

Changing the Basel Standardised Approach

Alternative Proposals Must Demonstrate Predictive Power

Special Report

This report assesses the Basel Committee on Banking Supervision's (BCBS) proposal to revise the credit risk weights system under the standardised approach (SA). Fitch Ratings is not a detached observer because the proposal removes the use of external credit ratings. This report analyses the merits of the BCBS proposals.

Predictive Power Is Key: We have significant concerns with regards to the Committee's proposal to adopt alternative measures with poor or undemonstrated predictive power for risk assessment in their efforts to reduce reliance on credit ratings. Credit ratings have been effective in assessing relative credit risk, and are widely understood and accepted by institutional investors and market participants.

Formal Assessment Needed: Fitch urges the Committee to conduct a formal assessment comparing the predictive power of its proposed alternatives with the current ratings-based approach before committing to any changes. This will help avoid degradation in the quality of risk-based capital framework which could undermine confidence and result in unintended market consequences.

Fundamental Change to Capital Requirements: The proposals represent a dramatic change from a relatively simple risk-weight regime based in part on external credit ratings to a more complex system based on metrics identified by the BCBS. Almost all banks are affected, either directly, for the majority of banks that capitalise credit risk using the SA, or via the proposals to use the SA as a floor, for banks using the models-based capital requirements.

Changing Lending Incentives: The changes are likely to have greatest effect in markets that are highly dependent on bank lending by changing the relative capital cost of different types of lending. This is especially important in the EU, which is traditionally more dependent on banks for credit intermediation than the US, and for asset classes that make up the bulk of bank balance sheets, such as corporate and SME lending, and residential mortgages.

Implementation Difficult, Costly: Banks will likely find it difficult and costly to source, maintain and protect all of the specific information needed to calculate risk weights. Corporate financial information, especially for SMEs, could face timeliness, accessibility and comparability hurdles. Assessing mortgage affordability may not be feasible in some countries as reliable comprehensive information on individuals' income and debt is not commonly available.

Contentious Sovereign Review Excluded: Fitch regards the widespread practice of exempting banks' sovereign exposures from capital charges as a major weakness in the risk-based framework. Although the treatment of sovereigns is being considered separately by the BCBS in a 'careful, holistic and gradual manner', this is a separate and apparently longer-term exercise.

Over time, capitalising sovereign exposures could impose greater market discipline on sovereign finances and narrow the gap between the capital-cost of lending to corporates as opposed to sovereigns.

Role of Credit Ratings: Credit ratings serve as important credit risk benchmarks for a wide variety of market participants and ultimately aid and support healthy, robust and transparent capital markets. Fitch is supportive of reasonable efforts to reduce over-reliance on credit ratings and believe it is important all market participants recognise that ratings have their strengths and their limitations.

Related Research

[Basel III Capital Charges Affect Investor Confidence in European Securitisation Market \(September 2014\)](#)

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Reliance on External Ratings

Role of Credit Ratings: This report assesses the merits of the BCBS proposals for revising the Standardised Approach to calculating bank capital requirements. The bulk of our feedback relates to bank and corporate exposures. Fitch believes strongly in the important role played by credit ratings in supporting healthy capital markets and as such, we set out below our concerns with regards to the current proposals to reduce reliance on external credit ratings.

Reliable Measure of Relative Credit Risk: Fitch's credit ratings – whether individually or on a portfolio basis – are a reliable measure of relative credit risk and default probability. This has been demonstrated clearly over long periods, and many jurisdictions and asset classes. No single measure should be used for risk assessment and the value of credit ratings may be enhanced when used in conjunction with other measures of credit risk.

Globally Consistent, Based on Evidence: Fitch's credit ratings are generated by globally consistent criteria that reflect a broad range of quantitative and qualitative risk factors - both historical and forward-looking - and expressed on a common scale across all regions and asset classes. This contrasts with the Basel Committee's proposed approach of selectively choosing a small number of historical quantitative metrics.

Thorough Analysis Needed: Any consideration of a wholesale replacement of ratings should be accompanied by a thorough analysis of the merits of alternative metrics, the empirical evidence that supports their use, an understanding of which risk factors are missing, and an understanding of the impacts associated with such a shift. Without a thorough understanding of the merits and risks of any alternative metrics, the BCBS risks undermining risk-based capital requirements and thereby misallocating credit in the economy and potentially increasing systemic risk.

Exposures to Corporates

Unconventional Metrics, Some Surprising Results: The BCBS proposes to determine risk weights for corporate exposures by reference to the size of the borrower as reflected in total revenues (with a rather simplistic assumption that smaller firms should have higher risk weights), and leverage (defined as total assets over total equity 'according to accounting standards of the relevant jurisdiction'). Currently the framework bases the capital charges on external credit ratings for rated corporates, and sets a flat 100% risk weight otherwise.

The proposed use of balance sheet leverage is surprising given the more common use of cash-flow leverage metrics (e.g. debt/EBITDA) in corporate credit assessments, and leads to some surprising results. The new proposals would assign a number of highly-rated issuers to the highest risk buckets, and conversely, would have treated the majority (60%) of defaulted issuers in the Fitch portfolio as low risk (risk weighted below 100%). This indicates that the proposed metrics would fail to discriminate adequately between different credits.

Decrease in Rated Corporate Risk-Weights: Analysis of the Fitch-rated portfolio of global corporates indicates the proposals lead to a decline in average risk weights to 84% from 102% as compared to ratings based risk weights, with lower-rated corporates and cyclical sectors such as property and real-estate benefitting most. Risk weights for higher-rated corporates increased. However, the overall decrease would likely be offset by the proposed increased requirements for off balance sheet exposures. The overall impact will depend on the size and make-up of a bank's portfolio, and the portion of corporate lending to rated entities.

Exposures to Banks

Missing Important Factors, Lack of Comparability: The BCBS proposes to determine risk weights for banks' exposures to other banks based on the common equity Tier 1 (CET1) risk-based ratio and non-provisioned impaired exposures. In contrast, the current Basel framework provides two options, both ratings-based; the first based on the sovereign rating, and the other

Related Criteria

[Global Bank Rating Criteria \(March 2015\)](#)
[Corporate Rating Methodology \(May 2014\)](#)

(more risk sensitive) based on banks' issuer ratings. Fitch agrees that asset quality and capital ratios are important considerations in bank credit assessment. But these metrics on their own provide an incomplete basis for credit differentiation, as they omit important factors such as the bank's operating environment (especially important for emerging-market banks), company profile, governance, liquidity and profitability. The proposed metrics also suffer from lack of comparability and consistency across jurisdictions (as reflected e.g. in the BCBS's efforts to address consistency of risk-weighted assets, which underpin the CET1 ratio).

Residential Mortgages

Risk-sensitivity Improved, Hard to Implement: Risk-sensitivity of SA capital charges for residential mortgages is significantly improved with proposed risk weights ranging from 20% to 100% based on an 'LTV-at-origination' ratio (see Figure 10). This contrasts with the current SA treatment that allows a flat 35% risk weight for lending 'fully secured' on residential property. The BCBS is also considering further differentiation for each LTV bucket based on the borrower's ability to pay, as measured by a 'debt service ratio' (DSR). The BCBS suggests measuring debt payments based on all debt the borrower has to service and income on a net basis, with a DSR threshold of 35%. Fitch believes that the DSR data in particular will prove challenging for banks to source and maintain and could add complexity and or opacity to the risk-weighted assets.

Figure 1

Summary of the Proposals

Exposure	Proposed revision	Current approach
Banks	CET1 and unprovisioned non-performing assets would determine a bank's risk weight.	Based either on each bank's credit rating or based on the sovereign rating.
Corporates	Size measured by revenue and balance-sheet leverage would determine a corporate's risk weight. Two specialised lending categories would also be introduced.	Based on credit rating, 100% if unrated.
Retail	Criteria for the preferential treatment for (non-mortgage) regulatory retail exposures of 75% would be tightened. Others would receive 100% risk weights, except for small businesses which fall back to the corporates treatment. The BCBS is consulting on further risk differentiation.	75% for qualifying regulatory retail exposures (including retail SME) except for lower LTV mortgages.
Loans secured on residential real estate	Risk weights would be based on the LTV ratio and, as secondary criteria, the borrower's affordability (i.e. a debt-service ratio).	Flat 35% risk weight for loans "fully secured" on residential property; unsecured retail risk weight applies otherwise.
Loans secured on commercial real estate	Risk weights would either be determined by considering exposures as unsecured corporate exposures or according to the LTV. In the former, the proposed specialised lending categories provide further risk differentiation.	The current treatment applies a flat 100% risk weight, with the possibility of a 50% preferential risk weight under nationally defined conditions.
Credit risk mitigation	The framework would be simplified and supervisory haircuts recalibrated. The corporate guarantor eligibility criteria would be updated.	Collateral subject to haircuts, guarantees recognised subject to meeting eligibility criteria.
Other	Revised treatments for: • exposures with currency mis-match between the loan currency and the borrower's income (add-on) • off-balance sheet exposures (higher conversion factors), • past-due loans (proposals are not specific at this point) • exposures to multi-lateral development banks.	See the Basel Framework for details.

Source: BCBS

Annex 1: Corporates

Unconventional Metric, Some Surprising Results

Corporate credit exposure constitutes one of the largest bank asset classes; for example in the EU just under 30% of exposures by volume are to corporates (see Figure 14 in Annex 4).

The Proposals

The BCBS proposes to determine risk weights for corporate exposures by reference to the size of the borrower as reflected in total revenues, and leverage (defined as total assets over total equity “according to accounting standards of the relevant jurisdiction”).

Figure 2

Proposed Corporate Risk Weights

(%)	Revenue ≤ EUR5m	EUR5m < Revenue ≤ EUR50m	EUR50m < Revenue ≤ EUR1bn	Revenue > EUR1bn
Negative equity	300	300	300	300
Leverage: 1x–3x	100	90	80	60
Leverage: 3x–5x	110	100	90	70
Leverage > 5x	130	120	110	90

Source: BCBS

The use of balance sheet leverage is surprising given the more common use of cash-flow leverage metrics (e.g. debt/EBITDA) in credit assessments. Investors, lenders and rating agencies typically use forecasted cash-flow leverage metrics in the assessment of credit risk as they better reflect debt servicing ability and default risk on a forward-looking basis. Historical metrics such as balance-sheet leverage do not achieve this. In addition, reliance on local accounting standards for smaller, non-listed corporates would likely run into definitional and data accuracy challenges as well as a bank's technical ability to retrieve revenue and leverage across its credits to calculate risk weights.

The Current Approach

In contrast, the current SA determines corporate and SME risk weights according to the credit rating of the borrower as shown in Figure 3. Notably, the US adopts an option under the Basel Accord that allows the application of a flat risk weight to all corporates of 100%. A large number of unrated corporates, especially smaller corporates and SMEs also receive a 100% risk weight.

Figure 3

Current Corporate Risk Weights

AAA to AA– (%)	A+ to A–	BBB+ to BB–	Below BB–	Unrated	Retail SME ¹
20	50	100	150	100	75

Source: Basel Committee on Banking Supervision

Some Surprising Results

Rated Corporate Risk Weights Would Fall, Cyclical Sectors Benefit

Fitch evaluated the impact on risk weights of the BCBS's proposals on the Fitch-rated global portfolio of corporates. Financial data for end-2013 was used for each corporate to calculate the risk weight that would be applied using the proposals and under the SA currently in force using Fitch's ratings. We recognise that in practice banks are permitted a choice of credit rating agency 'external credit assessments' from which to map under the SA. Based on the Fitch-rated global portfolio of corporates, the proposals lead to a decline in average risk weights by 18% (from 102% to 84%) as compared to ratings-based risk weights. Cyclical sectors seem to benefit from larger reductions in risk weights (22%, from 107% to 85%) than non-cyclical

¹ The Basel framework permits exposures to small businesses under EUR1m to be included in the regulatory retail portfolio

- Basel's proposal would base risk weights on historical balance sheet leverage and size measured by revenues

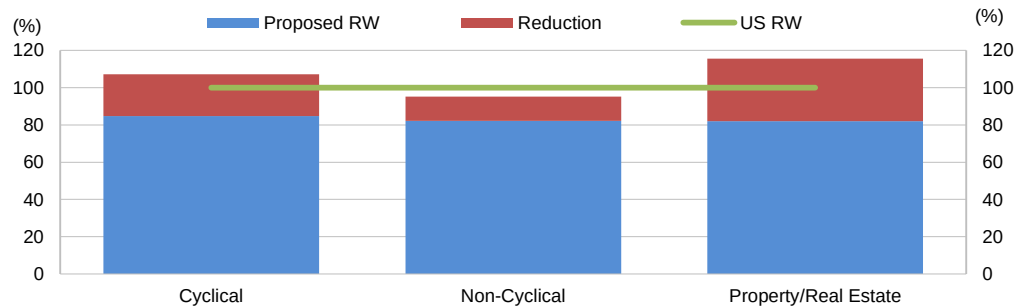
- Risk weights for rated corporates would fall to 84% from 102% on average based on Fitch's global corporate portfolio

sectors, which undergo declines of only 13% (from 95% to 82%). Rated property and real-estate companies benefit most from lower risk weights, with a decline of 34% from 116% to 82% (see Figure 4).

Figure 4

Average Change in Risk Weights

Proposed standard approach vs. current, global corporate sectors



Source: Fitch

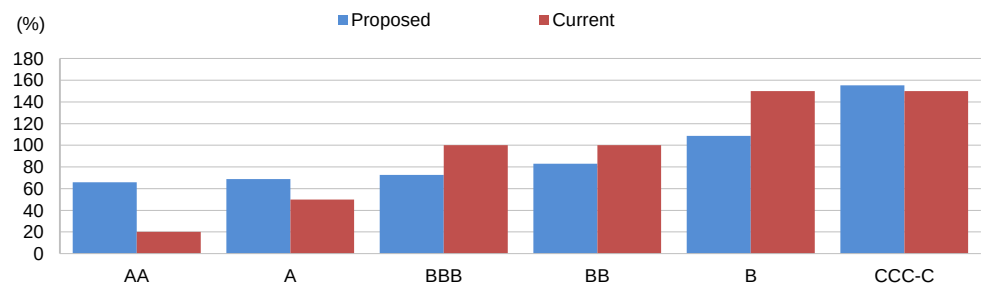
Counter-Intuitive Increase for Higher-Rated Corporates

Most of the reduction in capital charges appears to apply to lower-rated corporates (BBB category and below). Higher-rated corporates ('A' rating category and above) receive significantly higher risk weights under the proposed generally rising to a minimum of 60% from 20% for 'AA' rated borrowers such as Novartis AG (AA/Stable) and Royal Dutch Shell plc (AA/Stable) and from 50% for 'A' rated borrowers such as AstraZeneca PLC (A+/Stable) and Volkswagen AG (A/Stable). This reflects the proposals to raise the minimum corporate risk weight to 60% from 20%. Figure 5 below shows the effect of the proposals by rating.

Figure 5

Proposed vs. Current Average Risk Weights

Fitch global portfolio by rating category



Source: Fitch

Some Investment-Grade Names Treated as High Risk

In its corporate analysis, Fitch does not look at the level of book equity, other than in the (increasingly rare) occasion where it may be referenced in financial covenants. Many strong investment grade companies will have negative book equity for reasons that have no negative implications for their credit profile. For example, Fitch assigns Philip Morris International, Inc, a Long Term Issuer Default Rating (IDR) of 'A'/Stable.

Philip Morris has a history of distributing returns to shareholders via dividends and share buyback programmes, at a level commensurate with its strong investment grade ratings. The shares bought back are nonetheless deducted from shareholder's equity at fair value, causing the shareholders equity to become negative on a group basis in accounting terms. AutoZone, Inc rated 'BBB' stable is a similar example. These issuers have market capitalizations of USD121bn and USD21bn respectively, so the market would seem to share Fitch's indifference to their accounting-based equity position. Such issuers may nonetheless, in theory, be placed into the most risky 300% risk weight under the BCBS's proposals.

Proposed Metrics Appear Poor Predictors of Default

An analysis of defaulted corporates was conducted to evaluate the effectiveness of the metrics recommended as indicators of default. We analysed 35 corporates from a global total of 39 Fitch-rated entities that have defaulted since 2010. Fitch rated 32 of the 35 entities 'B+' or lower at the beginning of the year in which they defaulted, placing them in the highest risk-weight bucket of 150%. Fitch rated the remaining three at 'BB-', placing them in the 100% risk-weight bucket. So, under the current ratings-based approach, based on Fitch's ratings, over 90% of defaulted corporates would have been placed in the highest risk bucket prior to default.

Using the BCBS's proposed revenue and leverage metrics, 60% (21 of the 35) of the defaulted corporates would have been risk weighted below 100% prior to default. Another 20% would have been risk weighted at 110%, and only 20% of defaulted corporates would have been assigned to the riskiest 300% bucket prior to their default (due to these issuers reporting negative equity).

Pressure on the EU Treatment of SMEs

SMEs are less likely than medium and large corporates to solicit public credit ratings. Under the current SA, unrated corporates attract a 100% risk weight, and exposures to SMEs that qualify for retail treatment attract a 75% risk weight, a treatment that the BCBS seems set to continue to allow. Other SME exposures (with revenues below EUR50m) would attract risk weights in the range 90%-130%, depending on revenues and balance-sheet leverage; in practice many SMEs with limited leverage would probably fall into the 90%-100% range.

However, the EU currently applies a 'supporting factor' of 0.7619 to SME lending that reduces the capital requirements under both the IRB and standardised approaches by 24% and allows effective SA risk weights of 57% and 76% for unrated retail and non-retail SME exposures, respectively. The EU SME treatment was criticised in the Basel Committee's December 2014 review of the EU's Basel implementation as being '*an important departure from the letter and the spirit of the Basel minimum requirements*'. Based on EBA 2014 stress testing data, Fitch estimates that the SME 'supporting factor' reduced EU banks' risk-weighted assets by around EUR112bn. Implementing the BCBS proposals as they stand would require removal of the EU support factor and would therefore represent an increase in capital requirements for SME lending in the EU.

Off-Balance Sheet Charges Rise

The BCBS is also reviewing the 'Credit Conversion Factors' (CCFs) that banks apply to calculate capital charges for off-balance-sheet items. This change affects retail off-balance-sheet exposures such as undrawn credit card lines as well as corporate ones such as overdrafts. The BCBS proposes to discontinue the practice of allowing some 'unconditionally cancellable' exposures to attract a 0% conversion factor (ie a zero capital charge). This is because the BCBS believes there are in practice a number of constraints on banks' ability to cancel such commitments, including, for retail exposures, consumer protection laws in some jurisdictions. The Committee proposes a 10% CCF instead, consistent with the treatment in the leverage ratio. The proposals also see the CCF for other commitments rising from 20%/50% to match the Foundation IRB approach (75%), increasing the SA capital cost for these off-balance sheet commitments.

Annex 2: Banks

Missing Important Factors, Lack of Comparability

The Proposals

Under the BCBS proposals, capital requirements for banks' exposures to other banks would be based on two factors (see Figure 6):

- The capital adequacy ratio defined as Common Equity Tier 1 capital divided by Risk Weighted Assets, (CET1 ratio) and;
- Unreserved non-performing assets measured as non-performing loans, leases and interest-bearing debt less provisions divided by total loans, leases and interest-bearing debt, (NPA ratio).

Figure 6

Proposed Bank Risk Weights

Net NPA ratio	CET1 ratio					
	12% or more	12% - 9.5%	9.5% - 7%	7% - 5.5%	5.5% - 4.5%	4.5% or less
1% or less	30	40	60	80	100	300
1% - 4%	45	60	80	100	120	300
3% or more	60	80	100	120	140	300

Note: A preferential reduction by 20pp for short-term claims remains, subject to a floor of 30%
Source: Basel Committee on Banking Supervision

Both measures are commonly used indicators for banks' creditworthiness. The risk-based capital ratio, in particular, is the BCBS's main prudential measure, and has undergone numerous revisions and reviews since its first implementation under the 1988 global capital accord (Basel I). It is interesting to note that the BCBS chose the NPA ratio as the second parameter, rather than those measures that have been added by the BCBS itself under Basel III to complement CET1 following the experience from the global financial crisis, such as the leverage ratio (LR), the liquidity coverage ratio (LCR) and the net stable funding ratio (NSFR), although these regulatory measures do not directly reflect asset quality.

Fitch agrees that capital and asset quality are important in assessing bank creditworthiness. However, both proposed metrics exhibit some problems of consistency and comparability, and suffer from being backward-looking and subject to cyclical variation. Therefore these metrics are typically only one of a number of inputs to a rigorous credit assessment process. Other important factors include operating environment (particularly important for emerging markets), company profile, governance, liquidity and profitability. These factors are all included in Fitch's Viability Rating (VR), which assesses bank stand-alone creditworthiness.

The Current Approach

Under the current standardised approach (Figure 7), banks in a given jurisdiction are either assigned a blanket risk weight one category below the sovereign (Option 1) or else risk weights are based on the bank's rating with a minimum 20% risk weight for banks rated 'AA-' or above (Option 2). Both current options set lower risk weights for claims with an original maturity of 3 months or less, subject to a 20% floor. These exposures make up about 13% of total EU banks' exposures (on an absolute, non-risk-weighted basis).

Figure 7

Current Bank Risk Weights

(%)	AAA to AA-	A+ to A-	BBB+ to			Unrated
			BBB-	BB+ to B-	Below B-	
Option 1: Sovereign rating	20	50	100	100	150	100
Option 2: Bank rating	20	50	50	100	150	100

Source: Basel Committee on Banking Supervision

Problems of Comparability and Consistency

In November 2014 the BCBS published [a report to the G20](#) about the on-going efforts to restore confidence in risk-based capital ratios by reducing excessive variability. Lack of clear and consistent disclosure of asset quality information has also made bank credit challenging. Fitch commented on the heterogeneity of definitions ([Weaknesses in Problem Loan Reporting in EU Banks](#) from 13 May 2014) and the limited progress in efforts to align international accounting standards in this respect ([Asset Quality: New IFRS Impact on Credit-Loss Reserves](#) from 9 July 2013).

The maximum 300% risk weight would only apply to banks reporting CET1 below 4.5% (which Fitch believes would not be permitted in many jurisdictions) or to banks that do not provide sufficient disclosure. Fitch believes that banks would be likely to improve disclosures to avoid a 300% risk weight, and therefore it would be unlikely to apply in practice.

Simple Metrics Fail to Reflect Important Elements of Credit Risk

Fitch rates a number of banks that report high CET1 ratios and good reserve ratios (sometimes in excess of 100%), but where the challenging operating environment has a high influence on ratings. An example would be exposures to the [Nigerian banking sector](#), where banks are rated in the 'B' category (150% risk weight currently), which under the BCBS proposals in their current form would experience very significant risk-weight reductions under (with most Fitch-rated Nigerian banks risk weighted at 30%). Indeed, banks in challenging operating environments often operate with significant capital buffers (either above the regulatory minimums or incorporated into regulatory requirements) to reflect the uncertain conditions. The BCBS says it will consider adding an additional risk driver for country risk.

Support No Longer Reflected

The choice of ratios indicates the Committee's intention to base risk weights on banks' fundamental solvency rather than relying on sovereign or institutional support. While many failing banks have been supported, (either by shareholders or governments), regulators in many advanced economies have worked to remove implicit support from sovereigns. However, there remain many jurisdictions (for example in the Middle East) in which implicit or explicit support for major banks is expected to remain in place (see [Sovereign Support for Banks - Rating Path Expectations](#) from 27 March 2014). The Committee's proposals could result in higher capital charges for exposures to banks that are highly rated due to sovereign or institutional support but have weaker asset quality and capital metrics.

Risk Weights for Banks to Vary Widely

Fitch conducted an analysis of risk weights under the new proposal based on Fitch's rated portfolio. Fitch used reported CET1 ratios, and information on impaired loans, loan loss provisions and total loans from EU and US banks' financial reports from end-2013. The analysis does not reflect the lower risk weights often assigned to shorter-term exposures. Both the CET1 and NPA ratios are available for the vast majority of entities (263 out of 274; the remaining 11 have been excluded from the analysis) whereby the NPA ratio is calculated on loans only.

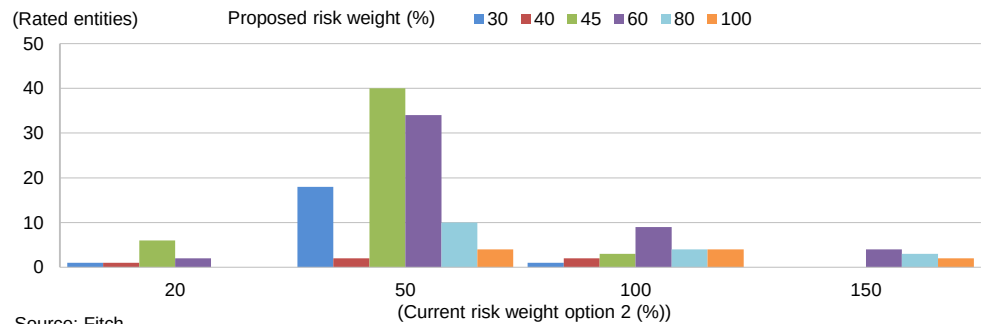
EU Bank Risk Weights Shuffled

Within the EU, the current standardised approach for banks' exposures to other banks is based on Option 2 of the Basel framework. Under this option, most EU bank exposures over 3-months are currently weighted at 50% (by number) as around 3/4 of banks are rated in the 'A' or 'BBB' category. For jurisdictions that apply option 2, the new proposals would see exposures to EU banks moving roughly in equal proportion to the 30%, the 45% and the 60% risk weight bucket, depending on the NPA ratio (see Figure 8). Those banks currently attracting 100% or 150% due to their sub-investment grade ratings would see their risk weights mainly reduce to the 60% bucket.

Figure 8

New Proposed RW Distribution

EU Banks



Little Effect on Country-Average Risk Weights in EU

While risk weights for individual EU entities seem likely to change significantly, Fitch's analysis finds that average risk weights across banks within countries would not be significantly affected. The largely neutral results on a country-aggregate basis may seem surprising for some regions with higher levels of impaired loans, such as some southern European countries. As an example, for Italy the lack of impact from the changes to the SA approach stems from the fact that currently banks' debt is already often risk weighted at 50% or at 100%, depending on rating. Fitch's analysis indicates that those on 50% would tend to move up into a range of buckets up to 100% risk weight, while those currently on 100% risk weight would see theirs reduce into a range of buckets down to 30%. Overall, the impact appears largely neutral.

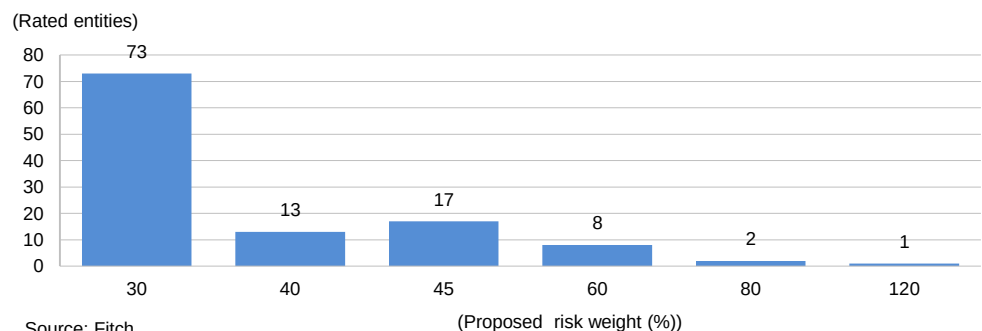
US Bank Risk Weights Higher

The US currently adopts a modified version of the first of the two Basel approaches, with a flat 20% risk weight for US banks' exposures to other US banks. Risk weights for US banks' exposures to non-US banks are based on the OECD's Country Risk Classification (CRC) scores, or else 20% if the bank's home country is an OECD member for which no CRC score is available. This approach reflects the US authorities' efforts to remove references to credit ratings in regulation. However, the OECD classifications do not include high-income or smaller countries. Fitch assessed the proposals on exposures to US banks in the Fitch-rated portfolio. In jurisdictions that apply a flat risk weight under Option 1 (including the US), exposures to around two-thirds (i.e. 73) of the US banks would move from the 20% risk weight into the 30% bucket, while the remainder would be distributed across the other risk weight buckets, mainly depending on the NPA ratio (see Figure 9). It remains to be seen whether and to what extent the US and other jurisdictions would implement the BCBS's final proposals, which are in any case subject to change following the consultation process.

Figure 9

New Proposed Risk Weight Distribution

US Banks



Annex 3: Mortgages

Residential Mortgages: More Risk Sensitive, Hard to Implement

The Proposals

The BCBS's proposals for residential mortgages introduce greater risk-differentiation than the current SA, disallowing the practice of 'tranching' for individual loans. This increases risk weights for high LTV residential mortgages in jurisdictions (such as the EU) which allow tranching and where there is high-LTV lending. In these jurisdictions, the approach may help address house price bubble risks from high LTV lending.

Risk-sensitivity of residential mortgages is significantly increased with risk weights ranging from 20% to 100% based on an 'LTV-at-origination' ratio (see Figure 10). The BCBS is considering further differentiation for each LTV bucket based on the borrower's ability to pay, as measured by a 'debt service ratio' (DSR). The BCBS suggests measuring debt payments based on all debt the borrower has to service and income on a net basis, with a DSR threshold of 35%.

Figure 10

Proposed Residential Mortgage Risk Weights

Loan-to-value ratio (%)	Loan-to-value ratio					
	<40%	40-60%	60-80%	80-90%	90-100%	>=100%
DSC ≤ 35%	25	30	40	50	60	80
DSC > 35%	30	40	50	70	80	100

Source: Basel Committee of Banking Supervision

The Current Approach

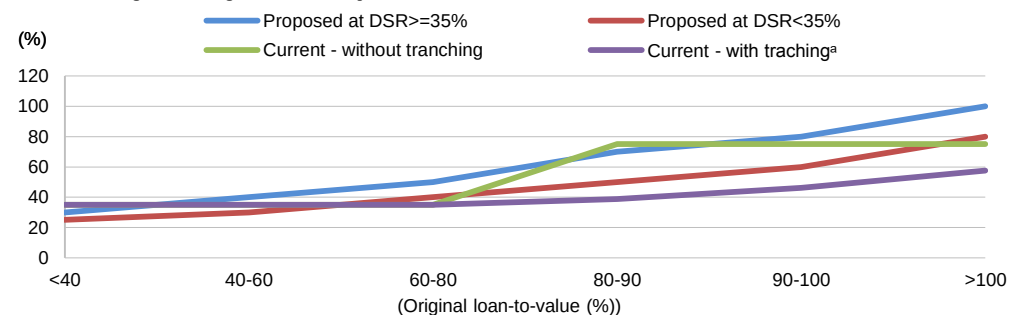
Under the current Basel SA, loans fully secured on residential property can be risk weighted at 35%. What constitutes full security has generally been interpreted as an LTV of no higher than 80%. However, how capital charges are to be applied beyond the full-security threshold is disputed, as the debate about 'tranching' illustrates.

Tranching Disallowed

Tranching refers to the practice of splitting a high-LTV mortgage into two parts for regulatory purposes; a fully secured part which benefits from the lower 35% risk weight, and a (typically smaller) unsecured part which is risk weighted as an unsecured retail exposure. Although this practice is not permitted under the Basel framework, which restricts the 35% risk weight to mortgages which are *fully* secured, it is permitted within the EU (the BCBS recently [criticised the EU](#) for allowing it, although the EU argues the treatment is permitted).

Figure 11

Risk Weight Progression by LTV



^a Assuming 80% current threshold and tranching application of 75% RW beyond

Source: BCBS, Fitch

The new proposals apply a single risk weight to the entire loan, and avoid a single cut-off point by having a graduated scale based on original LTV. This approach removes the incentive that led to tranching being introduced.

Measurement of Affordability Difficult

It is unclear at this stage how the BCBS intends to address the numerous issues around affordability measurement; possibly this is why it is proposed as a secondary factor. Not all European countries require banks to measure affordability in detail when granting residential mortgage loans. In those countries, availability of information about unsecured consumer debt, auto loans and credit cards may be limited. In addition, reliable income information may not be available at all. Even in countries with mandatory affordability measurement at loan origination implemented standards may vary and country-specific tax and social security arrangements may influence the choice of appropriate thresholds for risk measurement purposes. Fitch believes this is one element of the proposals that is likely to be modified – or even dropped – following the consultation process.

Higher Risk Weights for High-LTV Lending

Fitch conducted an analysis on 1.8 million loan-level records (including original LTV) from transactions since 2012 available from the European Data Warehouse (Edwin) to get an indication of the impact that the new proposals would have. Fitch estimates a DSR for each loan using Edwin-provided data including the loan amount, maturity, and interest rate to calculate monthly payments, and the borrowers' primary income. Countries for which sufficient data were available are France, Italy and the Netherlands. The data are made available by the ECB as part of their repo operations and contain information on all loans included in securitisations placed with them.

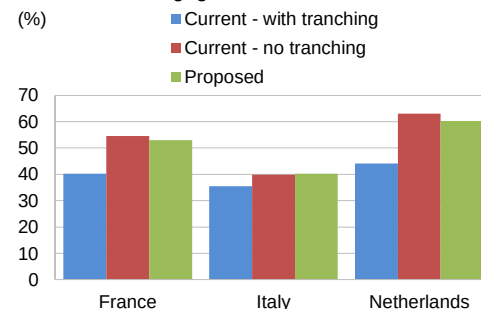
Countries like the Netherlands where large portions of originations are at high LTVs (reflecting in part tax incentives for borrowers) would see risk weights increase substantially under the new proposals (see Figures 12 and 13). In contrast, countries with predominantly low-LTV lending such as Italy would be less affected, if tranching is disallowed.

Figure 12

Average Risk Weights

Residential mortgages

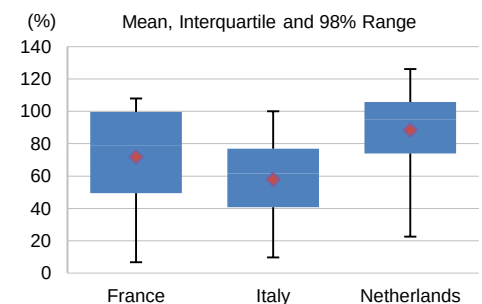
(%)



Source: Edwin, Fitch

Figure 13

LTV Distribution by Country



Source: Edwin, Fitch

Commercial Mortgages

The BCBS is also reviewing the treatment of commercial real estate (CRE), an asset class that it describes as a 'recurring source of troubled assets' for the banking industry. The current approach assigns a flat risk weight of 100% to CRE lending but allows national authorities to permit a lower, 50% risk weight for low LTV lending where portfolio loss experience is below certain thresholds.

The BCBS is considering choosing between an approach based on the borrower's ability to pay (ie based on the borrower's unsecured risk weight under the corporate or retail approach) and one based on the LTV ratio (with risk weights ranging from 75% to 120%). Under the first option the BCBS still appears to be considering retaining the possibility of a 50% risk weight. Although the proposals would be likely to be more risk sensitive than the current approach, neither option represents a full assessment of the risks in CRE lending, which would reflect both repayment capacity and the value and nature of the collateral.

Annex 4: EU and US Reliance on SA

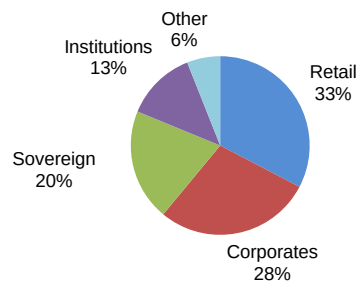
SA Underpins the Basel Framework

For most banks, the vast majority of banking capital requirements arise from credit risk rather than market or operational risk and the BCBS proposals cover the majority of banks' credit exposure types (see Figure 14 for example setting out EU banks' aggregate exposures), with sovereign exposures being the notable exception, as although they form a major component of banks' exposures, they are not included in the BCBS SA review.

Figure 14

EU Banks' Aggregate Exposures

Based on aggregated exposure values (EBA disclosures data item 992902, end-2013. Includes IRB and standardised exposures)



Source: EBA 2014 Stress testing disclosures, Fitch calculations

All US Banks Calculate SA

From 2014, all US banks calculate their capital requirements under the updated US implementation of the Basel standardised approach. Unlike the EU, the US authorities do not permit 'partial use'.

Additionally, the larger US banks calculate their capital ratios under the advanced approaches, and the standardised approach is applied as a 'floor' for calculating minimum capital ratios.

The US has already invested significant effort in removing ratings from its regulatory capital framework as was required under the Dodd-Frank Act; the Federal Reserve's [public response](#) to the BCBS proposals raises the question of whether the US would be prepared to implement them in their current form.

SA Important for EU Banks

All of the banks in the European Banking Authority's (EBA) 2014 stress test reported some exposures under the SA, with just over 40% of banks using the SA exclusively. Overall, just over 37% of EU banks' exposures are capitalised using the SA. Banks (especially larger ones) using their own models to calculate capital requirements still rely on the SA for about a third of their exposures (median 32% of exposures on SA for 72 banks with internal ratings based (IRB) permission in the EBA's 2014 exercise).

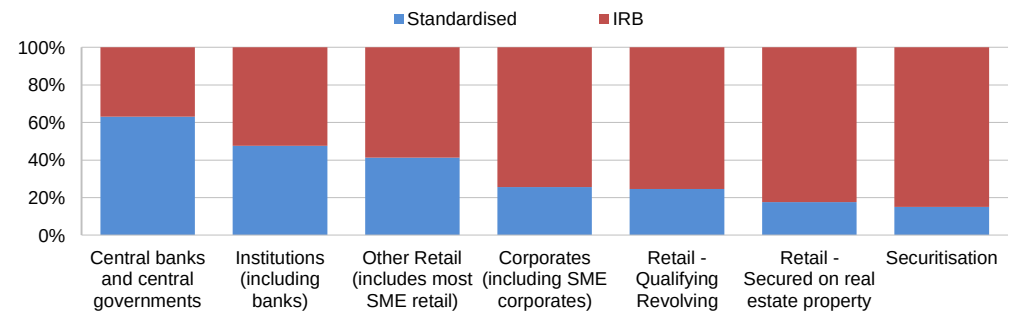
- Credit risk is the largest contributor to banking capital requirements

- 40% of European banks use the SA exclusively and IRB banks for 32% of their exposures

Figure 15

How EU Banks Capitalise Different Assets

Proportion of each asset class using each regulatory approach



Source: EBA 2014 Stress Testing Disclosures, Fitch calculations. Selected asset classes only.

Cherry-Picking Not Allowed

In part, the wide-spread use of the SA within the EU reflects the 'permanent partial use' exemption which allows EU banks to keep some exposure classes (notably sovereigns) entirely on the SA where they attract lower (often zero presently) capital charges. As a result of this exemption, the BCBS's on-going Regulatory Consistency Assessment Programme (RCAP) found the EU's Basel implementation 'materially non-compliant' in December 2014.

Floor Calibration Uncertain

The BCBS has not specified a specific floor calibration in its proposals, but it seems possible that it would be at a level less than 100% of the SA approach, to maintain some regulatory capital benefits for using advanced measurement techniques. The proposed floors would replace the previous Basel 'transitional' floor, which is based on Basel I and has become increasingly difficult to maintain.

- The BCBS proposed capital floors to banks using models based on the SA

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