BANK RATING METHODOLOGY

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1. ABOUT THIS METHODOLOGY

Scope

This methodology describes the analytical framework and criteria that Capital Intelligence Ratings (hereinafter CI Ratings or CI) uses when it rates banks. It is broadly applicable to all types of banks and all types of bank ratings.

Effective Date and Impact on Existing Ratings

This methodology replaces CI's current bank rating methodology and is effective immediately. While the updated Methodology does not involve a fundamental change in what CI looks at when assessing bank default risk, it does involve significant revisions to the way CI unpacks credit risk for analytical purposes. Key changes include the introduction of the Operating Environment Risk Anchor (OPERA) and Core Financial Strength (CFS) rating as intermediate steps in the determination of CI's new Bank Standalone Rating (BSR).

In light of the introduction of BSRs and CFS ratings, CI will phase out Financial Strength Ratings (FSRs). In addition, Support Ratings will be withdrawn and replaced by the Extraordinary Support Level (ESL).

CI expects the impact of the updated Methodology on bank Foreign Currency Ratings (FCRs) to be limited, but users of our ratings should be aware that BSRs in particular may differ, in some cases significantly, from current FSRs, reflecting the fact that they are different in meaning and scope.

Structure of this Methodology Report

The remainder of this methodology paper is organised as follows:

- Section 2 contains an overview of CI's analytical approach for determining bank ratings.
- In Section 3 we explain the relationship between issuer credit ratings (ICRs), such as foreign currency ratings, and BSRs.
- Section 4 we explain the rationale for each of the seven analytical pillars of BSRs and outline the criteria used to assess the underlying key rating factors.
- In Section 5 we address extraordinary support and explain the potential impact on ratings.
- Section 6 focuses on the relationship between bank ratings and sovereign risk.
- In Section 7 we outline our approach to rating financial instruments issued by banks, including hybrid capital and subordinated debt.
- Annexes 1 and 2 contain our rating scales for ICRs and BSRs, while the guidelines we use for mapping long- and short-term ratings are presented in Annex 3. Finally, the main financial ratios we look at when analysing banks are listed in Annex 4.

2. SUMMARY OF OUR ANALYTICAL APPROACH

2.1 Overview and Framework

CI assigns two main types of issuer credit rating (ICR) to banks: long-term international ICRs (LT ICRs) and short-term international ICRs (ST ICRs). These ICRs encapsulate CI's opinion of the overall creditworthiness of rated banks and indicate the general likelihood of default on senior financial obligations denominated either in foreign currency (foreign currency issuer ratings) or in the currency of the jurisdiction in which the bank is domiciled (local currency issuer ratings).

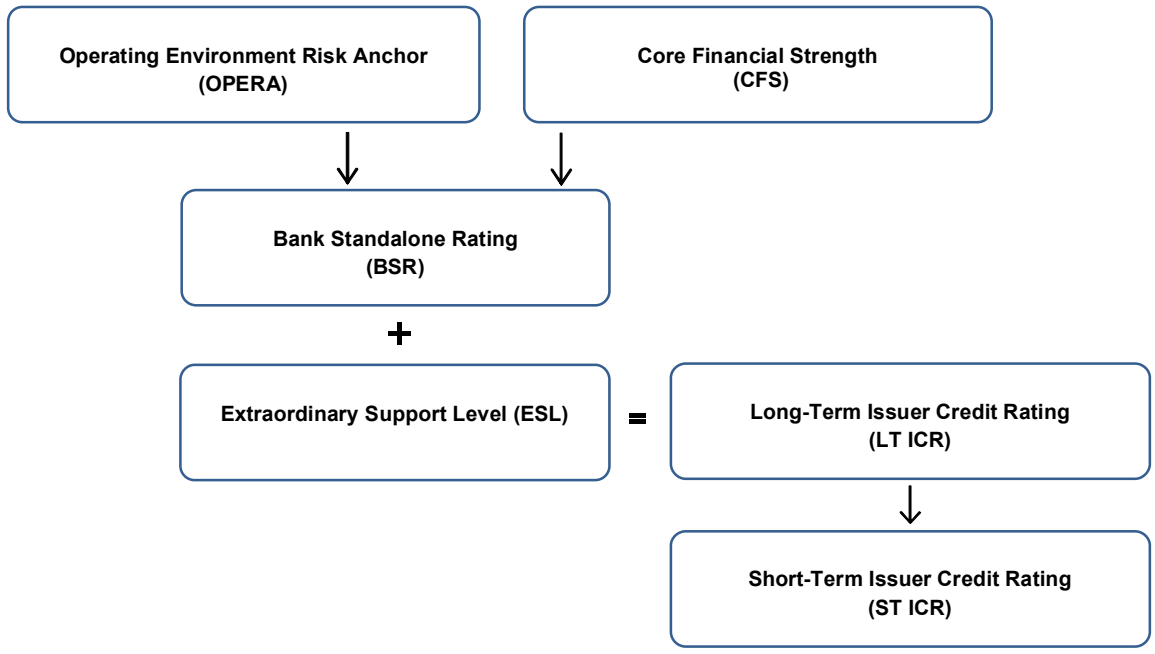
When we rate a bank, we consider both its standalone credit profile and the likelihood of the bank receiving extraordinary external support from owners or the government should such assistance be required in order to avoid default. Our assessment of standalone repayment capacity is reflected in the Bank Standalone Rating (BSR), while potential extraordinary support is indicated by the External Support Level (ESL). The BSR and ESL are analytical inputs into the process of determining issuer (and issue) credit ratings. On their own these assessments neither provide a full opinion of creditworthiness nor measure the likelihood of default.

See section 3 for more on the meaning of, and relationship between, ICRs and BSRs.

2.2 Determining International Issuer Credit Ratings

The framework for determining international ICRs for banks is summarised in Box 1 while the methodological process we follow is outlined in the following sections.

BOX 1: BANK ISSUER RATING FRAMEWORK (SIMPLIFIED)



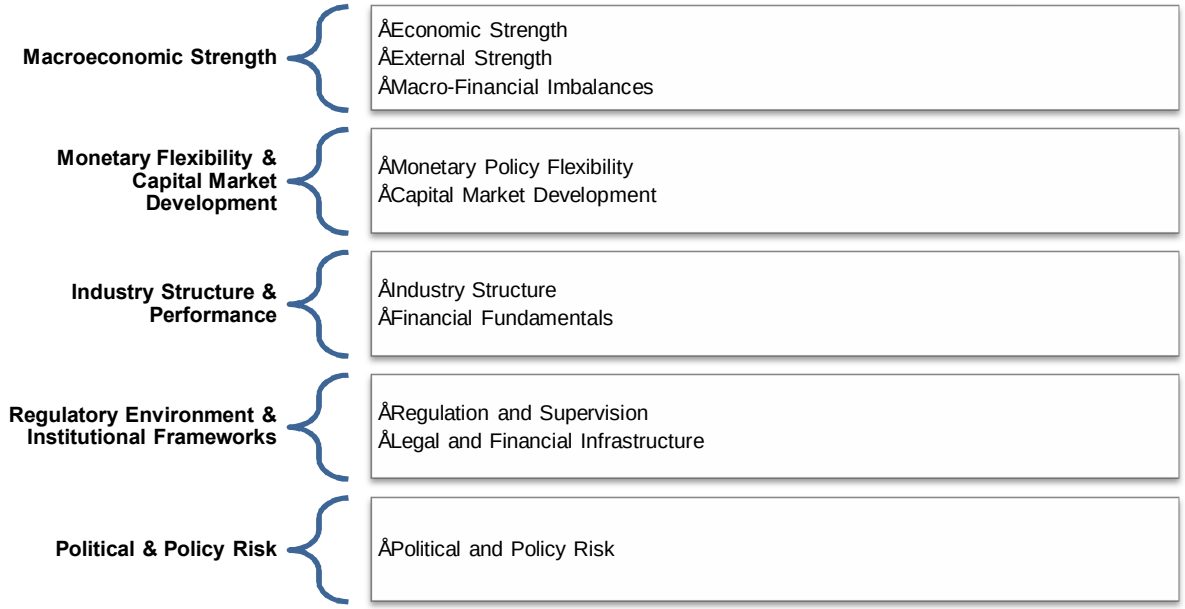
2.2.1 Operating Environment Risk Anchor (OPERA)

First, we establish the Operating Environment Risk Anchor (OPERA) for the banking sector of the country (or countries) in which the rated bank operates. OPERA encapsulates our assessment of the political, economic, institutional, and system-wide factors that may impact the standalone financial strength of the bank and is, therefore, a key element of the BSR.

OPERA is not a credit rating and differs from sovereign ratings, which are an opinion of the likelihood of a government defaulting on its financial obligations. However, since many of the economic and institutional factors that affect bank financial soundness also matter for sovereign credit risk, and given the association between systemic banking crises and sovereign debt crises, a countryôs OPERA will normally be highly correlated with the sovereignôs long-term foreign currency credit rating.[1]

The principal determinants of OPERA are identified in Box 2 and the concept is explained in more detail in Pillar 1 of our BSR criteria (see section 4).

BOX 2: ANALYTICAL DIMENSIONS OF OPERA



The highest attainable OPERA rating is óa+ô(see scale below). The smaller number of gradations in comparison with the LT ICR scale takes into account the purpose of OPERA in terms of setting a reference point for bank BSRs and reflects the fact that banking systems are highly leveraged, prone to volatility, and sensitive to confidence shocks. In our opinion banking systems do not tend to share the attribute of imperviousness to adversity, which is a defining characteristic of the óAAAôand óAAô categories on CIôs LT ICR scale. However, individual banks could achieve a LT ICR of óA+ôor higher, depending on their standalone financial strength and the financial capacity, ability and willingness of external supporters to provide adequate assistance in the event of distress.

[1] CI may assign either a public rating or an internal óshadowôrating to the sovereign. Shadow sovereign ratings are not intended for publication and are used to ensure that sovereign risk factors are adequately reflected in the ratings of non-sovereign issuers.

OPERA	
Low Risk	a+
	a
	a-
Modest Risk	bbb+
	bbb
	bbb-
Moderate Risk	bb+
	bb
	bb-
Significant Risk	b+
	b
	b-
High Risk	c+
	c
	c-

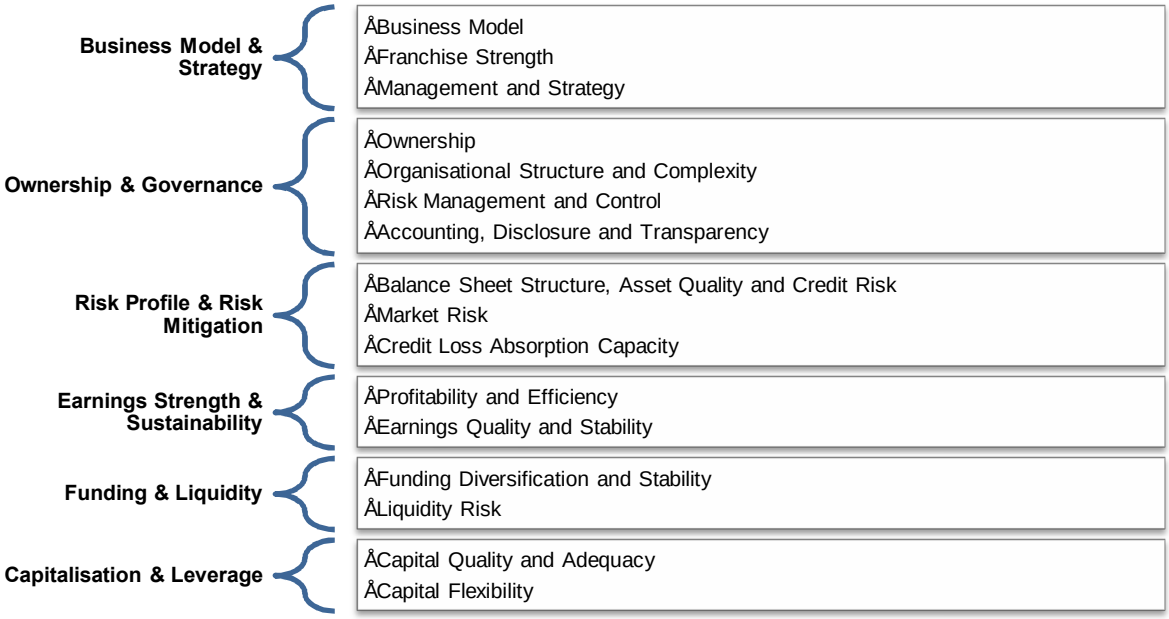
For banks with substantial operations in more than one country, we will generally adjust the home OPERA (i.e. the OPERA of the country in which the bank is domiciled and primarily regulated) to reflect the operating environment risk in other countries. The extent of any notch adjustments (positive or negative) will depend on the relative size of foreign exposures and the difference in strength (or risk) between the home and foreign markets.

2.2.2 Core Financial Strength (CFS)

Having established OPERA, we then evaluate the intrinsic financial, operational and business strength of the rated bank, which we summarise in the Core Financial Strength (CFS) rating. The CFS captures those financial and bank-specific non-financial factors (i.e. excluding the operating environment and certain sovereign risk factors) that have a significant bearing on the likelihood of a bank failing and requiring external support in order to remain a going concern and is determined by Pillars 2 to 7 of the BSR criteria (see section 4).

The six pillars and associated key rating factors are shown in Box 3.

BOX 3: ANALYTICAL PILLARS OF CFS



The assessment scale for CFS is similar to that used for OPERA, with ća+ôbeing the highest rating and ćc-ôthe lowest.

CORE FINANCIAL STRENGTH	
Very Strong	a+
	a
	a-
Strong	bbb+
	bbb
	bbb-
Moderate	bb+
	bb
	bb-
Weak	b+
	b
	b-
Very Weak	c+
	c
	c-

2.2.3 Bank Standalone Rating (BSR)

We combine OPERA and CFS using internal guidelines to derive an indicative, or baseline, BSR for the bank. The indicative rating may differ from the final rating and is not published in order to avoid confusion. For example, the combination of OPERA and CFS may result in an indicative BSR that is higher than the rating of the sovereign of the country in which the bank is based. However, if the bank does not meet our criteria for being rated above the sovereign, the final BSR assigned will normally

be restricted to the sovereign level (see section 6: Sovereign Risk and Bank Ratings).

Most banks are likely to have a BSR that is no higher than ëa+ô However, in cases where both the indicative BSR and CFS are ëa+ô(the highest CFS level) and the bank displays particularly strong standalone characteristics within its peer group, a higher BSR may be assigned.

2.2.4 Extraordinary Support Level (ESL)

Once we have established the BSR, we evaluate the likelihood that in the event of difficulties the bank would receive sufficient and timely extraordinary external support to enable it to remain current on its liabilities and avoid a payments default or insolvency. We capture this likelihood in the ESL (see section 5).

Such support could come from owners (public-sector or private), institutional supporters (e.g. mutual banking groups), or from the government.[2] Our assessment considers the potential supporterôs willingness, financial capacity and ability to provide adequate financial assistance, including liquidity and capital support, and we indicate the ESL as being one of the following: very high; high; moderate; or uncertain.

2.2.5 Issuer Credit Ratings (ICRs)

We map the bankôs BSR to the LT ICR scale and notch the rating up for external support (where appropriate and in line with our criteria) to establish a baseline for the LT ICR.[3] At the same time, we also take into account sovereign risk factors, including the risk of transfer and convertibility restrictions and other state-imposed controls that could impede the bankôs ability to meet its financial obligations in a timely manner.

The LT ICR for the bank will generally be set at the same level as the baseline for the issuer rating provided the latter is no higher than the sovereign rating. The bankôs long-term foreign and local currency ratings would also be equalised (if both are assigned) unless there are convincing reasons for judging default risk to be materially lower in one currency type compared to the other. However, where the baseline issuer rating is higher than the sovereign rating we would apply our criteria for rating above the sovereign to determine whether the bankôs ratings could be higher than the sovereign or whether they should be constrained by the appropriate sovereign rating (see section 6).

ST ICRs are mapped from LT ICRs using the guidelines shown in Annex 3.

2.3 Rating Scale and Definitions

The scale for ICRs and BSRs and the associated rating definitions are given in Annex 1 and Annex 2, respectively. Outlooks are also assigned to LT ICRs and BSRs to indicate the likely direction of a change in the ratings over the next 12 months. A Positive (Negative) outlook signals a better than even chance that the rating will be raised (lowered) within a year. A Stable outlook indicates that the rating is unlikely to change in the next 12 months.

2.4 Relationship with Issue (Debt) Ratings

The ICR usually serves as the reference point for the ratings of senior financial obligations, with the issue (debt) ratings of senior unsecured instruments generally set at the same level as the issuing bankôs ICR. By contrast the issue ratings for hybrid capital instruments and subordinated debt are usually notched from the BSR. This differential treatment reflects our general assumption that extraordinary support, which is factored into the ICR, is more likely to be made available for senior financial obligations than for subordinated obligations (particularly regulatory capital instruments and hybrid securities), and also because in some settings the ICR may be uplifted by the availability of sufficient ëbail-inableôsubordinated liabilities in resolution.

[2] Government or official support is defined broadly to include assistance from authorities at the national, sub-national and supra-national levels, as well as central banks and other public bodies.

[3] In jurisdictions with certain types of bank resolution regimes, the ICR may also be notched up in cases where the rated bank holds loss-absorbing junior liabilities of sufficient magnitude to provide reasonable structural protection to senior creditors in a resolution scenario (see section 3).

However, where we believe extraordinary support will extend to subordinated obligations, the issue ratings of such instruments will typically be notched instead from the ICR.

Finally, where a bank's ICR is lower than its BSR, due, for example, to sovereign-related constraints, the ICR alone will serve as the starting point for all debt ratings (i.e. senior and subordinated liabilities).

See section 7 for further information on issue ratings.

2.5 National Ratings

In some markets CI may also assign long- and short-term issuer (and issue) credit ratings on a national scale. Unlike international ICRs, national ratings are not comparable across countries and refer instead to the creditworthiness (usually in terms of local currency) of the issuer or issue relative to all other issuers or issues in the same country.

The main purpose of national ratings is to allow greater differentiation among issuers and issues in countries whose sovereign credit ratings are some way below 'AAA' on CI's international ratings scale. In this way, CI's national ratings aim to provide capital market investors with clear credit distinctions between issuers and issues that may not be possible under internationally comparable rating scales.

3. ISSUER CREDIT RATINGS AND BANK STANDALONE RATINGS

3.1 Issuer Credit Ratings (ICRs)

The ICR is a measure of overall creditworthiness. It primarily indicates the risk of a bank defaulting on material senior financial obligations (such as senior unsecured debt, deposits, and payment obligations with respect to secured transactions, letters of credit, and derivatives) relative to other banks globally. The ICR focuses on the likelihood of a bank meeting any or all such obligations in a timely manner, including in times of stress. Consequently, the level of the ICR generally reflects the category of senior debt at greatest risk of non-payment.

3.2 Bank Standalone Ratings (BSRs)

The BSR indicates the intrinsic, standalone credit strength of the rated bank, particularly its ability to meet its financial obligations on an ongoing basis without requiring extraordinary support from owners or the government and in the absence of extraordinary interference, including government-imposed transfer, convertibility, and deposit withdrawal restrictions (i.e. sovereign interference risk).

The BSR therefore reflects the likelihood of the bank becoming financially untenable, unsound, or non-viable due to inherent, institution-specific deficiencies, including weaknesses and vulnerabilities created or exacerbated by changes in the operating environment.

Unlike ICRs, BSRs do not measure the likelihood of default. Indeed, a bank may be non-viable on a standalone basis or ófailô(in the sense of requiring rescuing or resolving) but remain able to meet its senior financial obligations as they fall due owing to extraordinary support or the bail-in of junior liabilities in resolution.

The BSR takes into account, among other things, the likelihood of the bank becoming non-viable and having to impose losses on certain types of junior debt and regulatory capital instruments in order to remain solvent, or else having to face either liquidation or resolution by the authorities (potentially including forced restructuring, merger or acquisition, and the bail-in of liabilities) unless timely and sufficient extraordinary support is forthcoming.

For the purpose of BSRs, we would generally consider a bank to be financially untenable, unsound or non-viable (resulting in a ócôrating ï the lowest on the BSR rating scale) when, inter alia, it has:

- Filed for bankruptcy or similar protection from creditors;
- Defaulted on senior financial obligations or óplain vanillaôsubordinated debt;
- Been placed under regulatory supervision or entered into resolution due to its weak financial condition;
- Breached regulatory or legal requirements for continuing authorisation and is expected to have its banking licence revoked;
- Imposed, or signalled its intention to impose, losses on regulatory capital instruments or junior debt with point of non-viability loss-absorption features in order to restore viability (unless, in our opinion, such action has been triggered early while the bank remains viable); or
- Become balance sheet insolvent or is likely to require extraordinary support in order to meet debt and other liabilities as they fall due.

The above notwithstanding, events which we would not necessarily consider indicative of a bank being unsound or non-viable when assigning a BSR include, but are not limited to, the following:

- Defaults on financial obligations due to direct sovereign interference risk (as this is excluded from the determination of a bankôs intrinsic creditworthiness);
- The write-down, conversion into equity, or cancellation of coupon payments on subordinated financial obligations before the point of non-viability or resolution and while the bank remains a ógoing concernô, provided the actions do not constitute an event of default under the terms of the

issuing contract (e.g. the imposition of losses on ‘high trigger’ contingent capital securities would not normally be regarded as an event of bank failure);

- Receipt of emergency liquidity assistance from the central bank (provided the bank is solvent and such assistance is available to all banks), as well as official support provided to the banking system in the event of a systemic shock; and
- Receipt of capital and other assistance from external supporters to facilitate business growth, meet changes in regulatory requirements, or as a precautionary measure (for example in response to the outcome of an official stress-test or to mitigate an increase in systemic risk, outside of a situation of bank-specific distress or undercapitalisation).

Unless it has defaulted on senior financial obligations or filed for bankruptcy, a bank’s ICR would not necessarily be downgraded to a default rating category (i.e. ‘SD’ or ‘D’) should it become unsound or non-viable in any of the other ways described earlier. However, the ICR may be downgraded to a grade indicative of high relative credit risk if the event reflects fundamental weaknesses and is symptomatic of the bank’s diminishing capacity to service its senior financial obligations.

3.3 Relationship between BSRs and ICRs

A bank’s BSR and ICR will generally be set at the same level. However, they may differ, such as in the following cases:

- Where the bank is likely to receive extraordinary support in the case of need, the ICR may be notched above the BSR;
- Where the ICR is constrained by sovereign interference risk, the BSR may be higher than the ICR;
- Where the bank is unsound or non-viable (indicated by a BSR of ‘c’), the ICR may be higher or lower than the BSR depending on how close the bank is to defaulting on senior obligations (this partly reflects the fact that the ICR scale has more gradations, or notches, than the BSR scale in the rating space below the ‘B’ category); and
- Where the bank holds loss-absorbing junior liabilities of sufficient magnitude to provide reasonable structural protection to senior creditors in a resolution scenario (as explained below), the ICR may be higher than the BSR.

3.3.1 BSR and ICR in Countries with Bail-In Regimes

Since the global financial crisis, an increasing number of countries have implemented, or are in the process of introducing, resolution regimes that enable the authorities, inter alia, to impose losses on shareholders and creditors, including in some circumstances holders of certain types of senior unsecured liabilities, as part of efforts to rescue failing banks without the use of public funds (particularly where winding up would not be in the public interest).

In countries committed to ‘bail-in’ or ‘burden sharing’ it can no longer be assumed as likely that the government will bail out troubled banks and ensure that they continue to service senior financial obligations in a timely manner. Consequently, where such resolution regimes are in place, a bank’s ICR is less likely to be uplifted from the BSR on the basis of extraordinary official support (although it could still be uplifted for extraordinary private assistance, e.g. from the bank’s parent or broader group).

For resolution frameworks to be credible, regulators need to ensure that banks hold sufficient liabilities on their balance sheets that are readily available to absorb losses and facilitate recapitalisation in resolution. Since bail-in is generally expected to respect the hierarchy of claims followed in normal insolvency proceedings, it may be possible for banks in certain circumstances to build a buffer of loss-absorbing junior liabilities of sufficient magnitude to provide reasonable structural protection to senior creditors in a resolution scenario.[4]

[4] There are currently different standards for loss-absorbing capacity. They include total loss-absorbing capacity (TLAC), developed by the Financial Stability Board (FSB) and due to be phased in from January 2019 for global systemically important banks (G- SIBs), as well as the minimum requirement for own funds and eligible liabilities (MREL), introduced in the European Union (EU) under the Bank Recovery and Resolution Directive (BRRD). The EU intends to eventually integrate TLAC into the MREL system.

In such cases (and outside of a crisis scenario) the difference in relative credit risk between senior and subordinated obligations would be reflected in the ICR being set above the BSR, usually by one notch. We greatly restrict the uplift owing to the untested nature of such regimes and uncertainty about the timing and scope of bail-in, as well as the structure of the bankôs balance sheet in a situation of actual stress. We would not uplift the ICR in cases where the bankôs loss-absorption capacity includes senior unsubordinated debt instruments, regardless of whether such instruments are eligible for inclusion and bail-in under the rules of the regime.

The uplift for such structural protection is reflected in the ICR rather than in the BSR as state action to resolve the bank is a form of extraordinary intervention and would normally occur when the bank is very weak and near the point of non-viability on a standalone basis (consistent with the lowest BSR of ócc+ô) and would likely result in the impairment of junior debt.

In a crisis situation, the ICR could potentially be set multiple notches above the BSR since we would likely have greater visibility of the scope and modalities of the bail-in process once resolution is triggered, as well as of the bankôs own capacity to contribute to the recovery of its financial position without imposing losses on senior creditors.[5]

More generally, the conditions under which a bankôs ICR may be notched up for loss-absorption capacity are summarised as follows:

- We would expect the countryôs resolution regime to: (a) provide for the imposition of losses on certain financial liabilities in order to restore a bank to viability; but (b) enable this loss absorption/recapitalisation capacity to be achieved through the write down or conversion to common equity of contingent capital and other subordinated instruments without necessarily imposing losses on senior financial obligations or escalating the risk of default on senior obligations (e.g. by triggering a winding up petition or cross default clauses relating to senior debt).
- We would expect the rated bank to have a sufficient buffer of loss-absorbing own funds and junior liabilities to materially reduce the risk of it defaulting on senior unsecured obligations in the event of resolution and to be committed to maintaining such a buffer over time. Our assessment of the adequacy of the bankôs loss-absorption/recapitalisation capacity from junior liabilities would take into account, inter alia, the eligibility criteria for óbail-inableô instruments, regulatory minimum requirements for loss-absorption capacity, including any thresholds before a bank may be eligible to access resolution funds or receive other assistance, as well as the bankôs size, complexity and risk profile.
- There would need to be grounds for believing that the authorities would favour the bankôs resolution as a going concern rather than allowing the bank to enter normal insolvency proceedings after it has reached the point of non-viability. This may be because of the bankôs systemic importance, other public interest considerations, or stated policy intentions. Consequently, we would expect the authorities to provide temporary liquidity to the bank in resolution and take steps to ensure the continuity of its critical functions.

Notching for loss absorption capacity would generally not apply where, in CIôs opinion, the resolution regime is not credible, regardless of the size of the bankôs buffer of loss-absorbing own funds and junior liabilities. In such cases, any difference between the ICR and BSR would more likely reflect extraordinary support.

[5] A multi-notch differential could also occur outside of resolution, chiefly in situations where a bank is able to remain current on senior obligations while imposing losses on capital instruments to restore solvency or viability. For example, in the event of a distressed exchange of subordinated debt for equity, the ICR-BSR notch differential would typically widen as the likelihood of the transaction increases but may narrow afterwards in light of the capital increase. Similar dynamics may apply in a resolution scenario involving junior liabilities.

4. BANK STANDALONE RATINGS: ANALYTICAL PILLARS

In this section we explain the rationale for each of the seven analytical pillars of the BSR and outline the criteria used to assess the underlying key rating factors. The analytical pillars are:

1. Operating Environment
2. Business Model and Strategy
3. Ownership and Governance
4. Risk Profile and Risk Mitigation
5. Earnings Strength and Sustainability
6. Funding and Liquidity
7. Capitalisation and Leverage

ANALYTICAL PILLAR 1

OPERATING ENVIRONMENT

A bankôs financial health and risk profile is heavily influenced by the political, economic and regulatory environment of the country, or countries, in which it operates, and also by the structure and dynamics of the industry itself. In short, an environment characterised by steady growth in real income and employment, limited vulnerability to economic shocks, prudent fiscal and monetary policy, and high quality legal and regulatory frameworks is generally more conducive to implementing strategic plans, building a robust earnings profile, and managing credit and other risks, than one which is not.

CI recognises that changes in economic conditions often provide a leading indicator of banking sector performance and that economic disturbances or shocks ï for example to output, exports, domestic asset prices, exchange rates and external financing ï can have a profound impact on bank balance sheets and profitability. In addition, shifts in domestic confidence or country risk perceptions can drive up bank funding costs and in extremis cause liquidity to evaporate.

We are also aware that the size, structure, and sophistication of the banking sector and broader financial system can affect the franchise strength, competitive position, and growth prospects of individual institutions. Furthermore, interconnections between banks and common exposures to the financial cycle can increase the likelihood of distress at one bank being transmitted to others in the system.

Institutions also matter for banking system soundness. Regulatory and legal frameworks influence the scope of banksô activities and the risks that they take, while effective supervision can prevent problems at weak banks becoming widespread. If legal, regulatory and supervisory frameworks and institutions are deficient, the chances of systemic risks being identified and remedial action taken will be low; so too, in all likelihood, will be the capacity of the financial system to adjust to a major shock.

Assessment Criteria

CIôs assessment of the political, economic, institutional, and system-wide factors that may impact bank financial strength is summarised in the Operating Environment Risk Anchor (or OPERA), which we assign to each of the countries in which the banks we rate are based. OPERA captures those factors that are important for economic growth and broader macroeconomic and financial stability. It also incorporates general business risks and growth opportunities arising from the structure, level of development, and regulation of the banking industry.

CI acknowledges that the operating environment does not affect all banks within a country in the same way and that some banks are better able to withstand economic shocks than others, reflecting, for example, the strength of their liquidity and capital buffers, as well as their business profile and risk appetite. However, we also recognise that banks cannot insulate themselves fully from the economy and broader operating environment. Consequently, we express operating environment risk in terms of an anchor that serves to moor bank BSRs, with the tightness of the anchor (i.e. the distance between

the OPERA reference point and the BSR) typically depending on the Core Financial Strength (CFS) of the individual bank. However, in some cases sovereign risk may pose a binding constraint on BSRs (see section 6).

The OPERA for a countryôs banking system is based on an assessment of five key rating factors:

1. Macroeconomic Strength
2. Monetary Flexibility and Capital Market Development
3. Industry Structure and Performance
4. Regulatory Environment and Institutional Frameworks
5. Political and Policy Risk

The key factors and associated criteria are explained below.[6]

KEY RATING FACTOR 1

Macroeconomic Strength

Our assessment of macroeconomic strength is based on the economic strength, external strength and macro-financial imbalances components of our Sovereign Rating Methodology.

SUB-FACTOR 1.1

Economic Strength

Economic strength refers to the capacity of an economy to generate robust output growth, increase per capita income, and be resilient to adverse shocks, or at least able to recover quickly after they occur.

We base our assessment of economic strength on the following factors:

- Economic Growth Performance ï which takes into account the pace and durability of real output growth and its effectiveness in improving socio-economic outcomes;
- GDP Per Capita ï which we use as an indicator of economic affluence and as a proxy for a countryôs ability to absorb shocks. GDP per capita also correlates with financial intermediation and hence can be a useful indirect gauge of financial sector development;
- Economic Diversification ï which assesses the degree of concentration risk in a countryôs production and export base. A lack of diversification is a potential source of macroeconomic vulnerability. In addition, narrow-based economies tend to be predisposed to structural funding and credit concentrations in the banking sector;
- Competitiveness ï which we gauge by reference to a countryôs ranking in the Global Competiveness Index (CGI) produced by the World Economic Forum (WEF); and
- Inflation performance ï which we regard as an important indicator of monetary policy efficacy and confidence in the local currency. Persistently high inflation typically results in a short-term deposit structure and a preference for foreign currency over local currency. It also constrains long-term lending.[7]

[6] The public finances and government debt are not factored directly into OPERA. This is because the analytical category ófiscal strengthôï which incorporates fiscal performance, government debt and associated financing risks ï is a key component of our sovereign rating methodology and therefore a major determinant of sovereign credit ratings. Hence significant changes in fiscal strength will, *ceteris paribus*, tend to affect rated banks through a change in the sovereign rating (see section 6). Banks may also be affected through a change in OPERA should the deterioration in sovereign credit quality have a significant impact on funding conditions and the level of credit risk in the economy.

[7] In our Sovereign Rating Methodology inflation performance is considered under the heading ómonetary and financial stabilityô and not as part of óeconomic strengthô

SUB-FACTOR 1.2

External Strength

External strength refers to a countryôs ability to generate the foreign exchange needed to meet its current and future external debt service obligations in full.

Our assessment of external strength is divided into three segments:

- Current Account Performance and Financing ï which considers whether the external current account balance is consistent with underlying fundamentals and whether deficits can be financed comfortably;
- External Debt Capacity ï which examines the evolution of a countryôs gross and net external debt stocks against measures of repayment capacity; and
- International Liquidity ï which assesses a countryôs ability to access foreign currency resources and finance a balance of payments deficit in the event of a severe external shock.

See CIôs Sovereign Rating Methodology for further details.

SUB-FACTOR 1.3

Macro-Financial Imbalances

Macro-financial imbalances refer to significant and sustained deviations in macro-financial variables (such as aggregate credit growth, private sector indebtedness, and asset prices) from historical trends or norms. Such imbalances pose a material risk to the economy because they are often unsustainable and may ultimately result in a sharp slowdown in economy activity and potentially severe financial sector stress or a currency crisis. In fact, most systemic financial crises have followed lengthy periods of rapid growth in credit and property prices during which sectoral balance sheets (banks, households and corporates) have become over-stretched and vulnerable to relatively moderate ï and not just large ï shocks.

See CIôs Sovereign Rating Methodology for further details.

KEY RATING FACTOR 2

Monetary Flexibility and Capital Market Development

Our assessment of this key rating factor draws on the monetary policy flexibility and capital market development components of our sovereign rating methodology.

SUB-FACTOR 2.1

Monetary Policy Flexibility

Monetary policy flexibility takes into account the ability of the authorities to use policy instruments to influence domestic demand, manage inflation and ensure the sustainability of the countryôs exchange rate regime. Monetary policy flexibility also captures the capacity of the monetary authorities to adjust the policy stance to counteract economic shocks and to provide temporary liquidity support to the financial system in times of severe disruption.

SUB-FACTOR 2.2

Capital Market Development

Capital market development serves as proxy for the level of development of the financial system, and is also indicative of the range of funding options and interest rate and liquidity risk management tools available to financial institutions. The development of local capital markets is also important for the conduct of monetary policy and may help to bolster financial stability.

See CIôs Sovereign Rating Methodology for further details of both.

KEY RATING FACTOR 3

Industry Structure and Performance

Industry structure and performance is the third of the five components of OPERA. An industry-wide assessment is important for a number of reasons, not least because strengths and weaknesses at the system level will affect, to varying degrees, the market position and financial soundness of individual banks.

Our assessment of the relative structural strength of a countryôs banking industry is divided into two broad categories: industry structure; and financial fundamentals.

SUB-FACTOR 3.1

Industry Structure

Industry structure considers the strengths and vulnerabilities associated with the organisation and operation of the banking sector, in particular the extent to which structural factors affect the franchise strength, growth prospects, and the systemic risk exposure of individual institutions. We examine the banking sector in terms of:

- Size, development and complexity
- Concentration and competition
- Ownership and control

(i) Size, development and complexity ï The relative size, sophistication and development of the banking system may have implications for the growth of a bankôs business franchise, and for the diversification of risk and earnings.

We consider the depth and breadth of the banking sector ï the former in terms of total assets to GDP; the latter in terms of the diversity of the customer base and the variety, risk profile and maturity structure of the product range ï and evaluate the prospects for future expansion. In so doing we take into account the dynamics of the local market and the potential rewards, risks and challenges associated with potentially transformative processes such as financial innovation and deregulation.

We are cognizant of the potential vulnerabilities of óover-sizedôbanking sectors with total assets many times the size of the domestic economy, particularly if the scale of the industry has been achieved quickly and if it means that the authorities are unable to perform a credible lender of last resort function. In our opinion, overly large banking systems tend to be particularly risky when exposure to the local economy is high and this would be reflected in OPERA. In contrast, systemic risk related to size may be less of a constraining factor in offshore or internationally-oriented banking sectors, but only if linkages between the offshore and onshore sectors are limited and the risk of spillovers from international activities to the domestic financial system and economy is low ï conditions that few banking systems are likely to meet.

We also consider the degree of systemic risk in banking systems characterised by high levels of organisational and business complexity or by high interconnectedness between financial institutions. Complexity and interconnectedness are not necessarily negative factors. Indeed, at the bank level they may reflect the exploitation of economies of scale and scope and the diversification of counterparty exposures. However, large, complex, interconnected financial institutions are often more likely to engage in potentially higher risk activities beyond the scope of traditional financial intermediation and are typically harder to regulate and supervise. Moreover, the failure of such institutions tends to be disruptive to the whole banking sector, impacting liquidity, funding channels and investor risk perceptions.

(ii) Concentration and competition ï Banks operating in concentrated markets are often able to achieve greater market power and higher franchise values than those operating in more diffuse environments. However, bank concentration may also contribute to systemic risk, particularly where similarities in business models and funding profiles result in high exposure to common shocks and other forms of financial contagion.

We tend to regard highly fragmented banking sectors unfavourably, as the number of players relative to the size of the market tends to constrain overall efficiency and profitability and ï depending on the degree of market segmentation ï may make it more challenging for banks to build franchise strength. In our view fragmentation and overcapacity may also make the industry landscape less certain by increasing the likelihood of mergers and acquisitions, as larger banks seek to overcome the limited opportunities for organic growth. However, subsequent changes in the industry structure may be a positive factor to the extent that the increase in concentration drives diversification and growth.

Market competition and contestability are also important considerations. We examine whether competition is driving institutional efficiency and product innovation, as well as contributing to sustainable sector growth, or whether it is resulting in declining franchise values, aggressive or predatory commercial practices, and high or excessive risk taking. We recognise that the impact of competition on banking sector stability is not linear and that systems characterised by limited competition ï perhaps reflecting the dominance of a small number of large banks ï may be inefficient and prone to high systemic risk.

We take into account the effect on industry structure and competition of government policies on market entry and mergers and acquisitions. Lax entry policies can fuel fragmentation and increase prudential risks. Severe restrictions on mergers and acquisitions may hinder the development of business franchise and constrain profitability. We also consider the impact on business models and financial performance of any restrictive regulations, for example on product pricing, permissible lines of business, or geographic expansion. For countries undergoing financial liberalisation, we take into account the capacity of domestic banks to withstand more intense competition from foreign financial institutions.

We also assess the role of the banking sector in the wider financial system and the extent to which the sector faces, or may be expected to face, competition from the non-bank financial industry.

(iii) Ownership and control ï The ownership structure of the banking industry also has potential implications for competitiveness, efficiency and market discipline. Banking systems dominated by state-owned banks may be subject to politically-motivated lending and investment decisions, or may lack managerial skills and experience, which in turn might have a negative impact on the overall soundness of the banking sector. Systems in which a high proportion of resident banks are owned by foreign bank parents may benefit from the transfer of technology, management expertise, product innovation and capital and liquidity support from owners. However, the banking sector may also become more dependent on the long-term strategic ambitions of the foreign parents and might become less stable if the relative importance of the subsidiary within the group changes.

Also important is the degree of state interference in the sector, including via restrictions on bank behaviour ï such as controls on interest rates and the allocation of credit ï and the extent to which such interference constrains bank flexibility, earnings capacity and the efficiency of financial intermediation.

SUB-FACTOR 3.2

Financial Fundamentals

This sub-factor involves an examination of the financial profile of the banking sector, drawing on the criteria we use to assess individual institutions (specifically Pillars 4 to 7, below). We consider the banking sectorôs financial health by analysing the main aggregated micro-prudential indicators of financial soundness, specifically ratios measuring asset quality, profitability, liquidity, and capital adequacy published by national authorities or international financial institutions, or else estimated by CI in cases where timely data from official sources is not available.

We pay particular attention to funding, based on our observation that resilient banking systems tend to be characterised by funding structures that are diversified, stable and involve less leverage. Vulnerabilities tend to increase the higher the loan-to-deposit funding gap, the greater the reliance on wholesale funding (short term and foreign currency in particular), the lower the share of stable funding in total funding, and the more leveraged and less capitalised the system.

In addition, we consider potential vulnerabilities arising from system-wide asset concentrations, including where these reflect the small size or perhaps narrowness of the local economy, as well as those associated with weaknesses in lending and underwriting standards.

We also take into account the likely impact on fundamentals of changes in economic and financial conditions. A severe deterioration in industry funding conditions (i.e. beyond normal fluctuations or cyclical changes in market conditions) or the materialisation of systemic funding vulnerabilities that increase the risk of bank failures, as well as adverse economic shocks that increase credit risk in the economy could all have a significant impact on financial fundamentals and OPERA. The change in OPERA in the event of adverse disturbances would depend not only on the size, nature and duration of the shock, but also on the ability of the sovereign to provide sufficient support to the financial system to alleviate liquidity stresses and funding strains and preserve confidence without jeopardising its own creditworthiness.

We appreciate that aggregate data may mask significant differences between banks ï differences that may be of systemic importance ï and that movements in key ratios may be cyclical or transient and therefore not necessarily indicative of a fundamental change in the overall risk profile and financial soundness of the banking system. Consequently, similar to the way we assess the core financial strength of individual banks, we combine quantitative indicators with qualitative information to gain a more comprehensive understanding of the systemôs financial strength.

KEY RATING FACTOR 4

Regulatory Environment and Institutional Framework

By establishing the rules of the game and influencing the level of risk taking, the regulatory and institutional setting is a key determinant of financial system soundness. The final component of OPERA involves an evaluation of the following:

- The effectiveness of bank regulation and supervision; and
- The quality of the legal and financial infrastructure.

SUB-FACTOR 4.1

Regulation and Supervision

Regulation and supervision considers the extent to which regulatory and supervisory frameworks support a sound and healthy banking sector or, conversely, the degree to which existing or emerging weaknesses in such frameworks could have an adverse impact on the financial stability of the sector. Our focus is on prudential aspects of regulation and supervision. The structural impact of regulation, for example on business models and competition, is considered as part of ómarket structureô

In CIôs view, a strong and comprehensive risk-based regulatory framework is essential to ensure the safety and soundness of the banking sector. Equally important is the existence of efficient supervisory structures that are independent, competent, and adequately staffed. Supervisors must not only be empowered to enforce regulatory standards, but also proactive in their interventions and timely in their supervisory actions. We also view positively regulatory frameworks that take a broader macro-prudential perspective, complemented by effective cooperation and coordination with other regulatory and supervisory agencies, including overseas authorities in those countries where the bank sector has a significant regional or global footprint.

We are aware that at first glance many regulatory frameworks exhibit similar features. However, closer inspection often reveals significant differences in terms of the scope and rigour of regulatory standards. In addition, the quality and enforcement capabilities of regulatory and supervisory institutions can vary greatly, even after taking into account the relative size and complexity of the sectors they oversee. In order to ensure we capture the relative strengths and weaknesses of the regulatory environment, we frame our analysis around the following:

- The scope and quality of prudential regulations and disclosure requirements;

- The capacity of the authorities to identify institution-specific and systemic risks;
- Their ability and willingness to take timely corrective action; and
- Their track record in doing so.

(i) Scope and rigour of regulatory policies and standards ï CI pays particular attention to those areas where regulatory authorities deviate from international codes or best practices, applying stronger or weaker supervisory and prudential standards. The areas where differences tend to matter most for the safety of banks and the resilience of the financial system include, but are not limited to, the following:

- The scope of regulatory coverage (consolidated group, foreign entities etc.);
- The comprehensiveness of risks assessments (including risks to the banking sector from NBFIs);
- The strictness of prudential rules and standards (including on the quality and quantity of regulatory capital, the risk-weighting of assets, the measurement and control of large exposures, and the treatment of problem loans and loan losses); and
- The availability of policy tools to help contain risks and emerging vulnerabilities at an early stage, including appropriate macro-prudential policy instruments (these could include countercyclical capital buffers, systemic capital surcharges, dynamic provisioning, time-varying limits on certain exposures, and loan-to-value caps).

(ii) Capacity to identify institution-specific and systemic risks ï We consider whether the supervisory authorities have the appropriate human, technological and financial resources, as well as the relevant skills, to cope with the increasing complexity of banking activities and products. We also consider the quality and frequency of off-site monitoring and on-site inspections.

(iii) Independence and empowerment ï To ensure efficient banking supervision, supervisory authorities must be independent in their decision making and free from political influence or industry lobbying. Otherwise, conflicts of interest might lead to risks being underestimated and corrective action being delayed. CI therefore considers the degree of operational autonomy of the supervisory authorities and their ability to issue and enforce new rules and guidelines and ensure that financial institutions comply with prudential rules. We also take into account the effectiveness of policy coordination in countries where regulatory and supervisory functions are divided between different institutions.

(iv) Track record ï In evaluating the regulatory environment we put great emphasis on the supervisory authorityôs track record of: (a) resolving failing banks whilst preserving confidence in the sector; (b) detecting weak banks and successfully compelling the board of directors and management to address shortcomings and strengthen risk buffers; and (c) identifying risks to the financial system and of taking timely action to safeguard stability.

SUB-FACTOR 4.2

Legal and Financial Infrastructure

Legal and financial infrastructure captures a number of important institutional factors that impact bank operations and risk management. In particular, a clear and effective legal framework is especially relevant to financial institutions for the simple reason that financial instruments are legal contracts. The banking industryôs risk profile is therefore strongly affected by the certainty of legal rights within a country and the predictability and speed of their fair and impartial enforcement.

Besides general banking laws and regulations, the elements of a countryôs legal infrastructure that are of high importance to financial institutions include those governing creditor rights, ownership, contract enforcement, accounting, auditing and disclosure. Also important are laws and practices relating to failure resolution, particularly rules and procedures concerning insolvency, deposit insurance, and the recovery and resolution of distressed banks.

In this part of our OPERA assessment we also take into account the adequacy of vital financial sector infrastructure, such as payment and settlements systems, credit information systems and property (collateral) registries.

Our assessment of the overall strength and predictability of a countryôs legal system draws on the óinstitutional strength and administrative capacityôsub-factor of CIôs Sovereign Rating Methodology. However, this is a general evaluation and not specific to the banking sector. Of course it may be that the relative strength of the legal environment for banks is broadly in line with our general assessment for the country. Alternatively, we may consider that the legal environment for banks is stronger or weaker than implied by our more general assessment.[8] Our approach is to take the assessment made using our sovereign methodology as a baseline and to adjust it, where appropriate, for industry-specific business risks associated with the legal and financial infrastructure.

We consider, in particular, the strength of creditor rights, including the effectiveness and efficiency of: (a) bankruptcy or insolvency procedures for corporations and financial firms; and (b) the legal framework to enforce collateral and property.

We also consider the quality of accounting and auditing standards, including whether local standards and practices contain material deficiencies that undermine the accuracy and reliability of financial information. We also take into account the comprehensiveness and timeliness of financial reporting and the level of public disclosure.

In addition we may make a positive adjustment to our assessment of a countryôs legal and financial infrastructure if either of the following applies:

- **Deposit insurance** ï The country has a credible and comprehensive deposit insurance scheme or similar official backstop (such as a credible and explicit government guarantee on deposits) that in our opinion lowers the risk of a bank run and helps to support confidence in the banking system; or
- **Recovery and resolution framework for distressed banks** ï An effective and credible resolution regime with robust legal foundations is in place which we believe would facilitate the resolution of financial institutions without disrupting the financial system (for example through counterparty risk or contagion risk).

Conversely we may make a negative adjustment to our assessment if either of the following applies:

- **Inefficient payments infrastructure** ï There are serious deficiencies in the payments infrastructure that undermine the safety and soundness of the payments system; or
- **Inadequate financial information infrastructure** ï Credit information systems and property registries are weak or have yet to be developed, and a lack of comprehensive credit information sharing between a broad range of creditors complicates credit risk management and potentially increases the level of credit risk in the system.

KEY RATING FACTOR 5

POLITICAL and POLICY RISK

Our assessment of political and policy risk is drawn from our sovereign rating methodology and refers primarily to policy decisions and political events ï domestic and external ï that could materially affect sovereign creditworthiness. It also takes into account the durability of the social and political fabric of a country and the existence of any underlying vulnerabilities that could potentially engender political instability and undermine the workings of government.

See CIôs Sovereign Rating Methodology for more details.

[8] The key rating factor óinstitutional strength and administrative capacityôassesses the quality of a countryôs public institutions (including the legal system and the political and administrative divisions of the executive branch of government) and the capacity to design and enforce coherent economic policies and respond effectively to new challenges or sudden shocks. See the ópolitical and institutional riskôsection of CIôs Sovereign Rating Methodology for further details.

ANALYTICAL PILLAR 2

BUSINESS MODEL AND STRATEGY

Analysis of a bank's business model and strategy is a critical element of CI's assessment of core financial strength and contributes to a better understanding of an institution's risk profile and financial performance.

Banks engage strategically in different activities and geographical regions to fit their business objectives. A bank's business model is typically characterised by the nature and scope of its activities, funding and revenue sources. A bank's franchise strength is typically associated with the robustness and resilience of its market position and reputation. Management's ability to develop and execute adequate strategic plans is critical in shaping a bank's business model and franchise. Together, these factors form the basis for a bank's ability to generate and maintain appropriate levels of high-quality earnings and capital, thereby enabling it to withstand periods of economic or financial market stress.

Bank failures are often rooted in non-viable business models, overambitious strategies, or poor strategic execution. Such weaknesses can lead to the erosion of franchise strength and customer confidence, particularly during periods of rapid change in the operating environment.

Some of the common characteristics of non-viable business models include:

- Excessive concentrations across the business model, for example in terms of the customer base, income sources, or risk exposures. Even with sound risk management tools, such concentrations can be destabilising and leave the bank vulnerable to sudden changes in the business environment.
- Overambitious strategic assumptions and poor execution by a weak management team, particularly where this results in the misalignment of a bank's financial and operational capacity. In short, excessive optimism about capabilities, growth opportunities, and economic and market trends can lead to poor strategic decisions and ultimately threaten the viability of a bank's business model.
- Aggressive expansion and large-scale acquisitions in non-core or less well known activities or markets. This may include expansion or acquisitions in new business areas or outside traditional (home) markets, or by a shift in activities, including expansion of more volatile trading and market-related activities and investments in high risk or illiquid securities and derivatives.
- Revenue and earnings volatility, identified by significant changes in the earnings mix or in the level of earnings over a short time frame, particularly when driven by non-core business lines. Such volatility may also indicate vulnerability to sudden changes in the operating environment.

In general, CI believes that banks with business models that exhibit characteristics of high stability and predictability and provide good growth potential, and that have strong and defendable franchises, realistic strategic ambitions and adequate capabilities, are typically more resilient to adverse changes in the operating environment and event risk. Such banks tend to be in a better position to generate and maintain strong recurring risk-adjusted earnings, build strong capital buffers and withstand prolonged adverse economic or financial market conditions. Consequently, this should translate into a lower likelihood of failure compared to banks with weaker characteristics in these areas.

Assessment Criteria

CI's analysis of a bank's business model and strategy includes the following three key rating factors:

1. Business Model
2. Franchise Strength
3. Management and Strategy

The analysis aims to identify and assess on a forward-looking basis the areas that are most relevant in terms of the current viability and future sustainability of a bank's business model and strategy, and

which are most likely to affect the institution's resilience or vulnerability to changes in the operating environment.

KEY RATING FACTOR 1

Business Model

Relevant aspects in the assessment of a bank's business model include:

- Business mix, diversification, concentration, and correlation of activities;[9] and
- Stability, predictability and confidence-sensitivity.

There are significant differences in bank business models globally and numerous labels exist to classify banks and their business models. For the purpose of defining a bank's business model, CI mainly focuses on the range of activities, customer base, and asset structure, as well as on funding and revenue sources.

CI broadly distinguishes between retail-funded commercial banks, wholesale-funded commercial banks, and capital market-oriented banks, recognising that the boundaries are often not clear-cut. For example, many of the world's largest banking groups are 'universal banks'that offer a broad range of services, albeit to varying degrees, ranging from the more traditional banking services of deposit taking and lending to investment banking activities that include sales and trading, market-making, and securities underwriting.

Retail-funded commercial banks typically have a customer base that requires mainly traditional commercial banking services, including current account, saving and lending products. This is also reflected in banks' balance sheet structures and revenue profiles. For such banks, loans to consumers and small and medium-sized corporate customers account for the bulk of activity. On the funding side, these banks usually benefit from a high proportion of less confidence-sensitive customer deposits (often protected by deposit insurance schemes). Net interest income typically represents the largest revenue source.

Wholesale-funded commercial banks have a similar activity and asset profile to retail-funded commercial banks. The main differences are in the funding mix and customer base. Funding contains a higher share of potentially volatile capital market borrowing, including via debt issuances, interbank funding, and wholesale corporate deposits (not necessarily protected by deposit insurance schemes). Larger corporate customers represent a higher proportion of the asset base and revenues.

Capital market-oriented banks often have customers that require the full set of banking and capital market services, and many engage in a broad range of trading, derivatives, and market-making activities, including own-account trading. Their balance sheets carry a higher proportion of trading assets, available-for-sale securities, and interbank assets, and their funding is comparatively more dependent on confidence-sensitive (short-term) interbank, money market or capital market funding. More volatile revenues from trading and capital market activities account for a higher proportion of revenues compared with retail- and wholesale-funded commercial banks.

CI believes that well-diversified banks with low concentrations, limited reliance on more volatile and confidence-sensitive activities, and limited correlations (in terms of geography, business segments, products, and clients) are better positioned to withstand cyclical swings and extended periods of economic stress. However, such diversification needs to go hand-in-hand with adequate expertise, financial and operational capacity, and should finally translate into superior franchise, earnings and capital strength.

[9] Excluding asset concentration and funding concentration, which are considered separately in the asset quality and funding and liquidity sections, below).

KEY RATING FACTOR 2

Franchise Strength

Franchise strength is reflected in a bankôs market position, reputation and brand and is underpinned, inter alia, by its competitive strengths and ability to provide services that are difficult or costly to replicate.

Typical measures of market position include a bankôs relative share of geographical markets as well as business lines by revenue (or earnings) and assets. Other measures of a bankôs franchise include the size and nature of its distribution network, the type and quality of its products, other service offerings and client base, as well as its share of loans and deposits in the markets in which it operates.

Strong franchises are often, but not necessarily, associated with competitive advantages like superior pricing power, strong economies of scale, high barriers to market entry, stable client relationships, and comparatively favourable growth opportunities across key markets and segments, supported by good product innovation. Such credentials should ultimately lead to higher business and earnings stability and hence a reduced likelihood of failure.

KEY RATING FACTOR 3

Management and Strategy

CI aims to assess whether a bankôs strategic plans are sound and realistic in the context of its current business model and franchise and given its managerial, financial and operational capacity. The senior management team[10] plays a crucial role in formulating and executing a bankôs strategy and in shaping its business model, risk appetite and risk profile, and any weaknesses in its approach could, over time, translate into weaker financial strength.

In CIôs view, the following factors are relevant in identifying potential weaknesses and challenges regarding a bankôs senior management team and the execution of its strategic ambitions and plans:

- Depth, stability and track record of the management team;
- Experience, strategic competencies, integrity, credibility and execution skills;
- Strategic ambitions, risk appetite, underlying assumptions regarding economic conditions, growth opportunities and market trends;
- Strategic risks relating to the existing business model, mergers and acquisitions, expansion into new activities and locations;
- Reliance on key individuals and succession planning;
- Relationships within the senior executive team and between that team and the board and major shareholders;
- Senior management compensation tied to short-term performance goals (particularly if excessive); and
- Managementôs relationships with regulators and supervisory authorities.

[10] In some countries banks have a two-tier board structure, where the supervisory responsibilities of the board are performed by a separate body known as a supervisory board, which has no executive management function. Other countries use a one-tier structure in which the board has a broader role. CI does not advocate a specific board structure. For the purpose of CIôs analysis, senior management team includes the executive management as well as both executive and non-executive members of the board.

ANALYTICAL PILLAR 3

OWNERSHIP AND GOVERNANCE

Weaknesses relating to a bankôs ownership and governance can contribute to excessive risk taking, particularly if accompanied by inadequate risk management and risk control. Such weaknesses can be exacerbated by an aggressive expansion into new business areas or beyond traditional (home) markets, or by a shift in activities, including expansion of more volatile trading and market-related activities and investments in illiquid securities and derivatives. Such developments can make a bank more complex, opaque, interconnected, and ultimately more difficult to manage.

Unrealistic expectations or undue influence exercised by a bankôs owners may contribute to poor strategic decisions and threaten the viability of a bankôs business model. Furthermore, a lack of relevant and timely disclosure and an aggressive interpretation of, and exploitation of loopholes in, accounting standards can make it difficult for stakeholders to monitor and identify adverse developments at an early stage.

A critical element of CIôs analytical process, therefore, is to assess the effectiveness of a bankôs ownership and organisational structures, risk management frameworks and practices, as well as its accounting, disclosure and transparency standards.

CI views unfavourably banks that are impacted by undue influence from their owners (or other external stakeholders), have non-transparent organisational structures, lack adequate and effective risk management and control functions (including internal audit, credit review and compliance), and which exhibit poor levels of disclosure and transparency.

Assessment Criteria

CIôs analysis of ownership and governance includes the following four key rating factors:

1. Ownership
2. Organisational Structure and Complexity
3. Risk Management and Control
4. Accounting, Disclosure and Transparency

The assessment of these factors is largely driven by the qualitative judgments of CI analysts and rating committees, observed through good times and bad. While there is no single approach to assessing these factors, CI analysts seek to identify potential warning indicators or ôred flagsô associated with material shortcomings in ownership and governance. Information on acquisitions, corporate restructurings, lawsuits and legal settlements may also be used to provide insight into a bankôs governance and management capabilities.

KEY RATING FACTOR 1

Ownership

There are significant differences in the ownership model and structure of banks worldwide. The various types include stock-market listed banks with a diversified shareholder base, banks owned or controlled by an individual or a small number of shareholders (typically family or other related parties), banks owned by other financial institutions, as well as banks under public sector ownership, where owners are typically central government entities or regional, state or local governments. In addition, in some countries there are member-owned banks, organised under co-operative or mutual ownership models.

The focus of this key rating factor is on identifying potential challenges and conflicts of interests arising from the ownership model and structure, including how these are mitigated and how they might affect a bankôs risk profile and financial strength.

We view the following as potentially problematic:

- Concentrated ownership structures (e.g. institutions owned by management, families or non-financial corporates), particularly if there are concerns about corporate governance or leadership succession, or if the ownership structure suffers from poor transparency;
- Overly complex and non-transparent ownership structures (e.g. leveraged holding companies and cross-holding structures) which can create significant challenges for management and board overview;
- The exercise of undue public or political influence by owners (e.g. directed lending or investments, insider and related-party transactions); and
- Unrealistic or aggressive financial expectations by shareholders.

CI also assesses other potential benefits or challenges associated with ownership. For analytical purposes these are taken into account elsewhere in this methodology. For example the capacity and track record of owners to support the bankôs strategy and growth and maintain adequate capital levels is considered in Pillar 7 (Capitalization and Leverage), while the potential benefits for subsidiaries of larger banking groups in terms of stable and cost efficient intra-group funding and liquidity is captured in Pillar 6 (Funding and Liquidity).

KEY RATING FACTOR 2

Organisational Structure and Complexity

In some countries the organisational and legal structure as well as business model of banks has become increasingly complex and opaque. This partly reflects domestic and cross-border acquisitions, but has also been driven by tax and regulatory arbitrage considerations. In CIôs view, such complexity creates significant challenges for management and boards in understanding these structures and assessing and managing the implications for a bankôs risk profile, funding, profitability, and capitalisation.

CI pays particular attention to situations where a bankôs existing and planned organisation or activities involve non-transparent structures (e.g. special-purpose vehicles or similar structures) or where a bank engages in new activities, particularly in regions where there are doubts regarding the appropriateness of banking, regulatory or transparency standards (tax havens).

A key focus is on overly complex legal or organisational structures, particularly if not adequately mitigated by appropriate understanding from senior management teams (including boards) and where sufficient public transparency and disclosure is lacking.

KEY RATING FACTOR 3

Risk Management and Control

A critical factor in assessing the current and prospective risk profile of a bank is the quality and adequacy of risk management and risk control. Risk management and control refers to the effectiveness of policies, procedures and resources for identifying, measuring, approving, monitoring and controlling risk, as well as the ability to maintain risk levels within well-defined and acceptable limits. CI also assesses a bankôs risk culture and risk appetite, as well as its track record of managing risk over time and through the economic cycle.

CIôs evaluation of risk management and control takes into account the following:

- The organisational structure of risk management, including whether it encompasses clearly differentiated approval, control and monitoring functions, as well as sufficient and high quality resources;
- The strength and rigour of underwriting standards, including credit approval processes and whether such standards are likely to be eroded under competitive pressure;
- The comprehensiveness of risk management and control systems, including whether the interaction of credit with other types of risk (such as market and liquidity risk for counterparty

exposures) is captured adequately, the appropriateness of internal concentration and exposure limits, and the degree of compliance with such limits;

- The standing of the risk management function within the bank, its role in sanctioning and approving risks and the degree to which it may be seen to be independent within the organisation;
- The bankôs track record in successfully managing risk through the economic cycle and periods of stress, including its performance relative to country peers; and
- The bankôs management of, and vulnerability to, operational risk. Operational risk can take various forms. It can involve people (conduct, fraud, incompetence), system failures (breakdowns in systems or technology), and process failures (e.g. back-office problems).

In terms of conduct risk, CI assesses the relevance and significance of possible exposure to:

- Product mis-selling in retail and wholesale markets;
- Potential breaches of political sanctions and money-laundering legislation;
- Poorly designed distribution channels that may enable conflicts of interest with false incentives, including pushed cross-selling of products to retail customers;
- Conflicts of interest in conducting business; and
- Cases concerning the manipulation of benchmark interest rates, foreign exchange rates or any other financial instruments or indices.

Given the large degree of qualitative and subjective judgement in analysing these factors, CI analysts seek to identify potential warning indicators or ôred flagsô associated with material shortcomings. These may include situations where:

- The risk management function lacks stature, independence, resources or technical expertise;
- The bankôs risk appetite is perceived as high and underwriting standards are lenient in practice;
- The bank has a poor track record of managing risks through the economic cycle;
- Risk measurement and monitoring systems are inefficient or underdeveloped relative to the nature and degree of risk-taking;
- There have been material conflicts regarding litigation, regulatory breaches, or tax matters within the last 3-5 years; or where
- The bank has been sanctioned by the relevant authorities for material misconduct practices.

KEY RATING FACTOR 4

Accounting, Disclosure and Transparency

In CIôs view, timely, relevant and comprehensive accounting, disclosure and transparency regarding a bankôs financial condition and performance, business activities, risk profile, and risk management practices are essential for sound and effective corporate governance. Otherwise it is difficult for shareholders, non-executive board members, depositors, other relevant stakeholders and market participants to monitor the performance and risk profile of a bank and the effectiveness of its management.

Equally important, CI believes that a strong and independent internal audit function and appropriate management information systems (MIS), supported by robust information technology platforms, play an increasingly important role in enhancing the efficiency of management and board oversight and decision making.

In recent years CI has observed an improving trend in the frequency, timeliness, comprehensiveness, materiality and comparability of bankôs financial reporting and related disclosures. This includes the implementation of International Financial Reporting Standards (IFRS) in most developed and developing markets. Despite such improvements, CI still observes material differences in the quality of public disclosure and transparency across countries and between individual banks. The same holds true for the interpretation of regulatory and accounting standards by individual banks. Indeed, a

key focus of CI is on the extent to which a bank exploits any accounting or reporting latitude (for example with regard to the definition of risk-weighted assets, non-performing loans and other exposures, related party transactions, earnings recognition, and capital quality) in order to paint an overly positive picture of its financial health.

When assessing the quality of transparency and disclosure, CI focuses on potential weaknesses and warning indicators which warrant further investigation and ultimately may lead to an unfavourable assessment. These include:

- A lack of independence, skills, experience and diversity of non-executive boards;
- A lack of quality and independence of external and internal auditors;
- Instances where external auditors have issued an adverse opinion, determining that the financial statements are materially misstated and do not conform to the relevant accounting, regulatory or legal standards;
- Aggressive interpretation of accounting standards; and
- Shortcomings regarding the timeliness, comprehensiveness, materiality and consistency of disclosures.

ANALYTICAL PILLAR 4

RISK PROFILE AND RISK MITIGATION

Taking and managing risks is the essence of a bankôs business. Traditionally, credit risk has been the most important risk for banks and often the major cause of bank failure. However, a number of other risks (market, liquidity, funding, operational, strategic and reputational) have grown in importance over the years, increasing the complexity of bank risk profiles.

The major causes of serious banking problems and the most common causes of bank failures globally continue to be directly and indirectly related to credit risk. Such credit-related problems can stem from a variety of factors, including weak underwriting, inadequate pricing, excessive growth and concentrations, overreliance on collateral, forbearance, lack of adequate loan loss provisioning, directed lending, and related-party lending. Such problems are often exacerbated by a lack of attention to changes in the economic environment and accompanied by weaknesses in risk management, including deficiencies in the processes for credit assessments, credit approvals and credit monitoring.

Deterioration in a bankôs asset quality can lead to substantial losses, in turn impairing capital adequacy and increasing the bankôs vulnerability to further shocks. It is also likely to have an impact on revenue generating activities. Analysing credit exposures is sometimes challenging owing to variations in bank disclosure and the often subjective nature of practices for classifying loans according to expected payment performance.

For a growing number of banks, market risks have gained in importance over the past two decades and pose unique challenges. The complexity of new products and strategies has increased banksô reliance on quantitative models that employ a number of assumptions and statistical theory to price products and manage exposures. But quantitative models have limitations that can restrict their validity.

CI considers the wide array of risks that a bank is taking, how it manages those risks, and how relevant and interrelated those risks are for the bank. The resulting impact on a bankôs reputation, earnings, liquidity and capital position, and ultimately its financial strength, are of critical importance in CIôs analysis.

Assessment Criteria

The assessment criteria for this component of the BSR aims to capture the degree of risks and potential vulnerabilities a bank is facing and is based on three broad-based rating factors:

1. Balance Sheet Structure, Asset Quality and Credit Risk
2. Market Risk
3. Credit Loss Absorption Capacity

CI analysts aim to gain an in-depth understanding of a bankôs risk profile by typically analysing the following elements:

- Nature, size and composition (including seasoning) of on- and off-balance sheet exposures;
- Quality of credit and counterparty exposures;
- Nature and degree of market risk exposures; and
- Adequacy of loan loss reserves, provisions, credit valuation adjustments (CVA) and risk mitigation tools (e.g. collateral, guarantees, and netting agreements).

We draw on a wide range of (largely public) sources to assess a bankôs risk profile and risk management, including annual reports, investor presentations and regulatory filings (e.g. Pillar 3 reports). We will also take into consideration new material information that becomes available through changes in accounting rules (e.g. IFRS 9). Furthermore, regulators are increasingly conducting and publishing stress tests and other analysis that can provide valuable information regarding the risk

profile and potential vulnerabilities of banks. Discussions with management during the rating process and internal risk management reports can provide additional insight.

To analyse asset quality we use both quantitative indicators and qualitative judgements. The latter are necessary due to the lack of sufficiently harmonised international definitions and differing national (and intra-national) practices, as well as, in some cases, a lack of public disclosure.

KEY RATING FACTOR 1

Balance Sheet Structure, Asset Quality and Credit Risk

For most banks rated by CI, credit risk is still the major driver of risk and loans represent the largest proportion of assets. But credit risk encompasses more than "traditional" lending to banks and non-banks. Credit risk is present in a broad range of other bank activities and exists any time funds are extended, committed, or invested through contractual agreements, whether reflected on- or off-balance sheet. This includes securities investments, as well as trading and derivatives exposures. Credit risk can also arise from country or sovereign exposure as well as indirectly through guarantor performance. Failure to honour such contractual obligations typically results in the impairment of the exposure in the form of provisions or write-offs and can have adverse consequences for a bank's earnings, liquidity and capital position.

Certain factors may increase a bank's relative susceptibility to asset quality problems. Key vulnerabilities include concentrations and correlations in the credit portfolio, rapid credit growth, as well as poor underwriting standards and a lack of risk-adjusted pricing.

Asset quality is also typically highly correlated with adverse changes in macroeconomic and financial market conditions, including exchange rate volatility – especially for banks with a high share of foreign currency-denominated lending in total lending. For many banks, high and concentrated exposures to home or foreign governments represent a potentially significant vulnerability to a deterioration in sovereign credit quality

Assessing the relative strength of a bank's asset quality is often challenging due to differences between countries in terms of classifying loans, accounting for impaired assets, and provisioning. The analytical challenge is compounded further by the private nature of loan agreements and, in the case of some banks, limited disclosure of loan and investment portfolios as well as counterparties.

Banks employ a variety of risk management techniques and procedures in an effort to contain their exposure to credit risk. A bank may also require collateral and other credit enhancements in order to reduce the size of losses in the event of a borrower or counterparty defaulting. However, the impact of credit losses (net of recoveries) on a bank's capital position ultimately depends on the adequacy its loan loss reserve buffer (and underlying provisioning policies), as well as on its ability to maintain profitability when credit exposures become stressed.

CI's assessment in this area is based on the following five sub-factors:

(i) Asset Mix and Concentration Risk

(ii) Asset Growth and Dynamics

(iii) Quality of the Credit Portfolio

(iv) Exposure to Sovereign Credit Risk

(v) Quality of Investments and Other Credit Exposures

SUB-FACTOR 1.1

Asset Mix and Concentration Risk

Our first step is to analyse the current asset mix in terms of its fundamental soundness and consistency with the bankôs stated business and investment strategies. To the extent that data is available, we analyse the asset profile of the bank by type of exposure (e.g. loans, investments, due from banks), as well as by size, maturity, currency, economic sector, and geographical distribution.

We consider a number of factors, including:

- The size of the asset base in absolute terms;
- The diversity of assets and whether any concentrations are excessive;
- The relative importance of credit risk compared to other risks (such as market risk for banks with sizeable investment portfolios or with material structural interest rate risk positions);
- The relevance of specialised lending exposures which exhibit a higher level of complexity and are potentially more risky, such as commercial real estate, real estate development, and infrastructure financing;
- The extent of potentially more complex exposures, such as derivatives, securitisations (especially where credit risk transfer is limited) and off-balance sheet activities;
- Recent changes in the risk profile of assets; and
- Potential contagion effects from excessive cross-border exposures.

In CIôs view, diversification is an important line of defence against major credit losses, helping to avoid concentration of credit risk with a particular borrower or issuer, or group of borrowers/issuers, or with a particular industry or region.

The most important vulnerabilities in the asset structure tend to arise from high exposure to individual borrowers or excessive sector concentrations of loans. Such concentrations may leave a bank vulnerable to financial losses in the event of the creditor or sector experiencing serious financial difficulties.

CI generally regards credit risk to be highly concentrated and a potential rating constraint when a bankôs exposures exhibit any of the following characteristics:

- High exposure to a single industry or economic sector, particularly highly cyclical or troubled sectors or, more broadly, to a highly correlated set of sectors or activities, particularly if they are inherently cyclical or volatile and dependent on potentially more volatile income streams (e.g. commercial real estate, construction, subprime lending, ship financing, and airlines);
- High exposure to a single issuer, significant credit risk exposure to borrowers or counterparties[11] in regions or countries currently under, or at risk of, economic and financial stress;
- A high share of loans in foreign currency, particularly if borrowers lack a natural hedge against adverse movements in exchange rates;
- Other material exposure to indirect market risk;
- High exposure to related or connected parties, such as entities within the same group; and
- Material credit risk in the trading book if not appropriately managed (e.g. through single-name and sector limits, credit derivatives, netting agreements or collateral).

[11] Sovereign risk exposure concentrations are analysed separately below.

SUB-FACTOR 1.2

Asset Growth and Dynamics

CI considers potential risks arising from the pace of asset growth and from credit growth in particular. We also consider whether the asset structure is likely to shift towards higher risk activities or larger credit concentrations in the intermediate term.

The association between rapid credit growth and future NPLs is well known. Indeed, at the macro level, the empirical evidence points to excessive credit growth as one of the best predictors of banking sector problems. Fast-paced credit growth can undermine asset quality by stretching a bankôs risk management capabilities and internal controls, resulting in lending in excess of a borrowerôs repayment capacity and higher default risk when underlying economic conditions change. Aggressive growth strategies focused on new business lines or new markets may also be particularly risky.

We tend to view the following as potentially negative factors when assessing asset growth over a three-to-five year period (encompassing the recent past and the intermediate term):

- Credit growth which is well above historical norms for the bank and is substantially higher than the growth rate of the countryôs nominal GDP;
- Credit growth which is accompanied by a significant weakening of underwriting standards, for example hikes in loan-to-value (LTV) or debt-to-income ratios;
- Strong growth in new markets, products or activities, particularly those which are deemed to be riskier than the bankôs core business or for which there is little evidence of prior testing and risk assessment; and
- High or rising exposures to overheating economies or markets (e.g. real estate and stock markets).

Any concerns we may have about the current pace or composition of credit growth may be at least partly allayed where there is evidence that the bank is taking steps to tighten prudential standards and rein in credit growth or to reduce exposure to potentially problematic sectors or activities, such as sectors at risk of overheating or price bubbles.

SUB-FACTOR 1.3

Quality of the Credit Portfolio

In assessing the quality of a bankôs credit portfolio, a particular focus is on the assessment of the level and development of problematic exposures, which are often labelled broadly as non-performing loans (NPLs) or non-performing exposures (NPEs).

NPLs are a key concept in credit categorisation schemes, but the meaning and measurement can differ between jurisdictions and even between banks in the same country. The lack of harmonisation in the treatment of NPLs reflects differences in the following: accounting and regulatory standards; the scope of the definition (loans only or other instruments as well); the level of application (counterparty or transaction basis); recognition criteria (objective or subjective); discontinuation criteria; and the treatment of restructured exposures. As part of our analysis, we aim to gain a thorough understanding of the various concepts and their application.

CIôs assessment captures a broad range of impaired exposures, including loans, debt securities, and off-balance sheet exposures which exhibit one or more of the following characteristics:

- Defaulted or otherwise impaired;
- More than 90 days past-due;
- The debtor is assessed as unlikely to pay its credit obligations in full without realisation of collateral, regardless of the existence of any past-due amount or the number of days past due;
- Restructured (other than impaired or 90 days overdue);

- Forborne exposures (exposures with concessions, meaning the modification of the terms and conditions to borrowers who face, or may face, difficulties in meeting payments and which may include non-performing and still performing exposures);
- Performing exposures with an elevated risk of turning non-performing, such as ówatch-listô exposures and performing forborne exposures; and
- Foreclosed assets.

CI draws on a variety of key asset quality indicators and applies qualitative adjustments where necessary. We also take into account a number of other relevant factors, some of which are not quantifiable. In particular, for a more comprehensive evaluation of asset quality CI supplements the information contained in financial ratios with consideration of the following:

- The materiality of differences in loan classification criteria and accounting practices across countries. This includes differences that we are unable to adjust for in order to measure NPLs in accordance with a common definition owing to the absence, or the limited disclosure, of the relevant information; 12
- The possibility ï depending on accounting practices ï of an exaggerated or illusory improvement in asset quality following a troubled debt restructuring or the sale or transfer of bad loans to an asset management company or similar type of vehicle (set up, for example, by the government in the aftermath of a banking crisis); and
- Differences in write-off and accrual policies.

More specifically we tend to be more critical in our assessment of asset quality if any of the following conditions apply:

- Loan quality is materially worse than indicated by the NPL ratio owing to weaknesses in the bankôs approach to classifying loans or recognising impairments. This may include deficiencies in the following: the measurement and valuation of NPLs; the accuracy of classification standards; and adherence to those standards. We will critically evaluate forms of forbearance which allow both borrowers to more easily honour their obligations and banks to postpone the recognition of possible losses;
- The bankôs exposures are unseasoned and/or asset quality has not been tested in a more unfavourable economic environment;
- The level of foreclosed real estate and other property on the bankôs books suggests that asset quality is weaker than indicated by the NPL ratio;
- The recent improvement in the bankôs NPL ratio reflects to a significant extent the transfer or sale of NPLs to a special asset management company or special purpose vehicle; and
- An observed decline in the NPL ratio is misleading due to the pace of loan growth or the amount of write-offs.

Depending on the nature, scope and materiality of NPLs and the potential losses that may result from them, CI may also engage in more in-depth analyses (subject to data availability), which may include an analysis of:

- Various asset quality indicators per portfolio, industry, geography and their evolution over time;
- Distribution of exposures across classes of non-performing assets (i.e. past-due, doubtful, etc.);
- Migration rates from non-performing classes to performing, forborne exposures, and across non-performing classes;
- Foreclosed assets and evolution over time;

[12] CIôs ratios sometimes refer to non-performing loans (NPLs), as these are more widely published than other broader definitions of problem exposures, like non-performing exposures (NPEs) or non-performing assets (NPAs). However, comparability and consistency is also often limited.

- Historical recovery rates by portfolio, industry, geography or type of collateral and duration of recovery process; and
- Vintage of the NPL portfolio.

SUB-FACTOR 1.4

Exposure to Government Credit Risk

Banks are exposed to government credit risk in various shapes and forms, including directly (e.g. through loans and securities) and indirectly (e.g. from government guarantees provided to counterparts or derivatives like credit default swaps). Such credit exposures, particularly to the domestic government, may represent a substantial share of a bankôs assets and amount to a multiple of the capital base.

Historically, banks have regarded such exposures as virtually risk-free and highly liquid and government debt often benefits from favourable regulatory treatment, including:

- Low or zero capital requirements on certain sovereign exposures;
- Exemption of sovereign exposures from large exposure requirements;
- The categorization of high-quality government bonds as highly liquid assets within liquidity regulations; and
- Preferential treatment in various other regulatory frameworks (e.g. insurance, asset management).

In CIôs view such approaches ignore the adverse impact a marked deterioration in government creditworthiness, including a default, could have on banks with outsized sovereign exposures. We therefore make a largely qualitative assessment of a bankôs risk-adjusted government credit exposure and are aware that in many cases this may be higher than that implied by the local regulatory and accounting treatment of sovereign risk. In particular, we take the following factors into consideration:

- Size of exposure relative to capital, assets, or earnings;
- Origin of exposure (home or foreign);
- Type of government borrower/single borrower concentration ï in particular central, regional, and local governments, as well as the central bank might be viewed as a single borrower if we believe default risks are strongly correlated;
- Quality of exposure (e.g. as indicated by CIôs public sovereign ratings or confidential assessments); and
- Currency of exposure (i.e. local or foreign currency).

SUB-FACTOR 1.5

Quality of Other Investments and Credit Exposures

This sub-factor takes into account credit risk arising from the bankôs investment portfolio and, where significant, other interest earning assets and off-balance sheet exposures. For most banks the focus is on the quality of investments and, in particular, the likelihood of suffering credit losses or impairments on their securities portfolios. We also take into account credit risk associated with money market instruments and deposits with other banks (including central banks), which are not typically included in the investment portfolio.

Holdings of financial derivatives may also be an important consideration (for example if counterparty credit risk or ówrong-way riskôis high) although it is often difficult in practice to fully gauge such risks due to weaknesses in financial disclosures.

The analysis of the quality of financial investments cannot be divorced entirely from consideration of market risk due to the interaction between credit risk and market risk and the shared underlying

economic determinants of both risks. For example, in the case of tradable instruments, market risk and default risk tend to become interdependent when there is a large deterioration in market conditions. In such a situation, many of a bankôs positions may become hard to liquidate, resulting in sharp declines in fair value and the lengthening of the intended holding period.

Although changes in investment portfolio valuations may be driven by default risk, we would tend to regard such changes as more likely indicative of liquidity market risk premiums, especially over short horizons and provided market liquidity conditions do not inhibit a bankôs ability to trade or hedge positions.

More specifically, where material (and subject to data availability) we assess the quality of investments and other non-loan assets with respect to the following:

- Recent or expected impairments on investments and other non-loan exposures, including credit losses on off-balance sheet activities;
- The creditworthiness of issuers of securities and counterparties, including banks and financial guarantors;
- The degree of investment exposure to private equity, property development and more complex securitisation exposures;
- The liquidity profile of the investment book and other non-loan assets;
- The diversification of investments;
- Unrealised fair value losses on securities that the bank considers temporary and therefore not impaired (typically recorded through other comprehensive income rather than net profit), particularly where we consider there to be a significant risk that assets will not recover their value in the future; and
- Potential mark-to-market losses associated with a deterioration in the creditworthiness of counterparties.

KEY RATING FACTOR 2

Market Risk

Market risk is the risk of losses to a bank arising from movements in market prices driven by changes in interest rates, foreign exchange rates, and equity and commodity prices. In addition to market risk related to a bankôs trading and market-making activities, most banks are exposed ï albeit to varying degrees ï to interest rate risk arising from interest rate sensitive positions from non-trading activities (often referred to as interest rate risk in the banking book, or IRRBB).

To better determine the interest rate risk profile of a bank, analysts consider the main features of an institutionôs assets, liabilities and off-balance sheet exposures, in particular:

- Loan portfolio (e.g. volume of loans with prepayment options, volume of fixed and floating rate loans, loans with caps and floors);
- Bond portfolio (e.g. volume of investments with options, possible concentrations);
- Deposit accounts (e.g. sensitivity of the institutionôs deposit base to changes in interest rates, possible concentrations); and
- Derivatives (e.g. complexity of the derivatives used either for hedging or for speculative purposes).

When analysing market risks embedded in a bankôs activities, the following factors should be considered:

- Risks relating to mismatches in the re-pricing of assets, liabilities and off-balance sheet short- and long-term positions (re-pricing risk);
- Risk arising from changes in the slope and the shape of the yield curve (yield curve risk);

- Risks arising from hedging exposure to one interest rate with exposure to a rate which re-prices under slightly different conditions (basis risk);
- Risks arising from options, including embedded options, e.g. consumers redeeming fixed rate products when market rates change (option risk);
- A mismatch in the currency denomination of assets and liabilities (structural forex position); and
- The impact on the bank's economic value as a proportion of the institution's regulatory own funds as well as the impact on net interest income.

Public disclosure of market risk, while improving, is still weak and lacks any meaningful standardisation, making peer comparisons particularly difficult. Consequently, CI may assess a variety of indicators to gauge the level of market risk of individual banks (subject to data availability) including:

- The impact of (regulatory) standard interest rate shocks (e.g. change of 100bp shift in the yield curve) on net interest income or equity to measure the exposure to structural interest rate risk in the banking book (ALM risk);
- Changes and trends in trading revenues, market risk risk-weighted assets (RWAs), level of assets with no observable market values ('level 3 assets') and trends from value-at-risk (VAR) observations to gauge the level of trading risk;
- Level and performance of long-term investments in traded financial instruments to assess the exposure to interest and equity risk (other than credit risk); and
- Sensitivity of earnings (and capital) to changes in foreign exchange rates.

We take a more critical view if our analysis reveals one or more of the following characteristics, particularly if combined with weaknesses in the bank's risk management:

- An elevated level of risk arising from mismatches (e.g. maturities, currencies);
- High sensitivity of capital and/or earnings to changes in interest rates or changes in underlying assumptions (e.g. embedded options); and
- High market risk, as implied by the nature, composition, complexity, concentration and level of market risk exposures (e.g. trading revenues, market RWAs and foreign exchange sensitivity).

KEY RATING FACTOR 3

Credit Loss Absorption Capacity

This rating factor focuses on a bank's ability to withstand credit losses in its loan book and investment portfolio without impairing its capital and earnings base. The two principal sub-factors in this context are:

1. Loan Loss Reserve Coverage
2. Other Credit Risk Mitigation

SUB-FACTOR 3.1

Loan Loss Reserve Coverage

We use the NPL coverage ratio (loan loss reserves to gross NPLs) to provide an initial indication of a bank's capacity to accommodate losses through accumulated loan loss provisions. While high reserve coverage is generally preferable to low reserve coverage, we also consider the driving factors behind the determinants of the ratio to ensure that it provides a meaningful measure of loss absorption capacity. Consequently, we examine the trend in the coverage ratio over time, as well as the underlying provisioning policies of the rated bank. Provisioning policies differ between countries and are typically affected by accounting standards and tax treatment, as well as by prudential regulatory standards.

We generally regard the following as favourable:

- Adoption of conservative policies that recognise loan losses as early as possible, in part because this may have a disincentive effect on the growth of credit to areas of increasing risk; and
- Pursuit of prudent approaches that target an increase in the reserve buffer during periods of strong economic and credit growth, or achieve a similar result through a forward-looking evaluation of credit risk focused on expected losses.

We also take into account important supplementary factors, such as the following:

- Timeliness of impairment triggers (e.g. days in arrears);
- Conservativeness of collateral valuations and estimated asset recoveries (see below);
- Appropriateness of any assumptions regarding current and expected economic conditions, which may impact provisions; and
- Charge-off and write-off policies.

Where material, we also gauge the adequacy of provisions for credit losses on other impaired assets (such as securities and investment properties), as well as for off-balance-sheet positions (e.g. guarantees) and other contingent liabilities.

In this context we also consider the integrity of the classification framework for NPLs. In particular the coverage ratio may be a misleading indicator of absorption capacity in cases where NPLs are deemed to be underreported. We would seek to understand the motivation behind any large increases in loan loss reserves, particularly where it appears that the bank may have identified problems in its loan portfolio that are not yet fully reflected in the stock of NPLs.

CI may apply (positive or negative) qualitative adjustments to the quantitative indicators if any of the following applies:

- Loss absorption capacity is better than implied by the reserve coverage ratio because of the likelihood that a significant share of potential losses from impaired assets will be recovered, as evidenced by the bankôs track record of successfully foreclosing on and disposing of foreclosed assets within a reasonable timeframe;
- Loan loss reserves are over or understated due to local tax, accounting, and regulatory practices (including towards provisioning and write-offs);
- The bankôs reserve ratio is among the highest within the country peer group;
- Problem loans (e.g. NPLs, NPEs) are deemed to be over or understated; and
- Loan loss provisioning practices have some material weaknesses, for example an excessive focus on incurred losses, with little or no forward-looking component, or the use of optimistic or inappropriate assumptions and estimations in provisioning calculations.

SUB-FACTOR 3.2

Other Credit Risk Mitigation

Our analysis of loan loss absorption capacity also takes into account the potential for a bank to reduce the size of losses on impaired exposures through the recovery of assets pledged or secured against loans and other credit facilities. This factor is especially relevant in countries where provisions against NPLs are created after accounting for the value of collateral (securities, property and other assets) or other forms of credit risk mitigation (such as guarantees and credit derivatives) and where reserve coverage ratios are less than 100%. However, our approach to credit risk enhancements, especially collateral, is deliberately cautious and focuses primarily on the effectiveness of protection.

Depending on the nature, scope and materiality of such credit mitigation instruments, CI may ï subject to data availability ï take into account:

- Protection provided by collateral and guarantees held on a portfolio, borrower type, rating, and industry basis;

- The aggregate amount of collateral held against NPLs and the amount which secures performing loans;
- Adequacy and enforceability of collateral agreements and guarantees;
- Ability to realise collateral and to execute guarantees under the national legal framework;
- Liquidity and volatility in asset values for collateral;
- Guarantorsô creditworthiness; and
- Other qualitative factors, including the concentration of guarantors and collateral, as well as the correlation with borrower creditworthiness.

In our opinion, strong banks extend loans primarily on the basis of the repayment capacity of the borrower rather than on the ability to seize collateral. We generally only make a positive allowance for collateral where the following apply:

- Collateral and asset valuations are deemed reliable, conservative and adjust to changing economic and market conditions;
- The bank is able to enforce foreclosure provisions in a timely and cost effective manner; and
- The bank is expected to be able to liquidate or sell the repossessed assets within a reasonable timeframe (which may also depend on the efficiency of the legal system and courts).

We focus on actions rather than intentions when assessing whether the above conditions are met and therefore pay close attention to the bankôs track record of successfully foreclosing on and disposing of foreclosed assets.

ANALYTICAL PILLAR 5

EARNINGS STRENGTH AND SUSTAINABILITY

Earnings are an important line of defence for banks to cope with adverse financial developments without negatively impacting or eroding their capital base. Earnings provide banks with the ability to absorb losses, strengthen capital through retained profits, pay dividends to their owners and create value through capital appreciation. Earnings are therefore key drivers of investment and business growth and important determinants of creditworthiness and solvency over the long term.

The strength and sustainability of earnings depends on a variety of factors, including the bankôs operating and competitive environment, business model, business mix, strategy and franchise value, the quality of its asset base, the sources and cost of funding, as well as the ability of management to grow the business while controlling expenses.

A deterioration in bank earnings will typically reflect one or more of the following:

- Lower business volumes due to unfavourable macroeconomic conditions;
- Higher credit losses;
- Impairment of financial assets;
- Increased competition in core activities or markets, leading to compression of net interest margins;
- Changing trends and/or regulations, impacting profitability in core markets;
- Failed expansion plans (e.g. in connection with new activities, branches, subsidiaries or acquisitions);
- Insufficient diversification and unsustainable income streams (e.g. volatile trading income, extraordinary or non-recurring revenues, income from outsized maturity or foreign exchange mismatches);
- Inflexible cost base and poor cost control; and
- Extraordinary and/or non-recurring items (e.g. litigation costs, restructuring costs).

Profitability is generally considered to be strong when the level of earnings is more than sufficient to cover operating costs and provisioning expenses on a consistent and sustainable basis, allow for adequate pay-outs to shareholders, while also contributing to a strong capital base to buffer unexpected losses and support long-term growth. Conversely, persistent net losses erode capital and, in the absence of appropriate corrective action, may threaten the viability of an institution.

Assessment Criteria

CIôs assessment of earnings strength and sustainability encompasses various quantitative measures of returns, margins and costs, but also involves a more qualitative interpretation and forward-looking evaluation of a bankôs capacity to generate revenues and sustain profitability over time. We consider the quality of earnings in terms of stability, recurrence and diversification, as well as the capacity of earnings to absorb credit losses and other charges. We also assess cost discipline, efficiency and cost management.

Our analysis is encapsulated in two key rating factors:

1. Profitability and Efficiency
2. Earnings Quality and Stability

KEY RATING FACTOR 1

Profitability and Efficiency

CIs analysis of profitability and efficiency includes a detailed assessment of a bankûs revenue sources and cost structure, which determine underlying earnings capacity. We examine the principal drivers of revenue, cost and earnings over time, as well as future prospects. Furthermore, in addition to looking at absolute performance levels, we also take into account the level of risk assumed as profitability can be boosted, at least temporarily, through a significant increase in exposure to credit, interest rate and other risks.

Our analysis of profitability and efficiency (including across periods, geographies, segments, and compared to peers) draws on various financial indicators, which have been selected on the grounds of relevance, availability and comparability. We do not overemphasise the latest available results because earnings and profitability indicators may be heavily distorted by tax strategies, asset valuation methods, accrual and reserving practices, as well as by extraordinary or non-recurring items. We may also apply quantitative or qualitative adjustments to reported financial statements if we deem such changes necessary to better reflect the underlying economics or to enhance comparability.

The comparative analysis of profitability and efficiency also takes into account differences in leverage and business model between individual banks and across countries. The operating environment, including the stage of the economic cycle, is also an important consideration when comparing profitability across countries.

Generally, we view positively banks which demonstrate:

- Sound risk-adjusted revenue and profitability indicators through economic cycles;
- Strong cost efficiency indicators, a flexible cost base and a consistent track record in managing costs; and
- Appropriate dividend policies and superior earnings retention capabilities.

Conversely, we view more negatively banks which exhibit:

- Weak risk-adjusted revenue and profitability indicators through economic cycles;
- Weak cost efficiency indicators, an inflexible cost base and a weak track record in managing costs; or
- Excessive dividend policies and weak earnings retention capabilities.

KEY RATING FACTOR 2

Earnings Quality and Stability

An assessment of a bankûs earnings strength would be incomplete or even misleading without an assessment of the underlying quality and stability of those earnings. A bank that has strong indicators of current profitability and cost efficiency (e.g. measured in terms of return on assets or cost-to-income) could be assessed more cautiously if there are concerns about the quality and stability of its earnings on a forward-looking basis.

We focus on the diversification, volatility, resilience, recurrence, sustainability, and confidence sensitivity of earnings. We generally regard the following revenue sources to be of higher quality, typically more stable and less confidence-sensitive:

- Net interest income from retail and corporate customers; and
- Fee income from credit-related, private banking, asset management and account maintenance activities.

In contrast, revenues from transaction or capital market related activities, which may entail a higher level of market and operational risks, are generally regarded as lower quality, potentially volatile and more confidence-sensitive. These typically include:

- Trading income;
- Net interest income derived from elevated asset-liability mismatches;
- Other market sensitive income; and
- Non-recurring or extraordinary income (e.g. gains and losses on financial instruments, foreign exchange and real estate held for investment; other investment income, such as dividends or rentals); and gains and losses on the sale of foreclosed properties.

In CIÕs view, a bank which benefits from high levels of stable and recurring revenues and earnings, preferably generated by core business lines and in core geographic areas, is generally in a better position to absorb credit losses and other negative financial trends over the economic cycle.

Likewise, a bank with a strongly diversified revenue and earnings base (reflecting core business lines and geographies) is typically in a better position to generate stable and sustainable earnings than a more narrowly-focused bank or a bank that is reliant on elevated levels of opportunistic activities and/or lacks the necessary expertise in certain activities.

CI views heightened revenue and earnings volatility negatively. Such volatility is identified by significant changes in the level and/or composition of revenues or earnings over a short time frame, particularly when driven by non-core business lines and/or high levels of extraordinary or non-recurring earnings. This may signal weak underlying recurring profitability and an increased vulnerability to sudden changes in the operating environment or other adverse developments.

The relevance of individual revenue and earnings drivers varies from bank to bank. But in general, for (universal) banks active in traditional retail and commercial banking, asset- and relationship-based interest revenues from lending activities, as well as fee and commission income from the provision of different types of banking products and services represent the largest proportion of revenues.

In assessing earnings strength we would generally view more positively a bank that demonstrates some or all of the following characteristics:

- Revenues derived mainly from stable and sustainable sources and core business lines;
- A very strong track record of robust growth, little volatility and sound diversification of revenues and earnings;
- Earnings performance which is expected to remain strong over the coming years;
- Profitability that is unlikely to be significantly impacted by a moderate downturn in the economic cycle;
- Pre-provision earnings which are consistently sufficient to absorb elevated credits costs in a more stressful environment;
- Earnings quality that is very high and profitability metrics that are consistently among the highest in the peer group.
- In contrast, we would tend to view more negatively any of the following characteristics:
- Heightened revenue and earnings volatility, identified by significant changes in the level or mix of revenues or earnings over a short time frame, particularly if driven by non-core business lines;
- High levels of extraordinary or non-recurring earnings (such volatility may signal weak underlying recurring profitability or an elevated vulnerability to sudden changes in the operating environment or other adverse developments);
- Pre-provision earnings that regularly provide only a limited buffer against elevated credit costs; and
- Low earnings quality and profitability metrics that are consistently among the lowest in the peer group.

ANALYTICAL PILLAR 6

FUNDING AND LIQUIDITY

Liquidity is the lifeblood of any institution, but particularly so in the case of banks which are typically highly leveraged and confidence-sensitive businesses. As liquidity reflects a bankôs ability to meet both expected and unexpected cash flows and collateral needs in a timely manner, it is intrinsically linked to both sides of the balance sheet. Liquidity exists in assets readily convertible to cash (ôuse of fundsô) and in a bankôs ability to obtain funding through deposits and borrowings and capital injections (ôsource of fundsô).

Consequently, liquidity risk can be regarded as the risk of a bankôs financial strength being adversely affected by a real ï or even perceived ï inability to meet its obligations. A bankôs obligations, and the funding sources used to meet them, depend significantly on its business mix, balance sheet structure, and the cash flow profiles of on- and off-balance sheet obligations.

Liquidity risks can emerge for various reasons, including from maturity and foreign exchange mismatches, market constraints on the ability to convert assets into cash or in accessing sources of funds, and contingent liquidity events. Changes in economic conditions or excessive exposure to credit, market, operational, reputational and legal risks can also affect an institutionôs liquidity risk profile.

Adverse developments or ôshocksô often result in reduced confidence in a bank or banking system, leading to pressure on liquidity when customers withdraw deposits or investor interest in purchasing certain asset classes falls sharply. In addition, banks may cut interbank lines, or be less willing to extend credit and liquidity to other banks because of uncertainty about counterparty risk or a greater desire to retain liquidity for their own needs.

During the global financial crisis that began in 2007, many banks exhibited an undue reliance on inappropriate funding structures and inadequate liquidity levels. A growing reliance on short-term wholesale finance to fund a rapidly growing long-term asset base created major vulnerabilities for banks in the form of currency and maturity mismatches, and increased liquidity risk. As the financial crisis unfolded, many banks experienced funding market dislocation, with market funding becoming either unavailable or prohibitively expensive. Overall, banks that relied more on customer deposit funding fared better during the crisis.

The overreliance of banks on specific funding sources has also been associated with currency crises. For example, the 1997-98 Asian financial crisis was precipitated partly by domestic banksô sudden loss of access to large-scale, short-term borrowing in foreign currency that had been insufficiently hedged in terms of both maturity transformation and currency risk.

Assessment Criteria

CIôs analysis of a bankôs funding and liquidity profile includes the following rating factors:

1. Funding Diversification and Stability
2. Liquidity Risk

The analysis aims to identify and assess on a forward-looking basis the areas that are most relevant in terms of the current and future viability and vulnerabilities of a bankôs funding and liquidity risk profile, and how a bank is positioned to withstand changing, and potentially stressed, market conditions.

It is important to bear in mind and understand how a bankôs exposure to other risks (e.g. credit risk, market risk, reputational risk) may affect its liquidity and funding position. While the various risks are assessed independently according to our methodology, it is important to understand the interdependencies between them (and other BSR pillars) and to avoid viewing them in isolation. Any product or service may expose a bank to multiple risks and a real or perceived problem in any area

can have an adverse effect on a bank's liquidity position and/or affect its funding costs, thereby increasing liquidity risk.

In CI's view, in order to avoid liquidity problems banks need to have a combination of stable sources of funding and a buffer of liquid assets that can be sold during times when other sources of funding are drying up. Equally important is a funding structure which avoids undue funding concentrations and overreliance on short-term wholesale funding.

In general, CI would view banks with prudently managed, well-diversified funding sources, a stable funding base with limited reliance on short-term wholesale funding, low loan-to-deposit ratios, as well as sound buffers of cash, liquid, high quality and unencumbered securities as better positioned to withstand stressed market conditions compared to banks with weaker characteristics in this area.

Banks with structural imbalances in their liquidity and funding position determined by, for example, high funding concentrations (including excessive reliance on central bank funding), unsustainable maturity and foreign-exchange mismatches, high loan-to-deposit ratios, a low share of stable sources of funding, as well as banks with limited buffers of cash and low levels of liquid, high quality and unencumbered securities would typically be associated with weaker financial strength.

KEY RATING FACTOR 1

Funding Diversification and Stability

CI's analysis includes assessments of a bank's funding structure, concentrations and the stability of funding sources. It not only includes an analysis of developments in a bank's current and historical funding profile, but also an assessment of future expectations.

Banks fund themselves through a wide range of instruments, from both retail and wholesale sources. Retail sources include customer deposits (current account, time and savings deposits), predominantly from households, but also from small businesses. In many countries deposits are covered up to certain amounts by deposit guarantee schemes.

Wholesale funding includes funding from money and capital markets, which is used to supplement retail deposits in financing bank operations. On the short end, wholesale funding includes interbank loans, other short-term debt, most notably repurchase agreements (repos) and commercial paper (CP), as well as certificates of deposit (CDs). At longer maturities, banks issue medium-term notes (MTNs) and bonds. Wholesale funding also includes deposits from larger corporate and institutional clients, which are typically unsecured and less stable compared to retail deposits.

CI's assessment starts with the analysis of a bank's funding profile (subject to data availability) by type of instrument, type of depositor/investor, priorities, maturities, geographies, and currencies in order to identify potential funding concentrations.

We also consider the following factors that may have an impact on a bank's ability to raise funds in a timely and sufficient manner:

- Expectations regarding future balance-sheet growth and related funding requirements;
- Differences and changes over time in behavioural maturities of retail deposits (insured vs. uninsured, branch-based vs. internet deposits etc.);
- Foreign currency convertibility and access to foreign exchange markets;
- High reliance on central bank funding, which might signal that a bank has difficulties in raising external funds;
- Ability to transfer liquidity across entities, sectors and countries (e.g. in the case of international banking groups);
- Potential correlation between funding markets and diversification across different markets;
- Behavioural changes of contingent off-balance sheet exposures during times of stress (e.g. undrawn credit commitments, liquidity support for conduits etc.); and

- Implicit requirement for the institution to roll over assets and to extend or maintain other forms of liquidity support, even if not contractually obliged. This may include ównô special-purpose-vehicles (SPVs), loans to related parties, or liquidity needs of subsidiaries.

CI regards funding profiles characterised by most or all of the following as more stable and more likely to provide better mitigation against (funding) liquidity risk:

- High diversification across a range of instruments and, for banks with international activities, across geographies;
- No significant concentrations amongst clients, products, and maturities;
- Sourced from investors or depositors considered less likely to withdraw funds in a stressed environment;
- Dominated by retail deposits, preferably covered by comprehensive deposit guarantee schemes;
- A high degree of matching between liabilities and assets in foreign currency;
- Liabilities with contractual and behavioural maturities that are commensurate with the bankôs asset base and show limited mismatches;
- Low reliance on short-term wholesale debt, particularly to fund illiquid assets;
- Within wholesale debt, a relatively high proportion of longer-term debt without significant maturity concentrations; and
- Within long-term wholesale debt, a greater use of secured debt (e.g. covered bonds) compared to unsecured debt.

CI uses various financial ratios to assess a bankôs funding profile, supplemented by qualitative judgement to compensate for differences in accounting and disclosure standards. To the extent they are available, CI also monitors various regulatory funding metrics and, going forward, a key focus will be on additional metrics that are being introduced as part of the Basel III framework, such as the Net Stable Funding Ratio (NSFR), which will be phased in over the coming years. The NSFR aims to promote resilience over a longer time horizon by ensuring a sustainable maturity structure of assets and liabilities.

KEY RATING FACTOR 2

Liquidity Risk

In addition to maintaining a robust funding profile, CI regards a strong liquidity position consisting of adequate buffers of highly liquid, high quality and unencumbered assets that are without legal, regulatory or operational impediments and that can be sold or pledged to obtain funds in a range of stress scenarios as key mitigants to minimise liquidity and funding risks.

Such buffers are of particular importance if a bank is unable to attract new funding or roll over (renew) maturing liabilities, as they provide a source of liquidity to ensure the bank can meet payments that come due during periods of stress.

Financial institutions can also generate liquidity by selling or pledging various types of securities to secure borrowings from central banks or private counterparties. In normal times this may be simple to execute, but this might not be possible during periods of stress. Similar considerations apply to the depth and liquidity of the (unsecured) interbank market during times of stress.

In order to be a reliable source of funds across a range of possible market conditions, such securities should comprise assets that have the best chance of remaining liquid at times of stress. Liquid securities may include bonds from highly-rated governments, which trade in active sizeable markets. But even if they may remain liquid, selling such assets during stressed market conditions could entail significant discounts. Securities from banks and corporate borrowers might be less liquid than highly rated government bonds, but could also be eligible as collateral for repos and central bank purposes. Secured stand-by commitments are also a form of liquidity mobilised by the pledging of assets.

CI regards the following liquidity profiles as more stable and likely to provide better mitigation against liquidity risk:

- Strong buffer of cash, highly liquid and unencumbered assets, preferably eligible as collateral for central bank operations;
- No restrictions regarding the transfer of intra-group liquidity between parent and subsidiaries across borders; and
- Availability of contingent liquidity plans that are commensurate with the bankôs risk profile (including committed credit lines from high quality counterparties).

CI uses various financial ratios to assess a bankôs liquidity profile, as well as qualitative judgement to compensate for differences in accounting and disclosure standards. CI also monitors and analyses various regulatory metrics which are required by local regulators, to the extent they are available for CI. Going forward, a key focus will be on the Basel III liquidity coverage ratio (LCR) as it becomes more widely available. This standard aims to ensure that a bank has an adequate stock of unencumbered high quality liquid assets (HQLA) consisting of cash and assets that can be converted into cash at little or no loss of value in private markets, to meet its liquidity needs for a 30 calendar day liquidity stress scenario. The LCR was introduced on 1 January 2015, with the minimum requirement set at 60%. The required ratio is to increase in equal annual steps of 10 percentage points to reach 100% on 1 January 2019.

ANALYTICAL PILLAR 7

CAPITALIZATION AND LEVERAGE

Capital provides a bank with the ability to absorb unexpected losses and maintain a cushion to meet its obligations (liabilities), while remaining a going concern. Capital also enables a bank to leverage its balance sheet and is the ultimate determinant of a bank's lending capacity. Strong capital enables a bank to grow its asset base and, in turn, increase earnings. Capital also provides an incentive for the owners of a bank to ensure it is managed in a prudent manner as they have their own funds at stake.

Capital is important for confidence and often the ultimate line of defence against losses and insolvency. A bank's capital position is subject to a high degree of regulatory focus and, while generally not a leading indicator of financial health, could have potentially dire consequences if minimum regulatory requirements are reached or breached, either because of the risk of the bank's licence being revoked or an adverse shift in investor and depositor expectations.

Banks are highly leveraged institutions compared to most corporate entities. One of the main reasons the economic and financial crisis that erupted in 2007 was so severe was that banks in many countries had built up excessive on- and off-balance sheet leverage, which was not captured adequately in the Basel II regulatory framework. This was accompanied by a gradual erosion of the level and quality of the capital base. To address various weaknesses under Basel II, the Basel Committee has now strengthened the regulatory capital framework by raising both the quality and quantity of the regulatory capital position and enhancing the risk coverage of the capital framework (Basel III). In addition, a leverage ratio that serves as a backstop to the risk-based capital measures is intended to constrain excess leverage and provide an extra layer of protection against model risk and measurement error.

In CI's view, a strong capital base is a necessary, but not sufficient, condition for a bank's financial health. Capital strength needs to be seen in context of a range of factors, including a bank's:

- Risk profile and the volatility of its operating environment (the greater the risks, the higher should be the capital buffer);
- Ability to generate capital internally through retained earnings and sustained profitability;
- Asset quality and the level of provisions held against potentially problematic exposures;
- Loan classification and provisioning rules (both of which may affect capital adequacy);
- Ownership structure, including, where relevant, risks stemming from related group entities; and
- Vulnerability to off-balance sheet risks, as well as the potential risk to capital from securitised assets and other derivative related exposures.

Capital strength assessments also take into account the quality of financial disclosure and regulatory supervision, including the appropriateness of national discretions applied in determining regulatory capital adequacy.

Assessment Criteria

In assessing a bank's capital and leverage, CI focuses on the following key rating factors:

1. Capital Quality and Adequacy

2. Capital Flexibility

There is no single measure of the adequacy of a bank's cushion against losses. Differences between jurisdictions in terms of the definition of capital, as well as different regulatory, tax, accounting, and disclosure standards, can make cross-country comparisons difficult and may even provide a spurious indication of the relative strength of a bank's capitalisation. Moreover, capital adequacy cannot be evaluated using static ratios only. Indeed, specific capital ratios, judged in isolation, may be misleading. Occasionally, there is insufficient public disclosure as to the composition and adequacy of a bank's capital base.

CIôs analysis mainly draws on public disclosure by banks (annual reports, regulatory filings, Pillar 3 reports, investor presentations). Increasingly, regulatory reviews and stress tests and associated disclosures can provide a wealth of additional information for gauging the quality and adequacy of a bankôs capitalisation and leverage.

CI also recognises that the implementation of Basel III ï which includes multi-year transition periods ï is currently uneven across regions and that the adoption of significant regulatory requirements, such as total loss absorbing capital (TLAC) has not yet been completed. CI will therefore continue to focus on available regulatory capital ratios, as well as other capital metrics and qualitative adjustments to provide an additional level of consistency and comparability.

KEY RATING FACTOR 1

Capital Quality and Adequacy

From CIôs perspective, it is critical that a bankôs risk exposures are backed by a high quality capital base that is permanently and freely available, with no repayment requirements and against which losses can be written off whilst the bank continues as a going concern.

Building on improvements under the Basel II and 2.5 frameworks, Basel III has made further important progress in ensuring that the capital held is available to effectively absorb losses and that banks generally hold higher levels of capital against risks emanating from any part of their activities. Furthermore, deductions from capital and prudential filters and variations in banksô calculations of risk-weighted assets (RWAs) are expected to be further harmonised internationally. However, various elements of Basel III will only be phased in over the coming years during which time national regulators will maintain a level of discretion. As a result, implementation and disclosure standards ï while improving ï will be far from consistent and uniform. All this will continue to make comparisons challenging.

Capital instruments with the greatest capacity to absorb losses on a going concern basis include a bankôs common equity and retained earnings, which are also the predominant part of Tier 1 Capital (specifically Common Equity Tier 1 or CET 1) under the Basel III framework.

CI views as medium-to-high quality those capital instruments with strong equity-like features which under the Basel III framework are eligible as Additional Tier 1 (AT1) going concern capital. Such instruments are subordinated to Tier 2 capital, have fully discretionary noncumulative dividends or coupons, and have neither a maturity date nor an incentive to redeem. Within AT1 capital certain instruments may be subordinated to others e.g. non-cumulative preferred shares to other types of hybrid securities.

We view as lower-quality those types of capital that are generally only available to absorb losses after a bank has failed and is being wound up (although they may help avoid a bank run or insolvency in the first place). These include ótraditionalô subordinated debt and certain other Tier 2 ógone-concernô instruments. The quality of a bankôs capital base may also be viewed less favourably if it includes a significant proportion of assets with limited recoverability (e.g. deferred tax assets) or which may be difficult to monetise (e.g. goodwill and other intangibles).

In addition to assessing the quality of capital, it is equally important to analyse whether a bank holds adequate levels of high quality capital relative to the risks it is taking. Risk-weighted measures of capital adequacy take into account the relative riskiness of a bankôs exposures ï usually in terms of credit risk, market risk and operational risk. A key component of banking supervision is the CET1 ratio, which measures the amount of highest quality capital vis-à-vis RWAs.

We are cognizant that risk-based measures may hamper comparability as the estimation of risk by two banks based in the same country or in different countries can differ, depending on national regulatory standards and whether internal rating based approaches to measuring credit risk are used. We therefore look beyond ratios to assess whether a bankôs capital position is truly commensurate with its risk profile on a forward-looking basis, including, but not limited to, its business model, business strategy, asset-liability structure and operating environment.

A bank that appears to be sufficiently capitalised based on quantitative metrics may be deemed less adequately capitalised overall after considering its risk exposures. Such risks may stem from factors such as excessive or rapid growth in leverage, high exposure to governments with weak creditworthiness, model and data weaknesses (including the use of overly optimistic or aggressive assumptions by banks using the Internal Ratings Based, IRB, Approach), failure to take sufficient account of risks arising from off-balance sheet items/entities (for example, special purpose vehicles) or risks from unconsolidated subsidiaries that are significantly undercapitalised, as well as from an expected deterioration in sectors to which the bank is exposed.

Likewise, CI strongly believes that a bank's capital adequacy needs to be seen in the context of the adequacy of loan loss provisions. A shortfall of provisions against NPLs signals the risk of greater-than-expected losses and may potentially erode the amount of capital actually available to the bank.

CI also considers complementary simple leverage ratios as non-risk based capital measures of a bank's on- and off-balance sheet exposures. Leverage ratios have the advantage of simplicity and compared to risk-weighted measures are less easy to manipulate. As the Basel Committee on Banking Supervision has noted, during the global financial crisis that began in 2007 many banks built up excessive leverage while continuing to report strong risk-based capital ratios. Basel III therefore includes a leverage ratio requirement that is intended to supplement the risk-based regulatory capital ratios, constrain leverage in the banking sector, and provide a safeguard against model risk and measurement error.

In our analysis, we focus on selected key ratios based on the combination of relevance and data availability. CI may also apply other selected supplementary ratios, where deemed relevant. The selection primarily reflects the still widely diverging differences in regulatory standards and the limited disclosure within CI's current ratings universe. With the gradual implementation of Basel III and improved disclosure standards, CI plans to integrate additional ratios into its analysis as they become available.

In this context, CI views positively banks where:

- Regulatory capital ratios and leverage ratios are consistently stronger than regulatory minimum requirements and those of peers, and are expected to remain so for the foreseeable future;
- Capital consists almost exclusively of high-quality going concern loss-absorbing instruments (mainly CET 1 capital);
- Regulatory capital ratios and risk-weighted assets provide an appropriate picture of a bank's underlying capital strength, taking into consideration conservative prudential filters and buffers; and
- Stress-testing results, where available, do not reveal any significant vulnerabilities or risks to the bank's capital strength from severe shocks or adverse scenarios.

In contrast, CI views more negatively banks where:

- Regulatory capital and leverage ratios are consistently significantly weaker than those of peers and are expected to remain so for the foreseeable future;
- Capital contains high proportions of instruments with little or no capacity to absorb losses on a going concern basis;
- Regulatory capital ratios and RWAs do not provide an appropriate picture of a bank's underlying capital strength; the bank may be less conservative in the assessment of regulatory capital and RWAs than its peers;
- Stress-testing results, where available, reveal significant vulnerabilities or risks to the bank's capital strength from moderate shocks or adverse scenarios.

KEY RATING FACTOR 2

Capital Flexibility

The focus of this key rating factor is on a bank's flexibility (or lack thereof) to manage its capitalisation and generate capital internally and externally.

We consider a bank's track record of building (or rebuilding) its capital base through retained earnings, its ability to continue doing so, as well as the appropriateness and flexibility of dividend and share buyback policies. We view internal capital generation as a structural feature and generally look through cyclical improvements in earnings and capital.

We also consider a bank's ability to raise new capital from existing shareholders, taking into account their track record of supporting the bank during both good and bad times.

Externally, listed banks may seek to raise new capital from stock markets, though this option is highly dependent on market sentiment and would in most instances not be an option for weak banks or during periods of general market stress.

Banks may also be able to raise new capital by selling subsidiaries or parts of their operations. Such sell-offs could reflect strategic repositioning, but they could also be a response to financial pressure and the need to raise capital through gains on sale and/or by reducing RWAs. The likelihood of success and the level of proceeds will depend on the attractiveness to potential buyers and general market sentiment. Particularly for banks under pressure, these options might not be available. Even if successful, the potential impact on the bank's franchise strength also needs to be taken into consideration.

For banking groups we also assess the ability to up- or down-stream capital from one part of the entity's operations to another. We take into account potential regulatory constraints on the fungibility and transferability of capital and are cognizant of the risk of local regulators trapping capital in national markets, thereby preventing banking groups from utilising excess regulatory capital for other parts of the group.

Capital fungibility may also be subject to restrictions in regulatory regimes that require banks to separate wholesale/investment banking activities from retail activities. In such cases capital ratios on a consolidated basis might provide a false sense of comfort.

5. EXTRAORDINARY SUPPORT LEVEL

5.1 Criteria for Determining ESL and Rating Uplifts

When assigning an ICR, CI considers whether the bank would receive sufficient and timely financial support from its owners, parent or other support providers should it be at risk of failing. Such potential assistance, which we label "extraordinary support", can potentially mitigate weaknesses in the bank's intrinsic (standalone) creditworthiness, summarised in the BSR, thereby improving its overall credit profile and reducing the likelihood of default. By contrast "ordinary support" is factored into the BSR (see Box 4).

Historically, financial support from private or public sector owners to troubled banks has tended to be the norm rather than the exception. Support has been forthcoming for a variety of reasons including a desire to protect investments and avoid, or at least limit, the potential damage to the owner's reputation and franchise from the bank failing, as well as to fulfil legal or regulatory requirements. Governments have also been willing to provide financial assistance to struggling private sector institutions, particularly those deemed to be systemically important ("too-big-to-fail" or "too-important-to-fail").

During the global financial crisis that began in 2007 many governments and central banks took radical steps to support their banking systems. This was motivated by a desire to avoid systemic risks and contagion effects, including bank runs, the fire sale of assets, as well as adverse spillovers to other parts of the financial system and broader economy. In most cases support measures provided for the full protection of unsecured senior creditors, while in many cases junior creditors (especially holders of hybrid capital) suffered losses.

The willingness and financial capacity of governments to provide unconditional support has since become increasingly strained. As a result, there is a growing political determination to ensure that in the future failing banks will be resolved without recourse to public funds. As part of the international reform agenda, the G20 member countries are committed to implementing the Financial Stability Forum's (FSB) Key Attributes of Effective Resolution Regimes for Financial Institutions. These attributes set out the core elements of effective resolution regimes that should apply to any financial institution that could be systemically significant or critical if it fails.

The objective of such resolution regimes is to make it possible to resolve financial institutions without severe systemic disruption and without exposing taxpayers to losses, while protecting vital economic functions through mechanisms which make it possible for shareholders and unsecured and uninsured creditors to absorb losses in a manner that respects the hierarchy of claims in liquidation.

In light of these developments, there is, in CI's view, increasing uncertainty regarding the level and un-conditionality of government support for private commercial banks, at least in countries which have, or are considering implementing, comprehensive resolution and recovery schemes.

BOX 4: Distinction Between Ordinary and Extraordinary Support

CI distinguishes between ordinary support, which banks may benefit from during the normal course of business and which is reflected in the BSR, and extraordinary support to avert failure and default and which is reflected in the ESL and the final ICR. CI recognises that in practice the dividing line between ordinary support and extraordinary support is not always clear and hence the distinction is often based on analytical judgement.

Government support available to the entire banking sector (rather than to an individual bank or group of banks) at times of systemic stress, whilst not ôordinaryô would not be treated as extraordinary under our criteria. Such support is factored into the BSR (including via OPERA) and may help to partially or fully offset the impact of economic and financial shocks on banksôcore financial strength.

Examples of potential extraordinary support would generally include the following:

- Discrete liquidity support that governments, parents, or affiliates provide to specific entities;
- Loans from the parent or government (or through affiliates or government-owned banks) capital injections, or asset purchase programmes to avoid default ï potentially on uneconomic terms;
- Arrangement of a solvency rescue package directly from the government or through other market participants tailored to individual institutions;
- One-off transfers of risk from an issuer to a government entity, its parent or an affiliate to alleviate future stress; and
- Forbearance, e.g. the waiving accounting or regulatory standards in order to delay loss recognition or resolution proceedings.

Examples of positive ordinary support would generally include the following:

- Transfer of management expertise and operational systems, and assistance with business origination;
- Availability of centralized group liquidity resources;
- Favourable government contracts or annual subsidies from governments;
- Supportive regulation and system infrastructure, including regular access to the central bank and a deposit insurance system;
- Dividend policies, equity issuance flexibility or restriction;
- Capital increases to support business growth, strengthen the capital base, or to meet new system-wide regulatory requirements;
- Existing guarantees or lines of credit; and
- Provision of services (property, investment, payroll, shares sales force, etc.).

It is important to bear in mind that owners (supporters) may have a negative impact on the financial strength of a bank through ôordinaryôinteractions (reflected in the BSR). For example by:

- Aggressive financial expectations from owners (including dividend policy and high double leverage);
- Recurrent operating or capital subsidies;
- Price ceilings;
- Excessive politically motivated or related-party lending, forced lending, lending at uncommercial rates;
- Directives to provide loss-making goods and services;
- Unfavourable regulatory, tax, or legal regime;
- Special shareholder distributions; and
- Asset- or cash-stripping to service other obligations of the group or government.

Assessment Criteria

The Extraordinary Support Level (ESL) indicates CIô s expectation of the likelihood that in the event of financial distress the rated bank would receive extraordinary support to prevent it from failing and to enable it to continue meeting its financial obligations in a timely manner. This support could come from owners (private or public sector), institutional supporters (e.g. mutual banking groups), or from official sources (e.g. the government and central bank). Once provided, such support may help improve the bankôs intrinsic creditworthiness, resulting in an improvement in its BSR.

The various levels of extraordinary support and how we define them are shown in the table below.

ESL	Definition
VERY HIGH	The likelihood of extraordinary support is very high. The willingness, financial capacity and ability of potential supporters to provide sufficient and timely support are regarded as very strong.
HIGH	The likelihood of extraordinary support is high. The willingness, financial capacity and ability of potential supporters to provide sufficient and timely support are regarded as strong.
MODERATE	The likelihood of extraordinary support is moderate. The willingness, financial capacity and ability of potential supporters to provide sufficient and timely support are regarded as moderate.
UNCERTAIN	The likelihood of extraordinary support is uncertain. There is a high degree of uncertainty, or lack of information, regarding the willingness, financial capacity and ability of potential supporters to provide sufficient and timely support.

The ESL reflects the willingness, financial capacity and ability of potential supporters to provide sufficient and timely support.

Willingness is gauged by assessing factors such as the bankôs long-term strategic importance to, or operational integration with, its owners, as well as the ownerôs track record of providing support and any commitments regarding future support. In terms of official support, willingness is often linked to the bankôs systemic importance.

Financial capacity is a function of a number of factors, including: the support providerôs own intrinsic creditworthiness (indicated by its own standalone rating, whether from a public or internal assessment); the relative size of the rated bank compared with the support provider (e.g. in terms of capital, earnings); and the correlation of activities and strength of risk transmission channels between the rated bank and supporter (put differently, the likelihood of the supporter facing difficulties at the same time as the bank requiring support).

Finally, áabilityôcaptures the possibility of a potential supporter being unable to provide assistance due to legal or regulatory restrictions, even though it may be willing and have the financial capacity to do so. For example, the home regulator might impose restrictions on the flow of intra-group capital and liquidity or the cross-border transfer of excess profits, which could impair the ability of a parent to support a foreign subsidiary.

The determination of the ESL follows a 3-step process:

1. Identify potential support providers;
2. Assess the likelihood of support (based on willingness, financial capacity and ability); and
3. Determine the ESL and the impact on ratings (i.e. the uplift, if any, from the BSR).

In Step 1 we distinguish between the following broad categories of potential supporter:

(a) Private sector owners;
(b) Mutual/cooperative banking groups;
(c) Public sector owners; and

(d) Governments and central banks (i.e. official support).

With regard to official support, we identify whether the country has or is planning to introduce a formal recovery and resolution regime and, if so, whether the rules of the regime reduce the likelihood of, or make more uncertain, protection for senior creditors in the event official assistance is required.

Where a bank has several potential supporters, support would not be cumulative. Rather, as a rule of thumb, CI would make a qualitative assessment of which supporter is most likely to provide sufficient and timely assistance.

(a) ESL: PRIVATE SECTOR OWNERS

Private sector banks are often part of larger diversified banking groups. Historically, it has been rare for the troubled subsidiary of a private bank not to be supported by its typically stronger parent. In such cases support is often motivated by reputational concerns, strategic considerations, as well as legal and regulatory obligations.

In assessing the likelihood of support for a subsidiary we focus on the parentôs long-term commitment to the subsidiary, as well as the strategic importance of the subsidiary. A decrease in the strategic importance of the subsidiary may signal a reduction in the likelihood of extraordinary support in the future and could be a precursor to the sale of the subsidiary to a third party (which could become weaker as a result). Such a change in a subsidiaryôs status could be the result of shifts in strategic or risk priorities, the consistently weak performance of the subsidiary, or due to weaknesses at the parent bank leading to the redirection of financial and managerial resources ôback homeô

Banks also can have a variety of other shareholders, including other banks as minority shareholders (including joint-venture banks) as well as (unregulated) non-banks, including corporates, hedge funds, private equity investors, families, and private individuals.

Assessing the Likelihood of Private Sector Support

The willingness, capacity, and ability to provide extraordinary support in such cases is often more difficult to assess and may be uncertain or even questionable. For example, the long-term commitment of a private equity firm to a bank purchased by it may be highly uncertain and the latterôs strategic importance not particularly high. In such a case the likelihood of extraordinary support would be relatively low.[13]

Likewise, there may be insufficient information on the creditworthiness and financial capacity of private or family shareholders to make a reasonable assessment of the likelihood of support.

We generally regard the following, largely-qualitative, factors to be critical in determining a private sector ownerôs willingness, financial capacity, and ability to provide extraordinary support:

Willingness

- Ownership stake
- Long-term commitment and strategic importance of the subsidiary (business segments, clients, products, regions)
- Level of integration, characterised by one or more of the following: brand name, management, board representation, distribution network, IT systems, sharing or centralisation of functions (e.g. treasury, risk management guidelines, business referrals), liquidity and funding from parent
- Potential reputational risk if failure to support
- Track record in supporting subsidiaries

[13] Exceptions may include: captive finance companies of car manufacturers and other industrial companies; highly rated non-banks with clear, long-term strategic ambitions and strong commitment.

Financial Capacity

- Parent creditworthiness (including capital, earnings, liquidity)
- Relative size of subsidiary
- Correlation of activities

Ability

- Legal obligations (e.g. guarantees, profit-and-loss transfer agreements, letters of comfort, keep-well-agreements)
- Regulatory obligations to support subsidiaries
- Regulatory constraints to support subsidiaries (e.g. ring fencing)

Notching for Private Sector Support

The following table applies to extraordinary support levels for private sector ownership support:

ESL	Typical notching impact
VERY HIGH	Equalize with supporterôs BSR / supporterôs BSR -1 notch
HIGH	Bankôs BSR +2 / +3 notches
MODERATE	Bankôs BSR +1 notch
UNCERTAIN	None

Typically, the starting point for the notching of the bankôs BSR for extraordinary support would be the supporterôs BSR, which reflects the supporterôs own intrinsic creditworthiness to provide support. In exceptional cases the foreign or local currency ICR of the supporter might be the appropriate reference point. The final decision rests with the rating committee.

BOX 5: Characteristics of Extraordinary Support by Level (Private Sector Ownership)

VERY HIGH

- The parent/owner has the financial capacity to provide sufficient and timely extraordinary support.
- There are no legal, regulatory or other limitations (e.g. access to local currency) to the parent providing extraordinary support.
- The parent/owner provides legally binding and enforceable commitments (e.g. full, timely and irrevocable guarantees) on the subsidiary's debt obligations.
- The subsidiary is fully owned, operates most likely in the same country as the parent in core business lines of the group, is highly integrated with and key to the parent group's operations, franchise and reputation. It acts more like a branch or is established as a separate legal entity mainly for regulatory reasons.
- There is a strong track record of ordinary and extraordinary support for group subsidiaries, and there are no concerns regarding the parent's long-term commitment.

HIGH

- The parent/owner has the financial capacity to provide sufficient and timely extraordinary support.
- There are no legal, regulatory or other limitations/restrictions on the parent providing extraordinary support.
- The parent/owner provides strong commitments (but not full, timely and irrevocable guarantees) on the subsidiary's debt obligations.
- The subsidiary is likely majority owned, operates in core regions and business lines of the group. The bank is highly integrated and key to the parent's operations, franchise and reputation. There is a strong track record of ordinary and extraordinary support for subsidiaries, and no concerns regarding the parent's long-term commitment.

MODERATE

- There are some uncertainties regarding the parent/owner's financial capacity to provide sufficient and timely extraordinary support.
- There are some uncertainties with regards to legal, regulatory or other limitations on the parent providing extraordinary support.
- The bank may have a variety of shareholders, including other banks as minority shareholders or non-banks.
- The bank may have been taken over only recently.

UNCERTAIN

- The bank does not have a strategic owner.
- There is a mixed track record of ordinary and extraordinary support from the parent.
- The strategic importance and long-term commitment of the owners is questionable.
- The sale of a subsidiary or transfer of material operations (e.g. to a 'bad bank') has been announced or is increasingly likely.
- There are significant concerns about, or CI does not have access to information to assess, the owner's financial capacity to provide extraordinary support during times of stress.
- The relative size, performance and loss potential raise concerns regarding the parent's capacity to support the subsidiary.
- There are tangible concerns regarding regulatory, legal or other (e.g. access to local currency) limitations to providing extraordinary support, particularly in the case of foreign subsidiaries.

(b) ESL: MUTUAL/COOPERATIVE BANKING GROUPS

Members of cooperative/mutual banking groups may benefit from comprehensive intra-group support and protection schemes. The purpose of such schemes is to protect the affiliated institutions and in particular safeguard their liquidity and solvency in order to ensure that each member can continue to meet its financial obligations.

Assessing the Likelihood of Mutual/Cooperative Support

CI analyses the following factors which are deemed as critical in determining a cooperative/mutual banking groups willingness, financial capacity and ability to provide support to one of its members:

- Structure and organisation
- Legal and regulatory basis
- Scope of protection
- Effectiveness of the protection scheme
- Exit from protection scheme
- Reporting, auditing and monitoring
- Scope and quality of support measures (e.g. joint liability, guarantees, capital, liquidity support)
- Brand
- Reporting and Auditing
- Level of independence/integration (risk management, systems, funding, liquidity)
- Track record of support within group
- Credit strength of the group

For members of such groups, CI assesses the likelihood of support from the wider group, rather than a parent company. Depending on the nature and strength of the intra-group support schemes, CI may assign the same rating to all members of the group, or have the ratings in a narrow range.

Notching for Mutual/Cooperative Support

The following table applies to extraordinary support levels for mutual/ cooperative group support:

ESL	Typical notching impact[14]
VERY HIGH	Equalize with supporters rating
HIGH	Supporters rating -1 notch
MODERATE	Banks BSR +1 notch
UNCERTAIN	None

[14] As stated previously, the starting point for notching would be the supporters BSR, though in exceptional cases the foreign or local currency ICR of the supporter might be the appropriate reference point.

(c) ESL: PUBLIC SECTOR OWNERS

Government (domestic, supranational) ownership and involvement in the banking system is still significant in many countries around the globe. Such ownership is often motivated by the governmentôs desire to actively pursue economic policies through banks, often by providing them with a dedicated public policy role and mandate (e.g. development banks). In other countries the government or quasi-government entities hold large stakes in local commercial banks for long-term strategic reasons.

Assessing the Likelihood of Support for Banks Owned by the Public Sector

We generally regard the following factors to be critical in determining a public sector ownerôs willingness, financial capacity, and ability to provide extraordinary support:

Willingness

- Level of ownership stake
- Legal status and nature of ordinary support (e.g. regular capital contributions, funding guarantees)
- Nature and importance of public policy
- Privatization prospects
- Potential political risk if failure to support
- Track record in supporting public sector banks

Financial Capacity

- Public sector ownerôs creditworthiness
- Relative size of bank
- Bankôs creditworthiness and performance

Ability

- Legal obligations (e.g. guarantees, profit-and-loss transfer agreements, letters of comfort, keep-well-agreements)
- Regulatory obligations to support bank
- Regulatory constraints to support bank (e.g. EU competition law)

Notching for Public Sector Support

The following table applies to extraordinary support levels for public sector ownership support:

ESL	Typical notching impact
VERY HIGH	Equalize with supporterôs FC rating /supporterôs FC rating -1 notch
HIGH	Bankôs BSR +2 / +3 notches
MODERATE	Bankôs BSR +1 notch
UNCERTAIN	None

BOX 6: Characteristics of Extraordinary Support by Level (Public Sector Ownership)

VERY HIGH

- The owner has the financial capacity to provide sufficient and timely extraordinary support.
- There are no legal, regulatory or other limitations (e.g. access to local currency) to the owner providing extraordinary support.
- The bank is fully owned by the public sector and fulfils a dedicated public policy role that is or cannot be provided by private commercial banks.
- The owner provides legally binding and enforceable commitments (e.g. full, timely and irrevocable guarantees) on the entityôs debt obligations.
- There is a strong track record of ordinary and extraordinary support for public sector banks, and there are no concerns regarding the ownerôs long-term commitment (including privatisation).

HIGH

- The owner has the financial capacity to provide sufficient and timely extraordinary support.
- There are no legal, regulatory or other limitations/restrictions on the owner providing extraordinary support.
- The bank is at least majority owned and may fulfil a dedicated public policy role.
- Public sector owner provides a legally binding, full, timely and irrevocable guarantee for the subsidiaryôs debt obligations.
- There is a strong track record of ordinary and extraordinary support for public sector banks and no material concerns regarding the ownerôs long-term commitment.

MODERATE

- There are some uncertainties regarding the ownerôs financial capacity to provide sufficient and timely extraordinary support.
- There are some uncertainties with regards to legal, regulatory or other limitations on the owner providing extraordinary support.
- The public sector owns at least 25% of the bank and has a strong track record of supporting public sector banks, but there may be some concerns regarding its long-term commitment.

UNCERTAIN

- There is a mixed track record of ordinary and extraordinary support from the owner.
- The bank does not have a public policy role or its public policy role is to be transferred to the private sector.
- The sale/privatisation of the bank has been announced or is increasingly likely.
- There are significant concerns about, or CI does not have access to information to assess, the ownerôs financial capacity (capital, strength, liquidity etc.) to provide extraordinary support during times of stress.
- The relative size, performance and loss potential raise concerns regarding the ownerôs capacity to support the bank.
- There are tangible concerns regarding regulatory, legal or other limitations to providing extraordinary support.

(d) ESL: OFFICIAL SUPPORT

In the past, governments often provided extraordinary support not only to banks in which they had a direct ownership stake, but also to individual domestic private commercial banks (especially, though not exclusively, systemically important banks). This was done because of the fear that the bankôs distress or failure would cause significant dislocations in the financial system, spill over to other banks, and adversely impact the broader economy.

However, these extraordinary support measures (including capital injections, asset purchases, liquidity and funding support) often had a long-lasting deleterious effect on the public finances. As a response, the G20 leaders charged the FSB with the task of developing a policy framework to address the systemic risks, and reduce the moral hazard, posed by systemically important financial institutions (SIFIs). As part of this policy framework, many governments have now started to design and implement far-reaching bank recovery and resolution legislation, which also includes the ability to share losses with unsecured creditors. Such legislation aims to minimize the risk that tax-payers and governments will have to carry the burden of costly bank bail-outs going forward.

The international trend is to put in place frameworks whereby costs of financial institution resolutions are borne by the private sector first, and that public funds are used only when the private sector sources are not available or cannot achieve the objective. Additionally, when use of public funds is inevitable, the shareholders and other creditors of insolvent financial institutions should always bear the losses caused to that institution, before the infusion of public funds.

CI acknowledges that the scope and progress in implementing such frameworks varies across countries, and that there are still many unresolved questions regarding the practical application of such legislation. However, in our view, these developments are a clear indication of the reduced willingness of many governments to provide unconditional support to banks in the future. This applies particularly for countries which already have or are considering implementing far-reaching recovery and resolution regimes in the coming years.

CI does not rule out the possibility that governments in these countries might still provide extraordinary support. However, given the high level of uncertainty regarding the nature and degree of future assistance ï and particularly the likelihood that senior unsecured creditors might have to take losses ï we are now less likely to provide any ratings uplift for support until there is better visibility regarding the governmentôs actions when a bank is in crisis. At that time, the emergence of tangible official support might partly mitigate the decline of the BSR; but there may not be enough confidence to allow a rating uplift during ónormalô times.

In contrast, there are countries where bank resolution is not on the agenda in the foreseeable future and the government might still be willing and capable of providing extraordinary support to troubled banks (private, as well as state-owned).

Assessing the Likelihood of Official Support

Under our criteria we consider official extraordinary support as issuer-specific assistance provided by the government to a weak or failing bank, which helps it to continue meeting its senior financial obligations. Official support available to the entire banking sector (rather than to an individual bank or group of banks) at times of systemic stress, whilst not ôordinaryô, would not be treated as extraordinary under our criteria and would instead be reflected in OPERA.

We analyse the following qualitative factors which are deemed as critical in determining a governmentôs willingness, capacity and ability to provide extraordinary support to rated banks, should such assistance be needed in the future:

Willingness

- Systemic importance of the bank for the financial sector and economy, as suggested by its size, market share, interconnectedness, or designation by regulators as a systemically important institution (e.g. G-SIB or D-SIB)
- Governmentôs track record of supporting banks in general and the rated bank in particular
- Extent of any government ownership
- Potential impact (economic, financial, political) of allowing the bank to fail

Financial Capacity

- Sovereign creditworthiness
- Size of the bank relative to the fiscal resources and financial flexibility of the government

Ability

- Existing and planned recovery and resolution regimes (in particular whether they increase the likelihood of losses being imposed on senior creditors as part of a bankôs rescue)
- Other regulatory or legal constraints to provide timely support, such as rules (national or supranational) that may restrict the provision of state aid

Notching for Official Support

The following table applies to extraordinary support levels for official support:

ESL	Typical notching impact
VERY HIGH	Equalize with the sovereign rating /sovereign rating -1 notch
HIGH	Bankôs BSR +2 / +3 notches
MODERATE	Bankôs BSR +1 notch
UNCERTAIN	None

BOX 7: Characteristics of Extraordinary Support by Level (Official Support)

VERY HIGH

- The government has a very strong track record of extending support to troubled banks.
- The willingness to provide such support in the future is highly unlikely to change.
- Official sources provide legally binding and enforceable commitments (e.g. full, timely and irrevocable guarantees) for all or most of the rated bankôs liabilities.
- The government has ample resources and sufficient policy flexibility to support the bank; the relative size of the bank and loss potential (contingent liability) is unlikely to be an impediment to timely support.
- There is no recovery and resolution regime in place requiring losses be imposed on senior creditors, nor is such a regime anticipated in the foreseeable future.
- There are no other legal, regulatory or other limitations in place which could prevent the government providing support to the rated bank.

HIGH

- There is a strong track record of extending support to troubled banks.
- The willingness to provide such support in the future is unlikely to change.
- The government has sufficient resources and policy flexibility to support the bank.
- There is no recovery and resolution regime in place requiring losses be imposed on senior creditors, nor is such a regime anticipated in the foreseeable future.
- The governmentôs ability to provide timely support to the bank is unlikely to be affected by any legal or regulatory rules, or other restrictions.

MODERATE

- There is a mixed track record of extraordinary official support for banks.
- There is some ambiguity regarding the willingness to provide such support going forward.
- There are some concerns about the governmentôs capacity to provide sufficient support in the future.
- There are plans to introduce a resolution regime in the coming years that includes the bail-in of senior creditors as a tool for resolving failing banks.
- There are legal, regulatory or other hindrances which limit the governmentôs ability to provide extraordinary support.

UNCERTAIN

- There is a mixed or weak track record of extraordinary official support for banks.
- There are substantial concerns about the government's capacity to provide sufficient support in the future.
- A recovery and resolution regime is either in place or at an advanced stage of implementation which creates uncertainty about, and reduces the probability of, future extraordinary support for banks.

5.2 Rating Above the Supporter: Parent-Subsidiary Considerations

The criteria above focus primarily on situations where the potential supporter is stronger than the rated bank. There might be situations, however, where the reverse is true (in particular where the supporter is the parent and the entities are based in different countries), raising the question of whether the bank can and should be rated higher than the supporter. Such exceptions may apply if the following conditions are met:

- The bank's BSR is higher than the supporter's standalone credit strength;
- The bank exhibits superior and sustainable independence from its parent (e.g. in terms of business operations, management, systems, and funding);
- There are strong regulatory or legal constraints which prevent the supporter (parent) weakening the bank during periods of stress (e.g. through capital reallocation, up-streaming of dividends, transfer of assets, or interbank loans); and
- There are no sovereign related constraints.

6. SOVEREIGN RISK AND BANK RATINGS

6.1 Why Sovereign Risk Matters For Bank Ratings

Banks and sovereigns have a symbiotic relationship which stems from the importance of banks to the national economy and the role banks play in the financing of the government and in the transmission of monetary policy. The bank-sovereign nexus also reflects the high leverage of the banking industry and its inherent vulnerability to liquidity and funding shocks (in turn a reflection of its core function of maturity transformation), which necessitates a role for the state in providing a safety net ï usually in the form of central bank liquidity support and deposit guarantees ï to protect the system against spillovers from the failure of individual institutions.

Unsurprisingly, there is also a strong correlation between sovereign credit risk and bank systemic risk. A sovereign debt crisis is typically accompanied by a marked deterioration in economic and financial conditions, which tend to impact banks via higher funding costs and by weakening the debt servicing capacity of borrowers, resulting in weaker asset quality and credit losses. Since banks often have relatively large exposures to the government, a sovereign debt default will generally result in direct losses on holdings of the defaulted instruments and the erosion of banksôcapital position. In addition, the higher the expectations of a sovereign default, the more likely it is that banks will lose access to wholesale markets and external financing and face a run on deposits. Moreover, the ability of banks to service their own financial obligations will be impaired in the event that the government imposes capital controls or freezes deposits in an effort to preserve broader financial stability.

Since the sovereign is a source of systemic risk, and given that sovereign distress can have serious repercussions for the financial system, the ratings CI assigns to a bank will in most cases be no higher than the credit rating of the sovereign of the country in which the bank is domiciled.

6.2 Rating Banks Above The Sovereign

The sovereign rating does not impose an insuperable constraint on bank ratings, however. Indeed, CI is cognizant of the fact that governments can and do default without interfering directly in the banking sector, and many banks have endured sovereign debt crises and the associated economic turbulence without becoming insolvent or defaulting on their obligations.

Fearful of the potential political and economic cost of a financial system collapse, governments in some cases have taken steps to support domestic banks ï for example through central bank liquidity provision and regulatory forbearance of loss recognition ï even when defaulting on their own debt. Such actions are more likely to be attempted, and be successful, when the government is defaulting on debt denominated in local currency rather than foreign currency, when the default is in the form of a rescheduling (maturity extension) rather than a substantial write-down, and when the lender-of-last resort capacity of the authorities is adequate given the size and currency composition of banking system liabilities.

6.2.1 Bank Standalone Ratings (BSRs)

Banks with high exposure to the local economy or home sovereign, or that rely on foreign borrowing to fund domestic assets will, in most cases, have BSRs that are no higher than the long-term foreign currency rating of the sovereign. CI may, however, set the BSR above the sovereign rating when we consider the bankôs credit profile to be sufficiently robust to withstand the direct and indirect effects of a government default, including losses on sovereign debt and highly stressed operating conditions.

Consequently, when assessing whether to rate a bank above the sovereign on a standalone basis we will make assumptions about the nature and scope of a future default scenario. While plausible sovereign default scenarios will take into account country-specific circumstances, as a general baseline we would expect a bank to have sufficient financial resilience to cope in the short term with the following stresses without breaching regulatory limits:

- A substantial reduction in the face value of government securities (on foreign currency holdings in order to be rated higher than the sovereign foreign currency rating; on all holdings to be rated higher than the local currency rating);

- A significant contraction in real GDP;
- Large declines in property prices, domestic share prices and in the countryôs exchange rate;
- A sharp increase in domestic and foreign funding costs;
- A significant decrease in customer deposits; and
- A temporary loss of access to external funding markets.[15]

We would therefore expect the bank to exhibit most or all of the following characteristics:

- Sound standalone credit fundamentals, including strong capital and liquidity ratios (including adequate foreign currency liquidity), robust asset quality and profitability; limited reliance on confidence-sensitive sources of funding (including foreign-currency borrowing in international markets); and limited direct and indirect exposure to exchange rate risk;
- Low or moderate direct exposure to sovereign credit risk;
- Demonstrated resilience to previous episodes of sovereign stress or adverse economic and financial shocks;
- Low sensitivity to domestic economic conditions, including for earnings, funding and assets, most likely reflecting the existence of substantial operations outside of the home country.

Rating rules of thumb for BSRs

The principal considerations for setting a bankôs BSR above the sovereign rating are summarised in figure 1 below.

Banks with low-to-moderate direct exposure to the home sovereign in foreign currency, but with relatively large holdings of government local-currency debt, and which we consider as having the capacity to withstand the economic and financial stress associated with a sovereign default on foreign currency obligations, could achieve BSRs up to the same level as the sovereign local currency rating.

Banks with low-to-moderate direct exposure to the sovereign in both foreign and local currency, and a high resilience to sovereign-induced stress in the operating environment, could achieve BSRs one or two notches above the sovereign local currency rating. A larger differential may be warranted in exceptional circumstances, for example in the case of particularly strong offshore banks with very limited exposure to the domestic economy and sovereign; however, such instances are likely to be rare.

CIôs policy of restricting BSRs in the ratings space above the sovereign rating reflects the degree of uncertainty in the assessment of the bankôs capacity to withstand sovereign-induced stress. In short, neither the economic conditions that will prevail at the time of, and following, a government default, nor the severity of the default itself (in terms of the haircut), nor the behaviour of the authorities in the event of financial stress can be known for sure ahead of an actual situation of sovereign stress.

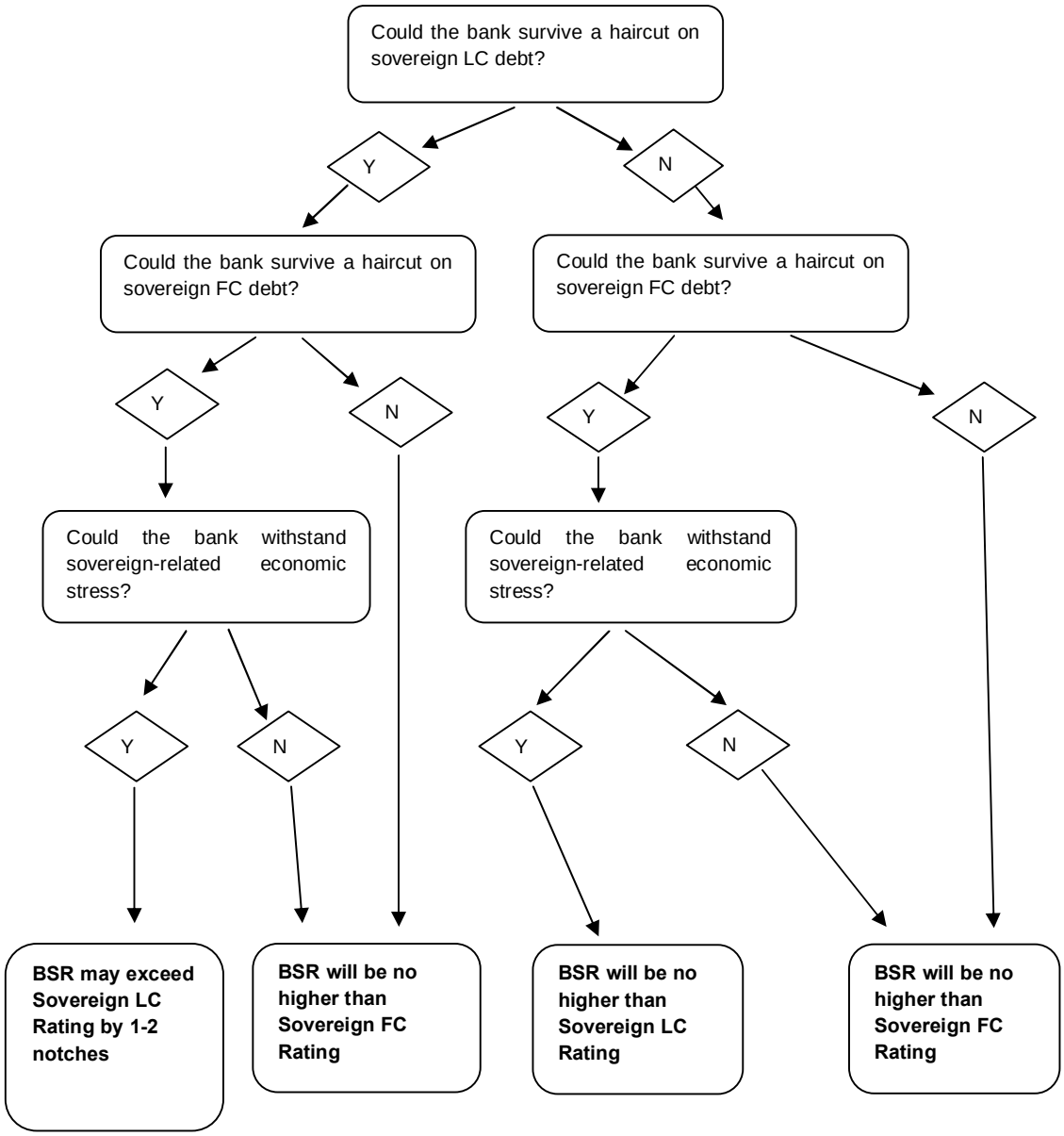
It follows that the BSR could potentially be more than one or two notches higher than the sovereign rating when the likelihood of a government default in the short term is very high and we are better able to evaluate with greater certainty the institutionôs ability to survive the associated stress.

Similarly, we may assign BSRs multiple notches above the sovereign rating in those countries where the government routinely fails to service its domestic debt on time (implying very low or ôSDô sovereign ratings) but the losses associated with such technical defaults are negligible and the disruption to the banking system minimal.

[15] We exclude from such scenarios the likelihood and potential impact of capital controls, deposit freezes and other restrictive measures, as sovereign interference risk is not factored into BSRs.

Figure 1

Decision Tree for Setting a Bank's BSR above the Sovereign Rating



6.2.2 Foreign and Local Currency Ratings

In order to assign foreign and local currency credit ratings to a bank that are higher than those of the sovereign, we would have to be satisfied that the bank would be able to continue meeting its financial obligations (i) in the event of a sovereign default in the relevant currency; and (ii) in the face of the associated deterioration in the operating environment. This superior capacity could reflect the bankôs standalone financial soundness (as described above) or the high likelihood that the bank would be supported by financially stronger owners in the event of a sovereign debt crisis.

However, fulfilment of these two conditions may still not be sufficient to warrant a higher rating than the sovereign. In contrast to our criteria for BSRs, in assessing whether a bankôs foreign and local currency ratings could be higher than those of the sovereign we would also have to take into account the potential impact of sovereign interference risk. Specifically, we would have to consider whether the government, at a time of severe fiscal or economic stress, would implement measures aimed at bolstering its own finances or averting broader economic and financial instability but which effectively force banks (and other entities) to default on financial obligations for reasons unrelated to their intrinsic financial health.

For foreign currency obligations, the principal form of sovereign interference risk concerns the imposition of transfer and convertibility (T&C) restrictions that prevent local currency being converted into foreign currency and funds from being transferred to creditors outside of the country (e.g. by imposing a moratorium on private sector payments of foreign debts). Governments can also cause banks to default on local currency obligations, for example, by imposing extended bank holidays, deposit freezes, and other restrictions that prevent account holders from accessing their funds in a timely manner (such actions might also extend to foreign currency deposits).

The evidence from past crises suggests that sovereign interference risk is higher in foreign currency than in local currency; but in many cases governments have imposed restrictive measures ensnaring both types of obligations at the same time. Consequently, in determining whether a bankôs foreign or local currency issuer ratings could be higher than those of the sovereign, we would need to be convinced that the government would not impose T&C and other restrictions were it to default on its own obligations or that the bank would be exempt from, or somehow able to circumvent, any such restrictions.[16]

Rating rules of thumb for foreign and local currency ICRs

Sovereign interference risk is strongly correlated with sovereign default risk. It follows that where sovereign interference risk is high a bankôs issuer credit ratings (ICRs) would normally be no higher than the respective sovereign credit rating, even if the bankôs BSR or support-enhanced indicative (baseline) ICR is higher than the sovereign rating. Conversely, where sovereign interference risk is low or moderate, the bank could potentially be rated higher than the sovereign, provided this is warranted by its BSR or support-enhanced baseline ICR.

The maximum number of notches a bank could generally be rated above the sovereignôs foreign and local currency ratings ï outside of an actual sovereign event ï is summarised in the table below. For example, where sovereign interference risk is low, the maximum foreign currency ratings assigned to banks would generally be no more than two notches higher than the sovereignôs foreign currency rating, while the maximum local currency rating would be no more than three notches above the equivalent sovereign rating.

[16]The focus throughout this section is on issuer ratings and sovereign risk. It does not address the growing number of structural and securitsation methods that may allow sovereign risk to be mitigated for specific debt issues.

Maximum Potential Notch Differential between Bank Issuer Ratings and Sovereign Ratings

Sovereign Interference Risk					
High		Moderate		Low	
FC	LC	FC	LC	FC	LC
0	0	1	2	2	3

FC=foreign currency; LC=local currency

The restrictions we impose reflect the inherent uncertainty in the policy reaction of the sovereign in a stress situation and, for uplifts driven by external support, uncertainty relating to the ability, willingness and financial capacity of the supporter to provide assistance to the rated bank in a sovereign default scenario, when the financial health of that bank is likely to have deteriorated significantly.

The greater potential uplift in local currency takes into the empirical observation that sovereigns are more likely to interfere with payments in foreign currency than in local currency. Nevertheless, given the significant correlation between sovereign interference in foreign currency and local currency, we would usually limit any difference in a bankôs local and foreign currency ratings to one notch.

The above guidance applies in particular when the risk of a crisis is remote. Clearly a bankôs ICR could potentially be multiple notches higher than the sovereign rating in situations where a government defaults but does not impose any restrictive measures and the rated bank is able to continue meeting its financial obligations on time.

Sovereign interference risk higher than sovereign credit risk

A government may also impose restrictive measures for reasons unrelated to its own near-term default risk, for example in an effort to safeguard financial system stability in the event of large-scale capital outflows triggered by problems in the banking industry or corporate sector. The risk of private sector imbalances endangering wider economic and financial stability would be reflected to a significant extent in both the sovereignôs credit ratings and OPERA, which in turn would affect the ratings of individual banks. However, where we consider sovereign intervention risk to be higher than sovereign credit risk we would constrain bank ratings at a level below the sovereign rating, commensurate with the higher relative default risk.

6.3 Determining Sovereign Interference Risk

Sovereign interference risk is a function of a number of factors, including the likelihood of sovereign default and/or financial system instability, the propensity of the state to intervene in the economy, institutional strength, and effective lender-of-last resort (LOLR) capacity.

Government default and financial system stability risks aside, we would typically expect sovereign interference risk to be higher in countries where state involvement in the economy is already high, or where, based on current policies or past actions, it is reasonable to conclude that the government has strong interventionist tendencies.

Sovereign interference risk is also likely to be higher, all other things being equal, in countries where the rule of law and checks on the power of the executive are weak, as such institutional shortcomings arguably increase the risk of unpredictable changes in laws and regulations and may also give rise to arbitrariness in the enforcement of contracts and property rights.

In our opinion, a country is also more likely to resort to extensive capital controls in a crisis scenario when the central bank has insufficient capacity to provide extraordinary liquidity assistance to the banking sector. This is because perceived weaknesses in LOLR capacity are likely to amplify the loss in public and investor confidence arising from a shock to the financial system (such as a government debt default), potentially resulting in large-scale deposit outflows and capital flight and necessitating the imposition of emergency controls.

High interference risk[17] ï We would generally consider the risk of sovereign interference in the event of government or financial system distress to be high when one or more of the following apply:

- The government has a track record of resorting to highly restrictive capital controls and other prohibitive measures at times of stress.
- The financial system is already subject to extensive capital controls, although possibly not on the transfer of funds to foreign creditors.
- The economy is relatively closed to external trade or has limited linkages with the global financial system.
- Direct state involvement in the economy is pervasive, as indicated, for example, by significant state ownership of key sectors or extensive intervention via direct regulation or controls.
- Legal institutions are weak, laws and regulations are often applied inconsistently or discriminatorily. There may be a history of government intervention in the court system or of the enactment of legislation by executive decree, with limited constraints on the exercise of such power.
- LOLR capacity is greatly constrained by factors such as the high share of foreign currency liabilities in total banking system liabilities, the size of the banking sector in relation to the domestic economy, or the rigidness of the exchange rate regime (unless, for example, the banking system is relatively small or reserve adequacy is particularly strong).
- The net external debt of the country is very high and a stability concern.

Low interference risk ï Conversely, we would generally consider the risk of sovereign interference to be low in a stress scenario when none of the above applies and instead the following hold true:

- The economy is open to trade and foreign investment, with no significant restrictions on current and capital account transactions, and where exports and inward investment are important for economic growth and job creation.
- The corporate sector is integrated into global production and supply chains; the financial sector is well-diversified and has strong international linkages; domestic entities are highly active in international capital markets (all of which arguably increase the cost of imposing foreign transfer and other payment restrictions).
- Direct state involvement in the economy is relatively low.
- The legal system is sound; laws and regulations are transparent and uniformly applied.
- LOLR capacity is high: the country issues its own currency and operates an independent domestic monetary policy unconstrained by exchange rate objectives. Countries with high LOLR capacity tend to have floating exchange rates, diversified financial systems, deep and broad domestic capital markets, as well as credible and effective monetary policy frameworks. We may also include here countries that are member states of a strong and credible monetary union in which institutional mechanisms exist at the centre to provide liquidity support to solvent but temporarily illiquid banks in those count ries, even in the event of government financial distress.

In addition, we are unlikely to view sovereign interference risk as low if the sovereignôs long-term foreign currency rating is below ôBBBô

Moderate interference risk ï We would generally classify sovereign interference risk as moderate in countries that do not satisfy the criteria for High or Low. Such countries may combine characteristics such as a reasonable degree of openness to foreign trade and investment with either significant state involvement in the economy or limited linkages with global economic and financial markets. Capital and exchange controls may be in place, but they are not very restrictive (we would generally include prudential controls adopted during the process of capital account liberalisation in this category). Monetary policy flexibility is likely to be moderate.

[17] To be clear, ôhighô interference risk does not necessarily mean that CI considers it likely that restrictive measures will be imposed in the near future. Rather it means that we consider it reasonably likely that such measures would be imposed in the event of severe sovereign stress, however remote such an event may currently be.

The above guidance notwithstanding, it is difficult to determine the likelihood of sovereign interference risk a priori and we may revise our assessment/classification (leading to changes ï up as well as down ï in the maximum notch differentials shown in table 1) when there is an imminent risk of sovereign distress or financial instability and we have a better idea of the likely policy response.

6.4 Piercing the Ceiling Implied by the Sovereign Interference Risk Assessment

Our assumptions about the impact of sovereign interference risk on banks are general rather than institution-specific, and in certain circumstances we may consider assigning a foreign currency rating to an individual bank that is higher than the limit for the long-term foreign currency rating established by applying our criteria for determining sovereign interference risk.

For a bank to achieve such a rating there would have to be compelling reasons for believing that it would be well insulated or strongly protected against the direct and indirect risks that tend to materialise in a sovereign stress scenario (i.e. its BSR or support-enhanced baseline ICR would be higher than the sovereign rating).

In addition, there would have to be strong grounds for considering that either the bank would be exempt from any such controls or that it would be capable of circumventing any transfer and convertibility restrictions or other restrictive measures enforced by the sovereign in a crisis scenario.

Such cases are likely to be rare in practice and are perhaps most likely to apply to foreign-owned, off-shore banks that: (i) are based in countries with large strategically-important offshore financial sectors (where the governmentôs incentive to intervene in their operations is very low, including compared to onshore banks); (ii) have very limited financial exposure to the domestic economy (the majority of assets and liabilities would typically be outside of the country); and (iii) have the ability to operate effectively from offices outside of the country, at short notice if necessary.

7. ISSUE CREDIT RATINGS (ISRs)

7.1 ISRs for Senior Financial Obligations

ISRs for conventional debt instruments primarily reflect default risk (namely the likelihood of the obligor or issuer being unable or unwilling to meet its financial obligations in a timely manner) but also take general account of the repayment priority of the rated instrument in the event of liquidation. For certain debt obligations, particularly those that are secured or guaranteed, ISRs may also reflect the likelihood of full recovery of principal (albeit delayed) in the event of default.

7.1.2 Reference Point and Notching

The ISRs of senior unsecured financial obligations are normally set at the level of the bankôs ICR. However, in certain circumstances we may assign ISRs to senior unsecured liabilities that are above the ICR. This could reflect the design of national insolvency and bank resolution frameworks, especially where there is a ranking of senior instruments in the creditor hierarchy and where the default risk of certain types of senior unsecured liabilities is lower than others, for example because they are excluded from the scope of bail-in rules (e.g. in some countries certain types of operational liabilities are protected from losses in resolution while senior unsecured bonds are not).

The ISRs of senior unsecured obligations of the same issuer could also be set at different levels when the bank is in or approaching a situation of financial distress and we believe there is a reasonable risk that it will selectively default on certain senior unsecured obligations but not others.

It is also possible for senior unsecured obligations to be rated below the ICR owing to: (i) the effective subordination of the instruments arising from the issuerôs use of a significant amount of its assets as collateral for other borrowings; or (ii) the structural subordination of the instruments in cases where the issuer is a holding company that has the same general credit risk as its operating companies but whose creditors would rank behind creditors of its core subsidiaries in liquidation.

Finally, senior debt that is secured may be rated higher than the issuing bankôs ICR provided the debt is sufficiently collateralised and full recovery likely. Secured instruments may also be rated above the ICR if the relative risk of default is lower due to the protection afforded to the instrument under the rules of a countryôs resolution regime (e.g. covered bonds may be excluded from bail-in). Separately, senior debt that is guaranteed may be rated above the ICR provided the terms of the guarantee and creditworthiness of the guarantor are sufficiently strong to make timely payment or full recovery likely.

7.2 ISRs for Hybrid Capital and Subordinated Debt Instruments

ISRs for bank hybrid securities and subordinated debt instruments, especially those with contingent capital features, reflect impairment risk and repayment priority. Impairment risk refers to the risk of formal payment default, as well as the likelihood of investors experiencing losses due to the activation of any loss absorbing mechanisms (contractual or statutory) of the rated instrument as a consequence of the weakened financial position of the issuing bank, the occurrence of a contractual trigger event, or regulatory intervention.

We recast default risk in broader terms as impairment risk to capture the loss-bearing risk characteristics of bank hybrid capital instruments and to better reflect regulatory initiatives taken in the aftermath of the global financial crisis (including in the context of Basel III and, in some countries, changes to bank resolution frameworks) aimed at ensuring that hybrid and subordinated-debt instruments are capable of supporting capital positions by taking losses outside of liquidation and without necessarily constituting an event of default in legal terms.

A growing number of hybrid and subordinated debt instruments have contractual and/or statutory contingent capital features. These instruments may be exposed to losses in certain circumstances including: upon reaching a pre-specified trigger threshold (typically a capital ratio) when the bank is a going concern; in the event of a regulatory determination that the issuing bank is non-viable; in the event of resolution, as well as in liquidation. Loss absorption mechanisms include conversion into common equity, the write-down of the principal amount of the liability, and the deferral or cancellation of coupon payments.

While the imposition of losses, including non- or partial-payment, may not constitute a default in legal terms under the issuing contract, CI Ratings regards them as default-like events as they are generally expected to result in a loss for the holder of the instrument. Consequently, regardless of contractual permissibility, the activation of an instrumentôs loss absorption mechanism would normally result in its credit rating being lowered to ódô

Impairment risk for contractual contingent capital instruments that convert/write-down while the bank remains a going concern and ahead of the emergence of distress is generally higher in comparison to subordinated debt instruments that would be subject to write-down or conversion into equity at the point of non-viability (PONV), as determined by the national supervisory authority in the context of the countryôs bank resolution regime.

Such non-viability instruments are typically designed to absorb losses on a ógone concernô basis, defined in broad terms to include loss absorption in liquidation and loss absorption as part of a compulsory restructuring process for a failing bank.

At the earliest, we would normally expect PONV securities to incur losses as part of a broader resolution exercise when the bank is, or is close to being, insolvent or unable to pay its debt and other liabilities as they fall due. Consequently, the ratings of PONV securities would generally be closer ï and in some cases the same ï as those of conventional, óplain vanillaô subordinated instruments.

7.2.1 Reference Point and Notching

While the rated bankôs ICR usually serves as the starting point for positioning ISRs on senior obligations, ISRs for hybrid capital instruments and certain types of subordinated debt are usually notched from the BSR.

This differential treatment reflects our general assumption that extraordinary support, which is factored into the ICR, is more likely to be made available for senior financial obligations than for subordinated obligations (particularly hybrid capital instruments), and also because in some settings the ICR may be uplifted by the availability of sufficient bail-inable subordinated liabilities in resolution.

However, where we believe extraordinary assistance will extend to subordinated obligations, the ISRs of such instruments will be notched instead from the support-adjusted BSR (which in most cases is likely to be the same as the ICR).

Finally, where the bankôs ICR is lower than its BSR, due, for example, to sovereign-related constraints, the ICR alone will serve as the starting point for all ISRs (senior and subordinated liabilities).

Standard notching for instruments with contingent capital loss-absorption features

We apply our standard notching guidelines where the issuing bankôs BSR is ótbb-ô or higher but follow a modified approach where standalone strength is weaker or where the impairment risk of a particular instrument is very high (see Additional notching considerations, below).

Notching for bank hybrid and subordinated-debt capital instruments with loss-absorption features reflects: contractual subordination; the type of loss absorption mechanism (coupon suspension, conversion to higher forms of capital, principal write-down); and the trigger mechanism and trigger point for loss absorption.

From the ISR reference point for the issuing bank we will normally deduct the following, where applicable, to arrive at the rating for the particular instrument:

(i) One notch to reflect contractual subordination.

(ii) An additional one notch if the instrument may be subject to equity conversion and/or a write-down in accordance with the provisions of either the underlying contract or a statutory bail in regime or similar (including, for example, as part of a government-led restructuring) without triggering legal insolvency or default on senior financial obligations.

(iii) This would typically apply when we deem it likely that the authorities could pre-emptively impose losses on these instruments before the bank has reached the PONV in order to avoid a bank-wide resolution/restructuring. We would, therefore, not apply this step if we believe the instrument is only likely to take losses when the bank is no longer viable and at approximately the same time as conventional subordinated debt and any subordinated debt instruments not included in regulatory capital.

(iv) Up to three additional notches if the instrument has mandatory going concern loss-absorption features (contractual or statutory) with notching taking into account how far the bank is from the contractual trigger level for imposing losses on investors, as well as the distance between the trigger level and the point at which the bank would be non-viable (in the absence of support).

(v) Maximum (negative) standard notching would generally apply to hybrid capital instruments with high-level triggers, i.e. triggers for conversion/write-off that are well above the level normally indicative of financial distress or non-viability, and where the bank is relatively close to the trigger level (e.g. the expected capital ratio is 1-2 percentage points higher).

(vi) We would not apply this additional notching to capital instruments with triggers set ï in our opinion ï at very low levels and hence only available to help recapitalise the bank when it is at or close to the point of non-viability.

(vii) One or more additional notches if the instrument is subject to coupon cancellation/deferral risk, for example because the bank has full discretion to omit coupons and coupon payments are either prohibited under the terms of the contract in certain circumstances (e.g. insufficient distributable items) or regulatory rules increase the likelihood of coupon omission occurring while the bank is a going concern. The number of notches will depend on the height of the trigger for coupon deferral: the higher the trigger, the greater the activation risk and therefore the lower the rating.

Where an instrument has multiple triggers, we will generally rate to the trigger we consider most likely to be breached first. We would not, however, assign ISRs to instruments with triggers based on financial market indicators (such as share prices or CDS prices) or systemic triggers based on the stability of the banking sector or financial system.

Additional notching considerations

Rating committees may deviate from the standard notching guidelines where appropriate, taking into account the specifics of the particular issue, the circumstances of the issuer, and changes in the behaviour of regulators that call for different notching to that suggested by the guidelines.

Due to the limited number of notches on the rating scale, when the BSR of the issuing bank is below ôbbb-ôwe may deduct fewer notches than indicated by our standard notching to determine the issue ratings of instruments with mandatory going concern loss-absorption features and coupon flexibility.

The ISRs assigned to such instruments would nevertheless reflect the high impairment risk and would not typically be above ôB+ôfor a bank with a BSR of ôbb+ô

We would also tend to deviate from our standard notching when impairment risk is very high. This could be, for example, because the contractual trigger level is close to being reached (e.g. the CET1 ratio is less than 1 percentage point above the trigger level), or because there is a high risk of coupon cancellation as the bank is close to breaching regulatory or contractual conditions for continuing payments. In such cases the ISR is likely to be at very low levels.

Where coupon risk is assessed to be the same for different instruments of the same class (e.g. AT1 qualifying subordinated notes with ôhighô and ôlowô triggers) and is higher than the risk of conversion/write-down, the ISRs we assign to the instruments are likely to be the same regardless of the trigger level. This could arise, for example, in situations where we do expect regulators to differentiate between different (AT1) securities when prohibiting banks from making coupon payments.

With contingent capital instruments there is also the possibility that the issuing bank could reach the point of non-viability before the triggers embedded in the instrument have been breached. In such an event, loss absorption would more likely take place as part of a statutory bail-in or broader resolution.

A similar situation could also arise if the trigger level is set below the regulatory minimum. In these types of cases ISRs may be based primarily on the analytical judgement of the rating committee rather than by the application of notching criteria.

ANNEX 1: ISSUER CREDIT RATINGS: RATING SCALE AND DEFINITIONS

CI's international issuer credit ratings (ICRs) indicate the general creditworthiness of an entity (such as a bank, corporate or sovereign) and the likelihood that it will meet its financial obligations in a timely manner. Foreign currency ratings refer to an entity's ability and willingness to meet its foreign currency denominated financial obligations as they come due. Foreign currency ratings take into account the likelihood of a government imposing restrictions on the conversion of local currency to foreign currency or on the transfer of foreign currency to residents and non-residents.

Local currency ratings are an opinion of an entity's ability and willingness to meet all of its financial obligations on a timely basis, regardless of the currency in which those obligations are denominated and absent the risk of transfer and convertibility restrictions that may constrain the servicing of foreign currency obligations. Both foreign currency and local currency ratings are internationally comparable assessments.

Foreign and local currency ratings take into account the economic, financial and country risks that may affect creditworthiness, as well as the likelihood that an entity would receive external support in the event of financial difficulties.

The following rating scale applies to both foreign currency and local currency issuer ratings. Short-term ratings assess the time period up to one year.

Long-Term Issuer Credit Ratings

Investment Grade	
AAA	The highest credit quality. Exceptional capacity for timely fulfilment of financial obligations and most unlikely to be affected by any foreseeable adversity. Extremely strong financial condition and very positive non-financial factors.
AA	Very high credit quality. Very strong capacity for timely fulfilment of financial obligations. Unlikely to have repayment problems over the long term and unquestioned over the short and medium terms. Adverse changes in business, economic and financial conditions are unlikely to affect the institution significantly.
A	High credit quality. Strong capacity for timely fulfilment of financial obligations. Possesses many favourable credit characteristics but may be slightly vulnerable to adverse changes in business, economic and financial conditions.
BBB	Good credit quality. Satisfactory capacity for timely fulfilment of financial obligations. Acceptable credit characteristics but some vulnerability to adverse changes in business, economic and financial conditions. Medium grade credit characteristics and the lowest investment grade category.
Speculative Grade	
BB	Speculative credit quality. Capacity for timely fulfilment of financial obligations is vulnerable to adverse changes in internal or external circumstances. Financial and/or non-financial factors do not provide significant safeguard and the possibility of investment risk may develop.
B	Significant credit risk. Capacity for timely fulfilment of financial obligations is very vulnerable to adverse changes in internal or external circumstances. Financial and/or non-financial factors provide weak protection; high probability for investment risk exists.
C	Substantial credit risk is apparent and the likelihood of default is high. Considerable uncertainty as to the timely repayment of financial obligations. Credit is of poor standing with financial and/or non-financial factors providing little protection.
RS	Regulatory supervision (this rating is assigned to financial institutions only). The obligor is under the regulatory supervision of the authorities due to its weak financial condition. The likelihood of default is extremely high without continued external support.
SD	Selective default. The obligor has failed to service one or more financial obligations but CI believes that the default will be restricted in scope and that the obligor will continue honouring other financial commitments in a timely manner.
D	The obligor has defaulted on all, or nearly all, of its financial obligations.

Short-Term Issuer Credit Ratings

Investment Grade	
A1	Superior credit quality. Highest capacity for timely repayment of short-term financial obligations that is extremely unlikely to be affected by unexpected adversities. Institutions with a particularly strong credit profile have a ó+ôaffixed to the rating.
A2	Very strong capacity for timely repayment but may be affected slightly by unexpected adversities.
A3	Strong capacity for timely repayment that may be affected by unexpected adversities.
Speculative Grade	
B	Adequate capacity for timely repayment that could be seriously affected by unexpected adversities.
C	Inadequate capacity for timely repayment if unexpected adversities are encountered in the short term.
RS	Regulatory supervision (this rating is assigned to financial institutions only). The obligor is under the regulatory supervision of the authorities due to its weak financial condition. The likelihood of default is extremely high without continued external support.
SD	Selective default. The obligor has failed to service one or more financial obligations but CI believes that the default will be restricted in scope and that the obligor will continue honouring other financial commitments in a timely manner.
D	The obligor has defaulted on all, or nearly all, of its financial obligations.

CI Ratings appends ó+ôand ó-ôsigns to foreign and local currency long-term ratings in the categories from ó**A**ôto ó**C**ôto indicate that the strength of a particular rated entity is, respectively, slightly greater or less than that of similarly rated peers.

Outlook: expectations of improvement, no change or deterioration in a bankôs long-term issuer ratings over the 12 months following its publication are denoted ó**P**ositiveô, ó**S**tableôor ó**N**egativeô

ANNEX 2: BANK STANDALONE RATINGS: RATING SCALE AND DEFINITIONS

Bank Standalone Ratings (BSRs) provide a forward-looking view of the intrinsic, standalone credit strength of rated banks, that is, the ability of banks to meet financial obligations on an ongoing basis without requiring extraordinary support from owners or the government and in the absence of extraordinary interference, including government-imposed transfer, convertibility, and deposit withdrawal restrictions (i.e. sovereign interference risk).

BSRs take into account key credit fundamentals including the relative strength of a bankôs business model, management, risk profile, earnings capacity, and capital and liquidity buffers. They also reflect the operating environment and sovereign credit risk. Hence the BSR represents CI Ratingsôopinion of the likelihood of a bank becoming untenable or unsound owing to inherent business and financial weaknesses, operating environment risks, and the direct and indirect impact of sovereign distress. BSRs generally take a long-term view, including of a bankôs resilience to adversity and stress.

The following definitions and rating scale apply to BSRs and should be read in conjunction with the relevant criteria.

Bank Standalone Ratings

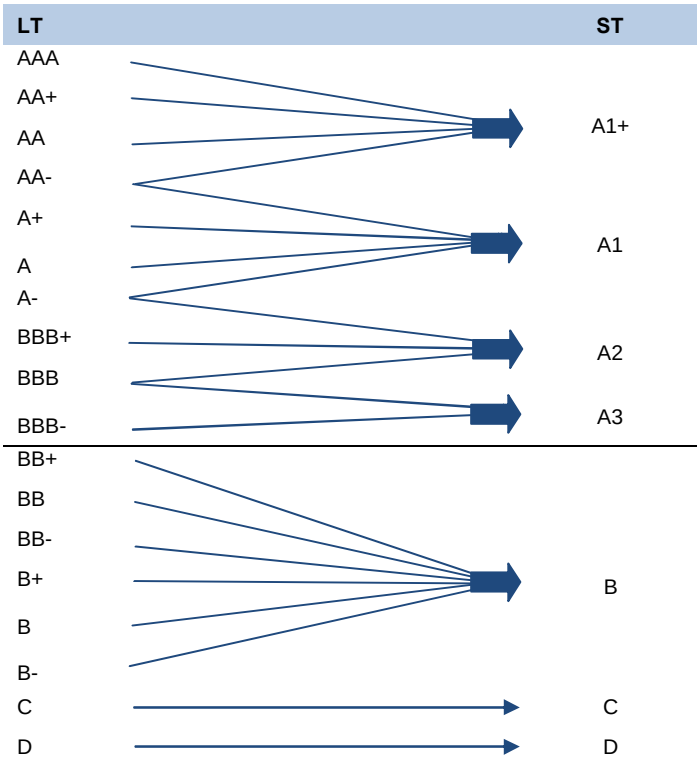
aaa	Exceptional standalone strength. Exceptionally strong and sustainable financial and non-financial credit fundamentals. Operating environment is very strong. The bank is highly resilient to adverse changes in business, economic and financial conditions. It is extremely unlikely that the bank will require extraordinary support to meet its financial obligations.
aa	Very strong standalone strength. Very strong and sustainable financial and non-financial credit fundamentals. Operating environment is likely to be strong. The bank is resilient to adverse changes in business, economic and financial conditions. It is unlikely that the bank will require extraordinary support to meet its financial obligations.
a	Strong standalone strength. Strong and sustainable financial and non-financial credit fundamentals. Operating environment may be less strong and resilient than in higher rating categories. The bank may be slightly more vulnerable to adverse changes in business, economic and financial conditions than banks in higher categories. In the event of adversity, the likelihood of the bank requiring extraordinary support to meet financial obligations is very low.
bbb	Sound standalone strength. Adequate financial and non-financial credit fundamentals. Operating environment may be sound overall but with some important vulnerabilities or weaknesses. The bank may be somewhat vulnerable to adverse changes in business, economic and financial conditions. In the event of adversity, the likelihood of the bank requiring extraordinary support to meet financial obligations is reasonably low.
bb	Moderate standalone strength. Moderate financial and non-financial credit fundamentals. Operating environment may have significant vulnerabilities or weaknesses. The bank may be vulnerable to adverse changes in business, economic and financial conditions. In the event of adversity, the likelihood of the bank requiring extraordinary support to meet financial obligations is moderate.
b	Weak standalone strength. Weak financial and non-financial credit fundamentals. Operating environment may be weak and highly susceptible to shocks. The bank is very vulnerable to adverse changes in business, economic and financial conditions. In the event of adversity, the likelihood of the bank requiring extraordinary support to meet financial obligations is relatively high.
c	Very weak standalone financial position, either with immediate problems or with insufficient capacity to withstand adversities. The bank may be at, or very close to, the point of non-viability. It may be in default or at very high risk of defaulting in the absence of extraordinary support. Operating environment may be very weak and volatile.

CI appends ó+ôand óôsigns to Bank Standalone Ratings in the categories from áaaôto ábôto indicate that the strength of a particular institution is, respectively, slightly greater or less than that of similarly rated peers.

Outlook: expectations of improvement, no change or deterioration in the rating over the 12 months following its publication are denoted óPositiveô óStableôor óNegativeô

ANNEX 3: CORRESPONDENCE BETWEEN LONG-TERM AND SHORT-TERM ISSUER RATINGS

Short-term ratings are mapped from long-term ratings using the guidelines below. Deviations may be permitted where entity-specific circumstances render the guidelines inappropriate.



ANNEX 4: KEY QUANTITATIVE METRICS

Some of the main ratios and other indicators that may be used by CI Ratings when analyzing conventional banks are provided below. The list is offered for guidance and is not exhaustive. We may use additional metrics, where appropriate, to address or further investigate bank- or country-specific factors, albeit within the context of the key rating factors referred to in this methodology. We may also apply different terminology to certain types of banks, such as Islamic banks.

PRINCIPAL INDICATORS OF BANK FINANCIAL PERFORMANCE AND RISK

(In percentage terms, unless indicated otherwise)

	INDICATOR	DESCRIPTION
	Size Factors	
1	Total Assets (in local currency)	Total assets in local currency
2	Total Assets (in US dollars)	Total assets in USD equivalent
3	Employees	Number of employees
	Asset Quality	
4	Total Assets Growth Rate	Annual growth in total assets
5	Customer Loan Growth Rate	Annual growth in gross customer loans
6	Customer Deposit Growth Rate	Annual growth in customer deposits
7	NPL Growth Rate	Annual growth in non-performing loans (NPLs)
8	NPL Ratio	NPLs as a percentage of gross customer loans
9	NPL Coverage Ratio	Sum of specific and general loan loss reserves as a percentage of NPLs
10	Extended NPL Coverage Ratio	Sum of specific and general loan loss reserves and regulatory Tier 1 capital as a percentage of NPLs
11	Unprovided NPLs to Total Equity	NPLs *less* loan loss reserves (specific and general) as a percentage of total equity
12	Loan Loss Provisioning Expenses to Customer Loans	Impairment charges for gross customer loans as a percentage of gross customer loans
13	Government Bond Exposure	Bonds issued by national and sub-national governments as a percentage of total equity
14	Related Party Exposure	Exposure to related parties (funded and unfunded) as a percentage of total equity
15	Off-Balance Sheet Exposures to Total Assets	Total off-balance sheet commitments and contingencies as a percentage of total assets
	Earnings and Profitability	
16	Return on Average Assets (ROAA)	Net profit as a percentage of average total assets
17	Return on Average Risk-Weighted Assets (RWAs)	Net profit as a percentage of average total RWAs
18	Operating Profit (Pre-Impairment) to Average Assets	Operating profit (pre-impairment) as a percentage of average total assets

	Earnings and Profitability (cont.)	
19	Operating Income to Average Assets	Operating income as a percentage of average total assets
20	Net Interest Margin (NIM)	Net interest income as a percentage of average total assets
21	Cost of Funds	Interest expenses as a percentage of average noninterest-bearing deposits and interest-bearing liabilities
22	Interest Income on Average Assets	Interest income as a percentage of average total assets
23	Non-Interest Income to Operating Income	Non-interest income as a percentage of operating income
24	Net Fee and Commission Income to Non-Interest Income	Net fee and commission income as a percentage of non-interest income
25	Cost to Income Ratio	Operating expenses as a percentage of operating income
26	Loan Loss Provisioning Expenses to Operating Profit	Impairment charges for customer loans as a percentage of operating profit (before impairments)
27	Total Impairment of Financial Assets to Operating Profit	Total impairment of financial assets as a percentage of operating profit (before impairments)
28	Return on Average Equity (ROAE)	Net profit as a percentage of average total equity
	Funding and Liquidity	
29	Customer Deposits to Total Liabilities	Customer deposits as a percentage of total liabilities
30	Loan to Deposit Ratio	Net customer loans as a percentage of customer deposits
31	Net Loans to Stable Funds	Net customer loans as a percentage of the sum of customer deposits, senior debt, subordinated debt, hybrid capital and total equity
32	Wholesale Funding Ratio	Financial liabilities (excl. customer deposits and derivatives) as a percentage of total liabilities and total equity
33	Short-term Wholesale Funding Ratio	Financial liabilities (excl. customer deposits and derivatives) maturing in less than 1 year as a percentage of total liabilities and total equity
34	Net Stable Funding Ratio (NSFR)	Long-term stable sources of funding as a percentage of the required amount of stable funding (regulatory ratio, as reported by the bank)
35	Liquidity Coverage Ratio (LCR)	High quality liquid assets as a percentage of net cash outflows (regulatory ratio, as reported by the bank)
36	Liquid Asset Ratio	Cash and balances with central banks *plus* debt issued or guaranteed by national or sub-national governments as a percentage of total assets
37	Net Broad Liquid Asset Ratio	Cash and balances with central banks *plus* debt issued or guaranteed by national or sub-national governments *plus* due from banks *less* deposits from banks as a percentage of total assets
38	Interbank Ratio	Due from banks as a percentage of deposits from banks
39	FX Assets to FX Liabilities	Foreign currency assets as a percentage of foreign currency liabilities
	Capitalisation and Leverage	
40	Common Equity Tier 1 (CET 1) Ratio	Common equity tier1 capital as a percentage of RWAs (regulatory ratio, as reported by the bank)
41	Tier 1 Ratio	Tier 1 capital as a percentage of RWAs (regulatory ratio, as reported by the bank)

	Capitalisation and Leverage (cont.)	
42	Total Capital Adequacy Ratio (CAR)	Total regulatory capital as a percentage of RWAs (regulatory ratio, as reported by the bank)
43	Basel III Leverage Ratio	CET1 as a percentage of total leverage exposure (regulatory ratio, as reported by the bank)
44	Balance Sheet Leverage	Total equity as a percentage of total assets
45	RWA Density	Regulatory RWAs as a percentage of total assets
46	Internal Capital Generation	Net profit attributable to retained earnings as a percentage of total equity (previous year)
47	Dividend Payout Ratio	Dividends attributable to fiscal year as a percentage of net profit

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