Revised Basel III Leverage Ratio

Visual Memorandum

January 21, 2014

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Overview of the Revised Basel III Leverage Ratio

- In January 2014, the Basel Committee finalized its revisions to the Basel III leverage ratio.
  - The Basel Committee *proposed* significant revisions to the denominator of the ratio in June 2013.
  - The Basel Committee may make further adjustments to the Basel III leverage ratio during the observation period prior to its introduction as a binding measure in 2018.

- Changes to June 2013 Proposal
  - Compared to the June 2013 proposal, the Basel Committee has made several important changes to the denominator of the Basel III leverage ratio. See comparison table beginning on page 5.

- Minimum Level, Numerator and Compliance Timing Remain the Same
  - The Basel Committee continues to set the *minimum* Basel III leverage ratio at 3%.
  - The numerator remains **Tier 1 capital**.
  - The Basel Committee will continue to collect data during the observation period to assess:
    - Whether a minimum Tier 1 leverage ratio of 3% is appropriate over a full credit cycle and for different types of business models; and
    - The impact of using either Common Equity Tier 1 or total regulatory capital (Tier 1 + Tier 2) as the numerator.
  - The January 1, 2018 compliance date has not changed. See timeline on page 8.
As defined in Basel III and consisting of Common Equity Tier 1 and Additional Tier 1 capital, subject to (i) adjustments and deductions and (ii) transitional arrangements.

### Visual Overview of the Revised Basel III Leverage Ratio

**Basel III Leverage Ratio (%)** = \( \frac{\text{Tier 1 Capital}}{\text{Exposure Measure}} \)

**A bank’s Exposure Measure is the sum of the following items:**

1. **All on-balance sheet assets**, including on-balance sheet collateral for derivatives and securities financing transactions but excluding on-balance sheet derivative and securities financing transaction assets that are addressed separately below.
2. **Derivative exposures**, including counterparty credit risk exposure and exposure to the reference asset.
3. **Securities financing transaction (SFT) exposures**, including where the bank acts as agent and provides an indemnity to one or both counterparties.
4. **Other off-balance sheet (OBS) exposures**, including commitments, liquidity facilities, direct credit substitutes, acceptances, standby letters of credit and trade letters of credit.
### Key Differences Between January 2014 Revisions and June 2013 Proposal

<table>
<thead>
<tr>
<th>Topic</th>
<th>June 2013 Proposal</th>
<th>Revised Basel III Leverage Ratio</th>
</tr>
</thead>
<tbody>
<tr>
<td>Derivatives collateral</td>
<td>▪ A bank must <strong>gross up</strong> its Exposure Measure for derivatives by the amount of any collateral received or provided by the bank where the collateral has reduced its on-balance sheet assets under applicable accounting standards.</td>
<td>▪ The general gross-up requirements are retained, subject to an important exception for cash variation margin.</td>
</tr>
<tr>
<td></td>
<td>▪ The general gross-up requirements are retained, subject to an important exception for cash variation margin.</td>
<td>▪ Cash variation margin may be used to reduce the Exposure Measure for derivatives if certain conditions are met.</td>
</tr>
<tr>
<td></td>
<td>▪ Cash variation margin may be used to reduce the Exposure Measure for derivatives if certain conditions are met.</td>
<td></td>
</tr>
<tr>
<td>Centrally cleared derivatives</td>
<td>▪ Centrally cleared derivative transactions are subject to the same treatment as non-cleared derivatives.</td>
<td>▪ The CCP-facing leg in a client clearing arrangement may be excluded from the Exposure Measure if the clearing member is not contractually obligated to reimburse the client for any losses suffered due to changes in the value of the client’s transactions in the event that the CCP defaults.</td>
</tr>
<tr>
<td></td>
<td>▪ Under the principal clearing model, where a clearing member bank intermediates itself as principal between a client and a central counterparty (CCP), both legs of the transaction (the client-facing leg and the CCP-facing leg) would count towards the Exposure Measure.</td>
<td></td>
</tr>
</tbody>
</table>
### Key Differences Between January 2014 Revisions and June 2013 Proposal (cont.)

<table>
<thead>
<tr>
<th>Topic</th>
<th>June 2013 Proposal</th>
<th>Revised Basel III Leverage Ratio</th>
</tr>
</thead>
</table>
| **Written credit derivatives** | ▪ The effective notional amount of a written credit derivative is added to the Exposure Measure to capture the bank’s exposure to the reference entity.  
▪ The notional amount of a written credit derivative may be reduced by the notional amount of a purchased credit derivative on the same reference name and same level of seniority if the remaining maturity of the purchased credit derivative ≥ the remaining maturity of the written credit derivative. | ▪ For single-name credit derivatives, allows the notional amount of a written credit derivative to be reduced by the notional amount of a purchased credit derivative on the same reference name with remaining maturity ≥ remaining maturity of the written credit derivative if the reference obligation ranks *pari passu* with or is *junior* to the reference obligation of the written credit derivative.  
▪ For tranched products, the purchased credit protection must be on a reference obligation with the same level of seniority. |
| **Securities financing transactions** | ▪ A bank must include its gross SFT assets in the Exposure Measure.  
▪ This means that SFT cash payables may not be netted against SFT cash receivables. | ▪ SFT cash payables and SFT cash receivables with the same counterparty may be netted if certain conditions are met.
### Key Differences Between January 2014 Revisions and June 2013 Proposal (cont.)

<table>
<thead>
<tr>
<th>Topic</th>
<th>June 2013 Proposal</th>
<th>Revised Basel III Leverage Ratio</th>
</tr>
</thead>
<tbody>
<tr>
<td>Off-balance sheet items</td>
<td>- The Exposure Measure of an OBS item is generally calculated by multiplying the</td>
<td>- Instead of a uniform 100% CCF, a bank is permitted to use the standardized credit conversion</td>
</tr>
<tr>
<td></td>
<td>notional amount of the item by a credit conversion factor (CCF) of 100%.</td>
<td>factors in the Basel risk-based capital framework to calculate the Exposure Measure for</td>
</tr>
<tr>
<td></td>
<td>- There is an exception for a commitment that is unconditionally cancelable at any</td>
<td>OBS items.</td>
</tr>
<tr>
<td></td>
<td>time by the bank without prior notice, to which a 10% CCF applies.</td>
<td>- The standardized CCFs in the Basel risk-based capital framework generally range from 10% to</td>
</tr>
<tr>
<td></td>
<td></td>
<td>100%, depending on the type of transaction.</td>
</tr>
</tbody>
</table>
Basel Committee’s Implementation Timeline for the Basel III Leverage Ratio


Jan. 1, 2015: Banks begin making detailed Pillar 3 public disclosures regarding the Basel III leverage ratio.

June 26, 2013: Basel Committee proposes significant revisions to the denominator of the Basel III leverage ratio.

Jan. 1, 2018: Basel III leverage ratio becomes a binding minimum requirement.

Basel Committee to make any final adjustments to the Basel III leverage ratio by 2017.
The Basel III leverage ratio framework follows the same scope of regulatory consolidation as the Basel risk-based capital framework.

Treatment of Investments in the Capital of Banking, Financial, Insurance and Commercial Entities that Are Outside the Scope of Regulatory Consolidation

- If a banking, financial, insurance or commercial entity is outside the scope of regulatory consolidation, only the carrying value of the investment (not the underlying assets and other exposures of the investee) is included in the Exposure Measure.

- Investments in the capital of unconsolidated financial institutions that are deducted from Tier 1 capital under Basel III may be excluded from the Exposure Measure.
The Exposure Measure generally follows the accounting value, subject to the following:

- On-balance sheet, non-derivative and non-SFT exposures are included in the Exposure Measure net of specific provisions or accounting valuation adjustments (e.g., accounting credit valuation adjustments);
- Netting of loans and deposits is not permitted; and
- A bank generally may not take into account of physical or financial collateral, guarantees or other credit risk mitigation techniques to reduce the Exposure Measure.
  - There are some exceptions to this general rule. E.g., cash variation margin associated with derivative exposures may be used to reduce the Exposure Measure, provided specific conditions are met.
Basel III Leverage Ratio: Components of the Exposure Measure

Exposure Measure =

1. On-balance Sheet Exposures  (pages 12-13)
2. Derivative Exposures  (pages 14-30)
3. SFT Exposures  (pages 31-37)
4. Other OBS Items  (pages 38-39)
1. On-balance Sheet Exposures

- A bank must include **all** balance sheet assets in its Exposure Measure.
  - **Include** any on-balance sheet collateral relating to derivatives and SFT transactions.
  - **Exclude** on-balance sheet derivative and SFT assets that are addressed in subsequent pages.

- **Certain Fiduciary Assets:** If a bank recognizes fiduciary assets on the balance sheet under applicable accounting standards, these assets can be **excluded** from the Exposure Measure if:
  - The assets meet the IAS 39 criteria for derecognition and, if applicable, IFRS 10 for deconsolidation.
1. On-balance Sheet Exposures (cont.)

- **Exclusion of Items Deducted from Tier 1 Capital:** To ensure internal consistency within the Basel III leverage ratio framework, balance sheet assets deducted from Tier 1 capital under Basel III should be excluded from the Exposure Measure.

  - **Example 1:** If a banking, financial or insurance entity is not included in the regulatory scope of consolidation, any investment in the capital of that entity that is deducted from the bank’s Common Equity Tier 1 or Additional Tier 1 capital under Basel III may be excluded from the Exposure Measure.

  - **Example 2:** For banks using the internal ratings-based (IRB) approach (or advanced approaches in U.S.) to determine capital requirements for credit risk, Basel III requires any shortfall in the stock of eligible provisions relative to expected losses to be deducted from Common Equity Tier 1 capital. The amount deducted may be excluded from the Exposure Measure.

- **Liability Items:** Liability items may **not** be deducted from the Exposure Measure.

  - *E.g.*, gains/losses on fair valued liabilities or accounting value adjustments on derivative liabilities due to changes in the bank’s own credit risk may **not** be deducted from the Exposure Measure.
2. Derivative Exposures: Overview

In general, a bank calculates the Exposure Measure for derivatives as follows:

\[
\text{Exposure Measure for Derivatives} = \text{Replacement Cost (RC)} + \text{Potential Future Exposure (PFE)} \pm \text{Adjustments for Certain Collateral}
\]

Specifically, there are different calculation methodologies for:

- A single derivative transaction that is not subject to an eligible bilateral netting contract;
- Multiple derivatives subject to an eligible bilateral netting contract;
- Collateral received and provided by a bank, including cash variation margin;
- Certain client clearing arrangements; and
- Written credit derivatives.
2. Derivative Exposures: Single Derivative Not Subject to an Eligible Bilateral Netting Contract

Exposure Measure = RC + PFE ± Adjustments for Certain Collateral

- This approach for determining derivative exposure is similar to the current exposure method (CEM) in the Basel Committee’s risk-based capital framework. *

- **RC** = greater of (i) mark-to-market value and (ii) 0
  - If, under applicable accounting standards, there is no accounting measure for certain derivative instruments because they are held entirely off-balance sheet, RC is the sum of the positive fair values of these derivatives.

- **PFE** = notional principal amount \( \times \) add-on factor
  - If the stated notional amount is leveraged or enhanced by the structure of the transaction, banks must use the effective notional amount when determining PFE.
  - Add-on factors depend on type of derivative and remaining maturity. See pages 16-18.

- **Collateral**: The treatment of collateral received and provided by a bank in connection with derivative transactions is discussed on pages 22-24.

* **NIMM**: The Basel Committee has proposed a non-internal model method (NIMM) to calculate derivative exposures, which would replace the CEM in the risk-based capital framework. The Basel Committee will consider whether to use NIMM for calculating the Exposure Measure.
2. Derivative Exposures: Single Derivative Not Subject to an Eligible Bilateral Netting Contract (cont.)

## PFE Add-on Factors

<table>
<thead>
<tr>
<th>Remaining maturity</th>
<th>Interest rate</th>
<th>FX and gold</th>
<th>Equity</th>
<th>Precious metals (except gold)</th>
<th>Other commodities</th>
</tr>
</thead>
<tbody>
<tr>
<td>1 year or less</td>
<td>0.0%</td>
<td>1.0%</td>
<td>6.0%</td>
<td>7.0%</td>
<td>10.0%</td>
</tr>
<tr>
<td>Over 1 year to 5 years</td>
<td>0.5%</td>
<td>5.0%</td>
<td>8.0%</td>
<td>7.0%</td>
<td>12.0%</td>
</tr>
<tr>
<td>Over 5 years</td>
<td>1.5%</td>
<td>7.5%</td>
<td>10.0%</td>
<td>8.0%</td>
<td>15.0%</td>
</tr>
</tbody>
</table>

### Notes

- For contracts with **multiple exchanges of principal**, the add-on factors are multiplied by the number of remaining payments under the contract.
- For contracts that are structured to settle outstanding exposures following specified payment dates and where the **terms are reset** such that the market value of the contract is **zero** on these specified dates, the residual maturity would be set equal to the time until the next reset date. In the case of interest rate derivatives with remaining maturities of **> 1 year** that meet the above criteria, the add-on factor is subject to a floor of 0.5%.
- **No PFE** would be calculated for single currency floating / floating interest rate swaps; the exposure on these contracts would be evaluated solely on the basis of their mark-to-market value.
- Forwards, swaps, purchased options and similar derivative contracts **not covered by any of the columns** in the above table are to be treated as “other commodities.”
2. Derivative Exposures: Single Derivative Not Subject to an Eligible Bilateral Netting Contract (cont.)

<table>
<thead>
<tr>
<th>Protection buyer</th>
<th>Protection seller</th>
</tr>
</thead>
<tbody>
<tr>
<td>Total return swaps</td>
<td></td>
</tr>
<tr>
<td>“qualifying” reference obligation</td>
<td>5.0%</td>
</tr>
<tr>
<td>“non-qualifying” reference obligation</td>
<td>10.0%</td>
</tr>
<tr>
<td>Credit default swaps</td>
<td></td>
</tr>
<tr>
<td>“qualifying” reference obligation</td>
<td>5.0%*</td>
</tr>
<tr>
<td>“non-qualifying” reference obligation</td>
<td>10.0%*</td>
</tr>
</tbody>
</table>

* The protection seller of a credit default swap is only subject to an add-on for PFE where it is subject to closeout upon the insolvency of the protection buyer while the underlying is still solvent. In that case, PFE should be capped to the amount of unpaid premiums.

- If a credit derivative is a first-to-default transaction, PFE is determined by reference to the lowest credit quality underlying in the basket.
  - *E.g.*, if there are any non-qualifying securities in the basket, the non-qualifying reference obligation PFE add-on factor should be used.
- For second and subsequent n\textsuperscript{th}-to-default transactions, underlying assets should continue to be allocated according to credit quality.
  - *E.g.*, the PFE add-on factor associated with the second or, respectively, n\textsuperscript{th} lowest credit quality underlying will be used for a second-to-default or an n\textsuperscript{th}-to-default transaction, respectively.
2. Derivative Exposures: Single Derivative Not Subject to an Eligible Bilateral Netting Contract (cont.)

- The PFE add-on factors for credit derivatives distinguish between qualifying and non-qualifying reference obligations.

**Qualifying reference obligations** include securities that are:

- Issued by public sector entities and multilateral development banks;
- Rated investment grade by at least two credit rating agencies specified by the national authority;*
- Rated investment grade by one rating agency and not less than investment grade by any other rating agency specified by the national authority (subject to supervisory oversight);*
- Subject to supervisory approval, unrated, but deemed to be of comparable investment quality by the bank and the issuer has securities listed on a recognized exchange;
- Subject to the discretion of the national authority, debt securities issued by banks in countries that have implemented the Basel III capital framework, provided that supervisory authorities in those countries will take prompt remedial action if a bank fails to meet the Basel III leverage ratio;
- Subject to the discretion of the national authority, debt securities issued by securities firms that are subject to capital standards that are equivalent to Basel III; and
- Issued by institutions that are deemed to be equivalent to investment grade quality and subject to supervisory and regulatory regimes that are comparable to the Basel III capital framework.

*The Dodd-Frank Act prohibits references to external credit ratings in federal regulations. U.S. bank regulators will presumably rely on the OCC’s non-credit ratings based investment grade standard when implementing this aspect of the qualifying reference obligation definition.
Recognition of Bilateral Netting

- For purposes of the Exposure Measure for derivatives, banks may net transactions subject to:
  - Novation under which any obligation between a bank and its counterparty to deliver a given currency on a given value date is automatically amalgamated with all other obligations for the same currency and value date, legally substituting one single amount for the previous gross obligations; and
  - Any other legally valid form of bilateral netting.

- **Eligible Bilateral Netting Contract:** In both cases, a bank must satisfy its national supervisors that it has a netting contract or agreement with the counterparty that satisfies the criteria on the next page.

- **No Cross-Product Netting:** Cross-product netting may **not** be used to determine the Exposure Measure.
An **eligible bilateral netting contract** is a netting contract or agreement with a counterparty:

- That creates a single legal obligation, covering all included transactions, resulting in either a right to receive or an obligation to pay only the *net* sum of the positive and negative mark-to-market values of included individual transactions in the event a counterparty fails to perform due to any default, bankruptcy, liquidation or similar circumstances;

- With respect to which the bank has written and reasoned legal opinions concluding and satisfying national supervisor (if necessary after consultation with other relevant supervisors) that, in the event of a legal challenge, the relevant courts and administrative authorities would find the bank’s exposure to be the net amount described above under:
  - The law of the jurisdiction in which the counterparty is chartered and, if the foreign branch of a counterparty is involved, also under the law of jurisdiction in which the branch is located;
  - The law governing the individual transactions; and
  - The law governing the netting contract or agreement.

- With respect to which the bank has procedures to ensure that the legal characteristics of netting arrangements are reviewed in light of possible changes in relevant law; and

- That does not contain a walkaway clause, which is a provision that permits a non-defaulting counterparty to make only limited payments, or no payment at all, to the estate of a defaulter, even if the defaulter is a net creditor.
2. Derivative Exposures: Multiple Derivatives Subject to an Eligible Bilateral Netting Contract

Exposure Measure = **Net RC** + **$A_{net}$** ± Adjustments for Certain Collateral

- **Net RC** = greater of (i) net mark-to-market replacement cost and (ii) 0
- **$A_{net}$** = adjusted sum of the PFE amounts of all derivative transactions subject to the same eligible bilateral netting contract. $A_{net}$ is determined using the following formula, which provides for limited recognition of the benefits of bilateral netting:

  \[ A_{net} = (0.4 \times A_{gross}) + (0.6 \times NGR \times A_{gross}) \]

  - **$A_{gross}$** = sum of individual PFEs (calculated by multiplying the notional principal amount by the appropriate PFE add-on factors on pages 16-18) of all transactions subject to the same eligible bilateral netting contract.
  - **NGR** = net to gross ratio, which is the ratio of net RC to gross RC for transactions subject to the same eligible bilateral netting contract (on counterparty by counterparty or aggregate basis, but no netting across counterparties).

- **Collateral**: The treatment of collateral received and provided by a bank in connection with derivative transactions is discussed on pages 22-24.

*FX Forwards*: For purposes of calculating PFE for forward foreign exchange contracts and other similar contracts in which the notional principal amount is equivalent to cash flows, the notional principal is defined as the net receipts falling due on each value date in each currency. The is because offsetting contracts in the same currency maturing on the same date have lower PFE and lower current exposure.
2. Derivative Exposures: Treatment of Collateral Received and Provided by a Bank

- **No Netting of Collateral Received**
  - A bank generally *cannot* reduce the Exposure Measure by any collateral *received* from the counterparty (regardless of permissibility of netting under applicable accounting standards or risk-based capital framework).
  - **Exception** for cash variation margin that meets certain conditions. See page 23.

- **Gross-up of Collateral Provided**
  - A bank generally must *gross up* its Exposure Measure by the amount of any derivatives collateral *provided* where the provision of that collateral has reduced the value of its balance sheet assets under applicable accounting standards.
  - **Exception** for cash variation margin that meets certain conditions. See page 23.
2. Derivative Exposures: Treatment of Cash Variation Margin

- If **all of the conditions** on the **next page** are met, cash variation margin may be treated as follows:

  - **Cash Variation Margin Received:** The bank may **reduce** RC portion of the Exposure Measure by the amount of cash variation margin received **if** the positive mark-to-market value of the derivative contract(s) has not already been reduced by the same amount under applicable accounting standards.

  - **Cash Variation Margin Provided:** The bank may **deduct** the resulting receivable from the Exposure Measure, **if** the cash variation margin provided is recognized as an asset under applicable accounting standards.

  - **No Effect on PFE:** Cash variation margin may **not** be used to reduce the PFE portion of the Exposure Measure, including the calculation of the net-to-gross ratio (NGR) described on **page 21**.
2. Derivative Exposures: Treatment of Cash Variation Margin (cont.)

- **Conditions Applicable to Cash Variation Margin:** The cash portion of variation margin exchanged between derivative counterparties may be treated in the manner described on the previous page if all of the following conditions are met:
  - For trades not cleared through a qualifying central counterparty (QCCP), the cash received by the recipient counterparty is not segregated.
  - Variation margin is calculated and exchanged on a daily basis based on mark-to-market valuation of derivatives positions.
  - The cash variation margin is received in the same currency as the settlement currency of the derivative contract.
  - Variation margin exchanged is the full amount necessary to fully extinguish the mark-to-market exposure of the derivative subject to the threshold and minimum transfer amounts applicable to the counterparty.
  - Derivatives transactions and variation margins are covered by a single master netting agreement between the legal entities that are the counterparties in the derivatives transaction.
  - The master netting agreement must explicitly stipulate that the counterparties agree to settle net any payment obligations covered by such a netting agreement, taking into account any variation margin received or provided if a credit event occurs involving either counterparty.
  - The master netting agreement must be legally enforceable and effective in all relevant jurisdictions, including in the event of default and bankruptcy or insolvency.
## 2. Derivative Exposures: Treatment of Certain Client Clearing Arrangements

The following treatment applies when a bank that is a clearing member (CM) offers derivatives clearing services to its clients with respect to a central counterparty (CCP).

<table>
<thead>
<tr>
<th>Client Clearing Arrangement</th>
<th>Example</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>CM Guarantees CCP’s Performance to Client</strong>&lt;br&gt;If the CM is contractually obligated to reimburse the client for any losses suffered due to changes in the value of the client’s transactions in the event that the CCP defaults, the CM’s trade exposures* to the CCP must be included in the Exposure Measure and treated like any other type of derivative transaction.</td>
<td><img src="https://via.placeholder.com/150" alt="Diagram" /> Include both derivative ❶ and derivative ❷ in the Exposure Measure</td>
</tr>
</tbody>
</table>

| **CM Does Not Guarantee CCP’s Performance to Client**<br>If the CM is not contractually obligated to reimburse the client for any losses suffered due to changes in the value of the client’s transactions in the event that the CCP defaults, the CM’s trade exposures to the CCP should **not** be included in the Exposure Measure. | ![Diagram](https://via.placeholder.com/150) Include only derivative ❶ in Exposure Measure |

---

* Trade exposures include initial margin posted irrespective of whether it is bankruptcy remote vis-à-vis the CCP.
The following treatment applies when a bank that is a clearing member (CM) offers derivatives clearing services to its clients with respect to a central counterparty (CCP).

### Client Clearing Arrangement

#### CM Guarantees Client’s Performance to CCP

Where a client directly enters into a derivative transaction with the CCP and the CM guarantees its client’s performance to the CCP, the CM must treat the guarantee as a derivative transaction that it has entered into with its client, including with respect to the treatment of cash variation margin.

**Example**

1. Include guarantee in the Exposure Measure as a derivative transaction with the client.
2. Derivative Exposures: Treatment of Written Credit Derivatives

- The Basel Committee stated that the sale of a credit derivative (e.g., a credit default swap or a total return swap) by a bank gives rise to both (i) counterparty credit exposure and (ii) a notional credit exposure to the reference entity.

- The Basel Committee believes that the Exposure Measure for written credit derivatives should capture both types of exposures.

- This is generally achieved by adding the effective notional amount of the written credit derivative to the formula for calculating counterparty credit exposure.

- As discussed in the following pages, certain adjustments can be made to the effective notional amount.

For a single written credit derivative that is not subject to an eligible bilateral netting contract:

\[
\text{Exposure Measure} = RC + PFE \pm \text{Adjustments for Certain Collateral} + \text{Effective Notional Amount}
\]

For multiple written credit derivatives subject to an eligible bilateral netting contract:

\[
\text{Exposure Measure} = \text{Net RC} + A_{net} \pm \text{Adjustments for Certain Collateral} + \text{Effective Notional Amount}
\]
2. Derivative Exposures: Adjustments to the Effective Notional Amount of Written Credit Derivatives

- **Effective Notional Amount:** The effective notional amount is the notional amount adjusted to reflect the true exposure of derivatives that are leveraged or otherwise enhanced by the structure of the transaction.

- **Adjustments to Effective Notional Amount:** The effective notional amount of a written credit derivative may be reduced by:
  
  1. Any negative change in fair value amount that has been incorporated into the calculation of Tier 1 capital with respect to the written credit derivative; and
  
  2. Certain Purchased Credit Derivatives: The effective notional amount of a purchased credit derivative on the same reference name (discussed further on the next page) provided:
     
     - The credit protection purchased is on a reference obligation which ranks *pari passu* with or is junior to the underlying reference obligation of the written credit derivative in the case of single-name credit derivatives*, and
     
     - Remaining maturity of credit protection purchased ≥ remaining maturity of written credit derivative.

* For tranched products, the purchased protection must be on a reference obligation with the same level of seniority.
2. Derivative Exposures: Adjustments to the Effective Notional Amount of Written Credit Derivatives (cont.)

“Same Reference Name” for Purpose of Recognizing Certain Purchased Credit Derivatives:

- Two reference names are considered the same only if they refer to the same legal entity.

- For single-name credit derivatives, protection purchased that references a subordinated position may offset protection sold on a more senior position of the same reference entity as long as a credit event on the senior reference asset would result in a credit event on the subordinated reference asset.

- Protection purchased on a pool of reference entities may offset protection sold on individual reference names if the protection purchased is economically equivalent to buying protection separately on each of the individual names in the pool (e.g., if a bank purchases protection on an entire securitization structure).

- If a bank purchases protection on a pool of reference names, but the credit protection does not cover the entire pool (i.e., the protection covers only a subset of the pool, as in the case of an nth-to-default credit derivative or a securitization tranche), offsetting is not permitted for the protection sold on individual reference names.

  - However, purchased protection may offset sold protection on a pool if the purchased protection covers the entire subset of the pool on which protection has been sold.
Adjustments to Counterparty Credit Exposure Formulas to Avoid Double Counting

- The Exposure Measure of a written credit derivative may be overstated by the inclusion in the Exposure Measure of both (1) PFE representing counterparty credit exposure and (2) effective notional amount representing reference entity exposure.

- The following adjustments may be made to avoid double counting:
  - If an eligible bilateral netting contract is not in place, a PFE of 0 is assigned to a written credit derivative whose effective notional amount is already included in the Exposure Measure.
  - If an eligible bilateral netting contract is in place, $A_{gross}$ may be reduced by the individual PFEs of written credit derivatives whose notional amounts are already included in the Exposure Measure. However, no adjustments may be made to NGR.
3. Securities Financing Transaction (SFT) Exposures

**Definition:** For purposes of the Basel III leverage ratio, SFTs include repurchase agreements, reverse repurchase agreements, securities lending and borrowing transactions and margin lending transactions.

The Exposure Measure for SFTs distinguishes between:

- A bank acting as **principal**; and
- A bank acting as **agent and providing an indemnity** to a counterparty to the SFT.

According to the Basel Committee, the methods for calculating the Exposure Measure for SFTs are designed to address the main differences among accounting standards.
3. SFT Exposures: Bank Acting as Principal

**Exposure Measure = Adjusted SFT Assets + Counterparty Credit Exposure**

- **Adjusted SFT Assets** = Gross SFT assets recognized for accounting purposes* (i.e., with no recognition of accounting netting), but adjusted as follows:
  - **Exclude** from the Exposure Measure the value of any securities received under an SFT if the bank has recognized the securities as an asset on its balance sheet.
  - **Netting of Cash Payables and Receivables:** Cash payables and cash receivables in SFTs with the same counterparty may be netted if all of the conditions on the **following page** are met.
    - In other words, although accounting netting is not recognized, regulatory netting is permissible if the conditions are met.

* For SFT assets that are subject to novation and cleared through qualifying CCPs, “gross SFT assets recognized for accounting purposes” is replaced by the final contractual exposure since pre-existing contracts have been replaced by new legal obligations through the novation process.
3. SFT Exposures: Bank Acting as Principal (cont.)

**Exposure Measure** = **Adjusted SFT Assets** + **Counterparty Credit Exposure**

- **Adjusted SFT Assets: Criteria for Netting of Cash Payables and Receivables**
  - The SFTs are with the same counterparty;
  - The SFTs have the same explicit final settlement date;
  - The right to set off the amount owed to the counterparty with the amount owed by the counterparty is legally enforceable both in the normal course of business and in the event of: (1) default; (2) insolvency; and (3) bankruptcy; and
  - The counterparties intend to settle net, settle simultaneously, or the transactions are subject to a settlement mechanism that results in the functional equivalent of net settlement, i.e., the cash flows of the transactions are equivalent, in effect, to a single net amount on the settlement date.
    - To achieve such equivalence, both transactions are settled through the same settlement system and the settlement arrangements are supported by cash and/or intraday credit facilities intended to ensure that settlement of both transactions will occur by the end of the business day and the linkages to collateral flows do not result in the unwinding of net cash settlement.*

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*According to the Basel Committee, this condition ensures that any issues arising from the securities leg of the SFTs do not interfere with the completion of the net settlement of the cash receivables and payables.
3. SFT Exposures: Bank Acting as Principal (cont.)

The measure for Counterparty Credit Exposure is the current SFT exposure without an add-on for PFE, calculated using the following formula.

If a qualifying master netting agreement (defined on next page) is in place:

Counterparty Credit Exposure = greater of (i) 0 and (ii) \( \Sigma E_i - \Sigma C_i \)

If a qualifying master netting agreement is not in place:

Counterparty Credit Exposure = greater of (i) 0 and (ii) \( E_i - C_i \)

- \( \Sigma E_i \) = total fair value of securities and cash lent to a counterparty for all transactions included in the qualifying master netting agreement.
- \( \Sigma C_i \) = total fair value of cash and securities received from the counterparty for all transactions included in the qualifying master netting agreement.

If a qualifying master netting agreement is not in place, counterparty credit exposure is calculated on a transaction by transaction basis, i.e., each transaction \( i \) is treated as its own netting set.
Recognition Criteria for Qualifying Master Netting Agreements

- For purposes of calculating the Exposure Measure for SFTs, the effects of a bilateral netting agreement will be recognized on a counterparty by counterparty basis if the agreement:
  - Provides the non-defaulting party with the right to terminate and close out in a timely manner all transactions under the agreement upon an event of default, including in the event of insolvency or bankruptcy of the counterparty;
  - Provides for the netting of gains and losses on transactions (including the value of any collateral) terminated and closed out so that a single net amount is owed by one party to the other;
  - Allows for the prompt liquidation or set-off of collateral upon an event of default; and
  - Is legally enforceable in each relevant jurisdiction upon the occurrence of an event of default regardless of the counterparty’s insolvency or bankruptcy.

- Netting across positions held in the banking book and trading book (i.e., market risk capital positions) will only be recognized when the transactions fulfill the following conditions:
  - All transactions are marked to market daily; and
  - The collateral instruments used in the transactions are recognized as eligible financial collateral under the banking book capital rules.
3. SFT Exposures: Bank Acting as Principal (cont.)

Reversing Sales-related Accounting Entries

- According to the Basel Committee, leverage may remain with the lender of a security in an SFT whether or not the transaction is reported as a sale under applicable accounting standards.

- Where sale accounting is used for an SFT under applicable accounting standards, the bank must:
  - **Reverse** all sales-related accounting entries; and
  - Calculate its Exposure Measure as if the SFT had been treated as a financing transaction under applicable accounting standards. See page 32.
3. SFT Exposures: Bank Acting as Agent

- If a bank acting as agent in an SFT provides an indemnity or guarantee to a customer or counterparty for any difference between the value of the security or cash the customer has lent and the value of collateral the borrower has provided, the bank should include in its Exposure Measure only the measure for Counterparty Credit Exposure and not Adjusted SFT Assets:

  If a qualifying master netting agreement is in place:

  \[ \text{Counterparty Credit Exposure} = \text{greater of } (i) \ 0 \text{ and } (ii) \ \sum E_i - \sum C_i \]

  If a qualifying master netting agreement is not in place:

  \[ \text{Counterparty Credit Exposure} = \text{greater of } (i) \ 0 \text{ and } (ii) \ E_i - C_i \]

- **Further Economic Exposure:** If a bank is further economically exposed (i.e., beyond the guarantee for the difference between the value of the security or cash its customer has lent and the value of the collateral the borrower has provided) to the underlying security or cash in the SFT,* the bank must calculate its Exposure Measure as if it were acting as principal, i.e., by including both Adjusted SFT Assets and the measure for Counterparty Credit Exposure.

- **No Guarantee or Indemnity:** Where a bank acting as an agent in an SFT does not provide an indemnity or guarantee to any of the involved parties, the bank is not exposed to the SFT and should not include the SFT in its Exposure Measure.

*E.g., if a bank manages collateral received in connection with an SFT for its own account rather than for the principal counterparty’s account.*
### 4. Other Off-Balance Sheet (OBS) Exposures

Exposure Measure = Notional Amount of OBS Item x Credit Conversion Factor (CCF)

<table>
<thead>
<tr>
<th>OBS Item</th>
<th>CCF</th>
</tr>
</thead>
<tbody>
<tr>
<td>Commitments that are unconditionally cancelable at any time by the bank without prior notice, or that effectively provide for automatic cancellation due to deterioration in a borrower’s creditworthiness*</td>
<td>10%</td>
</tr>
<tr>
<td>At national discretion, undrawn servicer cash advances or facilities that are unconditionally cancelable without prior notice</td>
<td>10%</td>
</tr>
<tr>
<td>Short-term self-liquidating trade letters of credit arising from the movement of goods (e.g., documentary credits collateralized by the underlying shipment) – for both issuing and confirming banks</td>
<td>20%</td>
</tr>
<tr>
<td>Commitments other than securitization liquidity facilities with an original maturity up to one year</td>
<td>20%</td>
</tr>
<tr>
<td>Commitments with an original maturity over one year</td>
<td>50%</td>
</tr>
<tr>
<td>Note issuance facilities (NIFs)</td>
<td>50%</td>
</tr>
<tr>
<td>Revolving underwriting facilities (RUFs)</td>
<td>50%</td>
</tr>
</tbody>
</table>

* The Basel Committee notes that, in certain countries (e.g., United States), retail commitments are considered unconditionally cancelable if the terms permit the bank to cancel them to the full extent allowable under consumer protection and related legislation.
4. Other Off-Balance Sheet (OBS) Exposures (cont.)

Exposure Measure = Notional Amount of OBS Item x Credit Conversion Factor (CCF)

<table>
<thead>
<tr>
<th>OBS Item</th>
<th>CCF</th>
</tr>
</thead>
<tbody>
<tr>
<td>Certain transaction-related contingent items (e.g., performance bonds,</td>
<td>50%</td>
</tr>
<tr>
<td>bid bonds, warranties and standby letters of credit related to particular</td>
<td></td>
</tr>
<tr>
<td>transactions)</td>
<td></td>
</tr>
<tr>
<td>All eligible liquidity facilities</td>
<td>50%</td>
</tr>
<tr>
<td>All off-balance sheet securitization exposures, except an eligible</td>
<td>100%</td>
</tr>
<tr>
<td>liquidity facility or an eligible servicer cash advance facility</td>
<td></td>
</tr>
<tr>
<td>Direct credit substitutes, e.g., general guarantees of indebtedness</td>
<td>100%</td>
</tr>
<tr>
<td>(including standby letters of credit serving as financial guarantees for</td>
<td></td>
</tr>
<tr>
<td>loans and securities) and acceptances (including endorsements with the</td>
<td></td>
</tr>
<tr>
<td>character of acceptances)</td>
<td></td>
</tr>
<tr>
<td>Forward asset purchases, forward forward deposits and partly paid shares</td>
<td>100%</td>
</tr>
<tr>
<td>and securities, which represent commitments with certain drawdown</td>
<td></td>
</tr>
<tr>
<td>A bank may apply the lower of the two applicable CCFs to an undertaking</td>
<td></td>
</tr>
<tr>
<td>to provide a commitment on an OBS item</td>
<td></td>
</tr>
</tbody>
</table>
The Basel III leverage ratio framework provides that banks should make detailed public disclosures regarding their Basel III leverage ratio beginning in 2015.

**Content of Disclosures:** The public disclosure requirements relating to the Basel III leverage ratio include, but are not limited to, the following:

- A summary comparison table that provides a comparison of the bank’s total accounting assets amounts and Basel III leverage ratio Exposure Measure;

- A common disclosure template that provides a breakdown of the main components of the bank’s Basel III leverage ratio;

- A qualitative reconciliation requirement that details the source of material differences between the bank’s total balance sheet assets in its financial statements and on-balance sheet exposures in the common disclosure template; and

- An explanation of the key drivers of material changes in the bank’s Basel III leverage ratio observed from the end of the previous reporting period to the end of the current reporting period.
Frequency of Disclosures: Generally, the required disclosures must be published by a bank at the same frequency as, and concurrent with, the publication of its financial statements.

However, 3 items must be publicly disclosed quarterly irrespective of the frequency of publication of the financial statements: (1) Tier 1 capital (numerator); (2) Exposure Measure (denominator); and (3) Basel III leverage ratio.

Location of Disclosure: A bank should either include the required disclosures in its published financial statements or, at a minimum, provide a direct link to the completed disclosures on its website or in publicly available regulatory reports.

A bank must make available on its website, or through publicly available regulatory reports, an ongoing archive of all reconciliation templates, disclosure templates and explanatory tables relating to prior reporting periods.
### Summary Comparison Table of Accounting Assets vs. Basel III Leverage Ratio Exposure Measure

<table>
<thead>
<tr>
<th>Item</th>
<th>Description</th>
<th>In relevant currency</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Total consolidated assets as per published financial statements</td>
<td></td>
</tr>
<tr>
<td>2</td>
<td>Adjustment for investments in banking, financial, insurance or commercial entities that are consolidated for accounting purposes but outside the scope of regulatory consolidation</td>
<td></td>
</tr>
<tr>
<td>3</td>
<td>Adjustment for fiduciary assets recognized on the balance sheet pursuant to applicable accounting standards but excluded from the Exposure Measure</td>
<td></td>
</tr>
<tr>
<td>4</td>
<td>Adjustments for derivative transactions</td>
<td></td>
</tr>
<tr>
<td>5</td>
<td>Adjustment for SFTs</td>
<td></td>
</tr>
<tr>
<td>6</td>
<td>Adjustment for other OBS items</td>
<td></td>
</tr>
<tr>
<td>7</td>
<td>Other adjustments</td>
<td></td>
</tr>
<tr>
<td>8</td>
<td>Basel III leverage ratio Exposure Measure</td>
<td></td>
</tr>
</tbody>
</table>
## Pillar 3 Disclosure Requirements: Common Disclosure Template (cont.)

<table>
<thead>
<tr>
<th>Item</th>
<th>Basel III Leverage Ratio Framework</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>On-balance sheet exposures</strong></td>
<td></td>
</tr>
<tr>
<td>1 On-balance sheet items (exclude derivative and SFT assets; but include collateral)</td>
<td></td>
</tr>
<tr>
<td>2 (Assets deducted in determining Basel III Tier 1 capital)</td>
<td></td>
</tr>
<tr>
<td>3 <strong>Total on-balance sheet exposures</strong> (excluding derivative and SFT assets) (sum of lines 1 and 2)</td>
<td></td>
</tr>
<tr>
<td><strong>Derivative exposures</strong></td>
<td></td>
</tr>
<tr>
<td>4 Replacement cost associated with all derivative transactions (net of eligible cash variation margin)</td>
<td></td>
</tr>
<tr>
<td>5 PFE associated with all derivative transactions</td>
<td></td>
</tr>
<tr>
<td>6 Gross-up for derivatives collateral provided where deducted from the balance sheet assets pursuant to applicable accounting standards</td>
<td></td>
</tr>
<tr>
<td>7 (Deductions of receivables assets for cash variation margin provided in connection with derivative transactions)</td>
<td></td>
</tr>
<tr>
<td>8 (Exempted CCP leg of client clearing trade exposures)</td>
<td></td>
</tr>
<tr>
<td>9 Adjusted effective notional amount of written credit derivatives</td>
<td></td>
</tr>
<tr>
<td>10 (Adjusted effective notional offsets and PFE deductions for written credit derivatives)</td>
<td></td>
</tr>
<tr>
<td>11 <strong>Total derivative exposures</strong> (sum of lines 4 to 10)</td>
<td></td>
</tr>
</tbody>
</table>
### Pillar 3 Disclosure Requirements: Common Disclosure Template (cont.)

<table>
<thead>
<tr>
<th>Item</th>
<th>Basel III Leverage Ratio Framework</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Securities financing transaction exposures</strong></td>
<td></td>
</tr>
<tr>
<td>12</td>
<td>Gross SFT assets (with no recognition of accounting netting), after adjusting for sales accounting transactions</td>
</tr>
<tr>
<td>13</td>
<td>(Netted amounts of cash payables and cash receivables of gross SFT assets)</td>
</tr>
<tr>
<td>14</td>
<td>Measure for Counterparty Credit Exposure for SFT assets</td>
</tr>
<tr>
<td>15</td>
<td>Agent SFT exposures</td>
</tr>
<tr>
<td>16</td>
<td><strong>Total SFT exposures</strong> (sum of lines 12 to 15)</td>
</tr>
<tr>
<td><strong>Other off-balance sheet exposures</strong></td>
<td></td>
</tr>
<tr>
<td>17</td>
<td>Off-balance sheet exposure at gross notional amount</td>
</tr>
<tr>
<td>18</td>
<td>(Adjustments for conversion to credit equivalent amounts)</td>
</tr>
<tr>
<td>19</td>
<td><strong>Off-balance sheet items</strong> (sum of lines 17 and 18)</td>
</tr>
<tr>
<td><strong>Capital and total Exposure Measure</strong></td>
<td></td>
</tr>
<tr>
<td>20</td>
<td>Tier 1 capital</td>
</tr>
<tr>
<td>21</td>
<td><strong>Total Exposure Measure</strong> (sum of lines 3, 11, 16 and 19)</td>
</tr>
<tr>
<td><strong>Basel III leverage ratio</strong></td>
<td></td>
</tr>
<tr>
<td>22</td>
<td>Basel III leverage ratio</td>
</tr>
</tbody>
</table>
U.S. Implementation of the Basel III Leverage Ratio

- **U.S. Basel III Final Rule:** An advanced approaches banking organization* must comply with a minimum Basel III supplementary leverage ratio of 3% beginning on January 1, 2018.

- **American Add-On Proposal:** In July 2013, U.S. bank regulators proposed higher Basel III supplementary leverage ratios for the 8 U.S. bank holding companies (BHCs) that have been identified as global systemically important banks (Covered BHCs) and their U.S. insured depository institution (IDI) subsidiaries. See visual on the next page.

- **Current Calibration:** The calibration of the Basel III supplementary leverage ratio in both the U.S. Basel III final rule and in the American Add-on proposal is broadly similar to the original December 2010 version of the Basel III leverage ratio.

- **U.S. Bank Regulators Will Consider Basel Committee Revisions:** U.S. bank regulators have stated that they will consider whether to revise the Basel III supplementary leverage ratio once the Basel Committee has finalized its revisions to the Basel III leverage ratio.

* An advanced approaches banking organization is one that: (1) has ≥ $250 billion in total consolidated assets; (2) has ≥ $10 billion of on-balance sheet foreign exposures; or (3) chooses, with approval by its primary federal banking regulator, to use the advanced approaches to calculate risk-weighted assets.

Covered BHC

- Other Subsidiary
- IDI Subsidiary
- IDI Subsidiary

>2% buffer
3% min.

>5% Basel III supplementary leverage ratio, on a consolidated basis, to avoid restrictions on capital distributions and discretionary bonus payments to executive officers

Each IDI subsidiary must maintain a 6% Basel III supplementary leverage ratio to be considered well-capitalized

3% add-on
3% min.

Related Resources: Davis Polk’s memo on the American Add-on proposal is available [here](#).
**Federal Reserve’s FBO Proposal:** Using its authority under the Dodd-Frank Act to establish enhanced prudential standards, the Federal Reserve has also proposed to apply U.S. Basel III and other U.S. prudential requirements to:

- Any U.S. intermediate holding company (IHC) that is required to be established by a large foreign banking organization (Large FBO), regardless of whether the IHC controls a U.S. bank.

**Basel III Supplementary Leverage Ratio for Advanced Approaches IHCs:** An IHC that crosses the applicability threshold for the U.S. advanced approaches capital rules (e.g., by having $ \geq 250 \text{ billion} \) in total consolidated assets) would become subject to the Basel III supplementary leverage ratio on a consolidated basis.

**Related Resources:** Davis Polk’s memo and visuals on the Federal Reserve’s FBO proposal are available [here](#).
U.S. Implementation Timeline for the Basel III Leverage Ratio

**July 2, 2013:** U.S. Basel III final rule requires advanced approaches banking organizations to meet a minimum 3% Basel III supplementary leverage ratio. The denominator is broadly similar to the Dec. 2010 version of the Basel III leverage ratio.

**June 7, 2012:** U.S. Basel III proposal requires advanced approaches banking organizations to meet a minimum 3% Basel III supplementary leverage ratio. The denominator is broadly similar to the Dec. 2010 version of the Basel III leverage ratio.

**July 9, 2013:** American Add-on proposal – higher Basel III supplementary leverage ratios for the 8 U.S. G-SIBs and their IDI subsidiaries.

**Jan. 1, 2015:** Advanced approaches banking organizations begin publicly disclosing their Basel III supplementary leverage ratio.

**Jan. 1, 2018:** Effective date of the Basel III supplementary leverage ratio. Proposed effective date of American Add-on proposal.
Related Resources: Davis Polk’s blog, memoranda, visuals, interactive tools and webcasts on bank capital, liquidity and other prudential standards are available at USBasel3.com