



Final Basel Capital Reform

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Agenda

1. Basel III: Finalising Post-crisis Reforms
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- Appendix: Change of Capital Rules

1. Basel III: Finalising Post-crisis Reforms

- The Basel III framework is a central element of the Basel Committee's response to the global financial crisis. It addresses shortcomings of the pre-crisis regulatory framework and provides a regulatory foundation for a resilient banking system that supports the real economy.
- A key objective of the revisions incorporated into the framework is to reduce excessive variability of risk-weighted assets (RWA). At the peak of the global financial crisis, a wide range of stakeholders lost faith in banks' reported risk-weighted capital ratios. The Committee's own empirical analyses also highlighted a worrying degree of variability in banks' calculation of RWA. The revisions to the regulatory framework will help restore credibility in the calculation of RWA by:
 - enhancing the robustness and risk sensitivity of the standardised approaches for credit risk and operational risk, which will facilitate the comparability of banks' capital ratios
 - constraining the use of internally modelled approaches
 - complementing the risk-weighted capital ratio with a finalised leverage ratio and a revised and robust capital floor

Basel III Reform Focus

- improving the quality of bank regulatory capital by placing a greater focus on going-concern loss-absorbing capital in the form of Common Equity Tier 1 (CET1) capital;
- increasing the level of capital requirements to ensure that banks are sufficiently resilient to withstand losses in times of stress;
- enhancing risk capture by revising areas of the risk-weighted capital framework that proved to be acutely miscalibrated, including the global standards for market risk, counterparty credit risk and securitisation;
- adding macroprudential elements to the regulatory framework, by: (i) introducing capital buffers that are built up in good times and can be drawn down in times of stress to limit procyclicality; (ii) establishing a large exposures regime that mitigates systemic risks arising from interlinkages across financial institutions and concentrated exposures; and (iii) putting in place a capital buffer to address the externalities created by systemically important banks;

Source: High-level Summary of Basel III Reforms 2017

Basel III Reform Focus

- specifying a minimum leverage ratio requirement to constrain excess leverage in the banking system and complement the risk-weighted capital requirements; and
- introducing an international framework for mitigating excessive liquidity risk and maturity transformation, through the Liquidity Coverage Ratio and Net Stable Funding Ratio
- The Committee’s now finalised Basel III reforms complement these improvements to the global regulatory framework. The revisions seek to restore credibility in the calculation of risk-weighted assets (RWAs) and improve the comparability of banks’ capital ratios by:
 - enhancing the robustness and risk sensitivity of the standardised approaches for credit risk, credit valuation adjustment (CVA) risk and operational risk;
 - constraining the use of the internal model approaches, by placing limits on certain inputs used to calculate capital requirements under the internal ratings-based (IRB) approach for credit risk and by removing the use of the internal model approaches for CVA risk and for operational risk;

Source: High-level Summary of Basel III Reforms 2017

Basel III Reform Focus

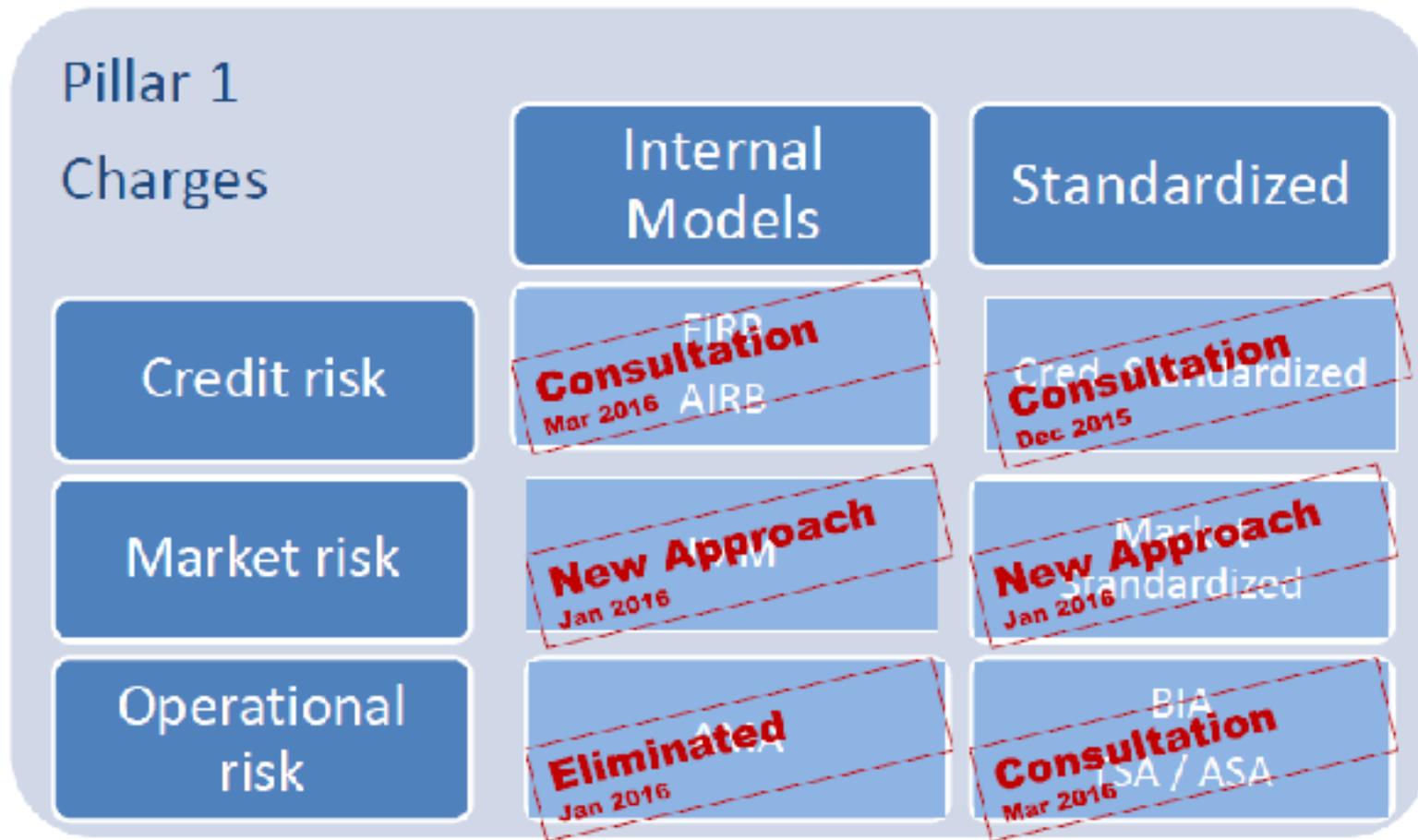
- introducing a leverage ratio buffer to further limit the leverage of global systemically important banks (G-SIBs); and
- replacing the existing Basel II output floor with a more robust risk-sensitive floor based on the Committee's revised Basel III standardised approaches.

Source: High-level Summary of Basel III Reforms 2017

A. Impact to BNYM/Clients/Competitors

- Overall industry impact:
 - The regulators refer to “a worrying degree of variability in banks’ calculations of [risk-weighted assets].” They have found that applying the major banks’ different internal models to the same portfolio of loans can produce very different numbers, meaning that some banks would be carrying significantly less capital than others for the same quantum of assumed risk.
 - The logical answer to that problem, one might think, is to interrogate the models closely, to see what is driving the differences, and demand calibration changes where the resultant asset reductions are deemed excessive. But the regulators clearly doubt their capacity to penetrate the dark recesses of banks’ internal models; so, instead, they have imposed a so-called “output floor.”

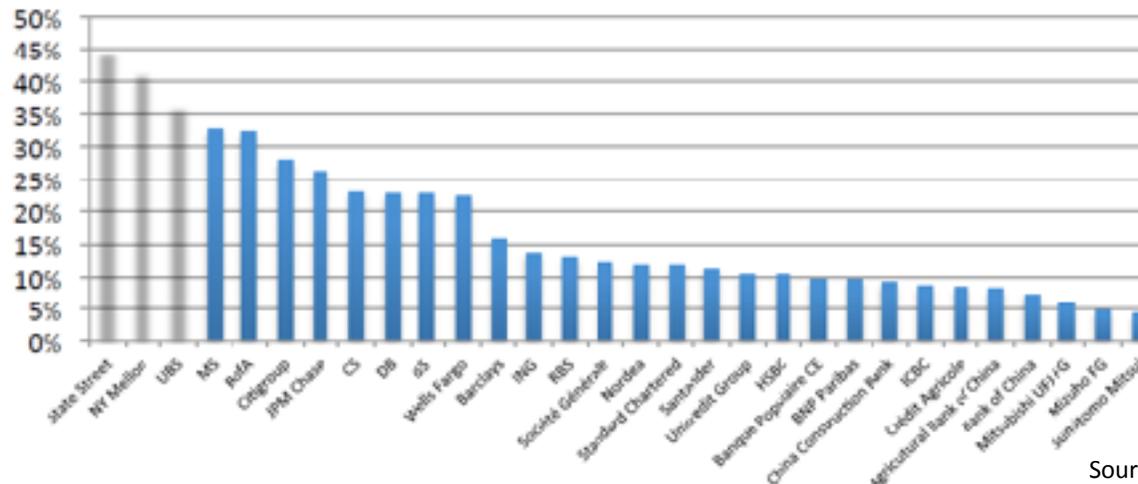
Changing Landscape



Source: IMF 2017

Operational RWA as a Percentage of Total RWA for GSIBs

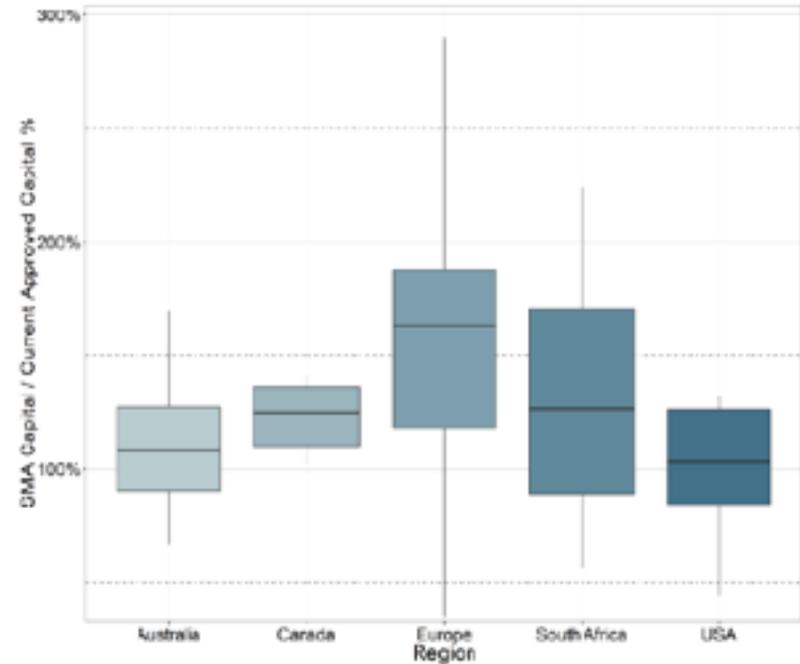
- Weaknesses in the determination of operational RWA across both existing and proposed approaches, and the sometimes counter-intuitive variability in outcomes, do little to contribute to the overall credibility and comparability of risk-based capital ratios.
- There is significant variation in the percentage of a bank's total RWA contributed by operational RWA. Some of this variation can be explained by differences in strategy and business model (eg the fact that among the GSIBs, State Street and Bank of New York Mellon have the highest proportions of operational RWA reflects their focus on custody and settlement services rather than traditional lending), but many of the differences appear to reflect differences in the approach towards determining operational RWA across banks and regulatory jurisdictions, rather than differences in the underlying operational risk profile.



Source: Harvard Business School 2016

Estimated Potential Impact of the SMA

Exhibit 5: Impact of proposed SMA capital requirement by region



Note: The calculation and figure are sourced from Operational Riskdata eXchange Association (ORX) in its May 2015 response to the SMA proposal publicly available.

Source: Harvard Business School 2017

Impact to BNYM/Clients/Competitors

- Ad hoc Assessment from Europe:
 - Aligning with the BCBS, the EBA conducted an interim ad hoc monitoring exercise to assess the impact of the Basel reform package on EU banks. Data refer to December 2015 for a total of 149 banks from 17 EU countries, including 44 Group 1 and 105 Group 2 banks.
 - The total change in T1 Minimum Required Capital (MRC) is 12.9% for all 88 banks, 14.1% for the large and internationally active banks (“Group 1”) and 3.9% for the other banks (“Group 2”). For Group 1 banks, the overall increase in Tier 1 minimum capital requirements consists of a 6.0% increase stemming from the credit risk components, a 2.7% increase stemming from operational risk reforms and 6.9% attributed to the output floor. The total impact of the reforms on all banks by the risk based elements (14.5%) is partially offset by the negative impact of the leverage ratio (-1.6%) which under the reform package become less binding than it is under the current framework. The inclusion of the “Basel I floor”, as a RWA add-on in the current baseline to align with the Basel methodology, reduces the overall impact of all factors to an increase of 11.4% in T1 MRC.

Impact to BNYM/Clients/Competitors

Table 1: Change in total T1 MRC as percentage of the overall base MRC (in %)

	Total		Credit risk		OpR	Output floor	LR
	All factors	of which: risk-based	IRB	SA			
All banks	12.9	14.5	4.3	1.0	2.5	6.6	-1.6
Group 1	14.1	15.6	4.5	1.5	2.7	6.9	-1.6
G-SIIs	15.2	14.1	5.1	1.6	2.9	4.5	1.1
Group 2	3.9	5.3	2.7	-2.4	0.8	4.2	-1.3

Appendix: Change of Capital Rules

A.1 Credit Risk Framework

A.2 CVA Risk Framework

A.3 Operational Risk Framework

A.4 Leverage Ratio Framework

A.5 Output Floor

A.6 Transitional Arrangements

A.1 Credit Risk Framework

The revisions to the standardised approach for credit risk, relative to the existing standardised approach. In summary, the key revisions are as follows:

- A more granular approach has been developed for unrated exposures to banks and corporates, and for rated exposures in jurisdictions where the use of credit ratings is permitted.
- For exposures to banks, some of the risk weights for rated exposures have been recalibrated. In addition, the risk-weighted treatment for unrated exposures is more granular than the existing flat risk weight. A standalone treatment for covered bonds has also been introduced.
- For exposures to corporates, a more granular look-up table has been developed. A specific risk weight applies to exposures to small and medium-sized enterprises (SMEs). In addition, the revised standardised approach includes a standalone treatment for exposures to project finance, object finance and commodities finance.
- For residential real estate exposures, more risk-sensitive approaches have been developed, whereby risk weights vary based on the LTV ratio of the mortgage (instead of the existing single risk weight) and in ways that better reflect differences in market structures.

Source: High-level Summary of Basel III Reforms 2017

Credit Risk Framework

- For retail exposures, a more granular treatment applies, which distinguishes between different types of retail exposures. For example, the regulatory retail portfolio distinguishes between revolving facilities (where credit is typically drawn upon) and transactors (where the facility
- For commercial real estate exposures, approaches have been developed that are more risk-sensitive than the flat risk weight which generally applies.
- For subordinated debt and equity exposures, a more granular risk weight treatment applies (relative to the current flat risk weight).
- For off-balance sheet items, the credit conversion factors (CCFs), which are used to determine the amount of an exposure to be risk-weighted, have been made more risk-sensitive, including the introduction of positive CCFs for unconditionally cancellable commitments (UCCs).

Source: High-level Summary of Basel III Reforms 2017

Internal Ratings-Based Approaches for Credit Risk

- The Committee has made the following revisions to the IRB approaches:
 - (i) removed the option to use the advanced IRB (A-IRB) approach for certain asset classes;
 - (ii) adopted “input” floors (for metrics such as probabilities of default (PD) and loss-given-default (LGD)) to ensure a minimum level of conservatism in model parameters for asset classes where the IRB approaches remain available; and
 - (iii) provided greater specification of parameter estimation practices to reduce RWA variability.

Source: High-level Summary of Basel III Reforms 2017

Internal Ratings-Based Approaches for Credit Risk

- Removing the use of the advanced IRB approach for certain asset classes
 - The revised IRB framework removes the use of the A-IRB approach – which allows banks to estimate the PD, LGD, exposure at default (EAD) and maturity of an exposure – for asset classes that cannot be modelled in a robust and prudent manner. These include exposures to large and mid-sized corporates, and exposures to banks and other financial institutions. As a result, banks with supervisory approval will use the foundation IRB (F-IRB) approach, which removes the two important sources of RWA variability as it applies fixed values to the LGD and EAD parameters. In addition, all IRB approaches are being removed for exposures to equities, which are typically a small component of the credit risk of banks.

Table 2 outlines the revised scope of approaches available under Basel III for certain asset classes relative to the Basel II framework.

Revised scope of IRB approaches for asset classes		Table 2
Portfolio/exposure	Basel II: available approaches	Basel III: available approaches
Large and mid-sized corporates (consolidated revenues > €500m)	A-IRB, F-IRB, SA	F-IRB, SA
Banks and other financial institutions	A-IRB, F-IRB, SA	F-IRB, SA
Equities	Various IRB approaches	SA
Specialised lending ²	A-IRB, F-IRB, slotting, SA	A-IRB, F-IRB, slotting, SA

Source: High-level Summary of Basel III Reforms 2017

Internal Ratings-Based Approaches for Credit Risk

- Specification of input floors
 - The revised IRB framework also introduces minimum “floor” values for bank-estimated IRB parameters that are used as inputs to the calculation of RWA. These include PD floors for both the F-IRB and A-IRB approaches, and LGD and EAD floors for the A-IRB approach. In some cases, these floors consist of recalibrated values of the existing Basel II floors. In other cases, the floors represent new constraints for banks’ IRB models.

Minimum parameter values in the revised IRB framework⁴ Table 3

	Probability of default (PD)	Loss given default (LGD)		Exposure at default (EAD)
		Unsecured	Secured	
Corporate	5 bp	25%	Varying by collateral type: <ul style="list-style-type: none"> • 0% financial • 10% receivables • 10% commercial or residential real estate • 15% other physical 	EAD subject to a floor that is the sum of (i) the on balance sheet exposures; and (ii) 50% of the off balance sheet exposure using the applicable Credit Conversion Factor (CCF) in the standardised approach
Retail classes:				
Mortgages	5 bp	N/A	5%	
QRRE transactors	5 bp	50%	N/A	
QRRE revolvers	10 bp	50%	N/A	
Other retail	5 bp	30%	Varying by collateral type: <ul style="list-style-type: none"> • 0% financial • 10% receivables • 10% commercial or residential real estate • 15% other physical 	

Source: High-level Summary of Basel III Reforms 2017

Internal Ratings-Based Approaches for Credit Risk

- The Committee agreed on various additional enhancements to the IRB approaches to further reduce unwarranted RWA variability, including providing greater specification of the practices that banks may use to estimate their model parameters. Adjustments were made to the supervisory specified parameters in the F-IRB approach, including: (i) for exposures secured by non-financial collateral, increasing the haircuts that apply to the collateral and reducing the LGD parameters; and (ii) for unsecured exposures, reducing the LGD parameter from 45% to 40% for exposures to non-financial corporates.

Source: High-level Summary of Basel III Reforms 2017

Overview of Revised Standardised Approach to Credit Risk

Exposures to banks							
Risk weights in jurisdictions where the ratings approach is permitted							
External rating	AAA to AA-	A+ to A-	BBB+ to BBB-	BB+ to B-	Below B-	Unrated	
Risk weight	20%	30%	50%	100%	150%	As for SCRA below	
Short-term exposures							
Risk weight	20%	20%	20%	50%	150%	As for SCRA below	
Risk weights where the ratings approach is not permitted and for unrated exposures							
Standardised Credit Risk Assessment Approach (SCRA) grades	Grade A		Grade B		Grade C		
Risk weight	40% ¹		75%		150%		
Short-term exposures	20%		50%		150%		
Exposures to covered bonds							
Risk weights for <u>rated</u> covered bonds							
External issue-specific rating	AAA to AA-	A+ to BBB-	BB+ to B-		Below B-		
Risk weight	10%	20%	50%		100%		
Risk weights for <u>unrated</u> covered bonds							
Risk weight of issuing bank	20%	30%	40%	50%	75%	100%	150%
Risk weight	10%	15%	20%	25%	35%	50%	100%

Source: High-level Summary of Basel III Reforms 2017

Overview of Revised Standardised Approach to Credit Risk

Exposures to general corporates						
Risk weights in jurisdictions where the ratings approach is permitted						
External rating of counterparty	AAA to AA-	A+ to A-	BBB+ to BBB-	BB+ to BB-	Below BB-	Unrated
Risk weight	20%	50%	75%	100%	150%	100% or 85% if corporate SME
Risk weights where rating approach is not permitted						
SCRA grades		Investment grade		All other		
General corporate (non-SME)		65%		100%		
SME general corporate		85%				
Exposures to project finance, object finance and commodities finance						
Exposure (excluding real estate)	Project finance			Object and commodity finance		
Issue-specific ratings available and permitted	Same as for general corporate (see above)					
Rating not available or not permitted	130% pre-operational phase 100% operational phase 80% operational phase (high quality)			100%		

Source: High-level Summary of Basel III Reforms 2017

Overview of Revised Standardised Approach to Credit Risk

Retail exposures excluding real estate									
	Regulatory retail (non-revolving)	Regulatory retail (revolving)						Other retail	
		Transactors			Revolvers				
Risk weight	15%	45%			15%			100%	
Residential real estate exposures									
<i>LTV bands</i>	Below 50%	50% to 60%	60% to 70%	70% to 80%	80% to 90%	90% to 100%	above 100%	Criteria not met	
<i>General RRE</i>									
Whole loan approach RW	20%	25%	30%	40%	50%	70%	RW of counterparty		
Loan-splitting approach ² RW	20%	RW of counterparty						RW of counterparty	
<i>Income-producing residential real estate (IPRRE)</i>									
Whole loan approach RW	30%	35%	45%	60%	75%	105%	150%		

Source: High-level Summary of Basel III Reforms 2017

Overview of Revised Standardised Approach to Credit Risk

Commercial real estate (CRE) exposures				
<i>General CRE</i>				
Whole loan approach	LTV ≤ 60%		LTV > 60%	Criteria not met
	Min (60%, RW of counterparty)		RW of counterparty	RW of counterparty
Loan-splitting approach ²	LTV ≤ 55%		LTV > 55%	Criteria not met
	Min (60%, RW of counterparty)		RW of counterparty	RW of counterparty
<i>Income-producing commercial real estate (IPCRE)</i>				
Whole loan approach	LTV ≤ 60%	60% < LTV ≤ 80%	LTV > 80%	Criteria not met
	70%	90%	110%	150%
<i>Land acquisition, development and construction (ADC) exposures</i>				
Loan to company/SPV	150%			
Residential ADC loan	100%			
Subordinated debt and equity (excluding amounts deemed net)				
	Subordinated debt and capital other than equities	Equity exposures to certain legislated programmes	"Speculative unlisted equity"	All other equity exposures
Risk weight	150%	100%	400%	250%
Credit conversion factors for off-balance sheet exposures				
	UCCs	Commitments, except UCCs	NIIs and RUIs, and certain transaction related contingent items	ST self-liquidating trade letters of credit arising from the movement of goods
CCF	10%	40%	50%	Direct credit substitutes and other off balance sheet exposures 100%

Source: High-level Summary of Basel III Reforms 2017

A.2 CVA Risk Framework

The Committee has agreed to revise the CVA framework to:

- enhance its risk sensitivity: the current CVA framework does not cover an important driver of CVA risk, namely the exposure component of CVA. This component is directly related to the price of the transactions that are within the scope of application of the CVA risk capital charge. As these prices are sensitive to variability in underlying market risk factors, the CVA also materially depends on those factors. The revised CVA framework takes into account the exposure component of CVA risk along with its associated hedges;
- strengthen its robustness: CVA is a complex risk, and is often more complex than the majority of the positions in banks' trading books. Accordingly, the Committee is of the view that such a risk cannot be modelled by banks in a robust and prudent manner. The revised framework removes the use of an internally modelled approach, and consists of: (i) a standardised approach; and (ii) a basic approach. In addition, a bank with an aggregate notional amount of non-centrally cleared derivatives less than or equal to €100 billion may calculate their CVA capital charge as a simple multiplier of its counterparty credit risk charge.
- improve its consistency: CVA risk is a form of market risk as it is realised through a change in the mark-to-market value of a bank's exposures to its derivative counterparties. As such, the standardised and basic approaches of the revised CVA framework have been designed and calibrated to be consistent with the approaches used in the revised market risk framework. In particular, the standardised CVA approach, like the market risk approaches, is based on fair value sensitivities to market risk factors and the basic approach is benchmarked to the standardised approach.

Source: High-level Summary of Basel III Reforms 2017

A.3 Operational Risk Framework

- The financial crisis highlighted two main shortcomings with the existing operational risk framework. First, capital requirements for operational risk proved insufficient to cover operational risk losses incurred by some banks. Second, the nature of these losses – covering events such as misconduct, and inadequate systems and controls – highlighted the difficulty associated with using internal models to estimate capital requirements for operational risk.
- The Committee has streamlined the operational risk framework. The advanced measurement approaches (AMA) for calculating operational risk capital requirements (which are based on banks' internal models) and the existing three standardised approaches are replaced with a single risk-sensitive standardised approach to be used by all banks.
- The new standardised approach for operational risk determines a bank's operational risk capital requirements based on two components: (i) a measure of a bank's income; and (ii) a measure of a bank's historical losses. Conceptually, it assumes: (i) that operational risk increases at an increasing rate with a bank's income; and (ii) banks which have experienced greater operational risk losses historically are assumed to be more likely to experience operational risk losses in the future.

Operational Risk Framework

- The operational risk capital requirement can be summarised as follows:

$$\text{Operational risk capital} = \text{BIC} \times \text{ILM}$$

where:

- Business Indicator Component (BIC) = $\sum(\alpha_i \cdot \text{BI})$
- BI (Business Indicator) is the sum of three components: the interest, leases and dividends component; the services component and the financial component
- α_i is a set of marginal coefficients that are multiplied by the BI based on three buckets ($i = 1, 2, 3$ denotes the bucket), as given below:

BI bucket	BI range	Marginal BI coefficients (α_i)
1	$\leq \text{€1 bn}$	0.12
2	$\text{€1 bn} < \text{BI} \leq \text{€30 bn}$	0.15
3	$> \text{€30 bn}$	0.18

- ILM (the Internal Loss Multiplier) is a function of the BIC and the Loss Component (LC), where the latter is equal to 15 times a bank's average historical losses over the preceding 10 years. The ILM increases as the ratio of (LC/BIC) increases, although at a decreasing rate.⁵

At national discretion, supervisors can elect to set ILM equal to one for all banks in their jurisdiction. This means that capital requirements in such cases would be determined solely by the BIC. That is, capital requirements would not be related to a bank's historical operational risk losses. However, to aid comparability, all banks would be required to disclose their historical operational risk losses, even in jurisdictions where the ILM is set to one.

Source: High-level Summary of Basel III Reforms 2017

A.4 Leverage Ratio Framework

- The leverage ratio complements the risk-weighted capital requirements by providing a safeguard against unsustainable levels of leverage and by mitigating gaming and model risk across both internal models and standardised risk measurement approaches. To maintain the relative incentives provided by both capital constraints, the finalised Basel III reforms introduce a leverage ratio buffer for G-SIBs. Such an approach is consistent with the risk-weighted G-SIB buffer, which seeks to mitigate the externalities created by G-SIBs.
- The leverage ratio G-SIB buffer must be met with Tier 1 capital and is set at 50% of a G-SIB's risk-weighted higher-loss absorbency requirements. For example, a G-SIB subject to a 2% risk-weighted higher-loss absorbency requirement would be subject to a 1% leverage ratio buffer requirement.
- The leverage ratio buffer takes the form of a capital buffer akin to the capital buffers in the risk-weighted framework. As such, the leverage ratio buffer will be divided into five ranges. As is the case with the risk-weighted framework, capital distribution constraints will be imposed on a G-SIB that does not meet its leverage ratio buffer requirement.

Leverage Ratio Framework

- Refinements to the leverage ratio exposure measure
 - In addition to the introduction of the G-SIB buffer, the Committee has agreed to make various refinements to the definition of the leverage ratio exposure measure. These refinements include modifying the way in which derivatives are reflected in the exposure measure and updating the treatment of off-balance sheet exposures to ensure consistency with their measurement in the standardised approach to credit risk.
 - The Committee has also agreed that jurisdictions may exercise national discretion in periods of exceptional macroeconomic circumstances to exempt central bank reserves from the leverage ratio exposure measure on a temporary basis. Jurisdictions that exercise this discretion would be required to recalibrate the minimum leverage ratio requirement commensurately to offset the impact of excluding central bank reserves, and require their banks to disclose the impact of this exemption on their leverage ratios.
 - The Committee continues to monitor the impact of the Basel III leverage ratio's treatment of client-cleared derivative transactions. It will review the impact of the leverage ratio on banks' provision of clearing services and any consequent impact on the resilience of central counterparty clearing.

Source: High-level Summary of Basel III Reforms 2017

A.5 Output Floor

- The Basel III reforms replace the existing Basel II floor with a floor based on the revised Basel III standardised approaches. Consistent with the original floor, the revised floor places a limit on the regulatory capital benefits that a bank using internal models can derive relative to the standardised approaches. In effect, the output floor provides a risk-based backstop that limits the extent to which banks can lower their capital requirements relative to the standardised approaches. This helps to maintain a level playing field between banks using internal models and those on the standardised approaches. It also supports the credibility of banks' risk-weighted calculations, and improves comparability via the related disclosures.
- Under the revised output floor, banks' risk-weighted assets must be calculated as the higher of: (i) total risk-weighted assets calculated using the approaches that the bank has supervisory approval to use in accordance with the Basel capital framework (including both standardised and internal model-based approaches); and (ii) 72.5% of the total risk-weighted assets calculated using only the standardised approaches.

Output Floor

The standardised approaches to be used when calculating the output floor are as follows:

- Credit risk: the standardised approach for credit risk outlined above. When calculating the degree of credit risk mitigation, banks must use the carrying value when applying the simple approach or the comprehensive approach with standard supervisory haircuts. This also includes failed trades and non-delivery-versus-payment transactions as set out in Annex 3 of the Basel II framework (June 2006).
- Counterparty credit risk: to calculate the exposure for derivatives, banks must use the standardised approach for measuring counterparty credit risk (SA-CCR). The exposure amounts must then be multiplied by the relevant borrower risk weight using the standardised approach for credit risk to calculate RWA under the standardised approach for credit risk.
- Credit valuation adjustment risk: the standardised approach for CVA (SA-CVA), the Basic Approach (BA-CVA) or 100% of a bank's counterparty credit risk capital requirement (depending on which approach the bank is eligible for and uses for CVA risk).
- Securitisation framework: the external ratings-based approach (SEC-ERBA), the standardised approach (SEC-SA) or a 1250% risk weight.
- Market risk: the standardised (or simplified standardised) approach of the revised market risk framework. The SEC-ERBA, the SEC-SA or a 1250% risk weight must also be used when determining the default risk charge component for securitisations held in the trading book.
- Operational risk: the standardised approach for operational risk.

Source: High-level Summary of Basel III Reforms 2017

A.6 Transitional Arrangement

Implementation dates of Basel III post-crisis reforms and transitional arrangement for phasing in the aggregate output floor		Table 5
Revision	Implementation date	
Revised standardised approach for credit risk	<ul style="list-style-type: none"> 1 January 2022 	
Revised IRB framework	<ul style="list-style-type: none"> 1 January 2022 	
Revised CVA framework	<ul style="list-style-type: none"> 1 January 2022 	
Revised operational risk framework	<ul style="list-style-type: none"> 1 January 2022 	
Revised market risk framework	<ul style="list-style-type: none"> 1 January 2022⁶ Existing exposure definition:⁷ 1 January 2018 Revised exposure definition: 1 January 2022 G-SIB buffer: 1 January 2022 	
Leverage ratio		
Output floor	<ul style="list-style-type: none"> 1 January 2022: 50% 1 January 2023: 55% 1 January 2024: 60% 1 January 2025: 65% 1 January 2026: 70% 1 January 2027: 72.5% 	

Source: High-level Summary of Basel III Reforms 2017