Banks Rating Methodology

1. Introduction

EthiFinance Ratings are opinions on the credit profile of an issuer or an issuance. These opinions are based on the analysis of historical data and assessments of the bank's expected trends.

The opinions issued are stable over time due to EthiFinance Ratings' methodological approach, without detriment to the possible revisions that may occur when there is a substantial change affecting the bank.

The credit profile refers to the bank's creditworthiness (Long Term Issuer Rating), understood as the ability and willingness of the bank to honour its financial obligations. The rating has two dimensions:

Default: non-payment of the obligations contracted by the financial institution to third parties or the initiation of bankruptcy proceedings.

Failure: inability of the financial institution to continue its activity because of the absence of extraordinary support. This support is defined as coming directly from public institutions or through delegated mechanisms, including acquisition by another bank or recapitalization from its shareholding.

The idiosyncrasy of a bank (essential function of allocating resources from savers to investors in the economy), has historically been characterized by low default rates due to institutional support through bailouts or takeovers. Since November 2014, the Banking Union has been promoting the FSB arrangement, a regulated resolution under the scope of the BRRD.

2. Scope

The objective of this methodology is to represent EthiFinance Ratings' approach to rating banks that operate both domestically and internationally, and their main activity is the allocation of financial resources through deposit taking and lending (commercial banks) and with access to central bank liquidity.

The approach used by EthiFinance Ratings considers qualitative and quantitative elements. This analysis includes subjective factors and considerations that reflect our opinion as accurately as possible. In addition, the methodology described here should be understood in a flexible manner due to the dynamic nature of the sector. Therefore, the importance of the factors described below may change to adapt the analysis to these changes.

3. Overview

The methodology is based on the determination of the intrinsic financial strength of the bank, which includes the effect of systemic support and, also, the support of any related companies, resulting in the long-term issuer rating. Subsequently, the rating evaluates the bank's obligations based on their seniority and collateral.

EthiFinance Ratings analyses banks, banking groups and credit cooperative groups, regardless of their shareholding nature and jurisdictional framework, as long as their main activity is lending and deposit taking.

Therefore, insurance companies, supranational entities, and those financial institutions without deposits as a source of funding, such as Non-Banking Financial Institutions and leasing companies and other intermediaries (securities firms and investment managers) are excluded from the scope of the rating.

The financial crisis that began in 2008 in Europe was accentuated by the sovereign debt crisis of 2012. These events represented the first test to which the Eurozone was subjected since the beginning of the Monetary Union. This situation was resolved due to the policies of the European Central Bank, the implementation of structural reforms mainly in peripheral countries and the development of new European institutions such as the Banking Union in November 2014. This led to a unified supervision by the European Central Bank (Single Supervisory Mechanism. - Pillar I) and the resolution by the Single Resolution Board (Single Resolution Mechanism. - Pillar II).

All these changes were the result of the supervisor's objective to achieve greater harmonization and, above all, to protect the market mechanism. These disciplinary tools were designed for banks to improve their ability to absorb losses, not only from their shareholders but also from private creditors (bail in). This is a fundamental novelty, as losses were previously borne by taxpayers (bail out).

Regulatory changes have forced banks to strengthen their ability to face possible crises by improving their liquidity profile, strengthening their regulatory capital ratios, increasing their bailable liabilities and reducing their risk profile. In this context, EthiFinance Ratings issues a rating opinion on these banks.

4. Banks Assessment

EthiFinance Ratings utilizes three categories to analyse the internal strength of the bank, made up of a series of factors that are intended to reflect as faithfully as possible the main aspects that determine the strength of the institution.

The categories, which will be developed in depth later, are the following:

- **Macroeconomic and sectorial environment:** sovereign rating, banking sector and regulation.
- **Company profile:** business model, positioning, and management.
- **Financial profile:** earnings & profitability, solvency, funding & liquidity.

		Categories	Criteria	Factors
ISSUER (LT Issuer Rating)	LT Internal Assesment	Macroeconomic and sectorial environment (15%)	Sovereign risk (10%)	Sovereign rating (10%)
			Sector and regulation (5%)	Regulatory standards (3%)
				Sector strength (concentration) (2%)
		Company profile (45%)	Business model (12%)	Geographical and business diversification (12%)
			Positioning (15%)	Market share and asset size (5%)
				Peer analysis (10%)
			Management and strategy (18%)	Shareholders (8%)
				Strategy/Risk appetite (8%)
				Brand (2%)
		Financial profile (40%)	Earnings & Profitability (10%)	Core metrics
			Solvency (15%)	
			Funding & Liquidity (15%)	
		Adjustments	Support	Systemic support
				Internal support
		Obligations	Resolution regimes	Adjustments based on seniority

*Source: EthiFinance Ratings

For the rating process, EthiFinance Ratings first computes the bank's Internal Assessment which is an opinion of the bank's creditworthiness on a stand-alone basis in the absence of any support. In a second phase, the Agency will build on the Internal Assessment introducing adjustments that will result in the final Issuer Rating. These adjustments consider internal (bail-in) and external support (bail-out) mechanisms originating from the sovereign or from other banks. The final issuer rating is the opinion of the entity's solvency profile, resulting from the combination of all the analytical factors and adjustments depicted on Table I.

Despite giving a quantitative weight to each category, the final evaluation also considers qualitative factors (such as trends) which, despite of not using weighting factors, reflect the static nature of the ratios, as they could limit the explanatory capacity of the category.

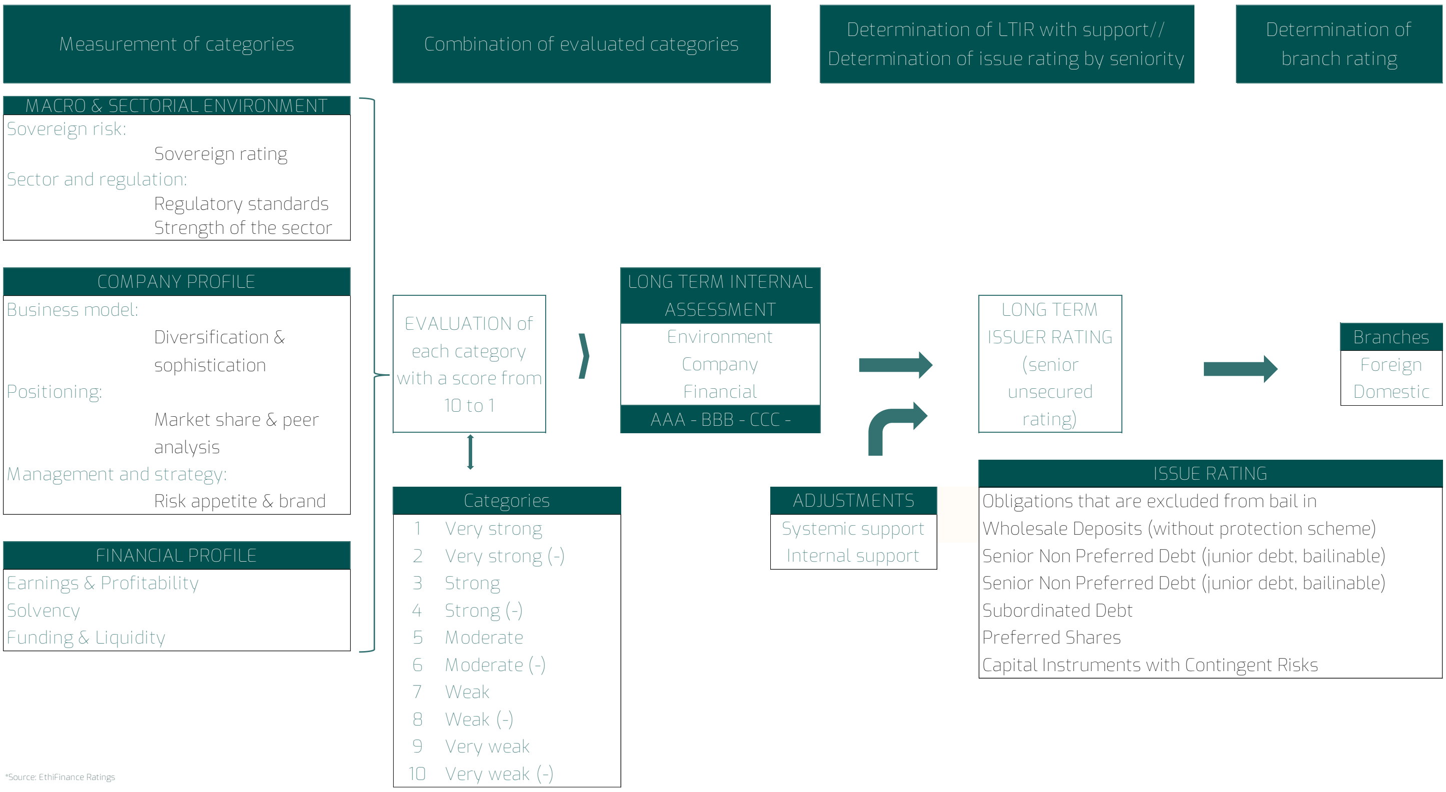
To determine an entity's internal assessment, EthiFinance considers all historical information for the previous three years, either qualitative or quantitative. This information may be provided directly by the entity or, if it is a publicly traded company, the Agency will consider all public information that it is required to disclose for regulatory purposes.

As can be seen in the following table, all factors are measured on a scale ranging from 10 to 1 (1 being the best) that evaluates the quality of each metric. It is the combination of factors that results in the score of each of the three categories, which together, make up the bank's Internal Assessment. This score will be mapped on to EthiFinance Ratings' long-term rating scale.

Score	1	2	3	4	5	6	7	8	9	10
Rating	AAA	AA	A	BBB	BB	B	CCC	CC	C	D

*Source: Ethifinance Ratings.

However, these categories are not isolated compartments, but are related to one another affecting each other positively or negatively. In this way, certain macroeconomic factors, related to the banking sector, act as potential indicators that could reflect a possible increase in an institution's risk (e.g., unemployment growth and NPL ratio).



*Source: EthiFinance Ratings

Once the bank's Internal Assessment is obtained, the rating will be modified for possible external or internal support, resulting in the Long-Term Issuer Rating, which will correspond to the bank's senior unsecured rating.

EthiFinance Ratings considers in its analysis the regulation applicable to each bank according to its jurisdiction. According to the Banking Union, under Pillar II, the BRRD determines that in the event that the European Central Bank determines the non-viability of a bank (failing) or its probability of failure, the Single Resolution Board will declare the resolution of the entity, specifying that the loss absorption capacity of its creditors must be at least 8% to be able to access the Single Resolution Fund (the contribution of the Fund cannot exceed 5% of the entity's liabilities). In this scenario, all liabilities, except retail deposits (those guaranteed under protection schemes), will be considered redeemable liabilities.

On the contrary, there are jurisdictions in which external support from governments or central banks is considered essential for the operation of the institution and as support in the face of possible adverse scenarios in the sector (developing countries).

The order of priority in loss absorbency determines the adjustment of the Long-Term Issuer Rating when rating the issuance.

On the other hand, if the issuer to be rated is a banking group, its subsidiaries should be rated considering the operating relationship with the holding company and any cross-border risk, e.g., the sovereign risk, the tariff policy or other country specifications (unemployment, GDP growth or currency).

Historically, there has been a connection between sovereign risk and banking risk: troubled banking systems are a threat to the solvency of the sovereign, while a weak sovereign, being ultimately the guarantor of the system's deposits and a major debtor of the banking system, can pose a threat to that country's banking system. The European banking union mitigates this negative relationship and reduces the negative impacts on each other in times of crisis.

In this sense, the bank could be rated above its sovereign rating provided that a significant part of its business is located outside the home country, shows a high degree of business diversification and lacks a large degree of funding sensitivity to international capital markets. Financial diversification reduces potential sovereign risk and thus mitigates the impact of local shocks on bank deposit volatility.

5. Assessment of Key Factors

This table summarizes each category with its key performance indicators applied to a specific example (scorecard). Their meaning, relevance and individual measurement scales are detailed below.

Scorecard Example					Final Score
Bank XYZ		2022			3,34
		Data	Score	Weight	Subtotal
MACRO & SECTORIAL ENVIRONMENT	Strong -		4,07	15,0%	0,61
Sovereign risk				10,0%	0,40
Sovereign rating		A-	4	10,0%	0,40
Sector and regulation				5,0%	0,21
Corruption perception index		46,3%	9	1,0%	0,09
Legal System		3	3	2,0%	0,06
Concentration		67,9%	3	2,0%	0,06
COMPANY PROFILE	Very strong -		2,69	45,0%	1,21
Business model				12,0%	0,24
Business model		2	2	12,0%	0,24
Positioning				15,0%	0,40
Market share		18%	3	2,5%	0,08
Asset size		1.675.755	1	2,5%	0,03
Peer Analysis		3	3	10,0%	0,30
Management and strategy				18,0%	0,57
Governance		3	3	5,0%	0,15
Management quality		2	2	3,0%	0,06
Execution		3	3	3,0%	0,09
Market risk		5	5	3,0%	0,15
Growth		4	4	2,0%	0,08
Brand and reputation		2	2	2,0%	0,04
FINANCIAL PROFILE	Strong		3,80	40,0%	1,52
Earnings & Profitability				10,0%	0,35
Pretax RoRWA		2,5%	5	4,0%	0,20
Adjusted NIM (Net Interest Margin / Risk Weigthed Assets)		4,5%	2	3,0%	0,06
Cost to income		46,1%	3	3,0%	0,09
Solvency				15,0%	0,63
CET1		12,1%	4	5,0%	0,20
Non performing loans/gross loans (Deliquency Ratio)		3,1%	4	5,0%	0,20
Total loan loss reserves/total problem loans (Coverage Ratio)		69,7%	4	2,5%	0,10
Basel Leverage Ratio (CET1 + AT1 / assets)		9,4%	5	2,5%	0,13
Funding&Liquidity				15,0%	0,55
Loan to deposits		107,0%	4	7,5%	0,30
Liquidity Coverage Ratio		165,5%	3	5,5%	0,17
Net Stable Funding Ratio		123,0%	4	2,0%	0,08

*Source: EthiFinance Ratings

Each category is distributed according to the total percentage of the rating. This distribution includes the quantitative criteria necessary in the analysis of a bank. This facilitates comparison between entities operating under different legislation, in different regions or with different business combinations. In addition, the scorecard is complemented by a qualitative analysis reflecting positive or negative trends.

Taking this analysis into account, a final rating is obtained that accurately reflects the opinion of EthiFinance Ratings.

5.1 Macroeconomic & Sectorial Environment

The main elements of this category are:

1. Sovereign risk
2. Sector and regulation

It is the first step in the process of analysing a bank and is one of the main categories on which the bank's credit quality is based. Its relevance to the banking sector depends on macroeconomic factors such as public debt, unemployment rate or GDP per capita.

EthiFinance Ratings considers that the sovereign risks where the bank operates, the particularities of the banking sector in that region and its regulatory framework are initial factors that may limit the bank's performance and, consequently, the soundness of the other categories such as its financial and business profile.

This category considers factors related to the strength of the economy and its sovereign debt profile, as well as aspects related to legal security and market penetration of the banking system. A bank operating in regions with sustainable public finances, where the legal framework guarantees the socioeconomic relations of its citizens and has high levels of penetration and efficiency, will have the fundamental basis for an adequate rating due to the link between sovereign and banking risk.

The analysis of the macroeconomic and jurisdictional environment considers all regions in which the bank has a significant share of business. In addition, the stability of its currency, the ability to finance growth on its own and the political and social stability of the region are considered in the analysis.

5.1.1 Sovereign Risk: Sovereign Rating

The main factor in this section is the sovereign risk of the country where the bank carries out a significant part of its activity:

a. Sovereign rating

Sovereign rating	
Rating	Score
≥AA+	1
≥AA-	2
≥A	3
≥BBB+	4
≥BBB-	5
≥BB	6
≥B+	7
≥B-	8
≥CCC	9
≤CCC-	10

*Source: EthiFinance Ratings

The sovereign rating determines the government's ability to meet its payment obligations and maintain fiscal, trade and labour stability. The sovereign's ability to influence the banking system, as well as the relationship between sovereign risk and banking risk (through the exposure of its debt markets) makes the financial sector particularly sensitive.

A sovereign with a weak credit rating is the result of a deteriorating economy that also needs intervention to smooth out imbalances, putting additional stress on the government. This deterioration would have an impact on banking assets, increasing their volatility and affecting the liquidity of sovereign and financial assets held by the bank.

On the contrary, a weak banking system increases the probability of sovereign shocks due to possible increases in credit spreads, as these would hinder access to credit for the rest of the agents in the economy, such as companies or households.

5.1.2 Sector & Regulation: Regulatory Standards and Strength of the Sector

The main factors of this section are the following:

a. Legal system

The legal context of the banking system in the region, or regions, where it operates is a relevant aspect in the assessment of a bank. This section considers the level of legal sophistication of the region, its transparency, the system's ability to enforce contracts and the effectiveness in the application of all legislation. In addition, the accounting standards applicable to the region, its stability and its ability to reflect the financial and economic situation of the financial institution are considered.

Legal System	
Score	Description
1-2	Regulatory environment highly developed and transparent. Very effective application of current legislation and regulation.
3-4	Regulatory environment highly developed and transparent. Application of current legislation and regulation.
5-6	Regulatory environment less developed and acceptable level of transparency. The application of legislation and regulation may be less effective or transparent.
7-8	Regulatory environment is in development. Financial reporting and regulatory application shows less transparency.
9-10	Regulatory environment in the process of development and with minimum transparency. Application of legislation and regulation with difficulties. Reporting and regulatory execution lacking transparency.

Source: EthiFinance Ratings

b. Corruption perception index

Corruption perception index	
%	Score
≥90	1
≥85	2
≥80	3
≥75	4
≥70	5
≥62.5	6
≥55	7
≥47.5	8
≥40	9
<40	10

*Source: EthiFinance Ratings

Institutional corruption is a cross-cutting factor throughout society and can be very costly. The corruption perception index measures the abuse of public power (bribes, electoral fraud, influence peddling, political scandals) exercised for personal benefit on a scale from 1 to 100. It is an index composed of several surveys of companies and experts and is elaborated by the non-governmental organization Transparency International.

c. Concentration

Concentration	
%	Score
≥76	1
≥68	2
≥60	3
≥52	4
≥44	5
≥36	6
≥28	7
≥20	8
≥10	9
<10	10

*Source: EthiFinance Ratings

Banking concentration has been defined as the market share by asset volume of the five main financial entities (index C5) in the market under study. The higher the level of banking concentration, the greater the bargaining power of the sector in the face of regulatory pressures and the greater use of economies of scale in terms of capacity adjustment in the sector.

Following the severe crisis suffered by the sector, banking concentration has intensified, as has historically occurred after any deep banking crisis, by reducing the number of entities operating, either through their liquidation or their absorption by other more solvent entities.

In addition, higher concentration reflects a mature business, with an increasingly difficult generation of value added, greater regulatory requirements and increased competition from new players traditionally outside the sector who, in order to exert their competitive pressure, do not need a physical presence (digitalization).

5.2 Company Profile

The main elements of this category are:

1. Business model
2. Positioning
3. Management and strategy

Why is the assessment of this category important

The company profile is the second category in our assessment and the first to focus on the bank being analyzed. This category analyses a bank's business model, given that its strategy is constrained by its risk appetite and a franchise strength that, in a sector whose reputation level is damaged, is important to maintain client-depositors' confidence to maintain financial stability.

A bank with a diversified business model and an effective risk management, whose market positions are not significant on its balance sheet and existing ones are mitigated by hedging, will have an adequate rating.

Regarding positioning, peer analysis is particularly relevant. In a mature and highly competitive sector in which efficiency has emerged as one of the main strategies, the analysis of the main competitors in the region is essential for anticipating market trends, as well as for identifying possible strengths or weaknesses.

5.2.1 Business Model: Diversification

The main factors of this section are the following:

a. Business Model

The business model of financial institutions determines the way in which results are generated. This, in turn, responds to the business mix followed by the entity, as well as to the distribution of its loan portfolio and its results according to its main business lines.

Within this business, diversification by product type is rewarded. However, excessive diversification could expose a bank to businesses with a risk profile that exceeds the entity's capacity to manage them and that could disrupt the stability of its results or its performance over the cycle.

Business Model	
Score	Description
1-2	Business model is highly stable and diversified in several segments or geographies. All business lines and regions show high activity which is strongly focused on traditional commercial banking. Minimal exposure in volatile business lines.
3-4	Business model is very stable and diversified in several segments or geographies. Most of business lines and regions show high activity which is highly focused on traditional commercial banking. Acceptable exposure in volatile business lines.
5-6	Business model has a moderate stability and is dominated by a core operating or geographic segment. Activity highly focused on traditional commercial banking. High exposure in volatile business lines.
7-8	Business model has a limited stability and is dominated by a core operating segment. Activity focused on non-traditional banking business. Very high exposure in volatile business line.
9-10	Business model has a weak stability. Total dependence on volatile business lines or regions.

Source: EthiFinance Ratings

5.2.2 Positioning: Market Share, Asset size and Peer Analysis

The main factors of this section are the following:

a. Market share

Market share	
%	Score
≥24	1
≥20	2
≥17	3
≥14	4
≥11	5
≥7	6
≥4	7
≥2	8
≥1	9
<1	10

*Source: EthiFinance Ratings

The market share of a bank is based on the strength of its main business lines and its ability to retain borrowers and depositors.

Market share can be measured at the regional, national or country level, depending on where the bank operates. Competitors may be non-bank institutions that compete with products similar to those of banks.

A strong market position translates into a broad customer base, along with greater business stability due to the strength of its deposit funding structure.

b. Asset size

Total assets	
(€ in Mln.)	Score
≥1.000.000	1
≥800.000	2
≥500.000	3
≥300.000	4
≥150.000	5
≥100.000	6
≥80.000	7
≥40.000	8
≥10.000	9
<10.000	10

*Source: EthiFinance Ratings

The size of a bank's assets is an important element to take into account in the evaluation of a financial institution because it largely conditions the capacity to generate results, profitability and risk profile.

Although size cannot determine a bank's rating, it could imply better structural advantages derived from economies of scale. In addition, this metric could be used as a tool for comparison with competitors.

c. Peer analysis

Peer Analysis	
Profitability	Net profit; ROA; ROE
Cost to income	Cost to income ratio
Asset quality	Cost of risk; NPL ratio; Total loan loss reserves/total problem loans
Liquidity	Loan to deposit
Solvency	CET1; Solvency ratio; APR density; Leverage ratio
Capitalization	P/BV if applicable

Source: EthiFinance Ratings

The purpose of the peer analysis is to establish an overview of the bank's performance as well as of its financial position in a regional, national or international environment. In this way, the bank can be evaluated in a broader perspective.

The peer analysis is performed by analysing five blocks (profitability, efficiency, asset quality, liquidity and solvency). Stock performance is also considered in the case of listed companies. Benchmark analysis is performed with banks in the same operating region or with a similar business mix.

5.2.3 Management & Strategy: Shareholders, Risk Appetite & Brand

a. Governance

The shareholder structure of a bank can be evaluated according to the type of ownership: state, institutional/corporate, family, publicly listed and cooperative. Normally, each type of shareholding structure has a specific corporate governance profile (conflicts of interest or shareholder value), but the aim is always to protect creditors through a rigorous transparency policy.

The stability and influence of its shareholders, the separation of interests (individual from creditors) and the frequency in the reporting of its financial statements are aspects positively valued. In addition, EthiFinance Ratings maintains its commitment to ESG (Environmental, Social and Governance) through which it intends to measure the sustainability and ethical impact of the entity's investments and its relationships with its clients, as well as its management of employees.

Although reputational risk, financial risks and legal risks are cross-cutting factors that affect a bank's financial profile, EthiFinance Ratings takes them into account when measuring the quality of its corporate governance.

Governance	
Score	Description
1-2	Corporate governance is very strong and provides a solid protection of the creditors against other stakeholders. Board supervision is very effective. Financial statements are reported with high quality and frequency. Very effective implementation of ethical and sustainable governance policies.
3-4	Corporate governance is good and provides fair protection of the interests of creditors against other stakeholders. Board supervision is effective. Financial statements are reported with good quality and frequency. Effective implementation of ethical and sustainable governance policies.
5-6	Corporate governance is adequate but shows improvement areas because is less developed than other peers. This scenario doesn´t present additional risks. The entity implements ethical and sustainable governance policies but without guarantees of its effectiveness.
7-8	Corporate governance is weak because it creates significant risks for creditors due to weak supervision by the board or low quality reporting. Governance policies on ethics and sustainability are not implemented.
9-10	Corporate governance is very weak because it creates high risks for creditors due to very weak supervision by the board or substantial accounting failing. The absence of any control in the ethical aspect of its corporate policy generates substantial risks for the entity.

Source: EthiFinance Ratings

b. Management quality

The management quality is assessed in terms of management knowledge, experience and the stability of both the current workforce and the succession plan for senior and middle management. Banks with a strong and effective corporate culture will be able to execute succession plans well.

Management Quality	
Score	Description
1-2	Management presents a very high degree of knowledge, permanence and background. Succession policy at all levels are frequently implemented. Management team rotation is very low in all regions where it operates.
3-4	Management presents a high degree of knowledge, permanence and background. Succession policy at the high level are implemented in a timely manner. Management team rotation is low in most of the regions where it operates.
5-6	Management has an adequate degree of knowledge, permanence and background. Succession policy at the high level are implemented in a timely manner in most cases. Management team rotation is managed properly.
7-8	Management has an acceptable degree of knowledge, permanence and background, although with areas to improve. Management team rotation and the dependence on individual figures is high.
9-10	Management may present significant weaknesses in areas such as knowledge, permanence or background. Management team rotation is too high.

Source: EthiFinance Ratings

c. Execution

The achievement of financial and business objectives is highly relevant to the strategic dimension of a bank because it evaluates its strategic plan in relation to its results. In addition, the management's ability to develop a strategic plan adapted through the cycle is also assessed. This evaluation is made considering the bank's long-term strategies and results.

Execution	
Score	Description
1-2	Financial and business objectives are solidly achieved by the bank in all phases of the cycle.
3-4	Financial and business objectives are mostly achieved by the bank with a reduced margin of error through the cycle.
5-6	Financial and business objectives are mostly achieved by the bank but the execution can change according to the economic cycle.
7-8	Financial and business objectives are often not achieved by the bank. It is likely that the execution can change according to the economic cycle.
9-10	Financial and business objectives are mostly not achieved by the bank. It is very likely that the execution can change according to the economic cycle.

Source: EthiFinance Ratings

d. Market risk

Market risks considers the bank's operations in the capital markets; therefore, its main risks are interest rate and exchange rate risk. The use of derivative instruments and exposure to indirect risks in a currency other than the functional currency are also elements that increase market risk exposure. These risks must be effectively mitigated by accounting hedges. A high proportion of the trading portfolio or the results derived from this activity are indicative of a high level of market risk.

Market Risk	
Score	Description
1-2	The bank has a low or very low exposure to main market risks. Interest rate risks and exchange rate risks are low and are adequately mitigated through hedging. Trading volume is reduced or very reduced.
3-4	The bank has a modest exposure to main market risks. Interest rate risks and exchange rate risks are modest and adequately mitigated through hedging. Trading volume can be substantial but under adequate controls.
5-6	The bank has a medium exposure to main market risks with an adequate hedging system that can be used. Trading volume can be substantial with a control over it that could be improved.
7-8	The bank has a high exposure to market risks and may include structural risks. The hedging strategies that can be used are basic so they can compromise their effectiveness.
9-10	The bank has a very high exposure to market risks. The hedging strategies that can be used are basic and may not be effective.

Source: EthiFinance Ratings

e. Growth

The growth or reduction of a bank's loan book must be analyzed in relation to the economic growth and in relation to its peers. A high balance sheet volatility means a potential decline in asset quality, which may lead to future impairments and, therefore, reductions in capital levels.

We value very positively the high level of geographic and product diversification of an entity, as this implies continuous growth levels throughout the economic cycle, as well as greater resistance to particular shocks in some of its markets (including recession or downturn phases).

Growth	
Score	Description
1-2	Business growth is unlikely to deteriorate the capital levels and sustainable growth of the main operating lines.
3-4	Business growth can sometimes exceed internal capital generation and the sustainable growth of the main operating lines. Balance sheet contraction can be achieved as planned.
5-6	Business growth often exceeds internal capital generation and the sustainable growth of the main operating lines. Balance sheet contraction can lead to delays as planned.
7-8	Business growth very often exceeds internal capital generation and the sustainable growth of the main operating lines. Balance sheet contraction planned is not achieved.
9-10	Business growth normally exceeds internal capital generation and sustainable growth of the main operating lines. Inability to reduce its balance sheet and provide it stability.

Source: EthiFinance Ratings

f. Brand

The brand has been a determining factor from the beginning of the crisis until today, due to the loss of confidence in the financial system following the bailout of many financial institutions with taxpayers' money. This loss of confidence led to greater economic and financial instability in the banking system.

Therefore, a solid brand image provides visibility to the business, which reduces the likelihood of future reputational risks and generates competitive advantages over competitors in a sector where uncertainty particularly affects financial institutions (bank runs).

Brand and Reputation	
Score	Description
1-2	Brand with a very good reputation in all business lines and regions where it operates. Competitive advantages are able to maintain in the long term. Reputational risk very mitigated.
3-4	Brand with a good reputation in all business lines and regions where it operates. Competitive advantages are able to maintain in the long term. Reputational risk mitigated.
5-6	Brand with an adequate reputation in the main business lines and regions where it operates. Competitive advantages are limited to maintain in the long term. Reputational risk similar to average of sector.
7-8	Brand with a moderate reputation in the main business lines and regions where it operates. Reputational risk is high. Competitive advantages are limited to maintain in the long term. The bank operates in volatility markets.
9-10	Brand with a objectionable reputation. The bank has no competitive advantages and operates in high volatility markets. Reputational risk is very high.

Source: EthiFinance Ratings

5.3 Financial Profile

The main elements of this category are:

1. Earnings & Profitability
2. Solvency
3. Funding & Liquidity

Why is the assessment of this category important

The financial profile of a bank is a key category in the credit profile analysis because, in addition to the typical aspects of this category, it often includes the influence of the bank's environment and management.

The three elements of this category are earnings and profitability: solvency and funding and liquidity. The analysis also evaluates the stability and trend of its ratios across time, for which a historical scope of at least 3 closed exercises is required. The data considered for the evaluation is the latest available or the average of the last 3 years.

A bank that shows predictable results over the cycle and is consistent with its risk profile will have a better solvency profile, which will translate into a higher rating.

Within the solvency category, the quality of the bank's assets is also evaluated, as well as their degree of coverage or guarantees. While the bank's capital levels are based on its risk profile, the composition of capital must also be considered, as there are different levels of quality and serve different purposes (buffers and bailable obligations).

A bank's liquidity and funding structure are two key factors in its operating performance. A strong liquidity and funding position shows the stability of its liabilities, and an adequate asset-liability matching, and sound funding structure can cope with financial markets in times of crisis. A solid funding profile can translate into lower funding costs and, consequently, improved operating margins.

The main sources of information used by EthiFinance Ratings are audited financial statements together with other public information reported to the supervisor. For solicited ratings, unaudited interim financial statements (monthly, quarterly, and semi-annual) will be used. In addition, further private information such as management reports, strategic plans, and all types of institutional information for investors may be required.

The financial analysis is always adapted to the idiosyncrasies of the bank. In the case of particular characteristics, other metrics can be used besides those indicated in this methodology or, if appropriate, metrics can be adjusted for a specific case (e.g., adding foreclosed assets to the impaired loans figure).

5.3.1 Earnings & Profitability

a. Return on assets

ROA	
%	Score
≥2,5	1
≥2,00	2
≥1,00	3
≥0,55	4
≥0,45	5
≥0,30	6
≥0,15	7
≥0,10	8
≥0,00	9
<0,00	10

*Source: EthiFinance Ratings

RoA is defined as net income of the exercise divided by the average total assets of the last two years. This ratio measures the bank's ability to generate earnings from the size of its assets. Therefore, the higher RoA, the better the rating.

The RoA considers the equity and the rest of the obligations contracted. However, an excessively leveraged financial structure would have a negative impact on RoA, as it would be constrained by higher financial expenses. An efficient balance sheet structure generates RoA rates above the financial cost of its debt.

b. Return on equity

RoE is defined as net income divided by equity of the last two years. This ratio measures the profitability that the bank can generate with its own equity. The higher the RoE, the better the bank's rating, as it will have a greater capacity to generate internal capital and will be able to generate higher returns for shareholders.

ROE	
%	Score
≥12,50	1
≥10,00	2
≥8,00	3
≥6,70	4
≥5,00	5
≥3,00	6
≥1,00	7
≥0,50	8
≥0,00	9
<0,00	10

*Source: EthiFinance Ratings

However, both RoA and RoE can be affected by non-recurring items that would impact the calculation of both ratios. Therefore, these ratios should be adjusted by eliminating these items from their calculation to obtain a normalized metric (without extraordinary items). This may be the case for the RoE when the entity makes share buybacks or distributes high dividends. However, this improvement in RoE would result in an overall decrease in the bank's financial strength.

c. Cost to income

Cost to income	
%	Score
≤37,50	1
≤45,50	2
≤55,00	3
≤63,00	4
≤70,00	5
≤77,50	6
≤85,00	7
≤92,50	8
≤100,00	9
>100,00	10

*Source: EthiFinance Ratings

This ratio is defined as the operating costs divided by the operating income (understood as net interest income plus net income from other banking products). A higher cost to income ratio means a worse cost structure since the operating costs represent a higher percentage of the result.

Banking business is intensive in personnel and technology expenses, so cost control is necessary to maintain adequate margins, especially in the context of low interest rates. The efficiency ratio tries to measure this effort in costs.

However, banks sometimes make divestments to improve their efficiency, but this implies threatening their future growth (as they need certain levels of capex to maintain adequate growth). In these cases, the efficiency analysis does not consider these movements because they are compromised by divestments that may affect the bank's future business profile.

d. Pre-Imp. Operating Profit / Avg. Total assets

Pre-Imp. Operating Profit / Avg. Total Assets	
%	Score
≥1,60	1
≥1,40	2
≥1,20	3
≥0,90	4
≥0,75	5
≥0,60	6
≥0,40	7
≥0,20	8
≥0,10	9
<0,10	10

*Source: EthiFinance Ratings

The ratio measures the amount of income generated by the bank's assets before their impairment (due to poor credit quality).

This ratio considers the bank's operating income, understanding that it could still incur in provisions (in accordance with the bank's risk profile) that would reduce its net income.

e. Interest margin/Avg. Total assets

Interest Margin / Avg. Total Assets	
%	Score
≥6,00	1
≥4,00	2
≥2,50	3
≥1,50	4
≥1,00	5
≥0,50	6
≥0,00	7
≥-0,50	8
≥-1,00	9
<-1,00	10

*Source: EthiFinance Ratings

This ratio measures the recurrence of its business in terms of profitability. Net interest income includes financial income minus financial expenses, that is, it considers the profitability of its assets and the cost of its liabilities, considering that its main portfolio is represented by loans and deposits to customers.

A high interest margin implies effective management of its balance sheet structure, considering the pressures to which a bank may be subjected by the repricing or depreciation of its sensitive balance sheet, which is subject to market volatility.

5.3.2 Solvency

a. Equity/total assets

Equity / Total Assets	
%	Score
≥12,00	1
≥10,00	2
≥8,00	3
≥6,20	4
≥5,20	5
≥4,30	6
≥3,50	7
≥2,00	8
≥1,00	9
<1,00	10

*Source: EthiFinance Ratings

The ratio provides a basic measurement of the bank's equity level in relation to its asset size.

This ratio does not consider the bank's risk profile, since it does not take into account the risk-weighted assets of its investments, so it is a measure of the bank's leverage.

Considering the highly leveraged nature of the banking business, this metric can provide enough information about the leverage limits.

b. Common equity Tier 1

CET1	
%	Score
≥17,00	1
≥14,00	2
≥13,00	3
≥12,00	4
≥11,50	5
≥10,00	6
≥8,50	7
≥6,50	8
≥4,50	9
<4,50	10

*Source: EthiFinance Ratings

The CET1 ratio is a regulatory metric and, therefore, the bank is required to report it in its periodic reports to the supervisory authorities. This ratio is preferable to the equity/total assets ratio because in the numerator it considers the highest quality regulatory capital instruments (share capital, reserves and others) and excludes other types of quasi-equity instruments such as subordinated debt. The denominator is also more meaningful because it computes assets on a risk weighted basis.

c. Nonperforming loans/gross loans

Non performing loans / Gross loans	
%	Score
≤0,80	1
≤1,60	2
≤3,00	3
≤4,00	4
≤5,50	5
≤7,50	6
≤10,50	7
≤15,50	8
≤20,50	9
>20,50	10

*Source: EthiFinance Ratings

The numerator of the delinquency ratio is the amount of borrowed money on which the borrower has not made scheduled payments for at least 90 days, and the denominator is the total gross loan portfolio.

The asset quality analysis takes into account the bank's loan portfolio, since it is the core business of banks and its deterioration directly affects their results.

d. NPL/Equity + reserves

NPL / Equity + Reserves	
%	Score
≤7,00	1
≤10,00	2
≤15,00	3
≤25,00	4
≤35,00	5
≤50,00	6
≤65,00	7
≤80,00	8
≤100,00	9
>100,00	10

*Source: EthiFinance Ratings

This ratio measures the bank's loss absorption capacity against the potential losses of the nonperforming loan portfolio. The lower the ratio, the greater the bank's ability to face possible losses since it will have more equity to do so.

Available reserves are used as impairment provisions. The bank establishes provisions (either specific or generic) for its loan portfolio, without considering written-off loans.

e. Total loan loss reserves/Total problem loans

Total Loan Loss Reserves / Total problem loans	
%	Score
≥120,00	1
≥100,00	2
≥85,00	3
≥69,00	4
≥56,00	5
≥45,00	6
≥35,00	7
≥20,00	8
≥10,00	9
<10,00	10

*Source: EthiFinance Ratings

This metric is also known as the coverage ratio. It is defined as the amount of provisions for impaired loans divided by total impaired loans. The ratio can show percentages higher than 100% because the numerator considers generic provisions and not only specific ones.

This ratio reflects the bank's risk mitigation policy. Banks with more conservative profiles will have a more aggressive impairment policy, which will reduce their net income, but will have a higher coverage that will protect the portfolio from eventual defaults.

f. Off balance sheet items/total assets

Off-balance sheet items	
%	Score
≤5,00	1
≤10,00	2
≥15,00	3
≤20,00	4
≤25,00	5
≤35,00	6
≤45,00	7
≤60,00	8
≤75,00	9
>75,00	10

*Source: EthiFinance Ratings

This ratio measures the proportion of the bank's off-balance sheet positions in relation to total assets. The bank's off-balance sheet commitments include the portfolio of guarantees lent to their clients, collateral and other contingent commitments that would increase its risk exposure in the event that contingencies materialize, or funding is not available.

Low off-balance sheet positions make risk exposure more predictable and measurable, as the bank's balance sheet is more in line with the bank's risk profile.

5.3.3 Funding & Liquidity

a. Loan to deposit

Loan to deposits	
%	Score
≤70,00	1
≤85,00	2
≥100,00	3
≤110,00	4
≤120,00	5
≤140,00	6
≤155,00	7
≤170,00	8
≤185,00	9
>185,00	10

*Source: EthiFinance Ratings

This is the main ratio for measuring a bank's liquidity. The numerator is the gross loan portfolio (excluding impairment provisions, the interbank portfolio and that of the central bank - repurchase agreements). The denominator is deposits, excluding interbank and central bank positions, as is the case with the numerator.

The average levels of this ratio at the OECD level are around 110%, even though appropriate levels would be 100% or even lower. This would mean that the bank maintains sufficient funding stability, with a retail deposit base that fully finances its loan portfolio.

b. Interbank ratio

Interbank ratio	
%	Score
≥120,00	1
≥110,00	2
≥100,00	3
≥90,00	4
≥70,00	5
≥55,00	6
≥35,00	7
≥20,00	8
≥10,00	9
<10,00	10

*Source: EthiFinance Ratings

The interbank ratio measures the net position of the bank in the interbank market. The asset portfolio is placed in the numerator and the liability portfolio in the denominator. A ratio greater than 100% reflects the bank's creditor profile in the inter-bank market, while levels below that figure indicate an over-dependence on inter-bank funding, which is more volatile and, therefore, more unstable than customer deposits with greater granularity.

This ratio acts as an early indicator. In case of market stress, it would be the first position to be cancelled since these are exposures not covered by any asset protection scheme as may occur in certain jurisdictions with deposits retailers.

c. Liquidity coverage ratio

Liquidity Coverage Ratio	
%	Score
≥185,00	1
≥170,00	2
≥155,00	3
≥140,00	4
≥130,00	5
≥120,00	6
≥110,00	7
≥100,00	8
≥90,00	9
<90,00	10

*Source: EthiFinance Ratings

The LCR measures the bank's resilience to liquidity stress in the short term. It is defined as high quality liquid assets (HQLA) divided by the net cash outflows (maximum cash inflows 75% of the outflows) that the bank would have over a 30-day period.

Regulatory compliance with this ratio has been executed in a phased in calendar since 2016 (minimum of 60%) until 2019 (minimum of 100%).

HQLA must not be committed to guaranteeing liabilities. These include cash, central bank reserves, some financial assets guaranteed by sovereigns and central banks, covered bonds, sovereign bonds, corporate bonds and some securitizations, all with a minimum of credit quality and adjusted by haircuts.

d. Net stable funding ratio

Net Stable Funding Ratio	
%	Score
≥135,00	1
≥130,00	2
≥125,00	3
≥120,00	4
≥115,00	5
≥110,00	6
≥105,00	7
≥100,00	8
≥90,00	9
<90,00	10

*Source: EthiFinance Ratings

The NSFR is defined as the relationship between the available amount of stable funding (ASF) and the required amount of stable funding (RSF). It attempts to measure the stability of long-term funding over banks' long-term liabilities. To do so, a series of haircuts are applied according to each type of asset and liability product.

A ratio greater than 100% means that the bank maintains a funding capacity (greater than one year) that more than covers all asset positions that must be maintained on the balance sheet. This is intended to discourage banks from funding themselves in the short-term money markets and to encourage funding from stable sources.

6. Support

6.1 Introduction

In this section, EthiFinance Ratings evaluates the support a bank can receive from other institutions and the way in which this support fits into the bank's credit rating. Two types of support have been considered: systemic support, understood as that provided by governmental, supranational, or similar institutions, and internal support, understood as that provided by institutions related to the bank, such as its parent company or other related companies.

The support included in this section is understood from a forward-looking perspective, that is, the support that would exist if the bank needed it. Therefore, the fundamental aspects to evaluate in this type of support are the probability that it will be executed in case of need and the entity's capacity to provide this support effectively. The regulatory framework has the capacity to influence the execution of the support, mainly systemic support.

This support is conditioned by the type of regime in which the entity operates. First, jurisdictions where a resolution regime is in place and the loss absorption and recapitalization capacity of the bank are reflected by law, without relying on taxpayer money. And, secondly, those jurisdictions where systemic support is foreseeable to happen if necessary. In the first case the credit rating of the bank would not be improved from its internal assessment while in the second case it could be improved. However, any rating upgrade conditioned by internal/external support will depend on the assessment of the supporter's credit profile.

Internal support is determined by the probability and capacity of the related parent company to provide future support to the bank in case of need. Unlike systemic support, internal support is more common in all jurisdictions. This support will depend on the importance of the bank to the rest of the group at an operational level or the reputational damage that could be triggered by a stress scenario.

6.2 Types of Support

The first type is systemic support. The fundamental aspect of this support is the existence of a resolution regime that will establish whether public institutions will be able to support systemically important banks (SIB.- systemic important bank) in case of need. In this case, the rating of the bank would be improved from one to a maximum of three notches, in the most favourable of scenarios.

The second type is internal support, in which the capacity and probability of support from the related companies belonging to the group are analyzed. In this case, the starting rating is the bank's internal assessment, which could improve or deteriorate in a range of up to three notches, depending on the credit strength of the supporter and its relationship with the rated bank.

In addition, the probability of related companies providing support to the bank, the importance of the entity's activity for all the group's business lines, the existence of the same brand and its presence in similar geographic regions (cross-border risk) should also be considered.

When the rated entity is part of a large financial company (a domestic or foreign subsidiary) and has an excessive operational dependence on the parent company, the starting point of the credit rating will be that of the parent company. This assumption is considered when there is an alignment of the entity's business strategy with the parent company (importance of the entity's business line to the parent company), reputational risk and a common brand. In addition, the strength of the entity (the subsidiary) will be considered in the credit rating. In this case, depending on its financial and business profile, it may affect the final score by subtracting up to 3 notches from the rating of the parent company (from 0 to -3 notches).

6.3 Analysis of the Support

In the previous section, we describe the types of internal and external support that a bank may receive. This support is then factored-in to the Internal Assessment of the bank so as to arrive to its final Long-Term Issuer Rating. Several adjustments are applied in this process, which have already been mentioned above and are explained below.

In the case of systemic support, the dependence on the regulatory framework of the region in which the bank operates determines the bank's potential support. Therefore, the analysis of this support is based on existing regulation that affect the banking system. However, in the case of internal support, we must consider the supporter's capacity to provide such support, the probability that it will provide it in case of need, and the interconnections it has with the bank analyzed.

Regarding the ability to provide support, the credit strength of the supporter is the fundamental element for this evaluation, so its credit rating would be considered. If this rating is based on consolidated financial statements, appropriate adjustments would be made to modify our assessment of the supporter isolated from the bank receiving this support.

Assessing the probability of execution in case of need considers aspects such as the degree of control the supporter has on the bank, that is, if it is the sole shareholder, has a minority stake or is a subsidiary of the group with an indirect relationship. It is also important to know of the existence of any legal support between both entities that guarantees this support and of the strategic importance and the financial links that could exist and that would make it difficult for supporters to let their subsidiary fail.

Finally, operating in the same region or under the same brand is a link that, despite being an intangible asset difficult to assess, shows a connection between the bank analyzed and the supporter and a mechanism for transmitting reputational risks that could affect the supporter in a liquidity stress scenario (bank runs) or insolvency situations in its subsidiary.

7. Issue Rating

7.1 Overview

In this section EthiFinance Ratings determines a methodology for the credit rating of the large categories of obligations that the bank can maintain with third parties. In this regard, the creation in some jurisdictions of bank resolution regimes in which certain liability instruments are used to absorb losses should be considered when the supervisory authority declares the probability of the bank's non-viability and, after that, the relevant authority should execute the resolution if considered necessary.

These new resolution mechanisms implemented in some regions have encouraged the proliferation of certain capital instruments and loss-absorbing liabilities so that, in the event of a crisis, the bank has a loss-absorbing capacity consisting not only of its capital, but also of a minimum percentage of bailable liabilities.

In the event of liquidation or resolution, the level of risk presented by each category of liability will depend on its seniority, except for deposits under protection schemes and certain specific obligations of the bank, with the possibility of being excluded from the bail in.

Given the regulatory complexity and the differences between resolution regimes or banking assistance, a notch adjustment model is shown below to reflect the level of risk by product type, understanding this risk as the probability of not paying the specific obligation.

7.2 Framework

The rating of a specific debt issued by a bank has its starting point in the bank's LT Issuer Rating and in a second phase, analyses the seniority of the specific debt in case of resolution or liquidation of the bank. Therefore, a recovery analysis is performed considering the liquidation value of the bank against all concurring debt where value is assigned to the different debt classes in order of preference (according to seniority). From this analysis and for a specific issue a percentage of principle recovery can be calculated which will determine how many notches below or above is the issue's rating. In any case, this rating is indicative and may be modified depending on the nuances reflected in the specific issue.

Category	Notching from a Bank´s LT Internal Assesment
Obligations under BRRD that are excluded from bail in (SIB or similar)	+2 notches máx.
Wholesale deposits (no protection scheme)	Similar to senior debt: 0 o +1 notch depending on resolution framework (BRRD = 0)
Senior Debt	0 o +1 notch depending on resolution framework (BRRD = 0)
Senior non preferred debt (junior debt, bailinable)	-1 notch if applicable
Subordinated debt	up to -2 notches in those jurisdictions where the bail in of this instrument is determined (absorption of losses). In those cases where the bail in is not regulated, -2 notches from the LT Issuer Rating (more possibilities of institutional support)
Preferred shares	Tier 2. - 3 notches or more depending on specifications
Capital Instruments with Contingent Risks (CoCos)	AT1. Rating no upper than preferred shares. From -3 to -6 depending on trigger point

Source: EthiFinance Ratings

As shown in table IV, the main obligations can be grouped into seven classes, although some of them may have very different specifications (preferred shares and CoCos).

7.2.1 Obligations excluded from bail in

Among the liability positions that present lower risk are those that could be excluded from the resolution procedure or, if not excluded, could have a preferred treatment (as in the Banking Union under BRRD) and would show a lower risk than senior unsecured debt. These exclusion decisions can be motivated by reasons of systemic type (contagion to other counterparts) or derived from the operation itself (difficulties in the viability of the bank in case of including those positions in the resolution), which is why they are more common in SIB's.

7.2.2 Wholesale Deposits

The wholesale deposits (those not linked to protection schemes) are in the range of senior unsecured debt, although there is resistance in certain jurisdictions to treat both in a similar way (protection of deposits) due to the possible reputational relevance that it would have. For this reason, there are regions in which this differentiation exists and, therefore, also the possibility of rating them above the LT Issuer Assessment.

7.2.3 Senior non-preferred

The senior non-preferred debt is aimed at complying with the loss absorption capacity required for the TLAC / MREL metrics. This type of debt must meet certain requirements, such as a maturity equal to or greater than one year or comply with the assumption of losses prior to senior debt. For that reason, the credit rating would be one notch below senior debt.

7.2.4 Subordinated

Subordinated debt is identified as one whose seniority is below senior debt. Also known as junior debt, this type of obligations come in a wide variety depending on variables such as the obligation to pay interests or their capitalization in cases included in the contract.

7.2.5 Preferred Shares

Preferred shares are one of the instruments with the highest credit risk. They are shares without political rights, but with a preference for collecting dividends. If necessary, in a situation of stress, the interruption of the dividend to a preferred shareholder would be preceded by the interruption of the dividend to the ordinary shareholder. These types of instruments would have a higher risk exposure as they are among the first in the order of loss absorption. Therefore ratings of preferred shares will be three or more notches lower than the LT Issuer rating.

7.2.6 Contingent Convertibles

Hybrid instruments known as CoCos (Contingent Convertibles) have been during the financial crisis the main capital adequacy mechanism to the Basel III requirements because they are considered additional capital of level one (additional tier I). The forced conversion into capital happens under certain assumptions or contingencies linked to a minimum capital level in the context of “going concern”. In this scenario, the conversion of the debt instrument into ordinary shares would take place and the bank would exchange a creditor position for another capital position.

The negative aspect of this conversion is the adverse scenario under which it occurs, since the bank proceeds to the mandatory conversion in a situation of stress and, therefore, absorption of losses. The contingencies under which the conversion to capital happens depend on the issuance and, mainly, on the trigger that conditions it. Depending on the characteristics of the issuance, the rating of these instruments could be penalized from -3 to -6 notches relative to the LT issuer rating.

7.2.7 Final Issue Credit Rating

After taking all these factors into consideration (Qualitative and quantitative, as well as other considerations), the analysis team will proceed to determine a final Long-Term and/or Short-Term Issue Rating based on the document named "Credit Rating Scales & Definitions" published in our website.

This document updates the previous version while preserving its original methodological criteria; therefore, all existing ratings remain unchanged. In this version, the format has been updated and includes a higher level of detail.