4 March 2014

Report on impact of differences in leverage ratio definitions

Leverage ratio exposure measure under Basel III and the CRR

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Abbreviations

BCBS	Basel Committee on Banking Supervision
CCF	Credit conversion factor
CCPs	Central counterparties
CEM	Current exposure method
CRD	Capital requirements directive
CRR	Capital requirements regulation
CVM	Cash variation margin
EBA	European Banking Authority
EU	European Union
IFRS	International Financial Reporting Standards
IRB	Internal ratings-based approach
LCR	Liquidity coverage ratio
LR	Leverage ratio
OEM	Original exposure method
OJ	Official journal
OTC	Over-the-counter
PFE	Potential future exposure
QCCP	Qualifying central counterparty
QIS	Quantitative impact study
RWA	Risk-weighted assets
SA	Standardised approach
SFT	Securities financing transaction
UCC	Unconditionally cancellable commitment
USGAAP	Generally Accepted Accounting Principles (United States)

Executive Summary

This report provides a policy analysis and quantitative impact assessment of aligning the current CRR[1] definition of the leverage ratio exposure measure to the Basel III standard published by the Basel Committee on 12 January 2014 ('Basel III'). This is an own initiative report intended to inform the EU Commission in view of its delegated act on the definitions for the leverage ratio as per Article 456(1)(j) CRR, by which the capital measure and total exposure measure can be amended before the start of public disclosure in 2015.

The report uses data gathered for Basel III-monitoring up to 30 June 2013. The sample consists of 173 EU institutions (41 Group 1 banks and 132 Group 2 banks) from 18 countries.[2] The CRR definition of the leverage ratio and the Basel III definition have not yet been tested through a quantitative impact study (QIS), which implies that the corresponding estimations are based on a number of simplifying assumptions as the available data did not always allow for an assessment with full precision.[3]

The overall quantitative impact of aligning the CRR leverage ratio definition of the exposure measure to Basel III is not clear-cut as it depends a lot on the treatment of Securities Financing Transactions (SFTs). With regard to these transactions, the CRR text may allow for different interpretations. This has been reflected by two alternative interpretations of the CRR text in this report. Interpretation 1 is that solely Article 429(9) CRR determines leverage ratio exposure for SFT positions, whereas under interpretation 2, accounting SFT assets are considered in the exposure measure in addition to the exposure amounts obtained through application of Article 429(9) CRR.[4] Interpretation 2 is relatively similar to the SFT treatment in Basel III.

Table 1: Average leverage ratios (%) by Group[5]

	Basel III	CRR LR SFT 1	CRR LR SFT 2
Group 1	**3.3**	**3.3**	**3.1**
Group 2	**3.9**	**3.9**	**3.8**

In Table 1 above the average leverage ratios are indicated when calculated according to Basel III and the CRR (under either interpretation of SFT treatment). Particularly given that interpretation 2 is relatively similar to the SFT treatment in Basel III, the difference in the Group 1 leverage ratio average of 0.2%

[1] As published on 26 June 2013 in the OJ (Regulation (EU) No 575/2013, ('CRR').

[2] Group 1 banks are internationally active institutions with Tier 1 capital in excess of EUR 3bn under Basel II. All remaining institutions are classified as Group 2 banks

[3] Chapter 2 contains a description of the methodology.

[4] A detailed description of the CRR SFT treatment is provided in Section 3.1 of this report.

[5] All leverage ratio averages are calculated using the same numerator (i.e. the amount of fully phased-in Basel III Tier 1 capital).

between Basel III (3.3%) and CRR SFT interpretation 2 (3.1%) can be understood to result from other, non-SFT related factors, especially the stricter treatment of off-balance sheet items under the CRR. Under CRR interpretation 1 for SFTs, the treatment is less strict than Basel III and this approximately compensates for the treatment of off balance sheet items which is stricter than Basel III, thus explaining the 3.3% for Group 1 banks under both definitions. The same observation can be made for Group 2 banks.

Detailed descriptions of the differences between the leverage ratio definition under the CRR and Basel III are provided in Chapters 3 and 4 of the report and were identified in particular in the areas listed in Table 2. The individual effects of these differences are displayed as percentage changes to the total leverage ratio exposure measure if the CRR treatment had been applied instead of Basel III.

Table 2: Percentage changes in leverage ratio exposure if the treatments of the CRR are applied instead of those of Basel III

	The percentage by which the total exposure measure under the CRR would be larger (+) or smaller (-) than under Basel III as a result of each definitional difference			
	Group 1		Group 2	
Credit conversion factors for off-balance sheet items	+6.5		+3.8	
Treatment of cash variation margin	+1.7		+0.9	
Consolidation scope	+1.4		+0.1	
Treatment of written credit derivatives	-2.9		-0.6	
Securities Financing Transactions: CRR interpretation 1 and 2	-7.9	+0.6	-3.2	+0.2
Overall percentage change in total exposure measure when applying the CRR in the above-stated areas instead of Basel III [6]	-0.5	+7.5	+0.9	+4.3

As is discernible from Table 2, the combined effects of the differences result on average in a 0.5% lower leverage ratio exposure measure under SFT interpretation 1 and a 7.5% higher leverage ratio exposure measure under SFT interpretation 2 for Group 1 banks if the CRR definitions are applied instead of Basel III. For Group 2 banks, the CRR leverage ratio exposure is on average 0.9% higher under SFT interpretation 1 and 4.3% higher under SFT interpretation 2 than the leverage ratio exposure under Basel III.

As indicated above, the quantitative impact is mostly driven by the differences in the treatment of off-balance-sheet items and SFTs, whereas the impact of the differences in the treatments of cash variation margin, written credit derivatives and consolidation scope is more subtle on average despite being material

[6] As only 149 out of the 173 participating institutions provided sufficient data on the EU-specific treatment for Securities Financing Transactions, the overall percentage changes in the bottom row of Table 1 vary slightly from the sum of the partial effects regarding each definitional difference.

for particular banks as revealed by the sensitivity analyses presented in Chapter 4. Regarding SFTs, the table underlines the earlier explication that CRR interpretation 2 is relatively close to the treatment under Basel III (the leverage ratio exposure measure would on average increase by 0.6% for Group 1 and by 0.2% for Group 2 banks).

It is to be noted that Table 2 only provides average differences in the size of the leverage ratio exposure measure, and that the impact may deviate considerably at an individual bank level. Particularly, the CRR leverage ratio exposure is larger (and consequently CRR leverage ratios are lower) than under Basel III for most banks irrespective of the CRR SFT interpretation.

In the interest of consistency between the leverage ratio calculation within the EU and the other jurisdictions that implement Basel III, the EBA recommends aligning the CRR to Basel III in terms of the definitions of the leverage ratio exposure measure as detailed in this report (including written credit derivatives). The revised Basel III framework leads to a more accurate measure of leverage and its implementation in the EU framework would, as estimated in this report, lead to leverage ratios that are broadly in line with, or possibly slightly higher than, leverage ratios calculated according to the current CRR. Some reservations on specific parts of the analysed treatments nonetheless remain and are highlighted in the remainder of the report. In particular, there is no definite conclusion on the issue whether, as an alternative to the mark-to-market method, the original exposure method could be applied by institutions as the impact is subject to a longer term review in accordance with Art. 511(3)(e) CRR. The analysis underlying this report has not indicated any EU specificities which would make the EBA recommend a divergence from the BCBS.

Further, it is to be noted that in the event the EU Commission delegated act does not align the treatment of SFTs with that of Basel III, the EBA recommends that the treatment in the current CRR be clarified in accordance with interpretation 2 on the basis that this treatment is more prudent and closer to the Basel III treatment.

The remainder of this report is structured as follows: Chapter 1 highlights the main events of the previous years that have resulted in the implementation of the leverage ratio in the CRR with certain differences when compared to Basel III. Chapter 2 contains important caveats regarding the methodology applied which should be taken into account when interpreting the results. Chapters 3 and 4 provide more detailed policy analyses and quantitative impact assessments of aligning the CRR definition of the leverage ratio exposure measure to Basel III. Finally, Annex I contains a list of differences described in this report and how they relate to the CRR.

1. Background

The CRD IV/CRR introduce a leverage ratio that is based on the Basel III Framework of the Basel Committee on Banking Supervision (BCBS).[7] Since the publication of the Basel III Framework in December 2010, the BCBS has further refined the exposure measurement of the leverage ratio and has developed a uniform format for leverage ratio disclosure, which becomes a requirement from January 2015 onwards. The new BCBS leverage ratio framework was published as a consultative document in June 2013 and, subsequently, a finalised version on 12 January 2014 ('Basel III').[8]

The EU implementation of the Basel III leverage ratio calculation is provided in Article 429 CRR. At present, this definition mirrors the Basel III Framework from December 2010 in many ways which results in the current divergence from Basel III. However, Article 456 (1) (j) CRR empowers the European Commission to amend the capital measure and the total exposure measure of the CRR leverage ratio via delegated act before the start of disclosure in 2015.

This report is made at EBA's own initiative and is intended to set out the main differences between the current CRR leverage ratio and the Basel III leverage ratio with a view to inform the EU Commission for the purpose of its delegated act. Separately, the EBA is working on an Implementing Technical Standard on disclosure for the leverage ratio as mandated by Article 451 (2) CRR.

[7] See Basel Committee on Banking Supervision (2011): Basel III: A global regulatory framework for more resilient banks and banking systems – revised version June 2011. http://www.bis.org/publ/bcbs189.htm

[8] See Basel Committee on Banking Supervision (2014): Basel III leverage ratio framework and disclosure requirements http://www.bis.org/publ/bcbs270.htm

2. Methodology

2.1 Data and data quality

The quantitative analyses in this report were performed based on the data from Basel III-monitoring as of 30 June 2013 for EU institutions. This is the only date for which the templates of the Basel III-monitoring were supplemented by one additional leverage ratio template capturing data according to EU-specific definitions. The sample consists of 173 EU institutions (41 Group 1 banks and 132 Group 2 banks) from 18 countries. In line with other EBA publications that are based on data from Basel III-monitoring, the coverage for the participating member states can generally be considered broad with regard to Group 1 banks. Regarding Group 2 banks, the coverage of the participating member states' banking systems may vary widely across jurisdictions.

Table 3: Number of institutions included in the analysis

	Group 1	Group 2
Austria	3	6
Belgium	1	2
Denmark	1	8
Finland	-	13
France	5	4
Germany	8	39
Hungary	1	2
Ireland	3	1
Italy	1	11
Luxembourg	-	1
Malta	-	4
Netherlands	3	15
Norway	1	7
Poland	-	5
Portugal	3	3
Spain	2	4
Sweden	4	-
United Kingdom	5	7
Total	**41**	**132**

Participating banks submitted comprehensive and detailed non-public data on a voluntary and best-efforts basis. National supervisors worked with banks to ensure data quality, completeness and consistency with the published reporting instructions. This led to the conclusion that the quality of the available data was sufficient to inform the analyses of the report.

Despite this general conclusion, it should be noted that additional data quality checks revealed several data issues at individual banks. Most of these data issues related to the banks' reporting of derivatives exposures, cash collateral and Securities Financing Transactions (SFTs). **Especially regarding SFTs, the data quality checks performed indicate that many banks are unsure about the application of the CRR treatment (in Section 4.1 of the report, it is explained in more detail that the CRR text may provide scope for different interpretations).** In cases where obvious errors in the reported data could be identified, the respective banks were removed from the analysis. Regarding the application of the Original Exposure Method (OEM) in the leverage ratio exposure measure[9], the quality of the data was deemed insufficient for a quantitative analysis. For this reason, no quantitative analysis on applying the OEM is included in this report. However, the impact of applying the OEM will be properly reviewed in a future report pursuant to Article 511 CRR.

2.2 'Composite bank' weighting scheme

Average amounts in this document have been calculated by creating a composite bank at a total sample level, which implies that the total sample averages are weighted. For example, the average change in the leverage ratio exposure is the sum of all banks' changes in the leverage ratio exposure measure divided by the sum of all banks' leverage ratio exposure measures.

2.3 Interpretation of results

According to Basel III and the CRR, the numerator of the leverage ratio is Tier 1 capital (to which the usual transitional arrangements for the definition of capital may apply). All results are calculated on the basis of the fully phased-in Basel III definition of Tier 1 capital, i.e. without considering transitional arrangements related to deductions and grandfathering of certain Tier 1 instruments. This implies that the Basel III capital amounts shown in this report assume that all deductions are fully effective and all non-qualifying capital instruments are fully left out. Moreover, any potential differences between the CRR definition of capital and the Basel III definition of capital are not reflected in the analysis as in the voluntary exercise banks were only asked to report according to the Basel III definition. In addition, it is important to note that the monitoring exercise is based on static balance sheet assumptions, i.e. the effects of banks' management decisions after the reporting date are not reflected.

Furthermore, it is important to take into consideration that the data from Basel III-monitoring as of 30 June 2013 only allow for a precise calculation of the leverage ratio as defined in the BCBS consultative paper from June 2013. The data do not allow for a precise calculation of the CRR

[9] This is pursuant to Article 429(7) CRR

(because of its very recent calibration) and the Basel III leverage ratios. However, the quantitative impact of applying the CRR-specific definitions and Basel III definitions in the leverage ratio exposure measure can be reasonably gauged.

Table 4 shows how the leverage ratio definitions that are analysed in this report are calculated in detail. Apart from the leverage ratio based on the June 2013 BCBS consultative document, the table includes proxy definitions for two CRR leverage ratios (reflecting different interpretations of the CRR SFT treatment) and the Basel III leverage ratio.

Table 4: Approximations for leverage ratios used in this report

	Basel III	CRR leverage ratio (proxy definition with SFT interpretation 1)	CRR leverage ratio (proxy definition with SFT interpretation 2)
Capital Measure	Fully phased-in Basel III Tier 1 capital		
Derivatives	Derivatives exposure according to Current Exposure Method/ Mark-to-Market Method. **Recognition of cash collateral in the replacement cost component**	Derivatives exposure according to Current Exposure Method/Mark-to-Market Method **without recognition of cash collateral**	
SFTs	Accounting SFT exposure with **netting based on accounting criteria plus add-on for counterparty risk**	SFTs exposure based on methods in accordance with **Article 220 (1) to (3) and Article 222 CRR**	Accounting SFT exposure with **netting based on accounting criteria plus** SFTs exposure based on methods in accordance with **Article 220 (1) to (3) and Article 222 CRR**
Other Assets	Accounting values of all assets that are not derivatives or SFTs assuming no netting or risk mitigation. **Deduction of receivables for cash collateral posted**	Accounting values of all assets that are not derivatives or SFTs assuming no netting or risk mitigation.	
Written credit derivatives	**Recognition at notional amount** which can be offset with bought credit derivatives if supervisory criteria are met	**No recognition of notional amounts.** Only recognised in the general derivatives treatment (i.e. Mark-to-Market Method)	

	Basel III	CRR leverage ratio (proxy definition with SFT interpretation 1)	CRR leverage ratio (proxy definition with SFT interpretation 2)
Off-Balance Sheet Items	**Application of the CCFs from the standardised approach to credit risk subject to a floor of 10%**	10% CCF applied to unconditionally cancellable commitments, 100% CCF applied to all other items	
Deductions from the leverage ratio exposure measure	Fully phased-in Basel III regulatory adjustments from Tier 1 capital that are related to assets		
Treatment of entities included in the scope of accounting consolidation but not prudential consolidation	Included at investment value in 'other assets'	Look-through approach to exposures in financial sector entities. Securitisation entities and commercial entities included at investment value in 'other assets'	

In reference to Table 4, the following caveats need to be considered when interpreting the results:

Basel III leverage ratio: The approximation used for the quantitative impact assessment is considered to be the best possible estimation of the Basel III definition given the available data. However, certain refinements that are part of Basel III are not reflected. In particular, the data do not allow for a differentiation between cash variation margin (CVM) and cash initial margin received or posted by institutions in relation to derivatives transactions.[10] For SFTs, the accounting criteria for netting are applied rather than the exact criteria of Basel III.[11] Notional amounts of credit derivatives are not capped at the maximum possible loss.[12] Finally, the trade legs with CCPs of client-cleared derivatives transactions are fully included in the exposure.[13]

CRR leverage ratio (proxy definition with SFT interpretation 1): The capital measure and regulatory adjustments to capital are not based on the CRR definitions but on the fully phased-in

[10] For more details, please refer to Section 3.4.

[11] For more details, please refer to Section 3.1.

[12] For more details, please refer to Section 3.3.

[13] For more details, please refer to Section 4.1.

BCBS definitions. The impact of lower conversion factors for trade-related off-balance-sheet items is not reflected by the data as these items cannot be isolated. Derivatives exposures are all measured by application of the Mark-to-Market Method, i.e. the option of applying the Original Exposure Method is not taken into account. Due to the room for interpretation that exists under the CRR in relation to the treatment of SFTs, the actual impact may be underestimated under "interpretation 1" as it is assumed that SFT accounting exposure must not be included in the leverage ratio exposure measure. [14]

CRR leverage ratio (proxy definition with SFT interpretation 2): As under CRR interpretation 1, except that it is assumed that SFT accounting exposure must be included in the leverage ratio exposure measure in addition to the SFT-specific treatment in accordance with Articles 220 (1) to (3) and 222 CRR. [15]

2.4 Policy and sensitivity analyses

The differences between the different leverage ratio definitions are described in detail in Sections 3.1 to 4.3 alongside sensitivity analyses for Sections 3.1 to 3.5.

[14] For more details, please refer to Section 3.1.

[15] For more details, please refer to Section 3.1.

3. Main policy issues

For each policy topic in this section a sensitivity analysis is provided for assessing how the differences between Basel III and the CRR affect the leverage ratio exposure measure of Group 1 and Group 2 banks. The result of these sensitivity analyses are presented both in terms of average changes in the total leverage ratio exposure measure as well as via scattergrams to indicate the variance in impact between institutions.

Before moving to the different sections relating to the separate components of the leverage ratio exposure, Figures 1 and 2 reflect the variance in the overall difference in leverage ratio exposure measure. These scattergrams complement the difference in leverage ratio exposure measure as indicated in the last row of table 2, which provided only average differences in the size of the leverage ratio exposure measure.

As Figures 1 and 2 indicate, the CRR leverage ratio exposure is larger (and consequently CRR leverage ratios are lower) than under Basel III for most banks irrespective of the CRR SFT interpretation, reflecting the fact that SFT exposures in the banking system tend to be concentrated at a subset of institutions. More in particular, the CRR leverage ratio exposure is larger than Basel III for 65.6% of Group 1 banks and 81.5% of Group 2 banks under CRR SFT interpretation 1 and for 96.9% of Group 1 banks and 91.1% of Group 2 banks under CRR SFT interpretation 2.

Figure 1: Overall percentage changes in the leverage ratio total exposure measure if CRR treatments are applied instead of Basel III; no inclusion of the accounting values for SFTs (interpretation 1)

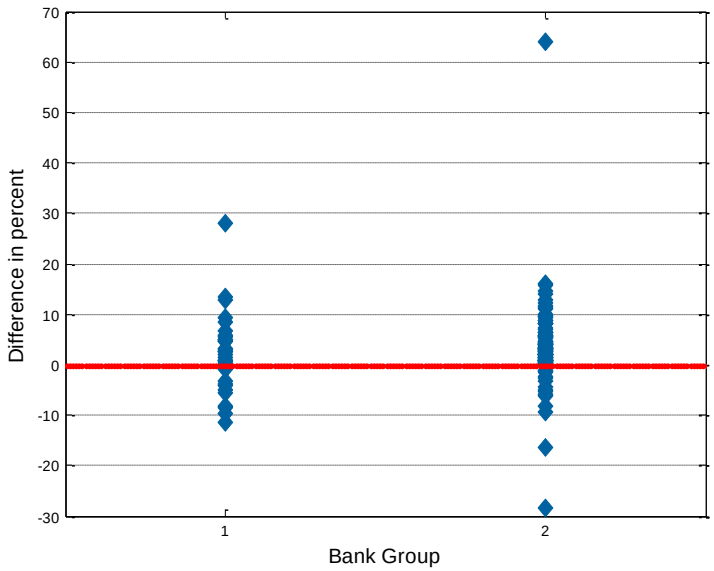
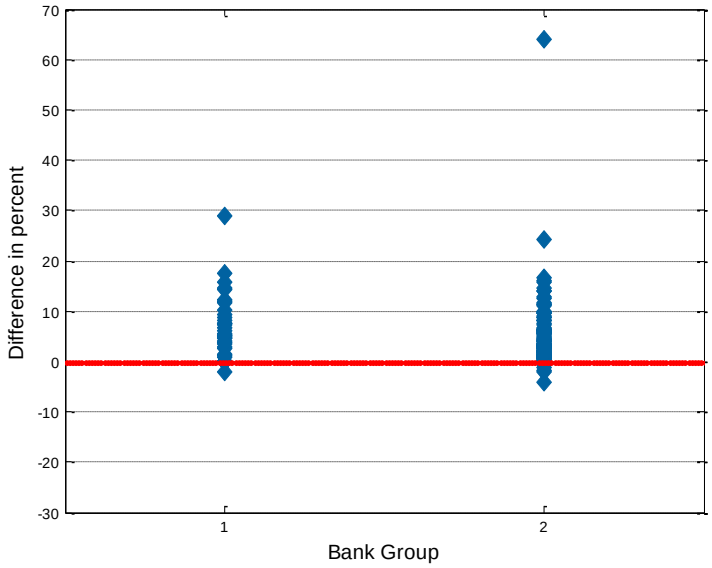


Figure 2: Overall percentage changes in the leverage ratio total exposure measure if CRR treatments are applied instead of Basel III; inclusion of the accounting values for SFTs (interpretation 2)



3.1 Treatment of Securities Financing Transactions (SFTs) [16]

Basel III

The treatment for SFTs consists of the following two components:

a) A measure of the accounting (cash) payables and (cash) receivables. Banks may net accounting payables and receivables for transactions between the same counterparties if certain supervisory netting criteria are met.[17] These criteria are based on both IFRS and US GAAP netting rules to ensure international comparability:

- transactions have the same explicit final settlement date;
- the right to set off the amount owed to the counterparty with the amount owed by the counterparty is legally enforceable both currently in the normal course of

[16] SFTs comprise the following transactions according to Article 429 (9) CRR: repurchase transactions, securities or commodities lending or borrowing transactions, long settlement transactions and margin lending transactions including those that are off-balance sheet.

[17] For SFT assets subject to novation and cleared to a qualifying central counterparty (QCCP), accounting SFT assets are replaced by the final contractual exposure, given that pre-existing contracts have been replaced by new legal obligations.

business and under the following circumstances: (i) default; (ii) insolvency; and (iii) bankruptcy; and

- the counterparties intend to settle net, settle simultaneously, or the transactions are subject to a settlement mechanism that results in the functional equivalent of net settlement, that is, the cash flows of the transactions are equivalent, in effect, to a single net amount on the settlement date. To achieve such equivalence, both transactions are settled through the same settlement system and the settlement arrangements are supported by cash and/or intra-day credit facilities intended to ensure that settlement of both transactions will occur by the end of the business day and the linkages to collateral flows do not result in the unwinding of net cash settlement.

b) A measure of counterparty credit risk representing any over-collateralisation (the total fair value of securities and cash lent to a counterparty less the total fair value of cash and securities received from the same counterparty, floored at zero[18]). For simplicity, haircuts for price and FX volatility are not applied.

Furthermore, where the institution is acting as an agent to one party in an SFT and provides a guarantee/indemnity for any difference between the value of the security or cash lent and the value of collateral provided, the exposure is limited to the amount the institution could lose by applying only component b of the SFT treatment.[19] Where sales-accounting is achieved, this must be reversed-out and the exposure should be in line with the method above.

The rationale behind this treatment is for the netting criteria to be robust enough to permit netting of accounting (cash) payables and (cash) receivables where there should be no (gross) exposure to the institution, whilst at the same time ensuring they can be consistently applied across jurisdictions. The counterparty credit risk exposure aims to reflect the exposure in case of counterparty default rather than in case of a default of the debtor of the underlying security. This is especially important for security exchanges, as otherwise these transactions may not receive any exposure charge.

In its June 2013 consultative document, the BCBS proposed a no-netting approach for accounting cash payables and receivables as this was seen as the simplest way to ensure international comparability. The counterparty credit risk add-on was also included. Many commenters criticised the no-netting approach by asserting that this would overstate the actual exposure of SFTs and associated risk: i) resulting in a less deep and liquid repo market which in turn may hamper short-term lending, ii) creating perverse incentives to engage in unsecured trades or to seek

[18] Netting between cash/securities lent and cash/securities borrowed can be performed on a netting set basis where there are eligible master netting agreements. Otherwise, the netting is applied on a transaction level.

[19] Moreover, where an institution acts as an agent in an SFT transaction and does not provide an indemnity or guarantee to any of the involved parties, the institution is not required to recognise the SFT transaction in the exposure measure.

securities instead of cash collateral, and iii) having negative repercussions on monetary policy transmission.

Current EU implementation

Article 429 (5) CRR stipulates the general principle that assets should be recognised according to the accounting treatment. Importantly, the potential effects of physical or financial collateral, guarantees or credit risk mitigation purchased are stripped out, as the leverage ratio is intended to be a non-risk measure. As SFT accounting (cash) receivables are assets, it could be inferred that they fall under the application of Article 429 (5) CRR, the implication of which appears to be that accounting netting between SFT accounting (cash) payables and (cash) receivables would apply, as it is not explicitly de-recognised.

In addition, Article 429 (9) CRR specifies a specific exposure measure for SFTs. Under the method set out in Article 220 CRR, the exposure is defined as the total fair value of securities and cash lent to a counterparty less the total fair value of cash and securities received from the same counterparty, and is therewith similar to the second component of Basel III for SFTs. Contrary to Basel III for SFTs, price and FX volatility haircuts are applied (leading to an increase in exposure) which institutions can choose to calculate via the Supervisory Volatility Adjustments Approach or the Own Estimates Volatility Adjustments Approach (CRR Article 220). Importantly, the application of Article 220 CRR is restricted to exposures covered by master netting agreements.

Furthermore, under CRR Article 429 (9), in conjunction with Article 222, institutions which calculate their risk-weighted exposure amounts according to the Standardised Approach (SA) may use the Financial Collateral Simple Method to calculate their SFT exposures (under this method, risk-weights are applied to the collateralised part of the exposure).

Since the haircut approach applies to exposures under master netting agreements and the Financial Collateral Simple Method to SA users, the CRR currently appears to be unclear about the treatment of internal ratings-based exposures that are not covered by master netting agreements.

In addition, the CRR is not explicit as to whether the specific exposure measure for SFTs replaces the general accounting treatment (interpretation 1) or whether the SFT treatment is to apply the accounting value plus the specific treatment for SFTs as an add-on (interpretation 2). Interpretation 2 may be justified by the fact that SFTs, different from derivatives, are not explicitly exempted from the application of Article 429(5)(a) CRR.

Moreover, as currently specified by Article 429 (9) CRR, banks shall determine SFT exposures in accordance with both Article 220 (1) to (3) and Article 222 CRR. This additive application would result in a double counting of exposures and has been disregarded for the purpose of this report.

Finally, unlike Basel III, the CRR does not make a distinction between principal and agent transactions, and does not clarify the treatment for SFTs subject to sale accounting.

Policy considerations (Final BCBS standard as 'B3' and CRR as 'EU)

	Pros	Cons
B3	• Aims to be consistent across accounting standards. • Captures counterparty credit risk exposure. • Recognises the exposure reducing effect of net settlement provided strict conditions are met.	• The impact of the netting criteria is uncertain. • Netting criteria may introduce difficulties in comparability or an un-level playing field between large and small institutions. • The counterparty credit risk add-on is less precise than the CRR treatment which applies haircuts.
EU	• CRR interpretation 2 is largely consistent with the final BCBS standard (i.e. accounting exposure plus add-on). • Recognises, under CRR interpretation 2, the exposure-reducing effect of net settlement provided strict conditions are met. • Captures counterparty credit risk (according to both CRR interpretations). • The method of Article 222 CRR provides for an operationally simple alternative to the more sophisticated method of Article 220 which may be important for smaller banks.	• Ambiguous and therefore open to interpretation. • Permits accounting netting. This makes it difficult to compare with firms applying different accounting standards. • Permits the use of different methodologies to calculate the exposure. The CRR also asks firms to add these treatments to the same SFT exposure which would result in a double counting. • Unclear how exposures that are subject to the IRB approach but not covered by a master netting agreement are measured under CRR. • No clarification of agent transactions and those with sale accounting. • The method of Article 222 CRR applies risk-weights which is against the principles of the leverage ratio.

Quantitative impact assessment

Figure 3: Percentage changes in the leverage ratio total exposure measure if CRR treatment is applied to SFTs (without the SFT accounting values, 'interpretation 1') instead of Basel III

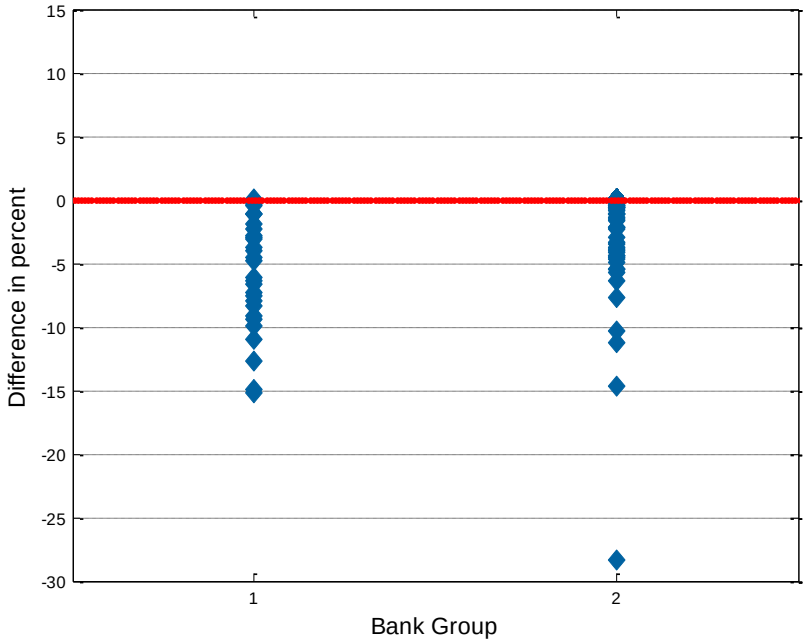
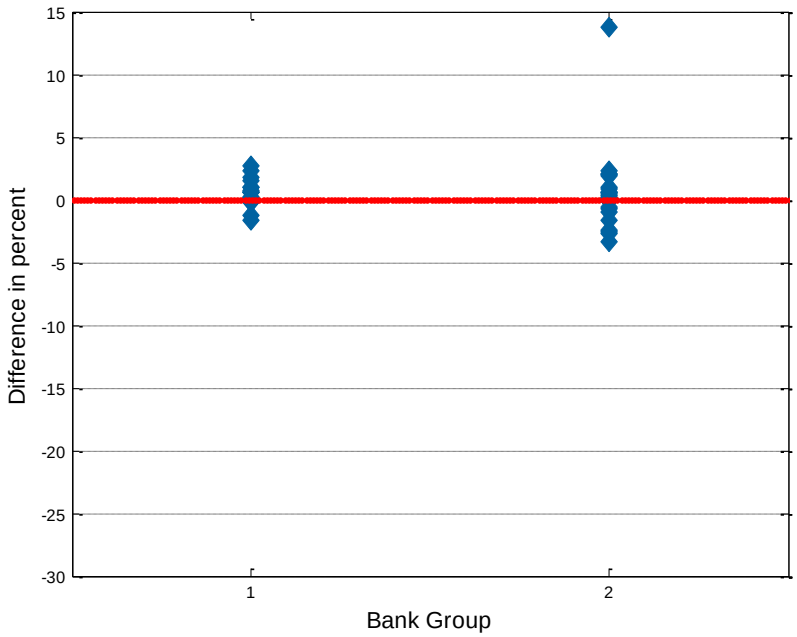


Figure 3 shows the percentage change in total leverage exposure when applying only the CRR add-on in accordance with Article 429 (9) (interpretation 1) instead of the Basel III treatment for SFTs. For the Basel III calculation the proxy calculation includes the accounting value plus the counterparty credit exposure. This proxy is likely to underestimate the actual netting allowed under Basel III and therefore the total exposure measure may be slightly overestimated.

Figure 4: Percentage changes in the leverage ratio total exposure measure if the CRR treatment is applied to SFTs (including the SFT accounting values, 'interpretation 2') instead of the Basel III treatment



As is clear from Figure 4, the change in exposures resulting from applying the accounting values plus the CRR add-on (interpretation 2) instead of Basel III has a much less material impact than interpretation 1, with impacts on exposure generally ranging from -3% to +3%, except for one Group 2 bank (+14%). Regarding component b of the SFTs' exposure, the counterparty credit risk add-on of Basel III does not include haircuts. On the other hand, Article 222 CRR provides for a risk-weighting which may lead in some cases to a smaller add-on than under Basel III. This may explain the apparent inconsistency in exposure variations with some banks reporting increases and others reporting decreases in their total exposure.

The difference in impacts when applying CRR interpretation 1 versus interpretation 2 highlights the importance of clarifying an unambiguous and harmonised treatment for SFTs.

3.2 Treatment of off-balance sheet items (OBS)

Basel III

Under Basel III, the credit conversions factors (CCFs) for OBS are aligned with those of the Standardised Approach (SA) to credit risk but floored at 10%. Therefore, the CCFs for the undrawn parts of commitments (for which there is no recognition on-balance-sheet) will be a portion of the notional amount corresponding to the risk of these commitments being drawn down in the future.

For commitments other than securitisation liquidity facilities with an original maturity up to one year and for short-term self-liquidating trade letters of credit arising from the movement of goods the CCF is 20%. For commitments other than securitisation liquidity facilities with an original maturity over one year, certain transaction-related contingent items, note issuance facilities and revolving underwriting facilities as well as eligible liquidity facilities that are OBS securitisation exposures the CCF is 50%. For unconditionally cancellable commitments (UCCs) and automatically cancelled commitments upon deterioration in a borrower's credit worthiness as well as certain undrawn servicer cash advances or facilities, the CCF is 10%. The remaining OBS items, such as direct credit substitutes or commitments with certain drawdown, receive a CCF of 100%.

The 2010 Basel III text and June 2013 BCBS consultative document both generally included all OBS at a uniform 100% CCF because the full amount of such exposures may be drawn down, especially in volatile periods. A 10% CCF was applied to unconditionally cancellable commitments (UCCs) only, because the unconditional right to cancel without notice could enable the institution to reduce these exposures if its balance sheet is expanding too fast.

Commenters on the BCBS consultation argued that trade finance OBS items in particular play an important a role for the real economy and should not receive a 100% CCF as this could impede the provision of such products. Moreover, a 100% CCF would not reflect historically low conversion rates. As for some respondents, it would have been more coherent to treat OBS in a similar way as the Liquidity Coverage Ratio (LCR) does.

Current EU implementation

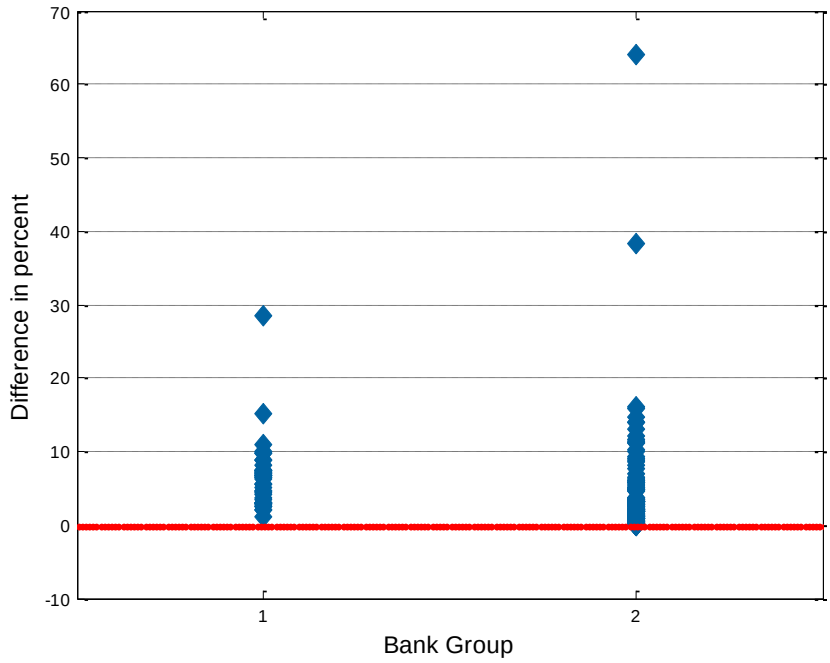
Similarly to the 2013 BCBS consultative document, a uniform 100% CCF is applied to most OBS items. However, the scope of commitments eligible to the 10% CCF is wider than in the 2013 BCBS consultative document. Moreover, due to the potential impact on trade, 20% and 50% CCFs are applied to trade-related OBS items depending on the probability of the draw-down rate (or the riskiness) of the instrument.

Policy considerations

	Pros	Cons
B3	• Historical average draw-down rates on commitments are below 100%, and this is reflected accordingly. • UCCs can be cancelled without prior notice so a 100% CCF may not be appropriate.	• The impact of the netting criteria is uncertain. • Netting criteria may introduce difficulties in comparability or an unlevel playing field between large and small institutions. • Differentiating CCFs by risk of draw-down may appear contradictory for a non-risk-based leverage ratio. • The definitions for OBS items can be subject to interpretation which may enable arbitrage. • May underestimate peak exposures, e.g. the complete draw-down of commitments by financially distressed clients. • It is unclear that a 10% CCF for UCCs reflects actual draw-downs and it may enable banks to change contractual arrangements in a minor way in order to receive a substantial decrease in CCF. • Basel is currently reviewing the SA so these CCF calibrations may change.
EU	• Trade finance: draw-down rates for these items are not 100%, and this is reflected accordingly. • Prudent compared to the final BCBS standard. • UCCs can be cancelled without prior notice, so a 100% CCF may not be appropriate.	• The definition of trade finance is vague and may include a vast amount of items. This increases risk of arbitrage. • It is unclear that a 10% CCF for UCCs reflects actual draw-downs and it may enable banks to change contractual arrangements in a minor way in order to receive a substantial decrease in CCF.

Quantitative impact assessment

Figure 5: Percentage changes in the leverage ratio total exposure measure if CRR treatment is applied to OBS items instead of the Basel III treatment



As is discernible from Figure 5, the CRR treatment of OBS items leads to higher exposure amounts than the Basel III treatment for items except trade finance, UCCs (where trade finance receives the SA 20% and 50% CCFs and UCCs 10% CCF) and those items that receive a CCF of 100% under both the CRR and Basel III.

However, the quantitative assessment for OBS items is subject to two important caveats:

- As the available data are not granular enough to reflect the impact on trade finance in the CRR, Figure 5 applies 100% CCFs to trade finance exposures. Therefore, Figure 5 may overestimate the divergence of the CRR impact from Basel III for some firms.

- In some cases, the 100% CCF is applied to unconditionally cancellable commitments instead of the 10% CCF on the basis of perceived restrictions in some countries' national laws.

The Group 1 weighted average total exposure increase is 6.5%. Most firms which see an increase of more than 10% total exposure are either concentrated in trade finance or carry out activities which may be considered as UCCs but national law could be restricting them from applying a 10% CCF. The Group 2 weighted average increase in total exposure is 3.8%.

3.3 Treatment of written credit derivatives

Basel III

Basel III incorporates a specific treatment for exposures arising from written credit derivatives to reflect the fact that, unlike most other financial derivatives, a written credit derivative creates a notional credit exposure to the underlying in a similar manner to a conventional long position (e.g. bonds).[20] Hence, Basel III generally requires the inclusion of written credit derivatives at a notional amount – capped at maximum possible loss[21] – in the exposure measure. The treatment permits for offsetting where protection is bought on the same reference name at the same level of seniority, under the condition that the remaining maturity of the bought protection is greater than or equal to that of the sold protection. For single name products only, the recognition of hedges is also broadened to cover protection purchased on reference obligations which rank pari passu or junior to the underlying obligation of the same reference name. The offsetting accommodates feedback from the consultation which pointed out that the vast majority of credit derivatives are held in the trading book and are more actively managed than the held-to-maturity positions that are typical for the banking book. Moreover, it reflects the fact that positions in derivatives are typically closed out by entering into an opposing derivative transaction, instead of selling the position such as with conventional long positions (e.g. bonds).

The counterparty exposure amount is captured for the portion offset (in case the protection provider defaults). To avoid double counting, banks are allowed to deduct the PFE add-on amount for a written credit derivative which has not been offset by bought protection.

Certain comments from the consultation asserted that there would be no reason for credit derivatives, specifically if in the trading book, to be treated differently from other derivatives, while noting that the risk-based framework also makes a distinction between instruments held for trading and held-to-maturity purposes. Some commenters recommended broadening the recognition of offsetting to credit derivatives bought, with the same reference entity, that only exceed one year residual maturity.

Current EU implementation

The CRR does not currently include a specific treatment for written credit derivatives. Written credit derivatives are included in the leverage ratio exposure similar to all other financial derivatives − i.e. by applying the Mark-to-Market Method (reflecting the counterparty exposure amount). This treatment is similar to the Basel III Framework from December 2010. At the time

[20] For example, the credit exposure that results from buying a EUR 100 government bond can be considered as equivalent to the economic credit exposure that results from writing EUR 100 worth of credit protection on the same bond (ignoring counterparty credit risk).

[21] This is achieved by reducing the effective notional amounts of written credit derivatives by negative fair value amounts that are incorporated into the calculation of Tier 1 capital.

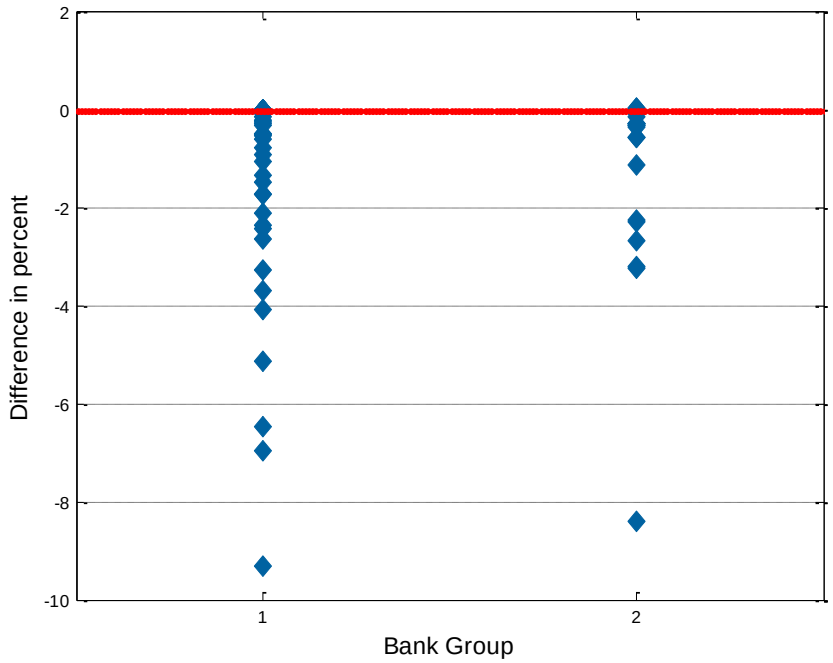
when EU legislators agreed on the CRR, the BCBS had not agreed on the additional treatment for credit derivatives.

Policy considerations

	Pros	Cons
B3	• Captures the notional credit exposure arising from written credit derivatives. • Aligns incentives between written credit derivatives and conventional long positions (e.g. bonds). • Eliminates opportunities for regulatory arbitrage.	• Adds complexity. • Positions held in the trading book are typically managed on a mark-to-market basis (not on a notional amount basis), i.e. the notional treatment is not aligned with the way trading book positions are managed. • May incentivise banks to incur maturity mismatches as the maturity of the protection bought must be equal or longer than the maturity of the protection sold to qualify for offsetting.
EU	• Simple. • Gives further recognition to the non-held-to-maturity nature and hedging capacity within the trading book.	• Does not capture the full credit exposure arising from the contract. • Incentivises banks to take on credit risk by writing credit derivatives instead of investing in conventional long positions (e.g. bonds). • Creates opportunities for regulatory arbitrage.

Quantitative impact assessment

Figure 6: Percentage changes in the leverage ratio total exposure measure if CRR treatment is applied to written credit derivatives instead of the Basel III treatment



On average the decrease in the exposure of the leverage ratio is 2.9% for Group 1 banks and 0.6% for Group 2 banks when applying the CRR treatment instead of the Basel III treatment. As can be seen in Figure 6, the impact varies considerably depending on whether an institution, compared to its size, has a large amount of sold credit derivatives that are not offset according to the applicable supervisory criteria.

3.4 Treatment of cash variation margin (CVM)

Basel III

Basel III allows for a netting of CVM (a specific type of cash collateral that is exchanged on a daily basis and reflects movements in market values) with derivatives market values if certain conditions, such as a daily exchange of the variation margin under an eligible Master Netting Agreement, are fulfilled. As a result, derivatives assets (but not derivatives potential future exposure (PFE)) would be reduced by the amount of CVM received. In addition, (on-balance sheet) receivables for CVM posted would be eliminated through netting with derivatives liabilities.

One of the main arguments for this treatment is that, according to the BCBS, the exchange of daily variation margin is a form of pre-settlement payment that reduces the derivative exposures, as opposed to other types of collateral that protect banks against future counterparty risks.

Different from Basel III, the BCBS consultative document needs to gross up their exposure measure by the amount of any derivatives collateral provided if the accounting standard allows for an elimination of the derivatives liability by the amount of collateral that is posted.

The respondents' main concern regarding the treatment of the BCBS consultative document was that it results in a higher leverage exposure for collateralised derivatives transactions than for uncollateralised derivatives transactions which may be regarded as contradictory to other regulatory initiatives such as CCP-clearing requirements or collateralisation requirements for OTC transactions and may overstate actual economic exposure.

Current EU implementation

Article 429 CRR does not include any special provisions related to the treatment of cash collateral. Therefore, the general accounting treatment applies. The IFRS accounting treatment mirrors the treatment prescribed in the BCBS consultative document, i.e. received collateral may not be used to reduce derivatives exposure and a receivable for posted cash collateral must be recognised in the leverage ratio exposure measure. Hence the treatment prescribed in the CRR differs from that of Basel III and leads to a higher leverage ratio exposure.

Policy considerations

	Pros	Cons
B3	• Consistent with the BCBS's and IOSCO general view that CVM is a form of presettlement. • Aligns the incentives of the LR with other regulatory requirements. • Enables banks to control their derivative exposure which would otherwise fluctuate with the market values of the contracts.	• Does not reflect the accounting treatment of IFRS and may therefore add to complexity for European banks. • Does not reflect intra-day exposures.
EU	• Reflects the accounting treatment under IFRS (the principal accounting framework used in the EU), which does not recognise cash collateral as settlement.	• Creates adverse incentives as the (risk reducing) margining of positions leads to an increase of exposure. • May appear inconsistent with other regulatory initiatives. • May accelerate deleveraging of non-derivatives assets when the leverage ratio is binding as the derivatives exposure cannot be controlled by banks without recognition of CVM.

Quantitative impact assessment

Figure 7: Percentage changes in the leverage ratio total exposure measure if CRR treatment is applied to derivatives cash variation margin instead of the Basel III treatment

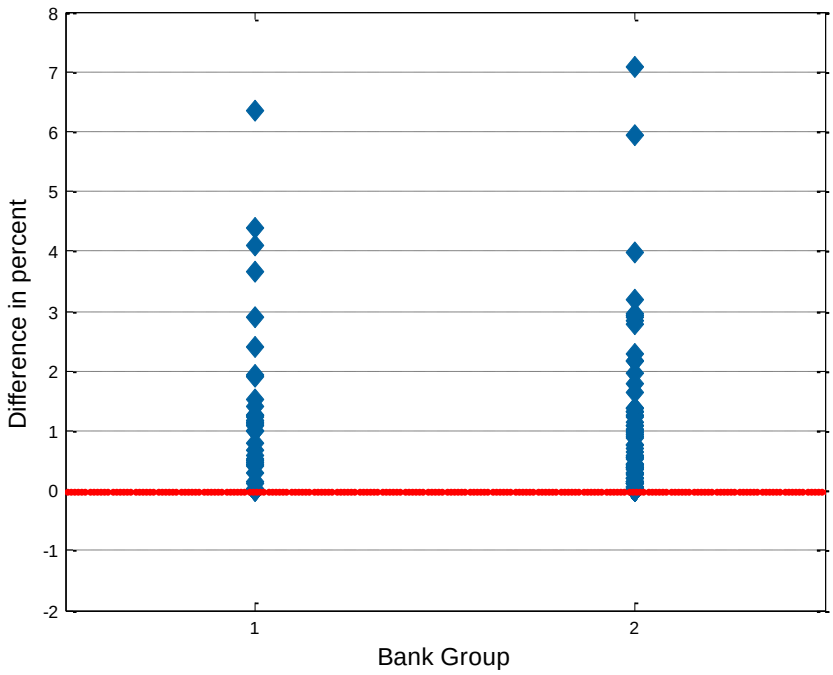


Figure 7 displays the percentage change in the total exposure measure if the CRR treatment is applied instead of that of Basel III. As the available data do not allow for a differentiation between variation margin and initial margin, the results are only the best possible estimate of the actual impact. With this mind, the impact of non-recognition of CVM is generally more significant for Group 1 banks than for Group 2 banks, with an average impact of 1.7% and 0.9% respectively. For three Group 1 banks and three Group 2 banks, the impact is 4.0% or higher.

3.5 Consolidation scope

Basel III

Under Basel III, the scope of consolidation for the purpose of the leverage ratio is the prudential scope of consolidation.[22] This means that exposures are calculated within the same scope as Tier 1 regulatory capital. Therefore, if an entity is included in the accounting scope of consolidation but not in the prudential scope of consolidation, only the investment value of this entity is included in the leverage ratio exposure measure unless it is deducted from Tier 1 capital.

This treatment differs from the one prescribed in the June 2013 BCBS consultative document, according to which the leverage scope of consolidation consists of all entities that are either part of the accounting scope of consolidation or the prudential scope of consolidation. Therefore, any investment in a financial sector, securitisation or commercial entity that is not deducted or only partially deducted from Tier 1 capital but is consolidated for one purpose (accounting or prudential) would have resulted in a consolidation of the underlying leverage exposures. The rationale for this treatment was to deter institutions from moving exposures into non-consolidated entities.

Respondents to the BCBS consultative document noted that this treatment would result in an inconsistent measurement of capital, which is solely determined by the regulatory scope of consolidation, and the leverage ratio exposure measure. In particular, some loss absorbing elements of the capital in the entities that are not captured by the prudential scope of consolidation would be not be recognised. Another important concern is that widening the scope of consolidation beyond the prudential scope creates considerable operational costs for some banking groups.

Current EU implementation

The second subparagraph of Article 429 (4) CRR requires the inclusion of exposures in financial sector entities that are consolidated for accounting purposes but not for prudential purposes.

This treatment differs from that of Basel III as it does not align the scope of consolidation of the exposure measure with the regulatory scope of consolidation determining Tier 1 capital. Moreover, the mere inclusion of these entities is not a proper consolidation and may therefore result in a double counting of intra-group exposures in the leverage ratio exposure measure.

[22] It should be noted that the BCBS is currently reviewing the prudential scope of consolidation.

Policy considerations

	Pros	Cons
B3	• Simple, no operational burden. • Symmetry between numerator and de-nominator. • Consistency in the prudential framework as a whole.	• Less conservative than the risk-based framework for equity exposures. • No capture of leverage outside of prudential scope which may incentivise regulatory arbitrage.
EU	• Captures leverage outside of prudential scope.	• Complexity and operational burden. • Asymmetry between numerator and denominator. • Inconsistent with the specific European supervisory framework and CRR treatment for financial conglomerates. • Unlevel playing field between insurance companies within a banking group and others. • Leads to double counting of intra-group exposures as they are not eliminated as in a proper consolidation.

Quantitative impact assessment

Figure 8: Percentage changes in the leverage ratio total exposure measure if CRR treatment is applied to entities that are outside the scope of prudential consolidation instead of the Basel III treatment

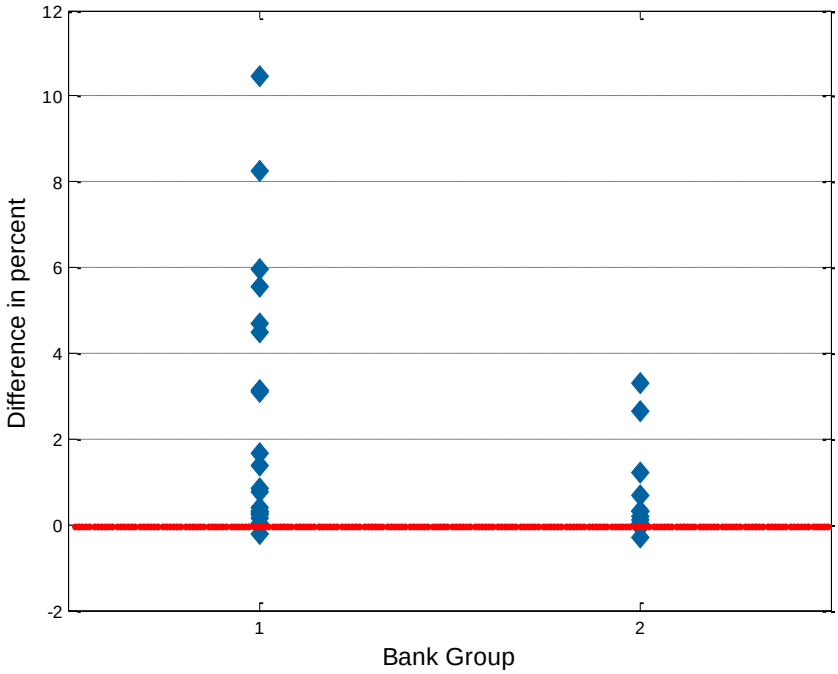


Figure 8 illustrates that switching from the prudential scope of consolidation (Basel III) to the leverage scope of consolidation as defined in Article 429 (4) CRR has no impact for the vast majority of banks in the sample. The average increase in the leverage ratio exposure measure is 1.4% for Group 1 banks and 0.1% for Group 2 banks. Regarding Group 1 banks, the impact is concentrated among six institutions which report at least a 4% change in exposure. It is to be noted that the real impact of the CRR treatment may be underestimated as the CRR provides competent authorities with the option to allow institutions not to deduct their significant equity investments in insurance entities in accordance with Article 49 (1). This could result in a full (rather than a partial) inclusion of underlying exposures of these entities for the purpose of the leverage ratio under CRR. A full inclusion is less likely when applying the Basel III definition of capital since the Basel III text does not provide for this option.

4. Other policy issues

4.1 Treatment of client-cleared derivatives transactions

Basel III

Client clearing is a service for the technical processing of standardised OTC derivative contracts through central counterparties (CCPs). In a client-cleared transaction, a clearing member ensures indirect access to a CCP for a client. There are two main models of client clearing of derivatives: the Principal Model, commonly used in the EU, and the Agency Model, typically operated in the US. The main difference between these two models is that in the Principal Model, a clearing member bank becomes a legal counterparty in two interconnected trades – one trade with the client and one matching trade with the CCP, whereas the clearing member bank does not become a legal counterparty in any trade in the Agency Model but merely guarantees the client performance to the CCP.

As a consequence of these different legal structures, the Principal Model generates a greater amount of leverage ratio exposure without any further clarifications. Against this backdrop, Basel III aligns the leverage ratio exposure for the two models by requiring the client clearing members under the Principal Model to capture the exposure between the client and the clearing member, and only the exposure between the CCP and the clearing member if the clearing member guarantees the performance of the CCP to its client. However, if the trade is with a qualifying CCP[23] and the clearing member does not guarantee the CCP's performance to its clients, the clearing member is not required to recognise the trade with the CCP in its leverage ratio exposure measure. This specific treatment reflects comments received in the consultation and is intended to avoid disincentives to client clear under the Principal Model. It also aligns the leverage ratio treatment between the Principal Model and the Agency Model. Finally, it reflects the clearing member's actual risk exposure.

Current EU implementation

The CRR does not distinguish between the two client clearing models. This may create a disincentive to client clear under the Principal Model as two trade legs (one with the client and one with the CCP) would have to be recognised in the leverage ratio exposure measure for each transaction.

[23] The BCBS defines a qualifying CCP (QCCP) in Annex 4, Section I, A. of the Basel II Framework (June 2006 version as amended).

Policy considerations

	Pros	Cons
B3	• Eliminates distortions between the two main client clearing models to ensure there is the same exposure. • Aligns the leverage ratio treatment with the actual risk exposure.	
EU		• Requires clearing member's to recognise the client-cleared trades with CCPs even if the risks are entirely borne by the client. • Creates a disincentive to provide client clearing services in the EU.

4.2 Application of the Original Exposure Method (OEM)

Basel III

Basel III applies the Current Exposure Method (CEM) to all derivatives for the purpose of the leverage ratio. Under the CEM, the exposure value is determined as the positive market value of the contract (the 'current exposure') plus an add-on reflecting potential future exposure (PFE) which depends on the type and the maturity of the transaction.

Current EU implementation

The CRR gives banks the choice of applying the OEM for calculating derivative exposures (interest-rate, foreign-exchange contracts, and contracts concerning gold) instead of using the CEM, when they also use this method to calculate their (risk-based) own funds requirements.

The OEM is a simple method that does not recognise netting. The exposure value is the notional amount of each instrument multiplied by the percentages set out in the table of Article 275 CRR.

The permission to use OEM in the CRR ensures consistency in the broader framework where needed (e.g. when a firm calculates its risk-based capital requirements using OEM). The use of OEM may also be appropriate for firms that do not carry out much derivative activity, as this is the simplest non-model method available (deriving market values, which is necessary for CEM but not for OEM, can be complex and costly).

The appropriateness of OEM will be reviewed by the European Commission by 31 December 2016, with a potential legislative proposal, as per Article 514 CRR. In addition, EBA will assess the whether applying OEM in the context of the leverage ratio results in material differences from the exposure values determined by using the Mark-to-Marked Method as per Article 511(3)(e) CRR.

Finally, it is to be noted if the specific treatment for cash variation margin (CVM) of Basel III was incorporated into the CRR, this treatment could perhaps not be applicable to exposures determined by the OEM because CVM may only offset the market value portion of the derivatives exposure which cannot be isolated under the OEM.

Policy considerations

	Pros	Cons
B3	• CEM permits derivative exposure calculation for a greater number of instruments CEM is more dynamic. • It is relatively straightforward to eliminate the effect of collateral.	• CEM is more complex than OEM. • Operationally more burdensome than OEM especially for smaller banks that are not required to recognise derivatives on-balance-sheet under national GAAP.
EU	• OEM is the least risk sensitive, non-model method approach. • OEM is simple to use and not burdensome. • OEM permits consistency for firms al-ready applying OEM for their risk-based calculations. • Conservative.	• The use of OEM is restricted to a very limited set of instruments and maturities. • OEM is less granular and dynamic than CEM. • The use of multiple measures to calculate the derivative exposure could reduce comparability. • Unclear how variation margin will be able to net the OEM exposure.

4.3 Frequency of the leverage ratio calculation

Basel III

Basel III only requires the calculation of the leverage ratio on an end-of-quarter basis, which is the same as the reporting requirement of the own funds figures under the EBA final draft implementing technical standards on supervisory reporting.

The June 2013 BCBS consultative document required an average calculation (more precisely, the three end-of-month leverage ratios of each quarter would be averaged). This requirement was intended to limit "window-dressing", e.g. enabling banks to move below the minimum leverage ratio within the quarter and increase their leverage ratios in time for the reporting/disclosure calculation. Respondents the BCBS consultative document asserted that this process was disproportionally onerous.

Current EU implementation

The CRR requires firms to calculate their leverage ratios on an average basis (the month end leverage ratio is averaged for that quarter). However Article 499 (3) states that during the transition period until 31 December 2017, national authorities are able to grant permissions to firms to apply the end-of-quarter calculation if a bank is unable to retrieve data of sufficient quality on a monthly basis.

Policy considerations

	Pros	Cons
B3	• Operationally less complex for the reporting.	• Does less to address the concerns of 'window dressing'.
EU	• Argued to limit arbitrage or 'window dressing'. • Permits firms to calculate the end of quarter leverage ratio until 31 December 2017 if the firm has inadequate data.	• More onerous, especially with the wider scope of consolidation. • Even the requirement of a monthly calculation does not eliminate the possibility of 'window dressing', especially for positions that can be moved shortly (e.g. trading book positions).

5. Annex: Approximate overview of differences described in the report and their relationship to the CRR

Item	CRR	Adjustment
SFTs	Art. 429 (5)	Cash receivables of SFTs excluded from application of Art. 429 (5).
SFTs	Art. 429 (9)	The counterparty exposure amounts, currently obtained by application of the Methods of Art. 220 (1) to (3) and Art. 222 CRR, are clarified to be add-ons and supplement those with the accounting (cash) receivables subject to netting based on specific criteria.
SFTs	Art. 429 (9)	Clarified what method applies for IRB exposures that are not covered by master netting agreements.
SFTs	Art. 429 (9)	The treatment of agent transactions clarified.
SFTs	Art. 429 (9)	The effects of sale accounting reversed.
SFTs	Art. 429 (9)	The haircuts from add-on amounts are removed.
OBS	Art. 429 (10)	Apply CCFs based on risk classification of Article 111 in conjunction with Annex I of the CRR subject to a floor of 10%.
Written credit derivatives	-	A treatment in Art. 429 is incorporated to capture additional treatment of written credit derivatives.
Cash variation margin	Art. 429 (5)/ Art. 429 (6)	Netting of received cash variation margin with derivatives exposures incorporated in paragraph 6 and an exclusion from paragraph 5 of receivable assets for posted cash variation margin.
Investees outside prudential consolidation	Art. 429 (4)	Art. 429 (4) 2nd subparagraph removed in order to limit leverage ratio exposure to entities within the scope of prudential consolidation.
Client clearing	Art. 429 (6)	CCP leg of client-cleared transactions excluded from exposure according to Art. 429 (6) CRR.
Cross-product netting	Art. 429 (6)	Language changed in order to clarify that cross-product netting is not applicable while cross-product netting agreements may still be eligible as long as netting is performed separately for derivatives and SFTs.
OEM	Art. 429 (7)	Clarified that cash variation margin shall not be used to reduce derivatives exposures determined via Original Exposure Method (OEM).
Frequency	Art. 429 (2)/	The requirement removed to calculate the quarterly leverage

Item	CRR	Adjustment
	Art. 451 (1) (a)/ Art. 499 (3)	ratio as an average of the monthly leverage ratios.