
The Author



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Abstract

“Leverage’ means the relative size of an institution’s assets, off-balance sheet obligations and contingent obligations to pay or to deliver or to provide collateral, including obligations from received funding, made commitments, derivatives or repurchase agreements, but excluding obligations which can only be enforced during the liquidation of an institution, compared to that institution’s own funds.” This is the definition in Article 4.1(93) of the EU Capital Requirements Regulation. The Basel III framework introduced a non-risk based Leverage Ratio, Tier 1 Capital to total exposure, to act as an additional “backstop” measure to the risk-weighted capital requirements. The exposure measure generally follows accounting value, and is the sum of on-balance sheet exposures, derivative exposures, securities financing transaction exposures and off-balance sheet items, with specific treatments for these types defined. Public disclosure by banks began in 2015, with a minimum leverage ratio requirement of 3% anticipated in 2018. The original 28-page 1988 Basel Capital Accord¹ set out capital requirements for assets with risk weights including 0% for certain claims on central governments, 20% for banks, 50% for residential mortgages and 100% for the private sector. In the decades since then, regulation has moved toward increasingly detailed and modelled risk sensitivity. According to the European Banking Authority, the non-risk based Leverage Ratio, rather than the risk-weighted Tier 1 Capital ratio, is the constraint for more than three quarters of the largest internationally active banks. For such a bank, a shift of assets from less risky to more risky would not affect its constraining requirement.

Background

An underlying cause of the global financial crisis was the build-up of excessive leverage in the banking system; in many cases, banks built up leverage while apparently maintaining strong risk-based capital ratios. Following the G-20’s call in its 2009 Declaration on Strengthening of the Financial System, the 2010 Basel III framework² introduced a non-risk based Leverage Ratio to act as an additional “backstop” measure to the risk-weighted capital requirements. The supervisory monitoring period, which focused on developing templates, commenced in 2011. The parallel run began with bank-level reporting to national supervisors from 2013, and proceeded with public disclosure starting in 2015. The final calibration is to be completed by 2017, with a view to migrating to a minimum capital requirement treatment in 2018.

Basel III Framework

The Basel Committee set out the revised Leverage Ratio framework in 2014,³ following a consultation the previous year. The Basel III Leverage Ratio is defined as (capital measure) / (exposure measure); the Committee is continuing to test a minimum requirement of 3%. The capital measure is the Tier 1 Capital (which is Common Equity Tier 1 + Additional Tier 1) of the risk-based capital framework. The exposure measure for the Leverage Ratio generally follows the accounting value, subject to the following: on-balance sheet, non-derivative exposures are included in the exposure measure net of specific provisions or accounting valuation adjustments, and netting of loans and deposits is not allowed. Except where specified differently, banks must not take account of physical or financial collateral, guarantees or other credit risk mitigation techniques to reduce the exposure measure. A bank’s total exposure measure is the sum of on-balance sheet exposures, derivative exposures, Securities Financing Transaction (SFT) exposures and Off-Balance Sheet (OBS) items; specific treatments for these four main exposures types are defined. In July 2015 the Basel Committee published its second Frequently Asked Questions (FAQ)⁴ and answers, covering the recognition of cash variation margin, client-clearing of affiliated entities’ trade exposures, exposures and netting of SFTs, netting for derivatives and SFTs in the presence of cross-product netting agreements, the

¹International Convergence of Capital Measurement and Capital Standards, Basel Committee on Banking Supervision, July 1988.

²Basel III: A global regulatory framework for more resilient banks and banking systems, Basel Committee on Banking Supervision, December 2010.

³Basel III leverage ratio framework and disclosure requirements, Basel Committee on Banking Supervision, January 2014.

⁴Frequently asked questions on the Basel III leverage ratio framework, Basel Committee on Banking Supervision, July 2015.

meaning of a negative change in fair value, and the treatment of long settlement transactions and failed trades.

On-Balance Sheet Exposures

Banks must include all balance sheet assets in their exposure measure, including on-balance sheet derivatives collateral and collateral for SFTs, with the exception of on-balance sheet derivative and SFT assets and other items that are covered below. Where a bank according to its operative accounting framework recognises fiduciary assets on its balance sheet, these assets can be excluded provided that they meet criteria for derecognition and deconsolidation. For consistency with the numerator of the ratio, balance sheet assets deducted from Tier 1 Capital may be removed from calculation. Liability items must not be deducted.

Derivative Exposures

Derivatives create two types of exposure: an exposure arising from the underlying of the derivative contract and a Counterparty Credit Risk (CCR) exposure. Banks must calculate their derivative exposures, including where a bank sells protection using a credit derivative, as the Replacement Cost (RC) for the current exposure plus an add-on for Potential Future Exposure (PFE); if the derivative exposure is covered by an eligible bilateral netting contract an alternative treatment may be applied, and written credit derivatives are subject to an additional treatment. For a single derivative exposure not covered by an eligible bilateral netting contract, the add-on ranges from 0% to 15% of the effective notional amount. When an eligible bilateral netting contract is in place, the RC for the set of derivative exposures covered by the contract will be the net RC and the net add-on will be calculated as $(0.4 + 0.6 \times \text{the level of net RC/the level of gross RC}) \times (\text{the sum of individual add-on amounts calculated by multiplying the notional principal amount by the appropriate add-on factors of all transactions})$. When calculating the exposure amount, a bank must not reduce the exposure amount by any collateral received from the counterparty; similarly, with regard to collateral provided, a bank must gross up its exposure measure by the amount of any derivatives collateral provided where the provision of that collateral has reduced the value of its balance sheet assets under its operative accounting framework. If certain conditions are met, the cash portion of variation margin received may be used to reduce the RC portion of the Leverage Ratio exposure measure, and the receivables assets from cash variation margin provided may be deducted; cash variation margin may not be used to reduce the PFE amount

(including the calculation of the net-to-gross ratio). Where a bank acting as Clearing Member (CM) offers clearing services to clients, the CM's trade exposures to the Central CounterParty (CCP) that arise when the CM is obligated to reimburse the client for any losses suffered due to changes in the value of its transactions in the event that the CCP defaults must be captured by applying the same treatment that applies to any other type of derivatives transactions; however, if the CM, based on the contractual arrangements with the client, is not obligated to reimburse the client for any losses suffered due to changes in the value of its transactions in the event that a Qualifying CCP (QCCP) defaults, the CM need not recognise the resulting trade exposures to the QCCP in the Leverage Ratio exposure measure. Where a client enters directly into a derivatives transaction with the CCP and the CM guarantees the performance of its clients' derivative trade exposures to the CCP, the bank acting as the CM for the client to the CCP must calculate its related Leverage Ratio exposure resulting from the guarantee as a derivative exposure, as if it had entered directly into the transaction with the client, including with regard to the receipt or provision of cash variation margin. In addition to the above CCR treatment for derivatives and related collateral, the effective notional amount referenced by a written credit derivative is to be included in the exposure measure; the effective notional amount of a written credit derivative may be reduced by any negative change in fair value amount that has been incorporated into the calculation of Tier 1 Capital with respect to the written credit derivative, and the resulting amount may be further reduced by the effective notional amount of a purchased credit derivative on the same reference name, provided that certain conditions apply. (Banks may choose to deduct the individual PFE add-on amount relating to a written credit derivative, which is not offset and the effective notional amount of which is included in the exposure measure, from their gross add-on.)

SFT Exposures

Securities Financing Transactions are transactions such as repurchase agreements, reverse repurchase agreements, securities lending and borrowing, and margin lending transactions, where the value of the transactions depends on market valuations and the transactions are often subject to margin agreements. Where the bank is acting as principal, the sum of adjusted gross SFT assets recognised for accounting purposes (i.e., with no recognition of accounting netting) and a measure of CCR calculated as the current exposure without an add-on for PFE are to be included in the Leverage Ratio exposure measure. (Gross SFT assets are adjusted by excluding the value of any securities received under an SFT, where the bank has recognised the

securities as an asset on its balance sheet, and by measuring cash payables and cash receivables with the same counterparty net if certain criteria are met.) Where sale accounting is achieved for an SFT under the bank's operative accounting framework, the bank must reverse all sales-related accounting entries, and then calculate its exposure as if the SFT had been treated as a financing transaction under the operative accounting framework for the purposes of determining its exposure measure. Where a bank acting as agent in an SFT provides an indemnity or guarantee to a customer or counterparty for any difference between the value of the security or cash the customer has lent and the value of collateral the borrower has provided, then the bank will be required to calculate its exposure measure as only current exposure without an add-on for PFE (CCR); a bank will be considered eligible for this exceptional treatment only if its exposure to the transaction is limited to the guaranteed difference between the value of the security or cash its customer has lent and the value of the collateral the borrower has provided. (In situations where the bank is further economically exposed to the underlying security or cash in the transaction, a further exposure equal to the full amount of the security or cash must be included in the exposure measure.)

Off-Balance Sheet Items

Off-Balance Sheet items include commitments (including liquidity facilities), whether or not unconditionally cancellable, direct credit substitutes, acceptances, standby letters of credit and trade letters of credit. To determine the exposure amount for the Leverage Ratio, OBS items are converted (as under the standardised approach in the risk-based capital framework) into credit exposure equivalents through the application of Credit Conversion Factors (CCFs) of 10%, 20%, 50% or 100% to the notional amount.

Countercyclical Behaviour

A paper published by the Bank for International Settlements (BIS) in 2014⁵ analysed how the Leverage Ratio behaves over the cycle. Using a large data set covering international banks headquartered in 14 advanced economies for the period 1995–2012, it found that the Leverage Ratio is significantly more countercyclical than the risk-weighted regulatory capital ratio: it is a tighter constraint for banks in booms and a looser constraint in recessions. This result was driven by the inclusion of guarantees and other OBS sheet

positions (credit lines, acceptances and OBS items related to securitisation) in the exposure measure of the Leverage Ratio.

Capital Requirements Regulation

The EU implementation of the Basel III Leverage Ratio calculation is provided in Article 429 of the 2013 Capital Requirements Regulation (CRR).⁶ This definition is based on the 2010 Basel III framework, which results in a divergence from the 2014 Basel III Leverage Ratio. CRR Article 456.1(j) empowers the European Commission to amend the capital measure and the total exposure measure of the CRR Leverage Ratio.

Differences in Definitions

In 2014 the European Banking Authority (EBA) provided a policy analysis and quantitative impact assessment⁷ of aligning the CRR definition of the Leverage Ratio exposure measure to the Basel III standard. The overall quantitative impact of alignment depends on the treatment of SFTs, for which the CRR text may allow for two different interpretations. The first interpretation is that solely Article 429.9 determines Leverage Ratio exposure for SFT positions, while under the second accounting SFT assets are considered in the exposure measure in addition to the exposure amounts obtained through application of Article 429.9. The second interpretation is relatively similar to the SFT treatment in Basel III. The stricter treatment of CCFs for OBS items under the CRR than Basel III is also a primary driver of difference in quantitative impact. Cash variation margin, written credit derivatives and consolidation scope treatments account for smaller impact differences on average. The CRR Leverage Ratio exposure is larger (and consequently CRR Leverage Ratios are lower) than under Basel III for most banks regardless of the CRR SFT interpretation. In the interest of consistency between the EU and the other jurisdictions that implement Basel III, the EBA recommends aligning the definitions of the Leverage Ratio exposure measure and the Leverage Ratio calculation of CRR to Basel III.

⁵ *The leverage ratio over the cycle* (BIS Working Paper No 471), Bank for International Settlements Monetary and Economic Department, November 2014.

⁶ *Corrigendum to Regulation (EU) No 575/2013 of the European Parliament and of the Council of 26 June 2013 on prudential requirements for credit institutions and*

investment firms and amending Regulation (EU) No 648/2012, Official Journal of the European Union, 30 November 2013.

⁷ *Report on impact of differences in leverage ratio definitions: Leverage ratio exposure measure under Basel III and the CRR*, European Banking Authority, 4 March 2014.

Implementing Technical Standards

As mandated by CRR Article 451.2, following consultation the EBA published its Implementing Technical Standards (ITS) on the uniform disclosure template for the Leverage Ratio in June 2015.⁸

Monitoring Exercise

The EBA reported in September 2015⁹ that, assuming full implementation of the new Basel III leverage framework exposure measure and the CRD IV–CRR capital measure, Group 1 banks¹⁰ show a Leverage Ratio of 4%, while the ratio for Group 2 banks is 5% as of 31 December 2014. Approximately 10% of both Group 1 and Group 2 banks would not fulfil the preliminary target Leverage Ratio requirement, and the shortfall in Tier 1 Capital required would amount to EUR 7 billion. The Basel Committee also published a monitoring report the same month.¹¹

United Kingdom

In July 2015, the Bank of England Financial Policy Committee directed the Prudential Regulation Authority (PRA) to implement a UK Leverage Ratio framework¹², and the PRA issued a Consultation Paper (CP)¹³ which set out how it intends to achieve this. It proposed that firms in scope be required to meet a minimum Leverage Ratio requirement and to consider whether they hold an amount of Common Equity Tier 1 that is greater than or equal to their CounterCyclical Leverage Ratio Buffer (CCLB), and if the firm is a Global-Systemically Important Institution (G-SII), their G-SII Additional Leverage Ratio Buffer (ALRB). It proposed that firms in scope also be subject to Leverage Ratio reporting and disclosure requirements. This CP was relevant to PRA-regulated banks and building societies with consolidated retail deposits equal to or greater than £50 billion. The consultation closed on 12 October, and the PRA plans to publish a policy statement with feedback, finalised rules and supervisory statements by the end of 2015.

United States

In the US the final Basel III rule was approved in 2013, and effective in 2014. The rule included the generally applicable US Tier 1 Leverage Ratio minimum requirement of 4% of Tier 1 Capital to total on-balance-sheet assets, and introduced the Supplementary Leverage Ratio (SLR) (i.e., the Basel III Leverage Ratio) minimum requirement of 3% of Tier 1 Capital to total leverage exposure for all US banking organisations subject to the advanced approaches rule (i.e., banking organisations with total consolidated assets equal to \$250 billion or more, or consolidated total on-balance-sheet foreign exposure equal to \$10 billion or more, and their subsidiaries), effective in 2018. The SLR was revised in 2014, consistent with the 2014 Basel Committee revisions to the Basel III Leverage Ratio. In addition, in 2014 the agencies adopted enhanced SLR standards for Global-Systemically Important Bank (G-SIB) holding companies and their insured depository subsidiaries (equivalent to 5% and 6% of total leverage exposure, respectively). US top-tier holding companies subject to the advanced approaches rule started disclosing the SLR in 2015, using the two common disclosure templates contained in the Basel III Leverage Ratio framework. Incorporation of the SLR disclosure into quarterly regulatory reporting is forthcoming.¹⁴

Non-Risk Based Constraint

According to the EBA, the Leverage Ratio requirement is a constraint for more than three quarters of the Group 1 banks. The Leverage Ratio, rather than the Tier 1 Capital ratio, is said to be a constraint for a bank if that bank requires more capital to meet the minimum Leverage Ratio requirement than to meet the minimum requirement for the Tier 1 Capital ratio; to be precise, it is deemed to be a constraint when 3% of the Leverage Ratio exposure exceeds the minimum Tier 1 Capital ratio times the RWA. For a Tier 1 Capital ratio of 8%, this is equivalent to 3x exposure being greater than 8x RWA. For such a bank, a shift of assets from less risky to more risky would not affect its constraining requirement.

⁸ EBA FINAL draft Implementing Technical Standards amending Commission Implementing Regulation (EU) No 680/2014 (ITS on supervisory reporting) with regard to the Leverage Ratio (LR) following the EC's Delegated Act on the LR (EBA/ITS/2015/03), European Banking Authority, 15 June 2015.

⁹ CRD IV–CRR/Basel III monitoring exercise report: Results based on data as of 31 December 2014, European Banking Authority Task Force on Impact Studies, 15 September 2015.

¹⁰ Group 1 banks are those that have Tier 1 Capital in excess of €3 billion and are internationally active. All other banks are categorised as Group 2.

¹¹ Basel III Monitoring Report, Basel Committee on Banking Supervision, September 2015.

¹² Financial Stability Report (Issue No. 37), Bank of England, July 2015.

¹³ Implementing a UK leverage ratio framework (Consultation Paper | CP24/15), Prudential Regulation Authority, July 2015.

¹⁴ Ninth progress report on adoption of the Basel regulatory framework, Basel Committee on Banking Supervision, October 2015.

Future Developments

The EBA announced in August 2015 that it will incorporate additional analysis into its calibration report on the Leverage Ratio, following a request by the European Commission to obtain further advice so as to ensure its possible future policy actions in this area are well informed. The EBA is mandated to produce a calibration report on the Leverage Ratio by October 2016, but it has stated that the delivery date is likely to be advanced to July 2016.

How We Can Help

Avantage Reply is a specialised management consultancy delivering initiatives in areas including leverage and capital requirements. Our capabilities include regulatory interpretation and implementation and business and technology change. We would be happy to discuss in more detail the Leverage Ratio and its implications on the business of your organisation.

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