# Rating Methodology

## Bank Ratings

03 May 2019

**Contacts**

**Dierk Brandenburg**
d.brandenburg@scoperatings.com

**Pauline Lambert**
p.lambert@scoperatings.com

**Marco Troiano, CFA**
m.troiano@scoperatings.com

**Jennifer Ray**
j.ray@scoperatings.com

**Chiara Romano**
c.romano@scoperatings.com

## Table of Content

**1. The rating ... 4**
1.1 Bank ratings, outlooks and reviews ... 4
1.1.1 The issuer rating ... 4
1.1.2 Our bank ratings reflect the probability of regulatory action leading to default-like events ... 4
1.1.3 Long-term debt ratings and correlation with issuer rating ... 5
1.1.4 Short-term ratings and correlation with long-term ratings ... 5
1.1.5 No other rating scales ... 6
1.1.6 Rating Outlooks ... 6
1.1.7 Rating reviews and changes ... 6
1.2 Impact of resolution, bail-in, MREL/TLAC on ratings ... 6
1.2.1 Impact of MREL/TLAC on senior unsecured debt ratings ... 7
1.2.2 Higher issuer rating stability and predictability under resolution regimes ... 8
1.2.3 Rating debt of banks not subject to resolution or equivalents ... 8
1.3 State support and bank ratings ... 8
1.3.1 Embedded operating support ... 9
1.4 Holding company ratings; ratings for debt included in MREL or TLAC ... 9
1.5 Rating bank subsidiaries ... 10
1.6 Group ratings ... 10
1.7 Capital instruments and subordinated debt ratings ... 11
1.7.1 Additional Tier 1 ... 11
1.7.2 Tier 2 ... 11
1.8 Covered bond ratings ... 11
**2. The methodology ... 12**
2.1 General foundations of the bank rating methodology ... 12
2.1.1 Peer group approach ... 12
2.1.2 Forward-looking ratings underpinned by forward-looking analysis ... 12
2.1.3 Focus on risk ... 12
2.1.4 Cyclical versus structural risks ... 13
2.1.5 General versus specific risks ... 13
2.1.6 Qualitative versus quantitative ... 13
2.1.7 Communicating vessels rather than building blocks ... 13
2.1.8 Impact of more comprehensive regulation and supervision ... 13
2.2 Analytical inputs ... 13
2.2.1 Sources of data and information ... 13
2.2.2 Market metrics and market sentiment ... 14
2.3 Links between banks and sovereigns ... 14
2.3.1 No mechanistic links between bank and sovereign ratings ... 14
2.3.2 Our view on a sovereign is not a proxy for assessing a bank's home-market conditions ... 14
2.4 Methodology outline and road-mapping framework ... 15
2.4.1 Macro ... 15
2.4.2 Micro ... 15
2.4.3 Road-mapping the analytical process: ... 16

**3. Analytical components of this methodology ... 17**
3.1 Group structure and ownership ... 17
3.2 Market position and interconnectedness ... 17
3.2.1 Asset size is not a rating driver ... 17
3.3 Business model ... 18
3.3.1 Business model assessment ... 18
3.3.2 Linking business model assessment with risk analysis ... 20
3.4 Risks ... 21
3.4.1 Strategy risk ... 21
3.4.2 Funding risk ... 22
3.4.3 Asset risk: mix, quality and transparency ... 23
3.4.4 Business risks: market and operational ... 24
3.4.5 Cyber risk ... 25
3.4.6 Regulatory risk ... 25
3.4.7 ESG risk (especially governance risk) ... 26
3.4.8 Reputational and legal risks ... 27
3.5 Protection against risks ... 27
3.5.1 Liquidity and asset-liability management ... 28
3.5.2 Earnings ... 29
3.5.3 Risk provisions ... 30
3.5.4 Capital, leverage and regulatory bail-in buffers (MREL, TLAC) ... 30
3.5.5 Risk culture, governance and management ... 31
**4. Appendix I ... 33**
**5. Appendix II ... 35**

**This is the fifth update of Scope Ratings' Bank Rating Methodology, initially published in February 2014 with subsequent updates in May 2015, May 2016, May 2017 and May 2018. The related methodology is the Bank Capital Instruments Rating Methodology, whose fifth update is published in parallel with this methodology. The process we use to analyse and rate covered bonds is detailed in a separate methodology (July 2018).**

Our Bank Rating Methodology sets the overall framework for our rating assessment of banking institutions. We primarily rate European banks, but the basic structure of our rating-assessment approach applies to banks worldwide. This enables us to make meaningful comparisons and ensures that bank ratings are consistent. That said, the methodology considers the dynamics and constraints specific to each region, market or market segment, both in Europe and beyond. For example, outright state support for domestic banks in distress may be more likely in several emerging markets than in mature markets in Europe, North America or elsewhere, where resolution regimes are now in place. On the other hand, in some emerging markets such external support may be driven by circumstances or political considerations, and less based on established and transparent rules and practices, thus necessitating a more nuanced rating approach.

This updated methodology does not include any material adjustments to the previous update (May 2018). Consequently no existing bank ratings or rating outlooks need to be adjusted following its publication.

*This updated bank rating methodology includes the following adjustment:*

a. *Clarification of our state support assumptions for government related banks, referencing our methodology for government related entities*

# 1. The rating

## 1.1 Bank ratings, outlooks and reviews

Our long-term bank ratings are in the 'AAA to D' categories, with '+' and '-' as additional sub-categories for each category from AA to B (inclusive), making 20 levels in total. Short-term ratings are represented by five symbols, from S-1+ to S-4.

For details on rating symbols and definitions please see Appendix 1.

### 1.1.1 The issuer rating

The **issuer rating** is our linchpin rating for banks. It represents *a credit opinion on a bank's ability to meet its contractual financial commitments on a timely basis, and in full, as a going concern*. As such, it aims to signal the relative risk of a default-like event. This definition means that an issuer rating does not automatically equate to specific ratings on securities (*see below for details on the correlation between debt ratings and the issuer rating*).

Our bank ratings are not based on, and do not claim to measure, specific percentages of default probabilities or, even more so, of loss severity. Such an exercise would be anchored primarily in statistical models which are unlikely to reflect the actual dynamics of bank credit risk, and which may thus provide misleading outcomes for rating users. The rationale for our approach is provided below.

### 1.1.2 Our bank ratings reflect the probability of regulatory action leading to default-like events

If we look at the default track record of banks across Europe and beyond – rare as defaults may be historically – we see that they were not due to commercial insolvencies or bankruptcies like in non-regulated credit sectors. For the small number of banks that were unable to meet debt repayment terms and other contractual financial commitments, or were prevented from doing so, this was the result of regulatory action being imposed upon them.

Regulatory action ranged from preventing a bank from making payments on specific categories of liabilities (like capital instruments), as seen several times during the last crisis, to placing a bank into insolvency or another form of closure. Currently, resolution actions apply across the European Union and the European Economic Area to a bank that is failing or likely to fail if: i) private-sector solutions or further supervisory actions are not likely to prevent this; and ii) it is in the public interest for the bank not to be placed into insolvency. Beyond the European Union/European Economic Area, resolution regimes exist in several other jurisdictions, including Switzerland and the United States.

*It is thus essential to emphasise that for banks, unlike other credit sectors, it is regulatory action which leads to default-like situations. This action can be in the form of: i) early supervisory intervention (e.g. to prevent payments on capital securities); ii) resolution-related debt bail-ins (affecting liabilities eligible for bail-in); or iii) insolvency proceedings. Bank ratings must therefore assess the extent to which credit fundamentals and other factors assessed in the rating process influence this probability.*

We use the term 'default-like' rather than 'default' events or situations because neither supervisory intervention-induced non-payment on capital securities (coupons and/or principal), nor a resolution-induced bail-in of eligible liabilities, could be considered *de jure* defaults, although the impact for investors in these securities may be similar to a default.

Early supervisory intervention, resolution, or being placed into insolvency does not occur to banks with decent-to-good credit fundamentals. Severe, potentially default-inducing regulatory action would only affect banks in a financially critical situation which pose an immediate threat to depositors and the financial system. Among other factors, such banks may display: i) very poor prudential metrics; ii) an inability to safely carry out activities due to material funding or capital shortages; or iii) harmful conduct or governance issues on a significant scale. At the same time, bank regulators may be overcome by rapidly occurring negative developments – for example, a funding and liquidity crisis – and thus their belated reaction could surprise investors and other market participants. This was seen in several instances when the financial crisis erupted.

*These possibilities demonstrate the necessity for investors and other market participants to have a firm grasp of the credit fundamentals of the banks they invest in or do business with, and for credit ratings to accurately and proactively reflect the extent to which these credit fundamentals evolve. This is all the more important since regulators' aim is to protect depositors and preserve financial stability, rather than specifically shelter institutional investors from losses.*

### 1.1.3 Long-term debt ratings and correlation with issuer rating

Each long-term debt security or class of long-term debt securities is rated based on: i) the issuer's credit strength (reflected by the issuer rating); and ii) the specific terms, conditions and characteristics of the debt instrument itself. Consequently, long-term debt ratings could be as follows *(for more details please see section 1.2)*:

- Higher than the issuer rating: typically for covered bonds (*please see section 1.6 and our Covered Bonds Rating Methodology, published separately*)
- Same as the issuer rating: for categories of senior unsecured debt, depending on the regulatory and legal framework, as well as on the credit strength of the bank. For example, in the case of EU banks subject to resolution, preferred senior unsecured debt (or equivalents) would be rated at the same level as the issuer rating.
- Lower than the issuer rating: for capital instruments, subordinated debt and – depending on the regulatory and legal framework, as well as on the credit strength of the bank – for categories of senior unsecured debt. For example, in the case of EU banks subject to resolution, non-preferred senior unsecured debt – whether issued at the level of the operating bank or holding company – would be rated one notch below the issuer rating.

### 1.1.4 Short-term ratings and correlation with long-term ratings

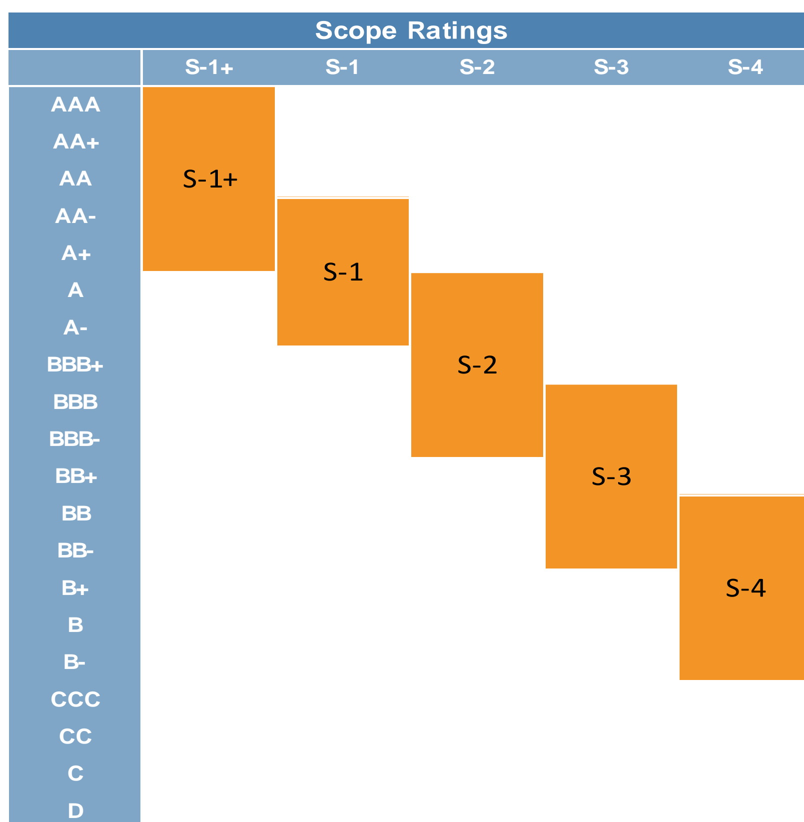
Short-term debt ratings reflect an issuer's capacity to repay debt with short-term maturities – typically up to 12 months – such as commercial paper, certificates of deposit, or other short-term financial commitments. These include financial contracts in which the issuer may act as a counterparty. Short-term ratings, as well as long-term ratings when appropriate, can also be assigned to a bank's financial commitments, even if they are not a funded debt, for example, derivatives contracts or letters of credit.

Our underlying analysis for a bank's short-term ratings is a subset of our overall analysis supporting the long-term ratings. Our analysis of a bank's funding and liquidity is a key element in the rating assessment mix *(see sections on funding and liquidity)*. For long-term ratings, it is part of a multi-pronged analysis which also examines other medium-term (rather than very short-term) risks, such as doubtful business models, more aggressive risk cultures, a deterioration in asset quality, an erosion of capital, or challenges in keeping pace with regulatory changes. For short-term ratings, however, the assessment of a bank's funding and liquidity characteristics – including the role played by changes in market sentiment – is paramount.

Given these aspects, a certain degree of short-term/long-term rating correlation must exist, and this is indeed the case (a bank's issuer rating is the long-term rating anchor for this correlation). However, we do not mechanistically correlate the two rating ranges, as *figure 1* shows.

Banks rated in the CCC-C range would most likely not have rateable short-term debt. If such debt existed, it would be covered by the long-term rating symbol, because the same very high probability of a default-like situation would affect short-term liabilities as well.

**Figure 1:**




Source: Scope Ratings

### 1.1.5 No other rating scales

We do not use any additional rating scales and symbols – stand-alone, support, baseline, or loss-severity ratings – for components of our main ratings. This reflects our view that a plethora of rating categories and sub-categories can and usually does blur the main credit message and adds unnecessary confusion for rating users.

### 1.1.6 Rating Outlooks

Our bank ratings are accompanied by rating Outlooks, which can be Stable, Positive or Negative. The Positive and Negative Outlooks normally refer to a timeframe of 12-18 months. However, these two Outlooks do not necessarily signal that a rating upgrade or downgrade, respectively, will automatically follow, although such an outcome should have a probability of over 50% if the Outlook is changed in that direction.

### 1.1.7 Rating reviews and changes

We continuously monitor our bank ratings. If we believe a change in credit fundamentals warrants a rating change, the first step is often to place the rating under review. Rating reviews are for a possible upgrade or downgrade, and very rarely for a developing outcome (only in instances of heightened uncertainty about a specific credit event).

We aim to finalise rating reviews as speedily as possible, but not at the expense of analytical thoroughness.

## 1.2 Impact of resolution, bail-in, MREL/TLAC on ratings

In jurisdictions with bank resolution and recovery regimes, ratings for specific liabilities not only reflect a bank's credit risk but also their ranking in bail-in under resolution *(see figure 2)*.

**Figure 2: Order of bail-in for eligible liabilities under resolution (for EU banks) – from the least remote**

| |
|---|
| 1. Equity |
| 2. Additional Tier 1 |
| 3. Tier 2 |
| 4. Other subordinated debt |
| 5. Senior unsecured debt eligible for MREL and/or TLAC (non-preferred senior) |
| 6. Other senior unsecured debt (preferred senior) and non-preferred deposits (wholesale and institutional) |
| 7. Preferred non-insured deposits (individuals and SMEs) |
| 8. Deposit guarantee scheme (for insured deposits) |

Source: Scope Ratings

As mentioned above, an issuer rating represents our opinion on a bank's ability to meet contractual financial commitments on a timely basis and in full as a going concern. Based on this definition, the issuer rating would be applicable to long-term liabilities meeting *both* of the following conditions in resolution:

- They rank at the remotest level for bail-in *and*
- Their repayment source lies solely in the bank's credit strength (informed by the issuer rating)

Senior unsecured obligations are likely to comply with the two above-mentioned conditions in jurisdictions without resolution regimes, or potentially in the case of banks which are likely to be placed into insolvency rather than being resolved (typically smaller banks which are not considered systemically important). In this case, their specific ratings would normally be the same as the issuer rating unless certain regulatory or legal situations exist, such as *de jure* or *de facto* depositor preference with respect to non-deposit senior obligations.

In the EU, the Bank Resolution and Recovery Directive (BRRD) has been in effect since the start of 2015. From the beginning of 2016, bail-in tools for resolution have also been in effect everywhere across the EU. Within the senior unsecured debt category, MREL/TLAC-eligible senior securities (e.g. non-preferred senior debt) would rank lower in seniority than senior unsecured debt which is not eligible for MREL/TLAC. Regular subordinated debt (a debt category mentioned by regulators but currently not actively utilised by banks) would rank lower than senior unsecured debt. It would be followed by Tier 2 (T2) securities, with additional Tier 1 (AT1) securities coming further below – thus bailed in first in the event of resolution *(see figure 2 and section 1.7)*.

### 1.2.1 Impact of MREL/TLAC on senior unsecured debt ratings

Banks in the EU which are subject to resolution have started to allocate or issue liabilities for 'minimum requirements for own funds and eligible liabilities' (MREL) and/or 'total loss-absorbing capacity' (TLAC). Aside from capital instruments and other subordinated debt, categories of senior unsecured debt are increasingly included. As a general rule, we rate all senior unsecured debt which can be specifically allocated to or is eligible for MREL/TLAC (e.g. non-preferred or holding company senior debt) at least one notch below the issuer rating. This offers investors and other rating users increased clarity and transparency in ranking bank credit risk, at a time when the complexity of the new regulatory rules presents a material challenge for various market participants, and often for the banks themselves.

The ratings of senior unsecured debt and other unsecured long-term liabilities which are *not* eligible for MREL/TLAC are likely to be placed at the same level as the issuer rating for the AAA-BB rating ranges. This reflects the material level of protection for this debt category provided by MREL/TLAC liabilities as well as outside resolution funds (national or the Single Resolution Fund).

Although the BRRD does call for other eligible liabilities (like non MREL-eligible senior unsecured debt, e.g. preferred senior) to be bailed in if MREL and outside resolution funds are insufficient for resolution (for example, to prevent insolvency proceedings if it is in the public interest to do so), such a scenario appears very unlikely. This is notably so in light of the 'no creditor worse off' principle codified in the BRRD – that is, no creditor should be treated worse in a resolution scenario than they would in a liquidation scenario.

The possibility of non MREL-eligible senior debt (e.g. preferred senior) being bailed in may however be more likely for banks with low issuer ratings – in the B range and below. In these cases, we aim to notch down all senior unsecured debt ratings from the respective issuer rating to reflect the expectation of heightened risk for these securities.

We do not rate senior unsecured debt and other eligible liabilities *higher* than the issuer rating even if the amount, stability and predictability of the liabilities which qualify as MREL/TLAC (and are below them seniority-wise) is reassuring. This is because a bank's liability mix and entire capital structure – including the size, stability and predictability of liabilities qualifying as MREL/TLAC – is already captured in the analysis underpinning the issuer rating. Using it again to notch up non-MREL/TLAC-qualifying debt ratings may therefore amount to double counting.

Regarding short-term ratings, the BRRD clarifies that liabilities arising from the participation in payments systems with a remaining maturity of less than seven days, as well as liabilities to institutions with an original maturity of less than seven days, would not be subject to bail-in. We consider these aspects when assigning short-term ratings to a bank's liabilities, on condition that the terms of the remaining or original maturity of a short-term claim are clear and transparent.

#### 1.2.2 Higher issuer rating stability and predictability under resolution regimes

A credible resolution and recovery regime should inherently strengthen the stability and predictability of issuer ratings over time – as insolvency scenarios become more remote. This is especially the case if the regime is accompanied by enhanced supervisory rules and practices, which is now the situation in Europe as well as in other developed markets.

The credit fundamentals of a financially stressed bank are likely to stabilise at an inherently very weak level if and when a resolution process is initiated. They should also improve in time if the resolution process, as intended, leads to a positive outcome. The issuer rating would anticipate and recognise this outcome and an MREL/TLAC cushion which is reassuringly ample, predictable and sustainable would be considered a positive element in the assignment of the issuer rating. At the same time, the ratings for the bank's: i) AT1 securities; ii) T2 securities; iii) non-T2 subordinated debt; and iv) senior unsecured debt eligible for MREL/TLAC (non-preferred senior) – in this order – would be lowered as necessary as the bank's fundamentals deteriorate, elevating the likelihood of regulatory action.

#### 1.2.3 Rating debt of banks not subject to resolution or equivalents

Our methodology also allows for the rating of: i) smaller, non-systemically important institutions in Europe and in other banking systems with resolution regimes; as well as ii) banks in systems without a resolution regime. In the case of such banks, we rate senior unsecured debt at the same level as the bank's issuer rating unless we have clear analytical reason to believe that senior unsecured debt will be subject to a different regime than deposits (e.g. in systems with depositor protection).

We believe that in systems with resolution regimes, the range of resolution alternatives and other remedial measures may extend beyond systemically important institutions. One example is smaller banks in Europe which issue covered bonds. The institution may be small in size and relevant mostly in its local area. However, placing it in liquidation and thus transferring the management of cover pools to an administrative trustee (a scenario which has never occurred in the recent history of covered bonds in Europe) would be very likely to shake investor confidence in the covered bond market in general. We therefore consider that banks issuing covered bonds, even with a small size and a mostly local reach, may be subject to resolution-like remedial measures rather than being placed straight into liquidation. We therefore rate the senior unsecured debt of such institutions one notch below the issuer rating – unless it is clear that the respective debt is not subject to bail-in.

Another example is smaller institutions which may not be systemically important on their own, but which are part of distinct groups or associations such as cooperative groups, savings bank groups, or relatively cohesive savings bank associations. We consider such groups or cohesive associations as systemically important and thus do not assume that one financially stressed member would be placed into liquidation in isolation by its supervisors. The senior unsecured debt of banks in these groups or cohesive associations should be rated one notch below the issuer rating (which itself is most likely to be partially based on the respective group or association's characteristics and internal support mechanisms).

### 1.3 State support and bank ratings

As resolution regimes have been implemented across Europe and North America, timely external state support for banks in distress (bail-out) has become an unlikely scenario. We therefore believe that bank ratings cannot generally be boosted by the expectation of state support. In general, we avoid assigning bank ratings based on excessively optimistic support assumptions.

Notching up a rating based on expected state support could be envisioned only if *both* of the conditions below apply:

- We have valid reasons to assume support would be given in a timely manner
- These reasons are sufficiently clear and transparent to be highlighted in the rating analysis

We generally assume that state support will be provided to banks falling under our definition of a government related entity. Our rating methodology for government related entities (July 2018), defines a government related entity as a standalone issuer that is directly or indirectly majority owned and/or sufficiently controlled by a government and whose activities fulfil a public sector mandate by implementing government policies or delivering essential public services. We rate such banks using a bottom-up or top-down approach, depending on our assessment of the entity's degree of integration with the government. Our rating captures the government's ability and willingness to provide support, and hence its likelihood.

We do not exclude possible state-support measures for a bank in resolution if the expected resolution tools are insufficient to prevent failure, which would be highly unlikely. However, if such measures are ever contemplated, they are likely to be implemented further downstream in the resolution process. For example, they would be likely to occur after unsuccessfully bailing in senior unsecured debt and/or wholesale deposits, and before the need to bail in preferred deposits. Alternatively, such support measures could occur even before bailing in wholesale (non-preferred) deposits. Our analysis aims to anticipate and incorporate this scenario into the issuer rating as far as possible. Under such a scenario, the notching up may not apply to various categories of bail-in-able debt instruments, starting with those eligible for MREL/TLAC.

We do not assign rating floors to systemically important banks in developed markets. The financial crisis demonstrated that 'piercing' or 'removing' a rating floor (something which is bound to occur in stressed situations or as a result of regulation changes) can unnecessarily disrupt market confidence. It also suggests that the respective floor may have been unjustified to begin with.

The above considerations regarding external support are mostly applicable to banks in developed markets. Banks in various emerging or frontier markets are more likely to be supported by governments in the event of stress. However, in some instances the decision to provide support may be political or based on circumstances (and thus more difficult to anticipate).

### 1.3.1 Embedded operating support

In most countries, all banks benefit from various forms of embedded support in their ongoing operations, much of it systemic, which aims to preserve a well-functioning financial system and economy. Examples include central banks keeping interest rates low to provide liquidity to the banking system and, through this, to the markets. This happened at the start of the last decade, post 9/11, and has been occurring since the crisis began over 10 years ago. Other more direct forms of support for banks would include quantitative easing policies (such as in the US, UK, Japan or the euro area) or direct lending to banks by central banks (such as the ECB's LTRO and TLTRO programmes or the Bank of England's FLS).

Such forms of support are essential to banks' ability to function as a going concern and are therefore incorporated in the issuer rating assessment as part of our fundamental analysis.

## 1.4 Holding company ratings; ratings for debt included in MREL or TLAC

While less widespread than in the US banking system, some European banking groups have a holding company structure – notably in the UK, Ireland, Switzerland and some Benelux countries. In line with the regulatory approach adopted in Europe (the EU and Switzerland), we consider the credit fundamentals of the entire banking group in our rating assessment. This contrasts with our approach for US banking groups which distinguishes between the group's operating bank(s) and the holding company.

Regarding debt instrument ratings, the rating for holding company senior unsecured debt with similar terms and conditions as the senior unsecured debt of the operating bank(s) would be the same, all things being equal and as long as there are no grounds to assume that the creditors of the holding company would be treated differently from creditors of the operating bank(s) in a stress scenario. Again, this would not be the case in the US, where the regulatory status of bank holding companies has been different for many decades, and where, accordingly, our approach would be to differentiate between the ratings of the operating bank(s) and the ratings of the holding company.

However, with the resolution avenues that have been put in place, primarily under 'single point of entry' (SPE), holding companies can issue debt – including senior – which would be included in MREL/TLAC. Such debt would thus be more likely to be bailed in than other senior unsecured liabilities. In such cases – either explicitly disclosed by the bank or its supervisory authority or if we consider it to be

a likely scenario – such debt has been and will continue to be rated below the issuer rating according to its specific terms, conditions, and seniority (*see section 1.2*).

## 1.5 Rating bank subsidiaries

In general, the issuer rating for subsidiaries within banking groups will be either at the level of the parent bank's issuer rating or below, rarely above. The ratings would consider the subsidiaries' own credit fundamentals – including the macro characteristics of their geographies, if different from the parent's – as well as the nature, stability and reliability of parental support. This support can range from implicit to a legal guarantee.

If the credit fundamentals of the subsidiary are materially weaker than the parent's, or if the subsidiary operates in a materially riskier economy (e.g. in a frontier market or a risky emerging market), its issuer rating would be lower, but nevertheless enhanced by parental support if warranted.

The rating notching gap between parent and subsidiary would typically be one or two, rarely three if both are in the same jurisdiction. It could be wider in the case of a subsidiary located in a riskier economy. We may also see reasons to de-link a subsidiary's rating from its parent's. This could be due to: i) our belief that the parent would not be allowed to support an ailing subsidiary with funds and/or capital due to possible regulatory ring-fencing; ii) material political risk associated with timely parental support to a foreign subsidiary; or ii) only marginal or a dwindling commitment from the parent to support its subsidiary (e.g. a non-strategic and/or loss-making subsidiary in a foreign market and/or in a business segment where the parent has no major strategic interest or which it is trying to exit).

If the subsidiary's fundamentals can be viewed as stronger than the parent's, there is also the possibility that the respective subsidiary is rated higher. Typically, the difference would be one notch, but it could be wider if, for example, we believe that a financially healthy subsidiary may not be permitted to contribute funds and/or capital to help a financially weaker parent in a riskier foreign economy due to possible regulatory ring-fencing.

Guaranteed subsidiaries would normally be rated at the same level as the guaranteeing institution.

In general, parental support for a financially weaker subsidiary within cross-border banking groups would be most reliable if both entities are domiciled in the same supervisory jurisdiction (national or within the euro area). The second strongest case would be that of closely cooperating supervisory jurisdictions, for example across the EU.

In determining the reliability and stability of parental support, we also look at the degree to which the respective subsidiary is considered strategic by the parent institution and the extent to which it is an integral component of its business model. Examples could be the mortgage or consumer finance subsidiary of a retail bank, or a home retail-bank subsidiary of a banking group with cross-border activities – especially if they carry the same name.

The rating of the subsidiary would also be driven by the bank's track record in supporting its subsidiaries, as well as by our assessment of its financial and managerial capacity to do so in a fully reassuring manner.

The resolution and recovery regimes for banks pose new challenges for the appropriate notching between parent and subsidiary ratings. Specifically, subsidiaries' ratings in groups with an SPE-resolution structure may be closer to the main operating bank(s)' ratings, provided the holding company above it holds the bail-in-able liabilities. For groups adopting a 'multiple points of entry' (MPE) resolution regime, the rating of subsidiaries which may be nearer the resolution frontier (and potentially have bail-in-able liabilities themselves) may end up being further away from the ratings of the main operating bank(s).

A clearer picture with respect to SPE vs. MPE resolution avenues should emerge once the details of the specific resolution structures are finalised and made public by banks and resolution authorities.

## 1.6 Group ratings

A significant number of European banking organisations are structured as distinct groups or associations that are more or less cohesive, such as cooperative groups, savings bank groups or savings bank associations. In most cases, their common feature is some form of internal support mechanism, ranging from more formal structures, such as intra-group guarantees or guarantee funds, to looser forms like cooperation or association.

Depending on the structure of the group, we assign either a group rating or a rating 'floor'. A group rating may be more appropriate for highly cohesive groups. This means that all members of the group benefit from the same rating level under normal

circumstances. Conversely, a rating floor may be more appropriate for groups or associations that are less cohesive. In that case, the rating of a financially weaker member of that group would not fall below that floor under normal circumstances.

In general, it may be possible to switch from a rating floor to a group rating if a group's internal cohesiveness increases over time. The opposite is possible as well.

There are some instances in which a rating floor would be inappropriate and where the entities of an association or a loose grouping should be rated on a standalone basis. The financial crisis demonstrated that the weaker member banks of associations or groupings previously deemed relatively cohesive and solidary can fail without receiving the support initially expected from the other members.

Neither a group rating nor a rating floor can apply to capital instruments and/or other junior securities issued by member banks of a respective group. This is because we do not consider that internal support mechanisms would apply to such instruments, given their regulatory role for loss absorption.

## 1.7 Capital instruments and subordinated debt ratings

### 1.7.1 Additional Tier 1

A bank's senior unsecured debt ratings provide the anchor for the notching down of subordinated debt and capital securities ratings. This can be either: i) the ratings of senior unsecured liabilities specifically allocated to or eligible for MREL/TLAC (e.g. non-preferred senior); or ii) the ratings applied generally to senior unsecured liabilities if no specific allocation to or eligibility for MREL/TLAC exists.

When rating Additional Tier 1 (AT1) securities, we assign a rating which is at least four notches down from the rating of the bank's senior unsecured debt. This notching reflects the twin risks of: i) coupon cancellation; and ii) principal-loss absorption. We see the likelihood of coupon cancellation as materially greater than the likelihood of principal conversion or write-down but consider that the magnitude of loss from principal conversion or write-down is materially higher than from missed coupons. These are two distinct risks for AT1 investors.

There are also instances of additional notching down – beyond the minimum four notches – due to security-specific or issuer-specific considerations. These include the level of the trigger, the distance to the trigger and the combined buffer requirement, the status of the issuer within the group, the issuer's liability and capital structure, specific regulatory requirements or guidelines, as well as the dynamics of the issuer's credit fundamentals (informed by the issuer rating level).

We do not assign so-called equity credit for issuers' AT1 securities and then, based on such metrics, adjust banks' capital positions. We believe that it is regulatory metrics, not rating agency-adjusted capital, that matter when assessing whether issuers require prompt regulatory action (which, based on the analysis detailed in this methodology, drives default-like scenarios for banks). Further, we do not believe that adjusting prudential regulatory metrics is part of our role as a rating agency and consider that such practices often create unnecessary confusion among investors.

### 1.7.2 Tier 2

For T2 securities, investors are exposed to principal-loss-absorption risks but not to coupon-cancellation risks. T2 securities also rank above AT1 in insolvency and bail-in and do not require a trigger for write-down or conversion. Nevertheless, according to the BRRD (Article 48), T2 is junior in bail-in to non-T2 subordinated debt. Also, converting or writing down T2 is possible in an early regulatory intervention (a step ahead of resolution), which is not the case for non-T2 subordinated debt. This translates into T2 being rated lower than non-T2 subordinated debt for EU banks. Consequently, when rating T2 securities, we typically assign a rating which is two notches down from the rating of the bank's senior unsecured debt (*see first paragraph of this section*).

*For full details on the rating process for bank capital securities and the credit assessment underpinning it please refer to our Bank Capital Securities Rating Methodology, an update of which (May 2019) is being published in parallel with this methodology.*

## 1.8 Covered bond ratings

We view covered bonds as part of the general on-balance sheet funding of a bank, a view further confirmed during the crisis when covered bonds managed to keep many banks afloat, while securitisation was significantly harmed.

The introduction of resolution/bail-in regimes in several markets, e.g. the BRRD in the EU, has had significant implications which are reflected in our methodology for covered bond ratings. The former base case for covered bond analysis – in which the cover

pool becomes the sole source of repayment upon the insolvency of the issuer – has become much more unlikely in a resolution regime.

Our rating approach reflects our view that:

- The issuer rating is the fundamental anchor point for covered bond analysis
- The combination of legal and resolution frameworks is the most important element supporting the covered bond rating
- The cover pool represents a second recourse after a chain of events affecting the issuer. It is limited but provides additional security and stability to the covered bond rating.

Our covered bond ratings will benefit from up to two additional notches for the legal framework, plus up to four additional notches for the resolution regime, plus up to three additional notches from our cover pool analysis.

For more details please see our rating methodology for covered bonds.

# 2. The methodology

## 2.1 General foundations of the bank rating methodology

### 2.1.1 Peer group approach

We believe that a bank's credit dynamics and fundamentals can only be fully understood and assessed in a peer group context, through a 'compare and contrast' analysis. In our opinion, peer group analysis needs to be embedded in the rating assessment process from the start, rather than used at a later stage as a 'health check' validating the initial assessment. This is because our ratings and the analysis behind them measure bank credit risk from a relative perspective – across time but also compared to domestic and cross-border peers.

For smaller, narrowly franchised institutions, like some retail banks or specialised lenders, the peer group consists of similar entities in the same market. However, to broaden our analytical focus, the comparison also needs to include similar banks in different markets. In the case of larger banks with diversified activities and a cross-border presence, our peer group assessment needs to be cross-border or even global in nature. The latter is especially true for wholesale and investment bank activities.

The analysis underlying our bank ratings thus identifies peer groups and their main characteristics at the earliest stage.

### 2.1.2 Forward-looking ratings underpinned by forward-looking analysis

We aim to assign forward-looking bank ratings that anticipate evolving credit trends, rather than belatedly adjusting to already-crystallised risks and developments. Accordingly, supporting opinions are geared toward future expected trends and developments. When possible, we underpin these opinions with forward-looking metrics and estimates, rather than assessing past performance alone. Our forward-looking assessments are based on publicly available financial data, macroeconomic scenarios, and management guidance.

### 2.1.3 Focus on risk

We undertake our fundamental analysis of banks from the perspective of risk and protection against risk, which underpins credit ratings. There are many instances in which banks that were long perceived as 'profit champions' ended up dangerously exposed to material risks without sufficient protection.

Our analysis focuses on what banking is essentially about:

- Providing financial services to and facilitating financial transactions for businesses, individuals, and the public sector. The provision of credit to the real economy in the markets where the bank is active is essential in this respect.
- Intermediating between savers and borrowers
- Providing liquidity to financial systems and economies

Banks need to remain profitable to continue capital formation and preserve market confidence, but they also have to satisfy all stakeholders sustainably. Fundamentally, banks cannot and should not be viewed as purely profit-maximising. For example, they face regulatory and market-driven constraints on liquidity, funding, capital, risk concentration, and business diversification. These constraints prevent banks from realising the full profit potential of their balance sheet and business activities. Banks are highly

leveraged businesses and the vast majority of their funding is not from shareholders, but from depositors (individuals, businesses, the public sector) and other creditors, for which appropriate protection is essential. This is the main reason why our credit analysis focuses primarily on downside risk rather than on upside potential (more so than for other industries). While earnings and profitability are the key drivers for upside potential, they are also an essential element of risk protection.

#### 2.1.4 Cyclical versus structural risks

Our ratings aim to provide a medium- to long-term view of a bank. This means that a temporary dip in earnings – quarterly, semi-annually or even annually – is not in itself a reason to downgrade a bank rating. Conversely, a one-off boost to profitability would generally not warrant higher ratings.

Disregarding temporary spikes or dips in earnings should contribute to ratings stability and predictability over time. However, deeper cyclical fluctuations may inevitably lead to more material changes in banks' fundamentals, which ought to be reflected in ratings.

The years-long financial crisis that started in 2007 proved again that what appear to be resistant banking structures can be washed away by cyclical trends. We aim to avoid rating pro-cyclically and, where possible, to anticipate the effect of cyclical trends on banks' structural risks. As mentioned above, this translates into ratings that are forward-looking rather than reactive. More proactive and timely rating adjustments would also help prevent unnecessary, multi-notch rating downgrades applied belatedly to catch up with changed realities.

#### 2.1.5 General versus specific risks

Even though a bank's performance cannot remain immune to an economic slowdown or a recession in its market(s), it is unusual to attribute difficulties solely to systemic risks. Most often, such hardships result from specific risks related to balance-sheet weaknesses or mismanagement. In this respect, financially weak and risky institutions are generally the first to suffer in stressed environments.

#### 2.1.6 Qualitative versus quantitative

Our analysis is an integrated mix of the two. Specifically, financial ratios and other metrics have to explain the qualitative narrative to have analytical credibility. Conversely, qualitative aspects of the analysis have to be supported by credible quantitative metrics. We do not set up boundaries for rating categories according to specific financial-ratio levels.

As these two areas are closely interconnected and interdependent, we do not assign percentages of importance for each in our bank rating methodology. *Specifically, we do not apply a scorecard approach to our bank rating analysis.*

#### 2.1.7 Communicating vessels rather than building blocks

We do not view the analytical components of our bank rating methodology as separate building blocks, with each of them assigned specific scores and eventually aggregating into a scorecard-driven credit rating. Rather, we consider them as communicating vessels which are gradually filled up as the analytical process progresses, including our peer group assessment.

The analytical process is also interconnected, with various elements of the assessment architecture determining others. For example, a bank's business model determines its funding mix, asset mix and risk profile, but can itself be adjusted to funding constraints or lending opportunities. Our analytical route for bank ratings twists and turns rather than pursuing a straight line.

#### 2.1.8 Impact of more comprehensive regulation and supervision

In the last decade, the banking industry has become significantly driven by tighter and more comprehensive regulatory norms and supervisory practices – a process which is underpinning its evolving dynamics, both for opportunities and constraints. Consequently, the more robust regulation and supervision and the banks' reaction to the new regulatory environment represent a far more central component of their strategies and performance than during the two pre-crisis decades of deregulation. This aspect holds true for both prudential and conduct regulation.

Our analysis and ratings aim to reflect these new regulatory realities *(for details please see section 3.4.6).*

### 2.2 Analytical inputs

#### 2.2.1 Sources of data and information

Our bank rating analysis relies on various sources, most of them in the public domain. During the last decade or so, and especially since the beginning of the crisis, the public disclosure of the larger banks has improved significantly and the degree of transparency on risk elements is now higher than before, with further improvements underway. This is found in the increasingly detailed annual

reports, Pillar-3 reports, and investor presentations accompanying quarterly results and other public events. Sources of information for the general background of banks' activities include central bank reports, bank regulators' statistics, reports from international organisations, comparative databases and industry reports. As mentioned below, market metrics also play an important role in our rating assessment of banks.

Publicly available information may be supplemented with non-public information for issuers engaging in dialogue with us. Our overall view is that such non-public information, if and when submitted, may not lead to conclusions that are materially different from those based solely on public information, provided the latter is adequate. That said, an ongoing and open dialogue between our analysts and the issuer is always welcome and viewed as adding value.

Under no circumstances would we assign or monitor a rating if the amount of information available to us, be it public or non-public, is insufficient to make an analytically consistent and balanced assessment.

#### 2.2.2 Market metrics and market sentiment

Trends in market metrics for banks (for example, credit default swap or bond spreads, share prices) should not and do not determine our bank ratings. Nevertheless, the message their relative positioning conveys needs to be assessed as a relevant variable in our analysis. In recent years it has become evident that market sentiment can create significant tailwinds or headwinds for a bank's ability to market-fund or to raise equity.

### 2.3 Links between banks and sovereigns

#### 2.3.1 No mechanistic links between bank and sovereign ratings

We do not see a valid analytical reason for making mechanistic links between bank and sovereign ratings – in the form of sovereign rating caps – notably for euro-area banks. This is especially the case for larger, geographically diversified banking groups which can generate revenues from non-domestic markets on a sustainable and predictable basis. First, the existence of the European Banking Union, underpinned by the Single Supervisory Mechanism and the Single Resolution Mechanism, contributes to a further delinking of bank credit from sovereign credit in the euro area. Second, the application of the BRRD across the EU is another step towards bank-home sovereign de-linkage (home sovereign bail-out is replaced by creditor bail-in).

There are however specific instances in which our view on a bank's home sovereign (and more rarely on a large foreign market's sovereign) is a material rating factor for a bank:

- The bank has large holdings of sovereign bonds (in most cases domestic). In this case the bank's exposure to its home sovereign's bonds is included in our analysis of asset mix and quality (large-exposure risks).
- The bank is expected by its home sovereign to contribute actively to public financing, i.e. to purchase sovereign bonds on a material scale in the future. Again, this entails current and contingent credit risk in the bank's balance sheet.
- The bank has a public mission specifically linked to the home sovereign (or rarely host sovereigns).
- The bank is materially dependent on borrowing from its domestic central bank and is less able to source market funding or international public funding. This scenario is less likely to occur for euro-area banks, where national central banks are part of the Eurosystem, with the ECB at its core.

#### 2.3.2 Our view on a sovereign is not a proxy for assessing a bank's home-market conditions

Sovereign ratings and analyses followed by market participants generally assess the likelihood that a country's central government can service its debt fully and on a timely basis. This assessment is not tantamount to analysing a country's economy, which offers a different perspective – although correlations visibly exist. For example, a central government with low indebtedness may be able to service its debt safely and comfortably even if its economy grows weaker, which may not be the case for a central government with high indebtedness.

Our economic assessment of a bank's home (national, regional or local) or foreign markets is part of our fundamental assessment underpinning its rating, providing context on trends in a bank's asset quality, funding or revenue generation. Consequently, it may be partially de-linked from our view on the sovereign's debt-servicing capacity.

## 2.4 Methodology outline and road-mapping framework

### 2.4.1 Macro

Our bank rating analysis is anchored in a macro assessment which looks at the following:

- General trends in the economy and financial system of the bank's main markets – domestic and key foreign (if relevant)
- Structure and parameters (performance, risks) of the banking system(s) where it operates
- Regulatory framework and dynamics
- Credit view on the domestic sovereign (and foreign sovereigns, if relevant)

### 2.4.2 Micro

From that broad background, the analysis moves into bank-specific areas, addressing the following components:

1. Group structure and ownership
2. Market position, size and degree of interconnectedness
3. Business model
4. Assessment of risks
5. Assessment of protection against and management of risk (including prudential metrics)
6. External support

The starting point is an assessment of the bank's group structure, ownership and governance, as well as its overall market position, size and footprint. An analysis of the bank's interconnectedness and substitutability, both domestic and cross-border, is also included. Important as they are, these elements are not viewed as principal rating drivers but rather as essential parts in creating an overall framework to understand the bank's credit dynamics.

This is followed by an assessment of the bank's business model. We believe that a bank's business model is the central element driving the strength and dynamics of its credit fundamentals. It is therefore an anchoring factor in our bank methodology. A bank's business model often drives its risk-return strategies, growth and diversification, as well as the way it is seen by its main stakeholders, customers, regulators, creditors, shareholders, counterparties.

Our analysis of risks includes the following categories:

- Strategy
- Funding
- Asset (mix, quality and transparency)
- Business (market, operational, etc.)
- Cyber
- Regulatory
- ESG (mostly governance)
- Reputation/legal

We aim to incorporate other risks specific to each bank in these broad categories. One example is market risk, which would represent a major component of business risk, regulatory risk and reputation/legal risk in the case of institutions with material investment-banking and trading operations. Another example is operational risk, especially for banks with large asset-management, private-banking or custody services (for which credit or funding risks are less prominent).

Technology reliability and cybersecurity risk are increasingly relevant for most banks and can affect funding, business operations and reputation. In recent years, technological advances and an increased industry focus on digital strategies – both for the customer offer and for transactions and internal processes – have raised the threat of cyber risk for banks' activities and customer and market confidence in the banking system. Consequently, Scope will identify cyber risk as a separate risk category in its rating analysis of banks going forward.

Our bank methodology then focuses on measures for protecting against and managing risk (including prudential metrics), encompassing the following categories:

- Liquidity/asset-liability management
- Earnings power
- Risk provisions
- Capital and leverage
- Risk culture, governance and management

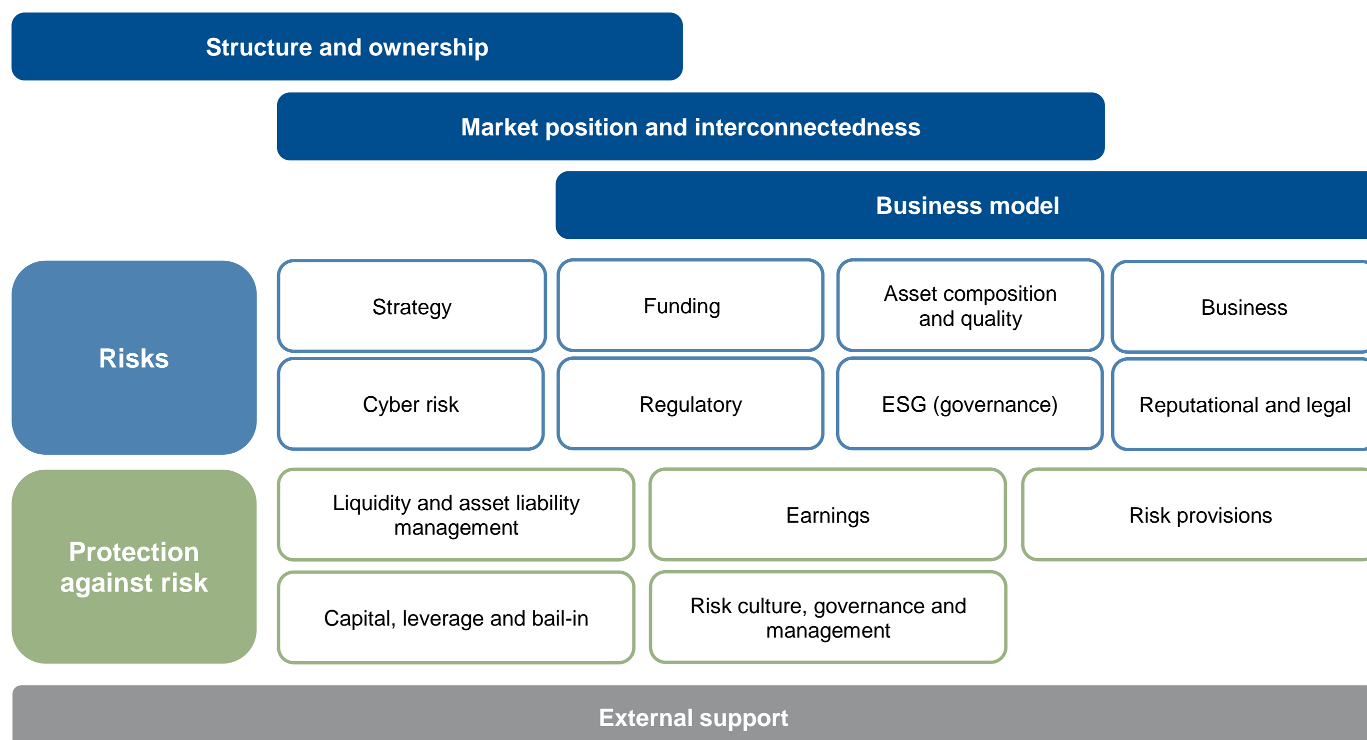
The final part of the methodology is the assessment of external support, if applicable.

#### 2.4.3 Road-mapping the analytical process:

We take the following steps to finalise an issuer rating recommendation:

1. We examine the range of data and information available, both macro and micro. A lack of sufficient relevant data and information will lead us to discontinue the rating assessment process.
2. We determine the appropriate peer groups for the bank being rated – both cross-border (based on business models and other relevant parameters) and national. The 'compare and contrast' peer-group view remains a constant through the entire assessment process, for each analytical component.
3. We go over the macro elements (see above) to clarify the overall environment in which our bank-specific analysis will be anchored.
4. We go through each component of our bank-specific analysis (*see Figure 3).*

**Figure 3: Methodology framework**




Source: Scope Ratings

The analytical components are detailed in the remainder of this methodology.

# 3. Analytical components of this methodology

## 3.1 Group structure and ownership

Our rating assessment looks first at a bank's corporate structure and market position. Often, a bank's group structure is driven by its business model and management strategies, as well as local regulatory and market dynamics. For example, a banking group may choose to subsidiarise a specific set of activities – such as investment banking – due to regulatory requirements or the need to make these operations visible and transparent within the consolidated organisation. As another example, we look at whether an EU bank's non-domestic activities within the EU are conducted through branches or subsidiaries, as this may impact the regulatory jurisdiction for these activities.

Our analysis of European banks' ownership identifies at least four types of institutions:

- Banks with listed shares
- Cooperative or mutual banking groups
- Public-sector banks (owned by regional or central governments or by other public-sector bodies)
- Closely held ownership (family or individual), which is still the case in a few instances for smaller local banks

In several cases the boundaries between these categories have been blurred, both in the years before the crisis (for example, cooperative groups listing shares publicly) and at the height of the crisis (for example, banks with listed shares being partially or entirely nationalised or public-sector banks being restructured and consolidated into institutions with listed shares).

In general, we do not consider public-sector ownership in and of itself to be a reason for sub-optimal management. We do, however, believe that politically driven management can harm a public-sector bank, as has been demonstrated too often in Europe. At the same time, this can also be the case for banks with other forms of ownership (mutual, publicly listed shares).

## 3.2 Market position and interconnectedness

With respect to market position, we assess the bank's footprint and market share in its core activities – such as mortgages, consumer credit/cards, SMEs, wholesale, trading, investment banking, asset management, and other financial services – both at home and abroad. Dominance in a product segment in a specific market, for example in mortgages or credit cards, may translate into pricing power which can help revenues, although retail products are often fully commoditised.

We also look at a bank's customer base in terms of its stability, degree of sophistication, customer demand for new or existing products, as well as various metrics related to local demographics in the markets where the bank has a material presence.

Assessing the competitive environment is important. As far as possible, we look at competition by geographic market and business line rather than among consolidated groups across countries and markets. A banking group can have a very competitive position in a specific market (in general, its domestic market) or in a certain business line, while being less competitive elsewhere.

Areas of particular importance in our analysis are the degree of interconnectedness within a bank, as well as its asset size. These elements indicate systemic importance and the substitutability of the respective institution which, in turn, are important in determining whether regulators and policymakers would consider the bank to be systemically important in a distress scenario. In general, the degree of concentration of a banking system is also important in this assessment: the higher the banking concentration, the higher the systemic importance and the lower the substitutability of the larger players. That said, the new regulatory dynamics within the EU, notably the European Banking Union, should make national characteristics less important.

In the last decade there has been a relative shrinking of cross-border interconnectedness in banking, manifested by reduced cross-border interbank exposures and lower levels of cross-border lending (especially to countries with more stressed economies). Our view is that the pre-crisis trend towards greater levels of cross-border banking interconnectedness is very unlikely to resume for the foreseeable future.

### 3.2.1 Asset size is not a rating driver

In our opinion the size of a bank's total footings should not be a central component of the rating. Firstly, asset size is influenced by accounting norms – for example, reporting gross derivative exposures (IFRS) versus net exposure (US GAAP). Secondly, size on its own does not tell a meaningful credit story, as the credit fundamentals of two banks with the same asset size can be markedly different. Thirdly and most importantly, size can be a proxy for positive credit characteristics such as a large, entrenched market position and pricing power, but also indicate excessive diversification or oversized risk-taking.

It is possible for smaller banks with strong credit fundamentals to achieve higher ratings than large banks with less healthy credit fundamentals.

## 3.3 Business model

*Our definition of a bank's business model relates to the business mix underpinning its capacity to preserve and grow sustainable and predictable high-quality, risk-adjusted earnings in markets and sectors in which it maintains a material presence.*

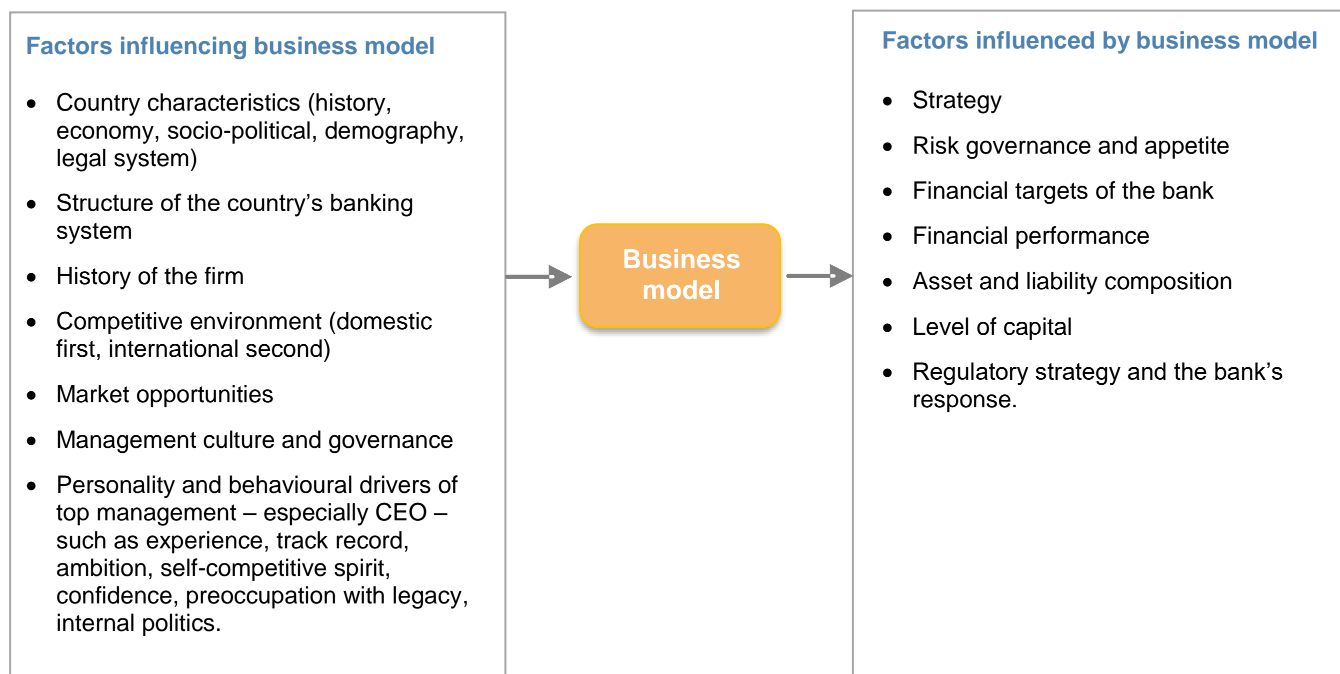
The above definition calls for several clarifications:

- High-quality earnings refer to earnings from the bank's core business franchise, defined by the activities and market segments in which it maintains a relevant and defensible presence. We thus attempt to identify and discount one-off or unsustainable earnings, and to identify a forward-looking, core business model that does not necessarily reflect historical activities and strategies.
- The sustainability of a business model relates to earnings quality and to the risk characteristics and interrelation attached to each business line in the mix. Assessing earnings without risk is, more often than not, a misleading indicator of a business model's sustainability.
- The business model's sustainability and predictability also need to be measured from the broader angle of all stakeholders, not only shareholders. The range of stakeholders in banking firms include depositors, regulators and other public authorities, debt holders, counterparties, other bank clients and business partners. In the case of systemically important banks, this also includes the credit and financial markets at large and the country's economic and financial stability. Banks have also been subject to media and public scrutiny, especially in the last decade.

### 3.3.1 Business model assessment

When assessing the viability and sustainability of a bank's business model, a key challenge is to make an appropriate comparison to identify outliers and flag early-warning indicators from a misalignment of business models with market conditions and financial fundamentals.

**Figure 4: Business model interactions**




Source: Scope Ratings

The business model assessment starts with a bank's business lines and compares the mix within the consolidated group across geographies. In developed markets, many large banking groups are universal in nature and therefore their business model is a specific mix of the various business lines.

In the broadest terms, a large banking group's activities are clustered into three categories:

- Retail and commercial banking (RCB)
- Wholesale and investment banking (WIB)
- Wealth and asset management (WAM)

An analysis of the RCB, WIB and WAM mix is the first step in our business model assessment.

The second step is to analyse the RCB, WIB and WAM in terms of:

- Specific business lines and main products
- Geographies

Most banks in a global peer group have extensive 'domestic RCB' (dRCB), and many also have 'foreign RCB' (fRCB) franchises, which warrant a comparative analysis of these activities. As for WIB, material activities are inherently cross-border, thus the comparison of domestic versus foreign is less clear-cut when identifying business models. Our analysis of WAM also includes looking at the bank's presence in insurance (mostly to collect long-term savings).

When looking at dRCB and WAM, we aim to identify the main business lines and products – such as deposits, mortgages, consumer credit, small-business lending, asset management, insurance – and, if available, market shares and their stability. Analyses of fRCB and WAM aim to differentiate according to the breadth of the cross-border presence (for example, countries in surrounding areas, other industrialised-country markets, emerging or frontier markets by geographies, regional clustering) and assess existing or potential synergies, as well as relative positioning and stability in each national or regional market.

For WIBs the aim is to identify core franchises (key business lines) in terms of market positioning, earnings and risks. The quality of earnings is acutely important for explaining and anticipating a WIB's sustainability and predictability versus volatility and uncertainty. We aim to identify the relevant geographies and products, and the bank's competitive position in each, which are important to subsequently analyse risk appetite, management and control.

In order to properly position our business model assessment within our rating analysis, we compare the business mix with the mix of assets, funds, earnings and risks. This comparison identifies general trends and outliers.

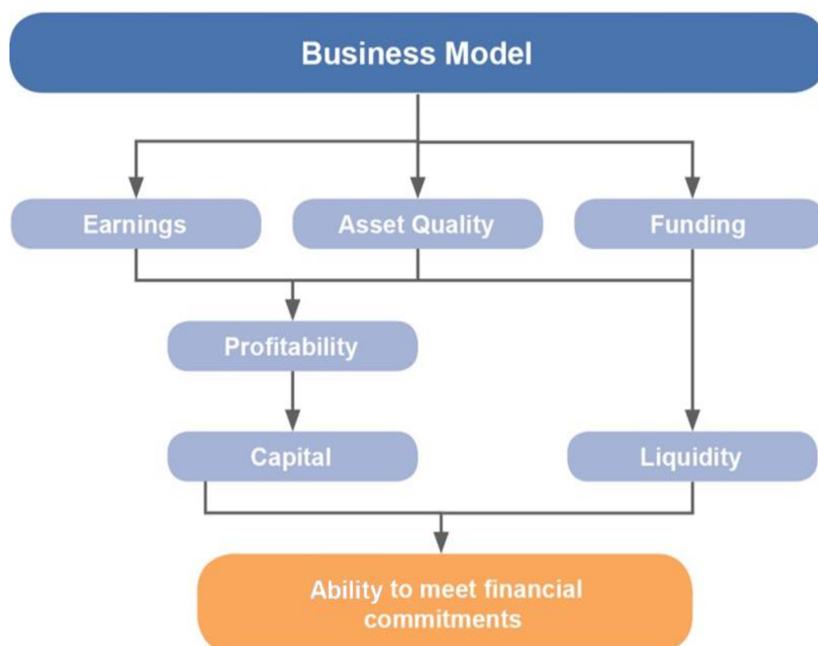
Based on this approach, we identify seven business model categories – with the cautionary note that they represent a broad generalisation since each bank has its own business model specifics and perfect comparisons are not possible. The first two business model categories in the list below include universal banks. A very large majority of banks belongs to the third and fourth business model categories.

1. International wholesale/investment and retail/commercial banks (dRCB, WIB, WAM, sometimes fRCB)
2. International mostly retail/commercial banks (dRCB, fRCB, WAM, reduced WIB)
3. Mostly domestic national-scale retail/commercial banks (dRCB, WAM, reduced fRCB and/or WIB)
4. Regional or local domestic retail/commercial banks (dRCB, sometimes WAM)
5. Private banking institutions
6. Specialised lenders (mortgages, consumer, leasing, etc.)
7. Specialised trading and/or investment banks

### 3.3.2 Linking business model assessment with risk analysis

The business model may not necessarily immediately trigger a bank failure to meet its contractual financial commitments in a timely manner and in full, but it is – alongside execution risk of the firm's strategy and its risk appetite – the threshold of a cascade potentially resulting in such a scenario (see graph below).

**Figure 5: Business model and risk analysis**




Source: Scope Ratings

Assessing the viability, sustainability, and risk characteristics of the business model is therefore an essential first step in our bank rating analysis:

a) **Viability**: is the business model viable in its current form (can it deliver high-quality, risk-adjusted earnings)?

b) **Sustainability:** can the business model deliver earnings on a longer-term basis, through the cycles, assuming worsening market conditions? What are the business model's key vulnerabilities and how can they be managed and mitigated?

c) **Risk characteristics:** a business model can be viable and sustainable and yet display a high degree of risk. When assessing risk within a business model it is important to differentiate between risk intrinsic to operations (part of an explicit risk appetite assessment which we can thus expect to be properly managed) and risk incidental to the activities, for example, a vulnerability in the business model.

We assess a bank's business model on a group basis and from three angles: business line, geography and risk-return parameters. Each is essential for understanding the bank's competitive dynamics, viability and sustainability over time. A bank's business model characteristics should be in line with its earnings, asset, and funding mix, as well as its internal capital allocation. Any material incongruities – such as large-scale market funding for retail loans or risky asset-liability mismatches – may signal an inappropriate risk appetite and/or high strategy execution risks. Our business model analysis examines business lines more deeply on a 'compare and contrast' basis.

Despite the current headwinds to growing margins and volumes, we believe that a bank's dRCB activities provide the strength and stability to anchor a solid business model: i) the targeting of a large and stable customer base; ii) via a well-suited and efficient distribution network; iii) with the offering of a diversified range of products and services. We also believe that developing effective digital offers and channels for a bank's products and services represents a *sine qua non* for a sustainable business model in this context.

Specialised lenders or firms relying primarily on WIB are more exposed to business model risk.

Revenue and funding diversification is generally positive for a business model. However, some diversification is less suitable, such as material retail-lending reliance on wholesale funding or pursuing revenue growth in riskier markets on the potentially false assumption that the bank's home expertise provides a competitive advantage in foreign markets.

## 3.4 Risks

As mentioned above, Scope focuses mainly on risk when analysing a rating.

Our assessment of bank risks encompasses eight broad categories: strategy, funding, assets (mix, quality and transparency), business (market, operational), cyber, regulatory, ESG and reputation/legal.

**Figure 6: Risk summary**

Source: Scope Ratings

### 3.4.1 Strategy risk

In our view, there are two components of strategy risk: strategy formulation and, more importantly, execution. In this context, successful execution rather than initial formulation most often assures the success of a strategy.

To assess a strategy's likelihood of success, we look at the management team's competence, experience, capacity to adjust, and track record. We consider that the management culture of a bank is very often shaped or re-shaped by the chief executive officer.

One area of focus is the bank's growth and diversification strategy. A specific example is M&A decisions, which can materially impact the bank's future, as amply shown by the financially shaky mega-transactions consummated as the financial crisis was heating up.

An effective and sustainable digital strategy is becoming critically important for all banking firms. The inability to offer up-to-date digital products and services or an inadequate digital infrastructure for internal and external transactions and processes is a real strategic risk which can negatively affect a bank's business, financial metrics, and overall viability.

Increasingly, banks will also have to integrate climate change and other ESG-related topics into their broader strategy framework. This follows the heighted focus of institutional investors and policymakers on the implications of climate change and on the pursuit of the UN's social development goals.

### 3.4.2 Funding risk

The financial crisis showed that funding shortages can sink a bank rapidly, even if it has complied with regulatory solvency ratios. Market sentiment is crucial to funding stability as long as banks rely on wholesale funding to support their balance sheet. Banks which no longer enjoy market confidence find themselves in a grave situation, even if their capital remains within regulatory boundaries.

Market confidence in banks is driven by various elements:

- Regulatory risk
- Trust and visibility with respect to the mix and loss contents of assets
- Confidence in the stability of the bank's liability structure, for example, stable funds or sticky deposits
- Confidence in the bank's strategy for growth and diversification
- Transparency and effectiveness of the digital offer
- View on the bank's true solvency (related to the perceived loss contents of assets)
- The bank's risk culture and its track record
- Vulnerability to misconduct risk (for customer and market activities), cyber risk, ESG, reputational, and legal risks
- The macro situation of the domestic market and other key markets

The deposit run is an even more severe scenario (also involving retail customers), which would result from a general collapse in confidence in a bank, with rapid and terminally corrosive effects. Several deposit runs did in fact occur at the height of the crisis, requiring state intervention.

With respect to funding risk, we look at several key indicators, when available:

- Reliance on wholesale funds (versus deposits)
- Analysis of the deposit base: insured, uninsured; stickiness; maturity structure; comparability of deposit rates within the country (and across the euro area; any material deposit concentrations – notably for offshore or cross-border deposits
- Analysis of market funding: long-term versus short-term, secured versus unsecured; domestic versus cross-border; currency risk (for example, USD funding for EU banks); degree of relative riskiness of short-term paper (for example, foreign USD commercial paper versus domestic EUR certificates of deposit)
- Regulatory ratios pertaining to funding and liquidity analysis, such as the liquidity coverage ratio and the net stable funding ratio
- Funding mismatches (for example, long-term loans funded with short-term funds, currency mismatches)
- Reliance on central-bank borrowing
- Loan-deposit coverage
- Asset encumbrance indicators and collateral analysis
- Role of securitisation

**Collateral and asset encumbrance risk**

The non-deposit financing of banks increasingly takes place on a collateralised basis. Specifically, borrowing from central banks (like TLTRO funds from the ECB), from non-bank providers (private repos) and, increasingly, from banks (in the interbank market) is mostly against collateral pledged by the borrowing bank. The providers of funding would require a haircut on the collateral, which can be material. The level of haircuts typically depends on the risk characteristics of the collateral as well as the bank.

To take an example, if a bank's core activities rely materially on collateralised borrowing with large haircuts, this points to structural weakness. Assessing whether a bank has sufficient eligible collateral is a dynamic process (and so far there is insufficient public transparency in this area) because widening haircuts in adverse conditions could lead to available collateral running out and thus being shut out from new secured borrowing when it may be needed most.

On a related point, we would ideally assess the encumbrance level of a bank's assets. In addition to the above categories of collateralised borrowing – much of it out of necessity – our asset-encumbrance analysis looks at covered bonds, which are also issued against collateral. The aggregate reliance on collateralised funding signals the vulnerability of unsecured depositors and investors if the bank has to wind down, as the encumbered assets would normally be unavailable for unsecured claims.

Having said that, our analysis differentiates between the stable, long-term secured funding expected for core activities (like covered bonds financing mortgages or public-sector loans) and secured funds taken mainly to fill a funding gap that otherwise threatens the bank's survival, such as financially weak banks borrowing from central banks.

Asset encumbrance becomes a major threat when a bank goes into insolvency and has its assets carved out. To the extent that larger banks in the EU are resolved rather than placed into insolvency, the threat of excessive asset encumbrance becomes more theoretical. In this respect other important factors should potentially represent a bigger threat than asset encumbrance for unsecured creditors, notably the bail-in waterfall highlighted earlier in this report *(section 1.2)*.

The ability to rely on covered bonds for secured long-term funding can be a positive and stabilising factor. During the crisis, covered bonds performed better in primary and secondary markets than unsecured bank debt or securitisation vehicles.

**Securitisation and special purpose vehicles (SPVs)**
Banks currently use securitisation far less than before the crisis. Nevertheless, it remains a legitimate funding avenue for banks, including specialised lenders, such as mortgage providers. We anticipate growth in securitisation funding going forward, encouraged both by market demand and new regulatory acceptance. When appropriate, we adopt a conservative view for risk transfer, choosing, for example, to reintegrate securitised assets into the bank's balance sheet (beyond the residual risk itself).

For banks using off-balance sheet SPVs, we analyse their assets and overall structure to provide a general rating assessment of the bank. Sponsor banks often provide liquidity backstop lines to their SPVs and have to accept taking SPVs or securitised assets back onto the balance sheet when faced with market-threatening conditions (as was manifestly the case at the beginning of the great financial crisis).

### 3.4.3 Asset risk: mix, quality and transparency

The composition and quality of a bank's assets are essential to its credit fundamentals and to driving market confidence in the bank's viability and financial strength. Our analysis looks at the main categories of assets and, if warranted and possible, goes beyond regulatory-accepted risk weights, which do not always capture the true risk contents. One example is investments in distressed or problematic sovereign bonds, which are most often made by banks based in countries with more stressed economies. Another example is mortgage credit products that may be riskier than the assigned risk weight implies.

**Asset mix**
Key indicators for the asset mix include:

- Analysis of asset mix, focusing on areas of risk, such as loans or investments
- Analysis of loan portfolio mix, focusing on areas of heightened risk, such as commercial real estate or leveraged loans
- Analysis of loan portfolio granularity, looking at main sector and, if possible, individual-exposure concentrations – especially for areas of heightened risk.
- Analysis of geographic distribution of risk assets (loans and investments) with a focus on concentrations in riskier geographies
- Secured versus unsecured lending
- Assessment of loan collaterals (e.g. mortgages, SMEs, commercial real estate)

**Asset quality**
Key indicators for asset quality include:

- Level of stress in the loan portfolio – looking at utilised categories of impairments and problematic credits. This analysis is done on a sector basis, with a focus on heightened risk areas.
- Impaired loans versus gross loans –viewed on an aging schedule basis if possible

- Loan-loss provisioning policies and practices for the bank – if possible by credit sector and for unsecured versus collateralised loans
- Dynamics of provisioning for loan losses ('compare and contrast' view for a specific credit sector or category of banks within one market and cross-border)
- Loan-loss reserves (stock of loan-loss provisions) versus impaired loans
- Loan forbearance practices and impact on loss-recognition timing (e.g. the transition to IFRS 9)
- Level of stress in the investment portfolio on a segment basis according to the portfolio's degree of riskiness. This assessment will include sovereign bonds and riskier investments, such as legacy or new securitisation assets, as well as other categories of securities.
- Analysis of the investment portfolio based on the geography of the securities (e.g. EU markets, US, emerging markets)
- Looking at geographic and sector aggregations in the risk asset portfolio – namely the total aggregate exposures of loans and investments
- Excessive exposure to carbon-intensive sectors or economies that are disproportionately exposed to climate change.
- Risk provisions for investments, if any
- Degree of risk in the short-term/liquid asset portfolio (e.g. repos, unsecured)
- Assessment of the derivative activities' impact on the risk profile of the balance sheet (and off-balance-sheet risks), in particular credit risk arising from credit derivatives used to sell credit protection

**Stress testing**

An important part of our asset-quality analysis is the stress testing of a bank's portfolio. In our rating assessment, we aim for simplicity in this area, especially since, historically, stress-test results for banking portfolios have not been entirely credible – even those claiming to have depth and sophistication. A conservative markdown for loans and investments, reflecting our perception of risks, is central to stress testing.

**Transparency**

For our analysis, it is important for a bank to disclose its asset mix and quality in a clear and transparent way. In the past, investors, other market participants, regulators and policymakers alike became wary of opaque or unconservative disclosures of the contents and valuation of asset items – whether these were loans, investments, or trading exposures. This includes the ongoing focus on improved climate-related disclosures such as the G-20 TCFD recommendations.

### 3.4.4 Business risks: market and operational

This category captures a wider range of banking risk exposures. For example, banks with investment banking and trading activities are exposed to market risk in addition to other risks, such as regulatory. For banks primarily active in asset management or custody services, operational risk would be paramount.

**Market risk**

In the aftermath of the financial crisis, both the required public disclosure and regulatory norms were visibly strengthened with respect to market risk. In fact, tighter regulations, requiring more demanding liquidity and capital levels, as well as dramatically changed market conditions after the crisis, led many banks to exit large-scale market activities. The combination of strengthened regulations and a reduced appetite for market activities has made market risk less threatening for the banking industry in general – although not for those banks still very active in trading. Nevertheless, we continue to view this risk as critically important.

On aggregate, a bank's market activities can be divided into primary and secondary markets. It is in the latter category that banks were taking unduly high risks in the past, and it is that category which was also most affected by the new regulations. Our analysis mainly focuses on the risks taken by banks in secondary markets. We look at the risk of products – both cash and derivatives – positions, exposure concentrations, geographies, and currencies. Again, our peer group analysis is a key analytical tool. This is especially the case because most large secondary-market positions are held by the global trading houses – mostly in Europe and North America.

We also pay particular attention to banking entities which have historically been less active in secondary trading markets, but which on occasion display a burst of market activity (due mostly to what they perceive to be favourable market conditions).

**Operational risk**

Our definition of operational risk is not a catch-all residual category. Our analysis aims to identify specific instances of operational risk explicitly.

Significant operational risk would normally exist in both retail and wholesale activities and would be even more prominent for activities structurally carrying low credit or market risk such as, for example, asset management or custody.

We consider the operational risk of specific material transactions (such as acquisitions or divestitures) or sizeable IT system migration processes. Our assessment includes specific geographies and business lines as far as possible.

We cannot always rely on hard data when assessing operational risk because this is not usually publicly available. Our analysis is inherently intuitive, aiming to identify especially low-frequency, high-impact events which can affect a bank's financial strength and market position to a larger extent.

### 3.4.5 Cyber risk

We increasingly view cyber risk as a very material risk category for the banking industry. Although it is still considered by many – including prudential regulators – as being part of a bank's operational risk (which in theory it is), we believe that the magnitude of its potential reach should qualify it as a distinct risk category. The analytical challenge (for rating analysts but also for supervisors and investors) is that a cyber threat cannot be properly quantified and measured: it may be a minor sideshow without relevance (other than some embarrassment for the bank's IT department), or it may have a truly devastating impact on the institution and its ecosystem. It all depends on the sophistication and determination of the hackers – cybercriminals or a hostile government – matched against the strength, depth and agility of the bank's cyber defences.

Investors and analysts generally feel reassured if they have a good degree of visibility on a bank's risks – be they in asset quality, funding, trading, or operations. In the case of cyber risks this is not easily possible. It is understandable that banks would deliberately avoid providing too much transparency on their cyber defences. Consequently, we believe that, on balance, investors and customers are simply left to assume the best about a bank's cyber defence effectiveness (otherwise they would not deal with that bank) and consider successful cyberattacks as freak occurrences, from which the bank will hopefully learn to improve its protection the next time around. In general, we are aware that banks have cyber protection plans, engage in self-hacking, sandboxing, simulations, emergency tests and, importantly, provide employee training on cyber risk and the protective measures which everybody needs to take.

Our rating analysis aims to look at the reliance of a bank on key third parties (e.g. on cloud hosts, data aggregators, blockchain solution providers) and the extent to which they can function safely if problems with one of them occur.

We also look at cooperation among regulators across jurisdictions to build up cyber protection effectiveness in the supervisory process and bank regulations. This process is aimed at more effective bank supervision, making sure depositors are protected and systemic stability is being safeguarded. However, investors are also more reassured if they sense that regulators are focussing on bank cyber risk in a coordinated fashion.

We believe that on the specific challenge of cyber risk, banks are more effective when they cooperate. The hypothetical minor upside that may be gained by having the reputation of being more effective on cyber risk than a competitor would be quickly wiped out by a successful, massive cyberattack on that competitor, which could significantly hurt trust in the viability of digital banking. This suggests that top managers and boards in banks would need to shed the competitive approach when dealing with the cyberworld and embrace constructive cooperation.

### 3.4.6 Regulatory risk

*We define regulatory risk for banks as the risk that regulatory action taken against a banking firm would have a material impact on its operations, and business and financial profile, potentially affecting its ability to meet its contractual financial commitments on a timely basis and in full.* We do not aim to rank or rate regulatory frameworks, structures or practices. Our analysis looks at regulatory risk solely from the angle of a bank's credit fundamentals.

Understanding regulatory risk is not an easy task, especially for larger groups with diversified activities in several jurisdictions. This is because, firstly, market observers and participants (including rating agencies) do not have access to data and information that

the bank provides to regulator(s) – for example, supervisory review and evaluation process (SREP) scores – nor are they privy to the dialogue between the bank and the supervisory authorities. Secondly, under constantly evolving regulatory initiatives, some banks can run afoul of new norms or rules or anticipate them in a sub-optimal way. This is especially true when it comes to various initiatives from different regulators (domestic or international) that do not necessarily converge, such as for groups operating in several jurisdictions.

Regulatory risk is higher for banks with material investment-banking and trading activities, and a high cross-border interconnectedness, and is highest for banks with any or all of the following:

- Past instances of prudential or conduct problems
- Risky business models and strategies
- More borderline prudential metrics
- Ongoing or emerging material conduct issues

Regulatory risk may manifest itself in both prudential and misconduct risk. While market observers, including rating agencies, have historically focused on the former (for example, the risk of a prudentially non-compliant bank being subject to regulatory action) the latter has become increasingly relevant. Spurred into action by many banks' questionable behaviour, regulatory bodies across many jurisdictions, including Europe and North America, have been focusing more than ever on banks' conduct. This is with respect to both retail clients (deposits, mortgages, other retail products and activities, mis-selling or improper marketing) and wholesale markets (such as trading practices including rogue activities, interest-rate benchmarks, product-suitability risk and misleading reporting).

Even if regulatory action does not materially constrain a bank's activities, the likelihood of hefty regulatory fines and a negative track record with the regulatory community is a material risk for banks – which is not likely to abate any time soon.

#### 3.4.7 ESG risk (especially governance risk)

Credit investors have become increasingly focused on environmental, social and governance (ESG) factors across the investable universe. It comes as no surprise that the banking sector is very much part of this approach. The 'G' (governance) in this acronym appears to be the most relevant for the assessment of bank credit risk at present.

Spurred by investors, customers and, more recently, regulators – but also acting on their own convictions – large banks are becoming more public about their ESG approach. This includes environmentally sustainable lending policies to reduce exposure to stranded assets (e.g. less oil and gas, more renewable energy), more transparent disclosure related to climate change and their own carbon footprint, or to social factors such as diversity, gender pay gaps and executive compensation, as well as declarations on the environmental principles for their overall lending and investment business.

The analysis underpinning our bank ratings focuses on the credit risk associated with ESG factors. At the same time, the challenge – for us and for most other market observers – is that the ESG analysis discipline is still in its infancy insofar as the credit-risk aspect is concerned. That said, regulatory action against a bank which has ignored ESG guidelines represents a potential bank-specific credit risk. Policymakers' tolerance vis-à-vis serial ESG offenders is growing increasingly lower. Similarly, institutional investors, business partners and customers would become wary of such banks, with negative consequences for their funding. This is clearly a scenario which is well anchored in a bank's credit risk and must be considered in the rating process.

**Governance:** With respect to governance, banks have made significant progress in the years following the crisis (not all banks, however). One market narrative is that regulations are keeping banks on a safe track. While this is true, heightened ESG awareness in recent years is also changing banks' culture for the better. A modified bank culture is leading to more responsible risk-taking, greater social, gender and ethnic awareness in employment policies and labour relations as well as higher health and safety standards.

We think that the right approach to governance encompasses risk management, business ethics, responsible finance, product governance, and of course the organisation's human capital. Avoiding unnecessary complexity (which may aim to obfuscate customers, investors and supervisors); staying away from fuzzier areas not solely because of fear of non-compliance but also due to the conviction that it would not be doing the right thing; or taking the high road even when a close competitor chooses the low road are all signs of good governance and a good culture.

Based on existing data and information, we analyse specific areas of governance in order to identify weaknesses and shortcomings which can lead to higher credit risk. One example is the lack of diversity in top management teams – primarily (but not only) gender diversity. We believe that, even with a proper governance structure in place, the lack of gender and other diversity within a bank's decision-making ranks creates the danger of groupthink. This was one of the culprits behind the last crisis and is clearly not on the wane. Demonstrating diversity awareness and implementing adequate employment policies and practices at the level of the entire organisation, but not in the executive suite, is a flawed approach in our opinion. As an example, precious few female CEOs or other top managers are working at European banks.

#### 3.4.8 Reputational and legal risks

The financial crisis highlighted, more than ever, the key importance of reputational risk for banks. Banks with a poor reputation (among creditors, investors, depositors, customers, policymakers, or the public at large) can run into problems which may rapidly become existential. Specifically, blots on a bank's reputation can lead to market distrust, negatively impacting its capacity to raise debt and equity (and also the performance of its debt and equity in secondary markets). Worse still, it can harm the bank's capacity to attract customer deposits, potentially forcing up its deposit rates and hurting retail-funding costs. Such a threatening development usually occurs concurrently or soon after the bank's market funding has dried out.

Banks' reputational and public image can be hurt by its retail operations, wholesale activities, private banking and asset management. In retail and commercial banking, recent examples include product mis-selling, the excessive charging of customers and cross-selling strategies, the latter burdening customers with unnecessary products through bundling. In the wholesale/markets areas, examples include interest-rate-benchmark mismanagement or deliberate manipulation, rogue-trader events, and excessive remuneration avenues and practices. In private banking and asset management, there are instances of inappropriate tax advice or money laundering practices on behalf of clients. All may impact the respective bank's reputation, adding to regulatory action. In future, we also expect that the handling of ESG risks will have an increasing impact on the reputational standing of banks.

In our view, any such reputational events can have a magnified impact on the banking industry in general and on the banks in question in particular. Even if reputation risk is likely to be a 'soft' part of our rating analysis, it is nonetheless essential for assessing public trust in a bank.

More severe incidents of misconduct can also generate legal risk for banks on top of regulatory fines, which can impose a hefty burden on earnings. Such incidents have already occurred in the recent past and are likely to re-emerge. Legal risks can represent a significant loss contingency for banks. The institutions especially affected are those involved in investment banking, trading or global fund management on a large scale. However, recent developments have shown that banks pursuing other business models are also at risk.

### 3.5 Protection against risks

After assessing risks, we look at a bank's credit fundamentals and evaluate how these protect it against these risks. This analysis is important for our opinion of the bank's ability to meet contractual financial commitments in a timely manner and in full.

In this context, the first step is to look at liquidity and asset-liability management, which protect the bank against illiquidity and funding risk. We then look at earnings, impairment provisions, as well as capital and leverage, as being protective layers against the loss risks (including credit risk) building up in the bank's business and balance sheet. Last, but not least, we look at the bank's bail-in coverage levels and mix. We also assess how the bank manages its risks, by looking at its risk culture, governance and management.

**Figure 7: Protection against risks: summary**

Source: Scope Ratings

### 3.5.1 Liquidity and asset-liability management

A decade ago, the onset of the financial crisis showed that funding risk inflicted pain most quickly, as banks – with regulatory-compliant capital ratios but structural funding mismatches (e.g. an excessive reliance on short-term market funds in foreign currencies) – were exposed to market-funding shortages and illiquidity. This kind of dramatic event can snowball into a deposit run, which did occur in some instances and had to be stopped by official intervention and public guarantees.

**Liquidity**

We believe that the classic definition of liquidity – the ability to pay liabilities as they come due – is no longer sufficient to assess bank liquidity. Even before a bank run becomes a reality, a bank's existence can be threatened if the necessary market funding is no longer provided and the bank is not structured in such a way as to carry out business without it. The mere perception of illiquidity can cause a bank to cease being a going concern. Conversely, reassuring liquidity may offer an otherwise financially weak institution – for instance, with low capital or poor earnings – more time to try to address weaknesses.

With respect to liquidity as risk protection for a bank, our assessment typically looks at the following elements:

- Compliance with the evolving prudential regulations on liquidity and funding (liquidity coverage ratio, net stable funding ratio, national prudential norms)
- Measurement and management indicators, such as liquidity gaps or funding concentrations. We also aim to look at specific parameters like fund-transfer pricing, although this analysis is often not possible with the data disclosed.
- Liquidity-risk governance (board, asset-liability committee, group treasury, subsidiaries, business lines)
- Analysis of the bank's liquid asset portfolio, looking at various categories of securities and their regulatory and market haircuts
- The bank's management of specific asset and liability classes from a funding and liquidity angle. Examples are current accounts or loan commitments. We aim to determine the stickiness of these classes, although this can often be more an intuitive process.
- Limit setting – examining liquidity buckets (weighted according to the liquidity of balance-sheet items)
- Scenario analysis and stress testing. We aim to understand of how the bank manages its interest-rate risk, performs re-pricing, handles negative headline events (such as rating downgrades), deposit withdrawals, manages an inability to rollover short-term paper, or deals with a sudden negative shift in market confidence. The level and stability of a bank's reliance on interbank funding – especially cross-border – is part of this analysis, as is reliance on funding from non-bank agents like money-market funds.

- Contingency plans for 'shutting-out' funding classes, for example, reliance on covered bonds and third-party repos if the bank can no longer access unsecured funding
- Business continuity plans

**Asset-liability management**
Asset-liability management (ALM) is critically important for our rating analysis of a bank. We look at the bank's balance sheet as having three principal building blocks: the trading portfolio, the investment portfolio and the loan portfolio. We attempt to identify areas of risk in each block and the way blocks correlate.

Overall, our ALM analysis looks at areas of structural mismatches (namely, mismatches which cannot be easily remedied) for: i) terms and maturities; and ii) currencies. One such example is a bank that funds EUR-denominated medium-term assets with USD-denominated short-term funds. Structurally imbalanced funding profiles were a principal source of stress for banks at the start of the last crisis, especially the excessive reliance on short-term confidence-sensitive funds supporting core activities and assets needing ongoing financing.

**Specialised lenders**
Our ALM analysis becomes very specific for wholesale-funded specialised lenders, for example, mortgage, public-sector or business credit providers in various European countries. This type of entity may often operate with thin margins, mostly due to the low yield on loans. They may also have market-funding advantages because they can issue covered bonds. However, some entities might boost profits via ALM mismatches – specifically using short-duration refinancing in a normal yield-curve environment that prevails when low rates are in place.

We would identify the following threats for an active ALM mismatching strategy of a specialised lender:

- A sudden shift in the yield curve as the bank remains locked in an unfavourable structural position
- Flawed mismatching strategies, as entities specialised only in long-term lending may sometimes be less experienced in advanced ALM and the use of hedging tools (which are costly)
- Regulatory risk. We expect bank supervisors to initiate action to address any ALM-mismatch risks they identify, with unforeseen consequences for the respective bank.

### 3.5.2 Earnings

A bank's earnings capacity measures its ability to build and preserve economic value over time, as well as to create a sufficient level of risk protection – primarily in the form of credit provisions and equity capital.

We consider that a bank's safety depends on the level and quality of its earnings, as well as on their sustainability and predictability. Although bank profitability differs between national markets, that alone may not be a weakness, especially since most banks compete domestically rather than cross-border. On the other hand, earnings sustainability and predictability could plausibly be compared on a cross-border basis.

Our assessment of earnings capacity focuses on three main areas:

- Net interest income
- Non-interest earnings (fees, commissions or trading)
- Expenses

With respect to net interest income, we look at the net interest margin (NIM) derived from the bank's financial intermediation activities (taking deposits and other funds versus making loans and investments). In most cases, net interest income still represents an important share of a bank's earnings.

We analyse the reasons underpinning differences between NIM levels across European and other banks, partly by examining the NIM components, such as the weight of deposit rates versus loan rates. Various parts of our overall assessment are included in this analysis, for example, the bank's business model, market position/pricing power, growth strategy, or its funding and asset mix. Overall, a low-interest rate environment, such as the one prevailing in Europe in recent years, prevents banks from generating high NIMs (unless they go for higher-yield assets at the expense of low risk taking).

Equally, we look at the sustainability, predictability and level of fees and commissions, based on the business-model breakdown: RCB, WIB and WAM.

Lastly, we assess the dynamics of trading revenues, assuming this activity is materially relevant for the bank. Our analysis is holistic here too. On the one hand, trading gains or losses can affect a bank's reputation or relationship with regulators and policymakers, as well as helping or hurting profitability, funding and capital. On the other hand, trading revenues can be closely associated with a bank's risk appetite, management and controls (or lack thereof).

With respect to expenses, we place each bank in an appropriate national-market and historical context. A bank's business model or its growth and diversification strategy are closely connected to its expense base. Overall, we believe that the bank with the best efficiency is not necessarily the safest bank, even though a competitively low cost-income ratio (especially in a national-market context) can help its bottom line. Various cost-generating initiatives – quality of customer service, risk management, digitalisation – in addition to rapidly increasing regulatory and compliance expenses can easily challenge a bank's efficiency, as would the need to invest for the longer term.

Consequently, a bank's efficiency must be viewed from this wider perspective, rather than solely from a narrow cost-income ratio angle, in order to establish the right balance between revenues, costs and risks. That said, high efficiency suggests good management which is a net positive in our analysis.

### 3.5.3 Risk provisions

The largest category by far of risk provision for most banks is credit-related. We look at the bank's loan-loss provisioning policies, both in the context of regulatory requirements and of the bank's own risk-protection practices. Since the introduction of IFRS rules more than a decade ago, banks across Europe (and beyond) have adopted more consistent approach to disclosing impaired loans and provisions. Nevertheless, banks have still maintained a certain flexibility in loss recognition and provisioning. In general, loans become provisionable when accrued interest (and principal if due) is not paid for 90 days or more. In recent years, there has been much stronger consistency in provisioning rules across the European banking sector due to the more effective actions taken by regulators – both at the EU level by the EBA and within the euro area by the ECB. We believe that the gradual introduction of IFRS 9 rules will have a mildly negative impact on bank earnings in the short term, but that in the middle to longer term is will be a net positive for credit by encouraging the early recognition of provisions for credit deterioration.

Wherever possible, our analysis looks at impaired loans, loan-loss reserves and provision charges by business segment, which usually gives a more accurate view. For example, a bank with a large consumer loan book and a smaller business loan book may have high aggregate coverage due to the statistical provisions for the consumer part. However, this could obscure insufficient coverage for the business loan book.

Aside from loan-loss provisions (both flows and stocks), we look at other categories of risk provisions, such as investment, market risk, legal contingency, or operations-related (including for cyber risk). Again, the nature and quantum of these types of provisions would be closely related to the bank's business model.

**Loan forbearance**

As the crisis started to hurt banks' financials, many institutions looked into avoiding the recognition of credit losses upfront and thus avoiding the need to provision against them. Loan forbearance became such an avenue, sometimes under the guidance of regulatory authorities and at other times at banks' own initiative (as long as local regulators did not prohibit the practice). As the crisis extended, especially in European countries with stressed economies, the practice of forbearing loans – to real-estate developers, businesses, or individuals (mostly mortgages) – became more widespread.

We note that there is often little disclosure on forborne loan amounts or forbearance practices. Consequently, provisions may not truly reflect the real loss contents of a bank's credit portfolio – or at least segments of it, such as commercial real estate. At the same time, for retail and SME banking, a bank often views lending as a relationship rather than a mere financial transaction. Accordingly, our rating analysis takes into account any relevant, culturally idiosyncratic aspects of credit forbearance in each market.

### 3.5.4 Capital, leverage and regulatory bail-in buffers (MREL, TLAC)

**Capital**

Assessing a bank's capital position is important for multiple reasons. First, capital is the last line of defence against potential losses and thus a key component of risk protection. Second, capital exerts control on a bank's growth and diversification. Third, the quality, level and generation capacity of capital (both internal and external) are important in the bank's culture and strategy. Fourth,

assessing and ruling on the level and quality of bank capital is a central prudential tool for regulators around the world, as well as a key metric for market participants. Banks deemed insufficient in regulatory solvency and unable to restore an acceptable capital position will be either resolved or closed down. The mere expectation of regulatory action may also erode market confidence for the respective bank, with serious consequences for the bank's ability to be active in the markets.

Our analysis of capital encompasses two levels. The first is that related to the actual capital position of the bank and includes:

- Regulatory prudential metrics associated with capital including Common Equity Tier 1 (CET1) and Tier 1 (T1) leverage
- The mix and quality of capital: equity, additional Tier 1 (AT1), Tier 2 (T2), combined capital buffers
- The capital strategy of the bank
- The capacity to generate new capital internally and externally
- The internal capital allocation process

The second level of analysis aims to look at exogenous drivers, primarily:

- Regulatory inputs and actions with respect to bank capital, and
- Market sentiment related to bank capital

The crisis revealed that even if a bank believes it operates with a sufficient level of capital, evolving regulatory rules and actions, either internationally or at national level, can make it more challenging to comply with capital adequacy at a reassuring level. One example is supervisory requirements for Pillar 2 capital (required and guidance) and for specific capital buffers.

Crucially, market sentiment can easily sway towards a negative view on a bank's capital, especially if it anticipates regulatory action or if the bank's peers (either domestic or international) display a relatively stronger capital position. Here again, we relate this factor to other parts of our analysis, such as the mix, quality and transparency of the bank's assets, as well as the risk characteristics of its business model.

**Leverage**
The current international regulatory guidelines (3% leverage or higher, and the calculation method) provide added clarity. Some national regulators insist on tougher leverage metrics from their banks.

In our view, leverage is still a work-in-progress for banks' strategic targets, regulators' demands, and market expectations. Nevertheless, we consider leverage to be a powerful financial metric, especially for banks with sizeable trading and investment activities (which usually benefit from very low credit risk weights).

**Regulatory bail-in buffers (MREL, TLAC)**
MREL and/or TLAC levels are becoming regulatory metrics of very high relevance, possibly as relevant as capital and leverage ratios. As an example, a bank could comply with regulatory capital and leverage requirements but be borderline in terms of MREL and/or TLAC. The opposite situation should inherently be less likely to occur.

As a consequence, the assessment of a bank's MREL/TLAC capacity and coverage is another fundamental regulatory metric informing the rating analysis.

### 3.5.5 Risk culture, governance and management

If risk-taking is a main driver of a bank's activities, its governance and management is essential for the bank's financial health. Scope aims to understand not only the various responsibility mandates and reporting lines for managing risks, but also what truly drives the respective bank's risk culture. Any risk governance and management structure which is just put in place to satisfy regulators and investors will remain ineffective and unconvincing.

One specific example is the analytical view that a bank's board and top management clearly grasp the multiple layers of real and potential risks for their bank, including ESG risks. A bank's track record, future strategy and the increasingly detailed public disclosure should offer a good indication of the extent to which this is the case, supplemented by a direct dialogue with management, if possible, during the rating assessment process.

We believe that a bank's risk culture permeates and underpins its activities – from the strategy-formulation stage to the daily grind of implementation across business lines, geographies, offices and individuals. Without personalising this aspect, we consider that a bank's risk culture is very often steered by its CEO. It is therefore important to understand the dynamics of corporate governance (rather than solely reporting lines) e.g. the track record of the relationship between the CEO and the board, between the CEO and other top managers, or between the chief risk officer, other top managers and the board.

We aim to understand how the risk management function is organised in the bank (central level, local levels) and how it interacts with the people generating the business (front office) and risk controllers (back office).

Again, a bank's track record in risk taking and risk protection indicates the effectiveness of its risk governance and management.

## 4. Appendix I

### Specific analytical guidelines for European bank rating ranges (applicable to issuer ratings)

*We highlight key analytical factors that characterise rating ranges, based on our bank rating methodology and our overall assessment of the post-crisis banking sector landscape. These factors are presented as a general guideline for our rating analysis process and not as indications of specific rating actions or decisions.*

**AAA:**

Banks rated AAA should have the safest, most stable and sustainable risk characteristics across the credit spectrum, capable of withstanding shocks similar to the recent crisis without any visible impact on their extremely strong financial and business fundamentals. At this time, we do not consider that any European bank would be rated at this level based on its own credit fundamentals.

**AA:**

Banks rated in the AA range have very strong and well-rounded business franchises, as well as viable, well-tested and sustainable business models. Often the anchor of these business models is a solid domestic franchise in retail/commercial banking (RCB). Wholesale/investment banking (WIB) franchises are well integrated in the overall strategy and risk profile of the entire group if they represent a material source of consolidated revenues. Business and asset-quality risks remain a manageable fraction of these groups' earnings-generation capacity. The institutions performed reassuringly during the crisis and emerged with solid fundamentals, including strong liquidity, funding, capital and leverage indicators. Management has proved its ability to steer the groups through difficult times. There should be no significant systemic or idiosyncratic threats that banks rated in the AA range cannot handle without hurting their financial or business fundamentals. This would include issues related to conduct, legal or reputation risk.

**A:**

Banks rated in the A range display attractive franchises, although in some instances some areas of activity in the business mix may be less convincing than others, for example, large-scale WIB or foreign RCB. For some institutions, the business model is still in need of some adjustments. For others the competitive position in core markets is challenged but they can handle this situation painlessly. Prudential metrics are reassuring; if some degree of volatility in them may exist, it would nonetheless be far from a genuine credit concern. There may be situations of weaker macroeconomic factors affecting some banks' performance, but overall viability is not threatened, as this relative weakness is well mitigated by good financial fundamentals, reliable management and risk-averse strategies. For some institutions, the track record during the crisis was mixed but they have been moving towards stronger performance in recent years. Some groups in the A range may display less convincing governance or group-structure characteristics.

**BBB:**

For some banks in the BBB range, macroeconomic weakness affects performance – revenue flows, asset quality and capital generation. Business models for some institutions are currently changing with still uncertain outcomes. Overall prudential metrics are acceptable and risks are generally well managed and currently under control, which may not have been the case before and during the crisis. Banks in the BBB range may display improving fundamentals after being affected during the financial crisis – in some cases being partially bailed out. Some institutions at the lower end of the BBB range may remain anchored in challenged franchises, with business models needing reshaping and with below-average financial metrics. Non-core loan portfolios or activities would have been identified as part of the de-risking process. While showing acceptable-to-good financials, several banks in this category may operate narrow franchises or experience market position challenges.

**BB:**

Institutions with ratings in the BB range display a mix of intrinsic weakness for several key risk indicators – asset quality, revenue generation and/or prudential metrics – and stressed macroeconomic factors. Risky and potentially miscalibrated strategies before the crisis may have caused structural problems with business and financial fundamentals. Some risks may be on the mend, but material challenges remain for institutions in the BB range. State bail-outs would have helped several of these banks survive the crisis but due to less-adequate financial and business metrics they continue to face headwinds to full recovery. A gradual improvement in credit trends may be the base case for banks in the BB range but a positive outcome is still uncertain. Consolidation into financially stronger groups may be an alternative for some of the banks in the BB range.

**B:**
Entities with ratings in the B range are generally affected by weak financial and business metrics, probably accompanied by borderline prudential metrics. Some of these banks may have embraced opportunistic strategies and flawed business models before and during the crisis, which would have marginalised or corroded their market position. Several banks rated B may already be under heightened supervision and early regulatory intervention could be occurring. Alternatively, some could already be in resolution. For the latter scenario, a conversion or write-down of MREL and/or TLAC could stabilise credit erosion and, if the resolution process is properly pursued, lead to a gradual stabilisation and improvement. Non-resolvable banks rated B may continue from here to slide closer to insolvency proceedings.

**CCC-C:**
Banks in the CCC-C range display severely eroded financial metrics, very possibly inadequate prudential indicators (capital, liquidity) and can thus potentially no longer pursue business activities as a going concern. Banks in the CCC-C range may be very close to or already in resolution, or close to insolvency proceedings for non-resolvable banks. At the lower end of the CCC-C range the latter may be in insolvency proceedings or liquidation.

**D:**
This rating applies to bank liabilities experiencing a default-like event. It is unlikely that the D rating would apply to an issuer rating of a resolvable bank.

## 5. Appendix II

### Financial ratios for banks

*The financial ratios and metrics listed below are used in the analytical process for our bank ratings, according to the present methodology. Not all ratios may be applicable to each rated bank, and bank rating reports typically do not include the entire range of these ratios. On occasion, we may use additional ad-hoc ratios for specific analytical aspects.*

### Business model

Asset mix, liability mix, earnings mix (by business line and geography)

### Funding/liquidity

| Ratio |
|---|
| Total loans / total deposits |
| Total deposits / total funds |
| Wholesale funds / total funds |
| Short-term wholesale funds / total funds |
| Liquidity coverage ratio (LCR) |
| Net stable funds ratio (NSFR) |
| Covered bonds / total funds |

### Asset composition quality and growth

| Ratio |
|---|
| Total loans / total funded assets |
| Impaired loans / total loans |
| Impaired-loan mix |
| Sub-standard and other problematic loans / total loans |
| Loan-loss reserves / total loans |
| Loan-loss reserves / impaired loans |
| Loan-loss-provision charges / loan-loss reserves |
| Loan-loss-provision charges / impaired-loan growth |
| Total loan growth / total funded-assets growth |
| Total loan growth / impaired-loan growth |

## Earnings

| As % revenues: | |
|---|---|
| - | Net interest income (NII) |
| - | Fees and commissions |
| - | Trading income |

| |
|---|
| Earning asset yield (%) |
| Cost of funds (%) |
| Net interest margin (%) |
| Pre-provision income / risk-weighted assets (RWA) |
| Post-provision income / RWA |
| Loan-loss-provision charges / pre-provision income |
| Loan-loss-provision charges / total loans (cost of risk) |
| Cost-income ratio |
| NII / loan-loss-provision charges |
| Pre-tax return on CET1 |
| Return on average equity (ROAE) |
| Return on total average funded assets |
| Return on average risk-weighted assets |
| Retained net income / prior year's book equity (internal capital generation capacity) |

## Capital and risk protection

| |
|---|
| Common Equity Tier 1 (CET1) ratio (as % RWA) |
| Tier 1 leverage ratio |
| Tangible leverage ratio |
| Total loss coverage: (CET1 + loan-loss reserves) / RWA |
| Asset risk intensity: RWA / total assets |
| Non-senior MREL estimate/total liabilities |
| MREL/TLAC-eligible liabilities (incl. senior) / total liabilities |

## Scope Ratings GmbH

**Headquarters Berlin**

Lennéstraße 5
D-10785 Berlin

Phone +49 30 27891 0

**Frankfurt am Main**

Neue Mainzer Straße 66-68
D-60311 Frankfurt am Main

Phone +49 69 66 77 389-0

**Paris**

1 Cour du Havre
F-75008 Paris

Phone +33 1 8288 5557

**London**

Suite 301
2 Angel Square
London EC1V 1NY

Phone +44 20 3457 0444

**Madrid**

Paseo de la Castellana 95
Edificio Torre Europa
E-28046 Madrid

Phone +34 914 186 973

**Milan**

Via Paleocapa 7
IT-20121 Milan

Phone +39 02 30315 814

**Oslo**

Haakon VII's gate 6
N-0161 Oslo

Phone +47 21 62 31 42

info@scoperatings.com
**www.scoperatings.com**


## Disclaimer

© 2019 Scope SE & Co. KGaA and all its subsidiaries including Scope Ratings GmbH, Scope Analysis GmbH, Scope Investor Services GmbH and Scope Risk Solutions GmbH (collectively, Scope). All rights reserved. The information and data supporting Scope's ratings, rating reports, rating opinions and related research and credit opinions originate from sources Scope considers to be reliable and accurate. Scope does not, however, independently verify the reliability and accuracy of the information and data. Scope's ratings, rating reports, rating opinions, or related research and credit opinions are provided 'as is' without any representation or warranty of any kind. In no circumstance shall Scope or its directors, officers, employees and other representatives be liable to any party for any direct, indirect, incidental or other damages, expenses of any kind, or losses arising from any use of Scope's ratings, rating reports, rating opinions, related research or credit opinions. Ratings and other related credit opinions issued by Scope are, and have to be viewed by any party as, opinions on relative credit risk and not a statement of fact or recommendation to purchase, hold or sell securities. Past performance does not necessarily predict future results. Any report issued by Scope is not a prospectus or similar document related to a debt security or issuing entity. Scope issues credit ratings and related research and opinions with the understanding and expectation that parties using them will assess independently the suitability of each security for investment or transaction purposes. Scope's credit ratings address relative credit risk, they do not address other risks such as market, liquidity, legal, or volatility. The information and data included herein is protected by copyright and other laws. To reproduce, transmit, transfer, disseminate, translate, resell, or store for subsequent use for any such purpose the information and data contained herein, contact Scope Ratings GmbH at Lennéstraße 5 D-10785 Berlin.

Scope Ratings GmbH, Lennéstraße 5, 10785 Berlin, District Court for Berlin (Charlottenburg) HRB 192993 B, Managing Director(s): Dr.Torsten Hinrichs, Guillaume Jolivet.