December 18, 2017

DECEMBER 2017 BASEL IV STANDARDS COMPARISON CHARTS

The charts below were prepared by Sullivan & Cromwell LLP for The Clearing House Association. The charts present a high-level summary of the final standards announced by the Basel Committee on December 7, 2017, referred to in this document as "Basel IV". The summary includes comparisons to the Basel Committee's earlier proposals, as well as to the current U.S. capital rules, where applicable. Of note:

- The Basel Committee deferred the implementation date for the revised **FRTB framework** to January 1, 2022 in order to align with the introduction of the revisions for credit and operational risk and allow for a review of the calibration of the framework.

- The Basel Committee noted that it would continue to monitor the impact of the Basel leverage ratio on **central clearing** and that, by December 2019, it would conclude a review of the impact of the Basel leverage ratio on banks' provision of clearing services and any related effects on the resilience of central clearing.

- The **leverage ratio buffer** applicable to G-SIBs is half of the applicable risk-based surcharge.

- The Basel Committee reiterated that jurisdictions will be considered **compliant with the Basel framework** if they do not implement some or all of the internally-modeled approaches.

- The revised **internal ratings-based approach** eliminates the 1.06 scalar.

- The **aggregate output floor** includes two categories—CVA and operational risk—in standardized RWAs used for the comparison that are currently reflected only in advanced approaches RWAs under the U.S. capital rules. In some cases, the same standardized RWAs will be reflected in both calculations of total RWAs for purposes of the output floor. This will occur for CVA and operational risk (for which internal models-based approaches are no longer available), as well as for other standards where banks use the standardized approach (for example, for market risk, if a bank has not received supervisory approval to use the internal models approach). The use of the same standardized RWAs for both calculations will provide a cushion for greater disparities between standardized and models-based RWAs where models-based approaches are used.

I. OUTPUT FLOOR AND TRANSITIONAL ARRANGEMENTS

Topic	Current U.S. Approach	Basel Consultation	December 2017 Basel IV Standard
Output Floor	U.S. advanced approaches banks (generally those with consolidated assets ≥ $250 billion or on-balance-sheet foreign exposure ≥ $10 billion) are subject to a capital floor (referred to as the Collins Amendment floor) that compares standardized approach capital ratios against advanced approaches capital ratios, with an advanced approaches firm's capital ratios being the lower of those calculated using the standardized approach and the advanced approaches For purposes of the Collins Amendment floor, standardized approach capital ratios reflect RWAs for: • Credit risk • Counterparty credit risk • Securitizations • Market risk (models-based approach)[1]	**2014 Consultation on Floors** Multiple ways to implement an output floor, in particular: • Risk category-based floor • Aggregate floor • Exposure floor **2016 Consultation on the IRB Approaches** Basel Committee considering aggregate output floor that could be calculated in the range of 60-90% Alternative could be to apply output floors at a more granular level where appropriate Jurisdictions would be considered compliant with the Basel framework if they do not implement any models-based approaches and allow only the use of the standardized approaches	Adopted an aggregate floor calibrated at 72.5% RWAs must be calculated as the higher of (i) total RWAs calculated using approaches bank has supervisory approval to use (including standardized and internal models-based approaches); and (ii) 72.5% of total RWAs calculated using only SA The following standardized approaches must be used when calculating the output floor: • Credit risk • Counterparty credit risk • CVA risk • Securitization framework • Market risk • Operational risk Banks must disclose (i) ratios that exclude the capital floor in RWA; and (ii) ratios that include the capital floor in RWA. The Basel Committee will set forth more granular information as part of its Pillar 3 disclosure framework Output floor subjected to a phase-in beginning on January 1, 2022 as follows: • January 1, 2022: 50% • January 1, 2023: 55% • January 1, 2024: 60% • January 1, 2025: 65% • January 1, 2026: 70%

[1] Market risk RWAs are included only if the firm is subject to the market risk capital rule. In addition, although there are differences between the market risk RWAs used for purposes of the standardized approach and advanced approaches capital ratios, they are largely the same and the method used for standardized capital ratios generally reflects a models-based approach.

Topic	Current U.S. Approach	Basel Consultation	December 2017 Basel IV Standard
	Advanced approaches capital ratios reflect RWAs for: • Credit risk • Counterparty credit risk • Credit valuation adjustment (CVA) risk • Securitizations • Market risk • Operational risk Accordingly, for purposes of the Collins Amendment floor, advanced approaches RWAs reflect two categories of RWAs—those for CVA risk and operational risk—that are not reflected in the standardized approaches RWAs		• January 1, 2027: 72.5% During phrase-in through December 31, 2026, supervisors may cap the incremental increase in total RWAs that results from applying the floor to 25% of a bank's RWAs Jurisdictions will be considered compliant with the Basel framework if they do not implement some or all of the models-based approaches and implement only the standardized approaches The Basel Committee noted that it will review the treatment of accounting provisions for purposes of calculating the output floor in light of the upcoming revisions to accounting standards to replace the existing incurred-loss approaches for establishing accounting provisions with forward-looking approaches based on expected credit losses

II. STANDARDIZED APPROACH FOR CREDIT RISK

Topic	Current U.S. Approach	Revised Standardized Approach for Credit Risk – Second Consultation	December 2017 Basel IV Standard
Bank Exposures	20% risk weighting for domestic banks and 20% to 150% risk weightings for foreign banks (based on country risk classifications (CRC) ratings)	External Credit Risk Assessment Approach (ECRA): 20% (AAA to AA-) to 150% (below B-) risk weightings Standardized Credit Risk Assessment Approach (SCRA): 50% (Grade A) to 150% (Grade C) risk weightings (based on, *inter alia*, a counterparty's meeting or breaching minimum regulatory requirements and buffers) 20% risk weighting for short-term exposures to banks (original maturity of 3 months or less) for AAA to BBB- (ECRA) and Grade A (SCRA), otherwise 50% or 150% risk weightings, depending on classification	Compared to the consultation, the final standard: • Provides for lower risk weights in ECRA for A+ to A- (30% vs. 50%) and in SCRA for Grade A (40% vs. 50%) and Grade B (75% vs. 100%) • Removed a footnote clarifying that breaching minimum liquidity requirements would not automatically result in Grade C classification • Treats trade-related exposures with an original maturity of six months or less as short term ECRA: 20% (AAA to AA-) to 150% (below B-) risk weightings SCRA: 40%[2] (Grade A) to 150% (Grade C) risk weightings (based on, *inter alia*, a counterparty's meeting or breaching minimum regulatory requirements and buffers)[3]

2 A 30% risk weighting can be used if the counterparty bank satisfies the criteria for Grade A classification and has a CET1 ratio ≥ 14% and a Tier 1 leverage ratio ≥ 5%. The second consultation tied Grade C classification to a counterparty bank's breaching a "published and binding" minimum regulatory requirement and clarified in a footnote that liquidity requirements would not be considered "binding" for this purpose because "[n]ational supervisors may allow banks to be below minimum liquidity requirements during a period of financial stress in order to avoid undue negative effects on the bank and other market participants." The final standard refers only to "published" minimum regulatory requirements and does not include the footnote addressing liquidity requirements.

3 A sovereign floor, equal to the risk weight that would be applicable to exposures to the sovereign of the country where the counterparty is incorporated, applies if an exposure is not in the local currency of the debtor bank's jurisdiction of incorporation and for borrowings booked in foreign branches of the debtor bank when the exposure is not in the local currency of the jurisdiction in which the branch operates. The floor does not apply to self-liquidating, trade-related contingent items that arise from the movement of goods with a maturity below one year.

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			20% for short-term exposures to banks (original maturity of 3 months or less) for AAA to BBB- (ECRA) and Grade A (SCRA), otherwise 50% or 150%, depending on classification, with short-term exposures including those with an original maturity of three months or less, as well as exposures to banks arising from the movement of goods across national borders with an original maturity of six months or less
Corporate Exposures	100% risk weighting	<u>ECRA</u>: 20% (AAA to AA-) to 150% (below BB-) risk weightings <u>SCRA</u>: 75% ("investment grade" corporates) to 100% risk weightings "Investment grade" is based on internal assessments of creditworthiness, and to be investment grade the counterparty (or its parent) must have securities outstanding on a recognized securities exchange, and the creditworthiness of the counterparty must not be positively correlated with the credit risk of exposures for which it provides guarantees	Compared to the consultation, the final standard: • Provides for lower risk weights in ECRA for BBB+ to BBB- (75% vs. 100%) and in SCRA for Investment Grade (65% vs. 75%) • Retains the public securities requirement for "investment grade" classification but clarifies that the no correlation condition applies only in the context of determining from which entities credit protection can be recognized <u>ECRA</u>: 20% (AAA to AA-) to 150% (below BB-) risk weightings <u>SCRA</u>: 65% ("investment grade" corporates) to 100% risk weightings "Investment grade" is based on internal assessment of creditworthiness, and to be investment grade the counterparty (or its parent) must have securities outstanding on a recognized securities exchange; there is no "non-correlation" requirement for general corporate exposures (for purposes of recognizing credit protection, there is the a requirement that creditworthiness of the counterparty must not be positively correlated with the credit risk of exposures for which it provides

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			guarantees)
Residential Mortgages	50% or 100% risk weighting	If repayment is not materially dependent on cash flows generated by the property: • 25% to 75% (individuals) or 85% (SMEs) risk weighting, or • The higher of 100% risk weighting or the risk weight of the counterparty for all exposures that do not satisfy specified underwriting requirements (including with respect to quality of the collateral and other documentation) If repayment is materially dependent on cash flows generated by the property: • 70% to 120% risk weighting, or • 150% risk weighting for all exposures that do not satisfy specified underwriting requirements (including with respect to quality of the collateral and other documentation) When specified underwriting requirements are met, the risk weight to be assigned to the total exposure amount is determined based on the exposure's LTV ratio; most favorable risk weighting is available at LTV ≤ 40% (not materially dependent) or 60% (materially dependent) LTV ratios are calculated to consider the LTV at origination	Compared to the consultation, the final standard: • Provides for lower risk weights for each LTV bucket • Makes the most favorable risk weighting available at a higher LTV where repayment is not materially dependent on cash flows generated by the property • Doubles the number of risk weighting buckets segmented by LTV where repayment is materially dependent on cash flows generated by the property • Includes the loan-splitting approach If repayment is not materially dependent on cash flows generated by the property: • 20% to 70% risk weighting based on LTV ratio (whole loan approach), or • 20% risk weighting for up to 55% of property value and the risk weight of the counterparty[4] for the residual value (loan-splitting approach); or • Risk weight of counterparty for all exposures that do not satisfy specified underwriting requirements (including with respect to quality of the collateral and other documentation) • Most favorable risk weighting is available at LTV ≤ 50% If repayment is materially dependent on cash flows generated by the property: • 30% to 105% risk weighting based on LTV

[4] For purposes of the items presented in this chart, the risk weight of the counterparty is 75% for exposures to individuals, 85% for exposures to SMEs and, for exposures to other counterparties, the risk weight that would be assigned to an unsecured exposure to that counterparty.

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			ratios (with six buckets available, compared to three in the consultation); or • 150% for all exposures which do not satisfy specified underwriting requirements (including with respect to quality of the collateral and other documentation) • Most favorable risk weighting is available at LTV ≤ 50% LTV ratios are calculated to consider the LTV at origination
Commercial Mortgages	100% or 150% risk weighting	60% or the risk weight of the counterparty if repayment is not materially dependent on cash flows generated by the property (the higher of 100% or the risk weight of the counterparty applies for exposures that do not satisfy the specified underwriting requirements) 80% to 130% risk weighting if repayment is materially dependent on cash flows generated by the property (150% for exposures that do not satisfy the specified underwriting requirements) Other than for land acquisition, development and construction (ADC) exposures, which are risk-weighted at 150%, the risk weight to be assigned to the total exposure amount is determined based on the exposure's LTV ratio, with the most preferential risk weight applicable where the loan amount does not exceed 60% of the value of the property pledged as collateral The definition of "commercial real estate exposure" is any exposure secured by immovable property that is not a residential	Compared to the consultation, the final standard: • Lowers risk-weightings for non-ADC loans where repayment is materially dependent on cash flows generated by the property • Risk weights certain ADC exposures at 100% • Includes the loan splitting approach If repayment is not materially dependent on cash flows generated by the property: • 60% or the risk weight of the counterparty (whole loan approach), or • the lower of 60% and the risk weight of the counterparty for up to 55% of property value and the risk weight of the counterparty for the residual value (loan-splitting approach), or • risk weight of counterparty for all exposures that do not satisfy specified underwriting requirements If repayment is materially dependent on cash flows generated by the property: • 70% to 110% risk weightings based on

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		property—there is no exclusion where the purpose is not to finance the collateral property	LTV ratios, or • 150% for exposures that do not satisfy specified underwriting requirements ADC exposures are risk weighted at 150%, or 100% if the purchaser/renter makes a substantial cash deposit under a written, binding pre-sale or pre-lease contract, which is subject to forfeiture if the contract is terminated The definition of "commercial real estate exposure" is an exposure secured by immovable property that is not residential real estate—there is no exclusion where the purpose is not to finance the collateral property
Covered Bonds			Introduced a standalone treatment for covered bonds, based on *issue-specific* ratings for rated covered bonds and the risk-weight of the issuing bank for unrated covered bonds, with risk weightings ranging from 10% to 100%
Project Finance, Object Finance and Commodity Finance		ECRA: Risk-weighted according to the *issue-specific* rating, using the look-up table for corporate exposures; issuer ratings may not be used SCRA: • Object and commodity finance exposures: 120% risk weighting • Project financing exposures risk weighted at 150% (pre-operational phase) or 100% (operational phase)	Compared to the consultation, the final standard lowered the risk weightings in the SCRA for object and commodity finance and pre-operational project finance exposures, and introduced a preferential risk weighting for high quality operational project finance exposures ECRA: Risk-weighted according to the *issue-specific* rating, using the look-up table for corporate exposures; issuer ratings may not be used SCRA: • Object and commodity finance exposures: 100% risk weighting • Project financing exposures risk weighted

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			at 130% (pre-operational phase), and 100% (operational phase) or 80% (operational phase—high quality)
Currency Mismatch Add-On for Retail and Certain Real Estate Exposures		Unhedged corporate, retail and real estate exposures with currency mismatch between loan and borrower's "main source of income," is subject to a 50% add-on, up to a maximum risk weight of 150% (no guidance on percentage that must be hedged to avoid add-on)	Compared to the consultation, the final standard provides that the add-on applies only to retail and residential real estate exposures to individuals and also provides guidance on the percentage of the exposure that must be hedged to avoid the add-on Unhedged retail and residential real estate exposures to individuals with currency mismatch between loan and borrower's "source of income," is subject to a 1.5 times multiplier, up to a maximum risk weight of 150% (hedges must cover at least 90% of loan installment)
Subordinated Debt, Equity and Other Capital Instruments	100% to 600% risk weighting	250% risk weight for all equity exposures 150% risk weight for subordinated debt and capital instruments other than equity exposures	Compared to the consultation, introduction of higher and lower risk weightings for certain equity exposures 400% risk weighting for "speculative unlisted equity" exposures (equity investments in unlisted companies for short-term resale) 100% risk weighting for equity exposures in certain legislated programs (determined by national supervisors and subject to an aggregate limit of 10% of Total capital) 250% risk weighting for other equity exposures 150% risk weighting for subordinated and non-equity capital instruments (including instruments eligible to be recognized as TLAC that do not otherwise qualify as regulatory capital, as well as certain pari passu liabilities)

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			National supervisors have discretion to exclude liabilities directly hedged by equity and to re-characterize debt as equity The risk weightings described above are subject to a five-year phase-in following the implementation of the Basel IV standards (risk weightings will start at 100% and will increase each year for five years)
Retail Exposures Excluding Real Estate	100% risk weighting	75% risk weighting, if product criterion is met and size and concentration thresholds for aggregate exposure to any one party are not exceeded 100% risk weighting for other retail exposures	Compared to the consultation, the final standard introduces a preferential 45% risk-weighting for qualifying retail exposures to transactors 75% risk weighting, if product criterion is met and size and concentration thresholds for aggregate exposure to any one party are not exceeded Preferential 45% risk weighting, if the criteria for 75% risk weighting are met, and the obligor is a "transactor" (balance repaid in full at each scheduled repayment date for the previous 12 months) 100% risk weighting for other retail exposures
Credit Conversion Factors (CCFs) for Unfunded Commitments	0% CCF for unconditionally cancellable commitments (UCCs) 20% CCF for commitments with original maturities of 1 year or less 50% CCF for commitments with original maturities of greater than 1	[10-20]% for retail UCCs [50-75]% CCF for other commitments irrespective of original maturity (except for retail UCCs)	Compared to the consultation, the final standard: • Establishes a 10% CCF for UCCs • Does not limit the lower CCF to retail UCCs • Applies a 40% CCF to other commitments 10% risk weighting for UCCs (scope not restricted to only retail; national supervisors given discretion to increase CCF if there are factors that may constrain banks' ability to cancel the commitment, and to exempt certain arrangements from the definition of "commitment" if the arrangement

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	year		meets specified criteria) 40% risk weighting for other commitments, regardless of maturity Revised CCFs are included in the calculation of the total exposure measure for purposes of the leverage ratio
Defaulted Exposures	150% risk weighting to the portion of the exposure that is not guaranteed or that is unsecured	150% risk weighting for the unsecured or unguaranteed portion of a defaulted exposure 100% risk weighting for defaulted residential real estate exposures if repayment is not materially dependent on cash flows generated by the property	Compared to the consultation, the final standard risk weights certain defaulted exposures at 100% 150% risk weighting for the unsecured or unguaranteed portion of a defaulted exposure when specific provisions are less than 20% of the outstanding amount of the loan 100% risk weighting for the unsecured or unguaranteed portion of a defaulted exposure when specific provisions are equal to or greater than 20% of the outstanding amount of the loan[5] 100% risk weighting for defaulted residential real estate exposures if repayment is not materially dependent on cash flows generated by the property
Credit Risk Mitigation: Collateral Haircut Approach	A bank may use either the simple approach or the collateral haircut approach for any particular type of exposure or transaction, but it must use the same approach for similar	Banks may operate under either the simple or comprehensive approach, but not both in the banking book Revised to reflect netting of long and short securities, diversification effects for securities financing transactions (SFTs) and margin	No change made from the second consultative document as to selection of approaches: banks may operate under either the simple or the comprehensive approach, but not both, in the banking book No changes made from the second consultative

5 National supervisors have discretion to reduce the risk weighting to 50% when specific provisions are no less than 50% of the outstanding amount of the loan.

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	exposures or transactions No collateral haircuts based on credit ratings; collateral haircuts are based only on the type of collateral and, where, applicable, risk weighting for issuer and residual maturity	loans Netting sets exclude securities issuances that are less than 10% of the value of the largest issuance within the set Higher equity haircuts and reduced granularity of corporate issuer haircuts compared to current Standardized Approach Non-investment grade securities and securitization exposures with risk-weight ≥ 100% are not eligible as collateral Ongoing review of core market participant exemption	document to: • the calibration of haircuts, • the definition of "eligible financial collateral," or • the definition for exclusion of smaller securities issuances Banks that lend securities or post collateral must calculate capital requirements for both (i) credit and/or market risk that remains with the bank and (ii) counterparty credit risk For purposes of calculating counterparty credit risks related to collateralized OTC derivatives transactions, banks may use the Internal Model Method as an alternative to the standardized approach for counterparty credit risk (SA-CCR), subject to supervisory approval Core market participant exemption was retained
Credit Risk Mitigation: CDS Hedges	Credit derivatives need not include restructuring as a credit event to be recognized as credit risk mitigants	Reviewing the requirement to include restructuring as an event of default in order for credit derivatives to be recognized as a credit risk mitigant	Including restructuring as an event of default is not required if (i) a 100% vote is needed to amend maturity, principal, coupon, currency or seniority status of the underlying corporate exposure, and (ii) legal domicile in which the corporate exposure is governed has a well-established bankruptcy code that allows for a company to reorganize/restructure and provides for an orderly settlement of creditors' claims
Implementation Date			January 1, 2022

III. INTERNAL RATINGS-BASED APPROACH FOR CREDIT RISK

Topic	Current U.S. Approach	Basel Consultation	December 2017 Basel IV Standard
Available Approaches	Advanced approaches banks (generally those with consolidated assets ≥ $250 billion or on-balance-sheet foreign exposure ≥ $10 billion) must calculate credit risk exposures under the U.S. advanced approaches, subject to the Collins Amendment floor discussed above The United States has implemented the advanced internal ratings-based approach (A-IRB) but not the foundation internal ratings-based approach (F-IRB)	Remove internal ratings-based approaches for exposures to (i) large corporates (total assets > €50 billion), (ii) banks and other financial institutions and (iii) equities, with the result that only the standardized approach (SA) would be available for these exposures Remove A-IRB for exposures to corporates w/ annual revenues > €200 million (the F-IRB would remain available for such companies if they also have total assets ≤ €50 billion) Retain A-IRB for exposures to corporates w/ total assets ≤ €50 billion and annual revenues ≤ €200 million Remove IRB approaches for specialized lending, leaving only the SA and slotting approach for specialized lending	Compared to the consultation, retained the F-IRB for exposures to large and mid-size corporates (with different threshold), as well as exposures to banks and other financial institutions • Eliminated the A-IRB approach for exposures to large and mid-sized general corporates (annual revenues > €500 million) and exposures to banks and other financial institutions, but F-IRB permitted for those exposures • Eliminated the IRB approaches for equity exposures (i.e., only SA) • Permits A-IRB and F-IRB for specialized lending exposures (project finance, object finance, commodities finance, income-producing real estate and high-volatility commercial real estate) In sum, below is the permitted scope of approaches: • Large and mid-sized corporate: F-IRB, SA • Other corporate: A-IRB, F-IRB, SA • Banks and other financial institutions: F-IRB, SA • Equities: SA • Specialized lending: A-IRB, F-IRB, slotting,[6] SA
Probability of Default (PD) Floor	PD for wholesale obligors and retail segments generally may not be less	PD floor of 5 basis points for (i) corporate, (ii) mortgages, (iii) qualifying revolving retail exposure (QRRE) transactors and (iv) other	Same as consultation: PD floor of 5 basis points for (i) corporate, (ii)

[6] The Basel Committee indicated that it will review the slotting approach for specialized lending "in due course".

Topic	Current U.S. Approach	Basel Consultation	December 2017 Basel IV Standard
	than 0.03% (subject to exceptions for exposures guaranteed by sovereigns or certain other types of entities)	retail PD floor of 10 basis points for QRRE revolvers	mortgages, (iii) QRRE transactors and (iv) other retail PD floor of 10 basis points for QRRE revolvers
Loss Given Default (LGD) Floor (A-IRB only)	LGD for each segment of residential mortgage exposures may not be less than 10% (subject to exceptions for exposures guaranteed by sovereigns and U.S. government agencies)	For unsecured exposures, LGD floor is as follows: • Corporates: 25% • Other retail: 30% • QRRE transactors and QRRE revolvers: 50% For secured exposures, LGD floor of 10% for mortgages and a varying floor for corporate and other retail exposures that varies by collateral type • Financial: 0% • Receivables: 15% • Commercial or residential real estate: 15% • Other physical: 20%	For unsecured exposures, no changes from the consultation, with LGD floors as follows: • Corporates: 25% • Other retail: 30% • QRRE transactors and QRRE revolvers: 50% For secured exposures, lower LGD floors compared to the consultation: LGD floor of 5% for mortgages and a varying floor for corporate and other retail exposures that varies by collateral type • Financial: 0% • Receivables: 10% • Commercial or residential real estate: 10% • Other physical: 15%
Exposure at Default (EAD) Floor (A-IRB Approach)		EAD subject to floor that is the sum of (i) on-balance sheet exposures; and (ii) 50% of the off-balance sheet (OBS) exposure using applicable CCF under SA	Same as the consultation: EAD subject to floor that is the sum of (i) on-balance sheet exposures; and (ii) 50% of OBS exposure using applicable CCF under SA
F-IRB Approach (Secured Exposures: LGDs and collateral haircuts)		Compared to Basel II, decreased LGDs for the following types of collateral: • Receivables: 20% • Residential real estate/commercial real estate: 20% • Physical collateral: 25% Compared to Basel II, increased haircuts for the following types of collateral: • Receivables: 50%	Compared to the consultation, the final standard has lower collateral haircuts for receivables, real estate and physical collateral LGDs per type of collateral: • Financial collateral: 0% • Receivables: 20% • Residential real estate/commercial real estate: 20% • Physical collateral: 25%

Topic	Current U.S. Approach	Basel Consultation	December 2017 Basel IV Standard
		• Residential real estate/commercial real estate: 50% • Physical collateral: 50% Removed the minimum collateralization requirements	• Ineligible collateral: N/A Haircuts per type of collateral: • Financial collateral: As determined under SA • Receivables: 40% • Residential real estate/commercial real estate: 40% • Physical collateral: 40% • Ineligible collateral: 100% Removed the minimum collateralization requirements
F-IRB Approach (Unsecured Exposures: LGDs)		45% and 75% LGD parameter, respectively, for senior and subordinated for exposures to non-financial corporates	Compared to the consultation: • LGD parameter for senior exposures to non-financial corporates reduced from 45% to 40% • 45% LGD parameter for senior exposures to banks and other financial institutions, reflecting availability of F-IRB for those exposures • Same 75% LGD parameter for subordinated exposures (expanded to apply to banks as well as non-financial corporates reflecting availability of F-IRB for exposures to banks[7])
1.06 Scalar	1.06 scalar applied to wholesale and retail risk-weighted assets (RWA),	No discussion of the scalar	Removed 1.06 scaling factor applied to RWAs

7 Paragraph 70 applies the 45% LGD parameter to "senior claims on banks, securities firms and other financial institutions" but paragraph 71 refers only to "subordinated claims on corporates and banks" in discussing the 75% LGD parameter.

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	RWAs for securitization exposures and RWAs for equity exposures under the advanced approaches		
1.25 Multiplier			Multiplier of 1.25 is applied to the correlation parameter in the RWA formula with respect to all exposures to: • Regulated financial institutions with total assets greater than or equal to $100 billion • Unregulated financial institutions (regardless of size)
Implementation Date			January 1, 2022

IV. OPERATIONAL RISK

Topic	Current U.S. Approach	Basel Consultation	December 2017 Basel IV Standard
Approach	Uses the advanced measurement approaches (AMA) to calculate risk-based capital requirements for operational risk; no standardized approach for operational risk	Withdrawal of AMA and introduction of a single standardized measurement approach (SMA) for operational risk	Same as consultation: a single standardized approach—SMA—to be used by all banks
Business Indicator Calculation	Not applicable—operational risk exposure is the 99.9th percentile of the distribution of potential aggregate operational losses, as generated by the bank's operational risk quantification system over a 1-year horizon Operational risk exposure reflects both internal and external operational loss event data, as well as scenario analyses and business environment and internal control factors	Business Indicator (BI) comprises: • Interest, leases and dividend component (ILDC) • Services component (SC) • Unadjusted business indicator (uBI) (i.e., with no high fees adjustment) • Financial component (FC) (i.e., net profit/loss on trading and banking books) Services component calculation includes modification for "high fee" banks (i.e., fees > 50% of unadjusted BI) by accounting for only 10% of fees in excess of 50% of the unadjusted BI Net interest margin cap set at 3.5% and applied at the institution level Financial statement items are averaged over three years	Compared to the consultation: • Eliminates uBI and adjustment for "high fee" banks • Net interest margin cap reduced to 2.25% BI comprises: • ILDC • SC • FC Net interest margin cap set at 2.25% and applied at the institution level Financial statements items are averaged over three years
Coefficients to Business Indicator Component		BI Component (BIC) is calculated by multiplying the BI by marginal coefficients that increase with the size of the BI, with the coefficients determined as follows: • BI < €1 billion: 11%	Compared to the consultation, fewer BIC buckets, with a higher marginal coefficient for BIs < €1 billion and lower marginal coefficients for BIs > €3 billion

Topic	Current U.S. Approach	Basel Consultation	December 2017 Basel IV Standard
		• €1 billion < BI < €3 billion: 15% • €3 billion < BI < €10 billion: 19% • €10 billion < BI < €30 billion: 23% • > €30 billion: 29%	BIC is calculated by multiplying the BI by marginal coefficients that increase with the size of the BI, with the coefficients determined as follows: • BI ≤ €1 billion: 12% • €1 billion < BI ≤ €30 billion: 15% • > €30 billion: 18%
Internal Loss Multiplier and Historical Data	Bank's operational risk data and assessment systems generally must include a historical observation period of at least 5 years for internal operational loss event data	Internal loss experience introduced to the SMA through the Internal Loss Multiplier Internal Loss Multiplier applicable only to banks with a BI > €1 billion Must use 10 years of good-quality loss data (during a transition period, non-AMA banks may use a minimum of 5 years of data)	Compared to the consultation, the overall framework did not change, although the calculation of the Internal Loss Multiplier was revised, as discussed below Internal operational risk loss experience affects the calculation of operational risk capital through the Internal Loss Multiplier Internal Loss Multiplier applicable only to banks with a BI > €1 billion Calculation of average losses must be based on 10 years of high-quality annual loss data (non-AMA banks transitioning to the standardized approach may use a minimum of 5 years of high-quality data)
Minimum loss data standards		Banks that do not meet the loss data standards must hold capital that is at a minimum based solely on the BIC	Banks with BI > €1 billion must use loss data as a direct input in operational risk calculations; however, at national discretion, supervisors may set the value of the Internal Loss Multiplier equal to 1 for all banks in their jurisdiction Banks that do not meet the loss data standards must hold capital that is at a minimum equal to 100% of the BIC
Exclusion of losses and divested activities	In practice, U.S. banks are typically not allowed to exclude losses from their	Loss component (LC) uses average historical loss experience over prior 10 years	Significant changes from the consultation, providing that banks may request supervisory approval to exclude certain operational loss events

Topic	Current U.S. Approach	Basel Consultation	December 2017 Basel IV Standard
	models even when a bank has discontinued or disposed of the businesses that caused the loss	Does not take into account discontinued or disposed businesses	that are no longer relevant to its risk profile, although the Basel Committee notes that these should be rare and supported by strong justification (settled legal exposures and divested businesses are discussed as examples, with the Basel Committee noting that a bank's analysis should demonstrate that there is no similar or residual legal exposure and that the excluded loss experience has no relevance to other continuing activities or products) Request for loss exclusions is subject to a materiality threshold to be set by the supervisor and losses can be excluded only after being included in a bank's operational risk loss database for a minimum period specified by the supervisor (losses related to divested activities are not subject to a minimum operational risk loss database retention period) The final standard specifically recognizes that banks may request supervisory approval to exclude divested activities from the calculation of the BI and also specifically notes that losses and BI items related to mergers and acquisitions must be included
Loss materiality and *de minimis* thresholds	Bank may refrain from collecting internal operational loss event data for individual operational losses below established dollar threshold amounts if the bank can demonstrate to the satisfaction of its primary Federal regulator that the thresholds are reasonable, do not exclude important internal	LC distinguishes between loss events above €10 million and €100 million and smaller loss events, with the LC equal to the sum of • 7 * average total annual loss, *plus* • 7 * average total annual loss (only including loss events above €10 million), *plus* • 5 * average total annual loss (only including loss events above €100 million)	Significant changes from the consultation, including a different formula for calculating LC and allowing a higher loss event threshold used in calculating operational risk capital requirements for banks with a BI > €1 billion LC does not distinguish between loss events above €10 million and €100 million, with the LC equal to 15 times the average annual operational risk losses incurred over the previous 10 years Minimum threshold for including a loss event is set

Topic	Current U.S. Approach	Basel Consultation	December 2017 Basel IV Standard
	operational loss event data and permit the bank to capture substantially all of the dollar value of the bank's operational losses	*De minimis* gross loss threshold set at €10,000, although when the bank first moves to SMA a *de minimis* gross loss threshold of €20,000 is acceptable	at €20,000 For purposes of the calculation of average annual losses and at national discretion, supervisors may increase the threshold to €100,000 for banks with a BI > €1 billion
Loss reference date	Bank should include legal losses in operational risk quantification processes using a date no later than the date a legal reserve is established	Banks muse use either the date of discovery or the date of accounting when building its loss data set Banks must use a date no later than the date of accounting for including losses related to legal events in the loss data set	Compared to the consultation, eliminated the ability to use the date of discovery, requiring that banks use date of accounting for building the LC data set Banks must use a date no later than the date of accounting for including losses related to legal events in the loss data set
Hedging and risk mitigation	Estimate of operational risk exposure may reflect qualifying operational risk mitigants, including insurance, if certain conditions are satisfied Consistent with Basel II, operational risk mitigants limited to 20% of total operational risk capital requirement In practice, the ability to recognize qualifying operational risk mitigants has been limited	Banks must not use losses net of insurance recoveries as an input for the loss data set	Compared to the consultation, revised to recognize benefits of insurance, providing that banks should use losses net of recoveries (including insurance recoveries) in the LC dataset, subject to the limitation that recovery can be used to reduce losses only after the bank receives payment
Timing losses		Gross loss computation must include timing losses Material timing losses should be included in	Gross loss computation must include timing losses Material timing losses should be included in the loss data set when they are due to operational risk

Topic	Current U.S. Approach	Basel Consultation	December 2017 Basel IV Standard
		the loss data set when they are due to operational risk events that span more than 1 financial accounting period and give rise to legal risk	events that span more than 1 financial accounting period and give rise to legal risk
Implementation Date		Before publication of the final standards, implementation arrangements will be discussed and will take into account the range of other reforms that have been, or are due to be, considered by the Basel Committee	January 1, 2022

V. LEVERAGE RATIO

Topic	Current U.S. Approach	Basel Consultation	December 2017 Basel IV Standard
Application of Leverage Buffer	Buffer applies to U.S. G-SIBs, which are subject to a uniform 2% buffer in addition to the 3% minimum requirement A U.S. G-SIB's leverage buffer is calculated as the covered U.S. G-SIB's supplementary leverage ratio minus 3 percent	Sought comment on whether and how a buffer should be implemented for G-SIBs	Implemented a buffer that applies to all G-SIBs in amount equal to 50% of the applicable G-SIB risk-weighted higher-loss absorbency requirement (G-SIB surcharge)
Leverage Buffer Distribution Restrictions	Schedule of distribution and discretionary bonus payment restrictions:	Sought comment on whether a buffer should include restrictions on capital distributions and discretionary bonus payments that are automatic or subject to timely and appropriate regulatory action	Implemented the buffer as analogous to the risk-based capital buffers such that if a bank does not meet the buffer, it will face graduated constraints on distributions and discretionary bonus payments based on the amount of the shortfall An example for a G-SIB with a 1% risk-based surcharge is provided below

<table>
<tr><th>Topic</th><th>Current U.S. Approach</th><th>Basel Consultation</th><th>December 2017 Basel IV Standard</th></tr>
<tr><td></td><td><table>
<tr><th>Leverage buffer</th><th>Maximum leverage payout ratio (as % of eligible retained income)</th></tr>
<tr><td>> 2.0%</td><td>No payout ratio limitation applies</td></tr>
<tr><td>≤ 2.0% and > 1.5 %</td><td>60%</td></tr>
<tr><td>≤ 1.5% and > 1.0%</td><td>40%</td></tr>
<tr><td>≤ 1.0% and > 0.5%</td><td>20%</td></tr>
<tr><td>≤ 0.5%</td><td>0%</td></tr>
</table></td><td></td><td><table>
<tr><th>CET1 risk-weighted ratio</th><th>Tier 1 leverage ratio</th><th>Minimum capital conservation ratios (expressed as % of earnings)[8]</th></tr>
<tr><td>4.5%–5.375%</td><td>3%–3.125%</td><td>100%</td></tr>
<tr><td>> 5.375%–6.25%</td><td>> 3.125%–3.25%</td><td>80%</td></tr>
<tr><td>> 6.25%–7.125%</td><td>> 3.25%–3.375%</td><td>60%</td></tr>
<tr><td>> 7.125%–8%</td><td>> 3.375%–3.50%</td><td>40%</td></tr>
<tr><td>> 8.0%</td><td>> 3.50%</td><td>0%</td></tr>
</table></td></tr>
<tr><td>Exposure Measure – Unsettled Trade Accounting</td><td>No specific treatment</td><td>For trade date accounting, proposed two options:
<u>Option A</u>: use gross cash receivables attributable to pending sales, with no recognition of offsetting reduction in cash receivables by the cash payables
<u>Option B</u>: use gross cash receivables attributable to pending sales, but permit offsetting if three conditions are met: (1) bank is serving as market-maker for the financial asset; (2) the financial assets</td><td>For trade date accounting, adopted Option B but removed market-maker condition

For settlement date accounting, adopted Option B, with a 100% CCF and the ability of banks to offset commitments to pay for unsettled purchases and cash to be received for offsetting sales subject to similar conditions as for trade date accounting</td></tr>
</table>

8 The percentages in the tables published by the Basel Committee reflect the percentage of earnings that must be retained and cannot be applied to distributions and discretionary bonus payments. In contrast, the percentages in the tables published by the U.S. banking agencies reflect the percentage of eligible retained income that can be applied to distributions and discretionary bonus payments. Put differently, a percentage of 100% in a Basel Committee table corresponds to a percentage of 0% in a table published by the U.S. banking agencies.

Topic	Current U.S. Approach	Basel Consultation	December 2017 Basel IV Standard
		bought and sold are associated with payables and receivables fair valued through income and included in the bank's trading book; and (3) the financial assets are settled on a delivery-versus-payment (DvP) basis For settlement date accounting, subject unsettled financial asset purchases to the requirements for OBS items and 100% CCFs, and allow deductions from the exposure amount of specific and general provisions that have decreased Tier 1 capital 100% CCF includes exposure amount associated with unsettled financial asset purchases where regular-way unsettled trades are accounted for at settlement date, subject to: • Option A: no offset • Option B: offset for commitments to pay and cash to be received provided the 3 conditions in Option B for trade date accounting are met	
Cash Pooling	No specific treatment	Combination of credit and debit balances and transformation of these into a single balance in a single account is not considered netting of assets and liabilities Any remaining balances (i.e., not extinguished) must be included in the LR exposure measure As a result:	Compared to the consultation, the final standard allows some notional cash pools to be reported on a net basis The final standard treats participating customer accounts as a single account for purposes of the LR exposure measure if the cash pooling arrangements entails a transfer on at least a daily basis of the credit/debit balances of such accounts into a single account balance and the bank is not liable for the

Topic	Current U.S. Approach	Basel Consultation	December 2017 Basel IV Standard
		• Notional pooling: associated balances must be reported on a *gross* basis • Physical pooling: associated balances may be reported on a *net* basis	balances on an individual basis upon the transfer If transfer of credit/debit balances does not occur daily, additional conditions must be met for accounts to be treated as a single account and for the cash pool to be reported on a net basis (e.g., bank has legally enforceable right to transfer the balances, no maturity mismatches or balances are overnight/demand, bank charges or pays interest and/or fees based on the combined balances of the participating customer accounts) Otherwise, individual balances of participating customer accounts must be reflected separately (and reported gross) in the LR exposure measure
Deductions for Specific and General Provisions	No adjustment for allowance for loan and lease losses (ALLL)	Banks may deduct from their LR exposure measure for on-balance sheet, non-derivative assets and OBS items (after application of the relevant CCF to the OBS item) an amount equivalent to associated specific and general provisions	Same as consultation, but provides that the resulting total OBS equivalent amount for OBS exposures cannot be less than zero
Credit Conversion Factors (CCFs)	100% CCF:[9] • Guarantees; • Repurchase agreements (the OBS component of which equals the sum of the current fair values of all positions the bank has sold subject to repurchase);	100% CCF: • Direct credit substitutes (e.g., guarantees) and acceptances (e.g., endorsements) • Sale and repo agreements and asset sales with recourse where credit risk remains with bank (other than certain SFT sale accounting transactions) • Forward asset purchases, forward forward deposits and partly paid shares and	Similar to consultation with certain adjustments, which are consistent with the CCFs for the revised Standardized Approach: For the proposed 100% CCF bucket, the final standard: • Removed sale and repo agreements • Limited the catch all to "credit substitutes"

9 The SLR exposure measure has an exception for the credit equivalent amount of OBS exposures relating to repo-style transactions, repurchase or reverse repurchase or securities borrowing or lending transactions that qualify for sales treatment under U.S. GAAP.

Topic	Current U.S. Approach	Basel Consultation	December 2017 Basel IV Standard
	• Credit-enhancing representations and warranties that are not securitization exposures; • OBS securities lending transactions (the OBS component of which equals the sum of the current fair values of all positions the bank has lent under the transaction); • OBS borrowing transactions (the OBS component of which equals the sum of the current fair values of all non-cash positions the bank has posted as collateral under the transaction); • Financial standby letters of credit; • Forward agreements <u>50% CCF</u>: • Commitments with an original maturity of more than one year that are not unconditionally cancelable • Transaction-related contingent items, including performance bonds, bid bonds,	securities, which represent commitments with certain drawdown • Exposure amount associated with unsettled trades (*see above* "**Unsettled Trade Accounting**") • OBS items not explicitly included in another category <u>[50-75]% CCF</u>: • Commitments, regardless of maturity of underlying facility (unless qualifying for a lower CCF) • Note issuance facilities (NIFs) and revolving underwriting facilities (RUFs) regardless of maturity of underlying facility <u>50% CCF</u>: certain transaction-related contingent items (e.g., performance bonds, bid bonds standby letters of credit) <u>20% CCF</u>: issuing and confirming banks of short-term self-liquidating trade letters of credit arising from movement of goods <u>[10-20%] CCF</u>: retail commitments that are unconditionally cancellable by the bank at any time without prior notice or that effectively provide for automatic cancellation due to deterioration in borrower's creditworthiness	<u>For the proposed [50-75]% CCF bucket, the final standard</u>: • Applies a 50% CCF to NIFs and RUFs regardless of maturity of underlying facility • Applies a 40% CCF to commitments, regardless of maturity of underlying facility size (unless qualifying for a lower CCF) <u>For the proposed 20% CCF bucket, the final standard</u>: clarified that "short-term" means maturity below one year <u>For the proposed [10-20%] CCF bucket, the final standard</u>: • Applies a 10% CCF to all commitments (not just retail) that are unconditionally cancellable by the bank at any time without prior notice or that effectively provide for automatic cancellation due to deterioration in borrower's creditworthiness • Encourages regulators to evaluate factors that may restrain ability to cancel and, thus, consider applying higher CCF as appropriate

Topic	Current U.S. Approach	Basel Consultation	December 2017 Basel IV Standard
	warranties, and performance standby letters of credit <u>20% CCF</u>: • Commitments with an original maturity of one year or less that are not unconditionally cancelable • Self-liquidating, trade-related contingent items that arise from the movement of goods, with an original maturity of one year or less <u>10% CCF</u>: • Unused portion of a commitment that is unconditionally cancelable		
Replacement Cost (RC) and Potential Future Exposure (PFE); Cash Variation Margin (VM)	Based on the current exposure method (CEM): on-balance sheet carrying value plus the PFE determined per the treatment of derivative contracts under the standardized approach, except that PFE is calculated without the recognition of collateral as	Based on a modified version of SA-CCR Banks must calculate their exposures associated with all derivative transactions, including where a bank sells protection using a credit derivative, as a scalar multiplier alpha set at 1.4 multiplied by the sum of the RC and the PFE In general, collateral received may not be netted against derivative exposures whether or	Same as consultation The Basel Committee noted that it will continue to monitor the impact of the LR's treatment of client cleared derivative transactions and that, by December 2019, conclude a review of the impact of the LR on banks' provision of clearing services and any consequent impact on the resilience of central counterparty (CCP) clearing

Topic	Current U.S. Approach	Basel Consultation	December 2017 Basel IV Standard
	a credit risk mitigant Cash collateral received from a counterparty that offsets derivative assets or cash collateral posted to a counterparty that reduces balance sheet assets is included in the LR exposure measure unless the collateral is cash VM that meets certain requirements	not netting is permitted under applicable accounting standards or risk-based capital requirements, and banks must gross up their LR exposure measure by the amount of derivatives collateral provided where that collateral has reduced balance sheet assets Cash VM exchanged between counterparties that meets certain conditions and is viewed as a form of pre-settlement may be used to reduce the RC of the LR exposure measure	
Securitizations	No specific treatment	Would require banks to treat OBS securitization exposures in accordance with the treatment of OBS securitization exposures for facilities that are not credit risk mitigants in the 2014 version of the securitization framework, which applies a 100% CCF	An originating bank may exclude securitized exposures its LR exposure measure if the securitization meets the operational requirements for the recognition of risk transference applicable to transitional securitizations in the 2016 revisions to the securitization framework Banks meeting these conditions must include any retained securitization exposures in their LR exposure measure In all other cases (e.g., traditional securitizations that do not meet the operational requirements for the recognition of risk transference or synthetic securitizations), the securitized exposures must be included in the LR exposure measure No change in CCF for OBS securitization exposures, which is 100%
Open-ended Repos	Repo-style transactions may be offset only if, among other requirements,	Permits cash payables and cash receivables SFTs with the same counterparty to be netted if, among other things, the transactions have	Adopted consultation as proposed

Topic	Current U.S. Approach	Basel Consultation	December 2017 Basel IV Standard
	they have the same explicit final settlement date (receivables or payables from “open” transactions may not be offset against payables or receivables from overnight transactions, or against other “open” transactions)	the same explicit final settlement date (e.g., overnight or term repos) Clarifies that transactions with no explicit end date but which can be unwound at any time by either party to the transaction (open repos) are not eligible for offsetting treatment	
Cash VM and FX Haircut	No FX haircut Cash collateral can reduce the LR exposure measure only if it is VM that satisfies certain requirements, including that the VM is in the form of cash in the same currency as the currency of settlement set forth in the derivative contract (which includes any currency for settlement specified in the governing qualifying master netting agreement and the credit support annex to the qualifying master netting agreement, or in the governing rules for a cleared transaction)	Proposed to include FX haircut: Both cash VM received and provided would be subject to an FX haircut if there is a currency mismatch between the cash VM and the termination currency of the netting set (i.e., the currency in which the bank would submit its claim upon a counterparty default)	FX haircut not adopted Variation margin may be in the form of a currency specified in a derivative contract, master netting agreement, credit support annex to the master netting agreement or as defined in any netting agreement with a CCP
Strike Price of Purchased Options	No specific treatment	The effective notional amount of options where the bank has the obligation to provide credit protection under certain conditions may be offset by the effective notional amount of options by which the bank has the right to	Adopted consultation as proposed

Topic	Current U.S. Approach	Basel Consultation	December 2017 Basel IV Standard
		purchase qualifying credit protection, provided that the strike price of the underlying purchased credit protection is equal to or lower than the strike price of the underlying sold credit protection	
"Connected" or "Correlated" Counterparties Criterion		The effective notional amount of a written credit derivative may be reduced by the effective notional amount of a purchased credit derivative on the same reference name if, among other things, the credit protection purchased through credit derivatives is not purchased: • from a counterparty connected with the reference name (as defined in the Basel framework for measuring and controlling large exposures) or • from a counterparty whose credit quality is highly correlated with the value of the reference obligation in the sense specified in the Basel III discussion of wrong-way risk	Compared to the consultation, the final standard removed the "connected counterparty" prohibition but retained "correlated counterparty" prohibition with a note that the credit quality of the counterparty must not be positively correlated with the value of the reference obligation and that, in making this determination, there does not need to exist a legal connection between the counterparty and the underlying reference entity
"Same Material Terms" Criterion		The effective notional amount of a written credit derivative may be reduced by the effective notional amount of a purchased credit derivative on the same reference name if, among other things, the credit protection purchased through credit derivatives is otherwise subject to the same material terms as those in the corresponding written credit derivative	Adopted consultation, providing that the credit protection purchased through credit derivatives is subject to "the same or more conservative material terms" – e.g., level of subordination, optionality, credit event, reference credit derivative and "any other characteristics relevant to the valuation of the derivative" – as the corresponding written credit derivative
Inter-company Clearing Exposures	A bank may exclude from its LR exposure measure a clearing member's	For the purposes of the treatment of clearing services, an entity affiliated with the clearing member bank may be considered a client if it	Adopted consultation as proposed

Topic	Current U.S. Approach	Basel Consultation	December 2017 Basel IV Standard
	exposure to a clearing member client for a derivative contract if the clearing member client and the clearing member are affiliates and consolidated for financial reporting purposes on the bank's balance sheet	is outside the regulatory consolidation at the level at which the LR is applied (i.e., is not consolidated for regulatory purposes with the clearing member bank) In contrast, if an affiliate is consolidated for regulatory purposes, the trade between the affiliate and the clearing member bank is eliminated in consolidation but the clearing member bank still has a trade exposure to the CCP, with the result that the transaction is treated as proprietary	
Central Bank Reserves	Central bank deposits not excluded from LR exposure measure	Central bank deposits not excluded from LR exposure measure	Permits a jurisdiction, at its discretion, to temporarily exempt central bank reserves "in exceptional macroeconomic circumstances" to "facilitate the implementation of monetary policies," provided the jurisdiction also calibrates the minimum LR requirement commensurately to offset the impact of exempting central bank reserves Banks would be required to disclose the impact of such exemption alongside public disclosures of their leverage ratios
Implementation Date	Disclosure of LR required since January 1, 2015 LR becomes a binding requirement on January 1, 2018		January 1, 2022 Jurisdictions may apply the revised standard for the LR exposure measure prior to January 1, 2022

VI. CREDIT VALUATION ADJUSTMENT RISK

Topic	Current U.S. Approach	Basel Consultation	December 2017 Basel IV Standard
Credit Valuation Adjustment[10]	Scope of application: Applicable only to advanced approaches firms for purposes of their advanced approaches capital ratios Methods: The U.S. has implemented the standardized approach (SA) and the internal models approach (IMA)	Methods: Revised methods include IMA, SA and basic approach (BA)	Compared to the consultation, the final standard • Eliminates the IMA and allows only the SA and BA, and • Allows banks below a materiality threshold to set the CVA capital requirement as equal to the counterparty credit risk capital requirement Scope of application: CVA must be calculated by all banks, but banks below the materiality threshold (non-centrally cleared derivatives ≤ €100 billion) may set CVA capital to 100% of counterparty credit risk capital requirement Methods: Methods include SA and BA
Implementation Date			January 1, 2022

10 The credit valuation adjustment (CVA) framework imposes a capital requirement for the potential mark-to-market losses of derivative instruments as a result of the deterioration in the creditworthiness of a counterparty.