20 milestones
- Specific evaluations to a national level on proposed international regulations
The Dodd-Frank Act - Financial Regulatory Reform: Areas of Focus

- Systemic Risk
- Financial Stability & Capital
- Requirements
- Volcker Rule
- Consumer Protection & Mortgage Reform
- Federal Bank Supervision
- Registration of Advisers
- Other Areas of Reform
Basel III Implementation Considerations

- Policy and Procedures Documentation
- Model Validation and Testing
- Data Aggregation & Automation
- Client coordination to determine risk calculation components
- Basel II – Basel III Migration Management
- Systems Development
- Reporting
Assessing Impact and Preparing for Basel III

**Impact Assessment & Strategy**
- Risk framework and linkage to a broader governance framework.

**Change Management**
- LER, Living Wills, geographic and cost optimization, product design and pricing.

**Cost Management**
- Sale of businesses or portfolios, rapid book run-down due to capital and liquidity costs, disposal or buy-out of minority interests.

**Capital & Liquidity Efficiency**
- Capital and Liquidity as drivers of decision-making, model strategy, MI, data quality, management of deductions and related governance.

**External Reporting**
- Multiple changes in external/regulatory reporting driving data, process, system changes and training requirements.

**Change Management**
- Multiple changes in external/regulatory reporting driving data, process, system changes and training requirements.
# Implementation of Basel III

<table>
<thead>
<tr>
<th>Key Objectives</th>
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<tbody>
<tr>
<td><strong>Documentation</strong></td>
</tr>
</tbody>
</table>
| **Basel II – Basel III Migration Management** | • Management of incremental changes for additional regulatory requirements  
• Gap analysis to establish current and target states – in line with management’s objectives  
• Change management to ensure stronger standards are captured by key business processes |
| **Capital Attribution** | • Attribution of risk capital to business units and risk centers (e.g. during yearly budgeting cycles)  
• Determining trading diversification benefits |
| **Capital Calculations** | • Market and Credit Risk capital for both Basel II and Basel III |
| **Model Validation** | • Validation of internal models for market risk  
• Testing inputs, theory, backtesting, Testing of hypothetical portfolios |
| **Data Aggregation** | • Incorporating relevant information from various systems into proper formats  
• Migration from manual Excel format to more reliable systems |
Questions or Comments?