Structured Finance Rating Methodology - SME CLOs

1. Introduction

This methodology needs to be evaluated as a whole with the document "General Structured Finance Rating Methodology" published in February 2023.

The structured finance instrument's rating, as it happens with other financial products or entities, refers to creditworthiness or solvency of instrument. The rating must be considered as a dynamic element in continuous review and predictive character because it is based on future default probabilities.

The structured finance instrument payments will depend mainly on the underlying portfolio asset's payments as well as those structural improvements designed to protect the instrument bonds payments. Therefore, the bonds' credit risk will be linked not only to the counterparty risk of the Securitization Fund's financial agents, also and especially to the collateral assets' quality and their structure.

Structured finance product's Credit rating scale: EthiFinance Ratings has a set of scales designed to determine the credit rating of an entity, using an alphanumeric system with different levels. The issued ratings range from top solvency levels to more degraded levels with the possibility of insolvency. The long-term credit rating scale and the definition of each of the rating categories can be found in the *"Credit Rating Scale & Definitions"* document that appears on the EthiFinance Ratings website.

2. Scope

The methodology described in this document applies to SME CLOs backed by granular and well diversified portfolios of loans to small and medium sized enterprises. EthiFinance Ratings (Agency indistinctly) evaluates qualitative and quantitative factors, to determine the final rating of the transaction.

The methodology applies to European SME CLOs transaction, with the application of the given assumptions based on the idiosyncrasies of the country and particular assets. If required, the methodology may be adjusted by introducing any ad-hoc variables that are determined to be essential to analyse specific risk factors of the transaction.

3. SME CLOs Assessment

3.1 Collateral

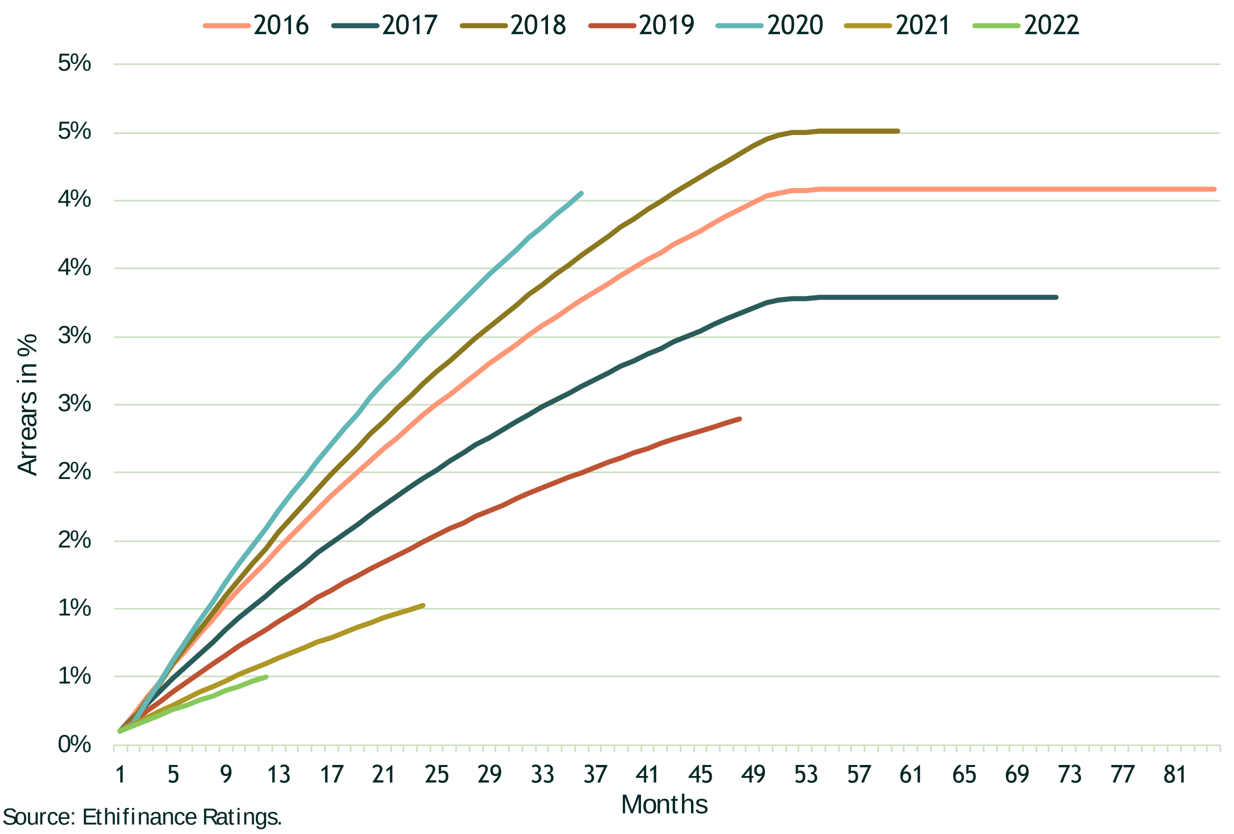
3.1.1 Historical Performance Information and Probability of Default

EthiFinance Ratings relies on the historical performance provided by the originator as a key input to determine a probability of default (PD) and to form a view regarding future performance.

Generally, the originator is expected to provide from five to ten years of historical data that is representative of the originators SME loan book data, which provides a good reference for the transaction and that covers a full economic period. The Agency will evaluate the criteria used to select the portfolio. The expected default rate may be higher than that indicated by the historical information observed, when the data supplied does not cover a period of significant stress.

EthiFinance Ratings expects to receive the historical performance information in the form of static and dynamic defaults, delinquencies, recoveries and prepayment ratios by vintage of origination/default, usually on a monthly or quarterly basis. The vintages should be broken down into different categories such as asset type, debtor type...

Historical information on recoveries by Vintages of default entries



Source: Ethifinance Ratings.

EthiFinance Ratings has a proprietary database, to complement and enrich the historical and the current information provided. EthiFinance Ratings will utilize this database and its own PD models, to estimate the debtors' PD, for back testing purposes.

In case, the information provided will be enriched with variables within EthiFinance Rating's database on a loan-by-loan basis, in cases where there are gaps in the data provided. The Agency would assume an expected one-year PD or annualised default rate for each debtor rather than to derive an expected one-year PD or annualised default rate for the underlying portfolio.

PD Calculation

PD Calculation

- Internal EthiFinance PD for SME / Corporates with similar characteristics of the portfolio. Historical data with adequate depth.

- Debtor features (self employed):
  - CNAE: National Classification of Economic Activities
  - Years of which has carried on business
  - Status on CIRBE
  - Purpose of the loan
  - Other specific factors which may affect the credit quality

- Other information for SMEs, companies or freelance on credit status:
  - Status on CIRBE
  - Loan range
  - Information on prior default of the debtor
  - Existence of loan guarantees or insurance
  - Months up to date with payments
  - Loan scoring

PD Distribution

PD Distribution

- Information arrears (+90 days in default) by vintage origination (quarterly) and breakdown of assets if necessary (i.e freelance vs corporate; specific CNAE as in real estate development and construction).

- Delinquency in originator's "population" portfolio in each moment of time.

Source: Ethifinance Ratings.

EthiFinance Ratings may from time to time use other public market information or from other transactions rated by EthiFinance Ratings as a source of information to calibrate the initial estimations.

In cases where the information provided is deemed to be insufficient, the Agency may apply a rating cap or decline to rate the transaction.

3.1.2 Loan Data Tape Analysis

EthiFinance Ratings analyses the risk characteristics may vary depending on the type of product or overall composition of the underlying portfolio. To have accurate information, EthiFinance Ratings will perform a detailed analysis of the underlying portfolio in its most relevant characteristics and segregate the portfolio into several groups which facilitates the analysis of common risks and helps to form an opinion on the credit quality of the securitized collateral.

The loan data tape analysis will allow EthiFinance Ratings to estimate the cash flows of the underlying assets as well as other relevant aspects such as debtor and industry concentration levels and variability of the loan characteristics (amortization type, interest, and principal frequency payments, weighted average interest rate, weighted average life…) amongst others.

For each loan, EthiFinance Ratings derives a proprietary industrial classification from the established NACE industry codes (Statistical Classification of Economic Activities in the European Community) in order to assess the industry concentration levels.

3.1.3 Portfolio Composition and Asset Characteristics

Once the current individual loan data and historical information have been analyzed, EthiFinance Ratings may adjust the expected default for the underlying portfolio to take into consideration variables such as the performance trends, the portfolio composition, the underwriting and servicing quality of the originator/servicer as well as macroeconomic factors.

Collateral performance is unknown and can differ significantly from expectations. The volatility of expected default rates depends on the portfolio composition.

Diversified portfolios are expected to exhibit lower volatility and default rates that are closer to the expected case. On the other hand, concentrated portfolios are expected to exhibit higher volatility of expected default rates. All these factors will be considered when modelling correlations.

Depending on if the portfolio is homogenous or not, EthiFinance Ratings will decide if the Monte-Carlo-Model or Granular Model will be used.

As described in the "General Structured Finance Methodology" in the Annex III: Granular Model and Monte-Carlo Simulation, we can see that the characteristics that will be evaluated in the Monte-Carlo Model include: the individual portfolio risk characteristics derived from the loan data tape, the weighted average life, the PD assumption based on historical and EthiFinance Rating's credit risk information and the two-correlation factor to capture concentrations in debtors and/or industries.

	AAA AAA (sf)	AA AA (sf)	A A (sf)	BBB BBB (sf)	BB BB (sf)	B B (sf)*
Correlation Intra-Industry	28% / 23%	26% / 22%	25% / 21%	22% / 18%	20% / 17%	18% / 15%
Correlation Inter-Industry	12% / 10%	11% / 9%	10% / 8%	9% / 7.5%	8% / 6.5%	6% / 5%

*Or below.
Source: Ethifinance Ratings.

As said before, the agency relies on a Monte Carlo simulation and as a result the portfolio default rate for each rating level is determined as percentiles of the loss distribution based on EthiFinance Ratings Corporate Default Rates Idealized Curve.

3.1.4 Recovery Rates

SMEs loans can be secured or unsecured depending on the guarantees which will be available in case of the debtor defaults.

This information must contain, at least:

Guarantee Information

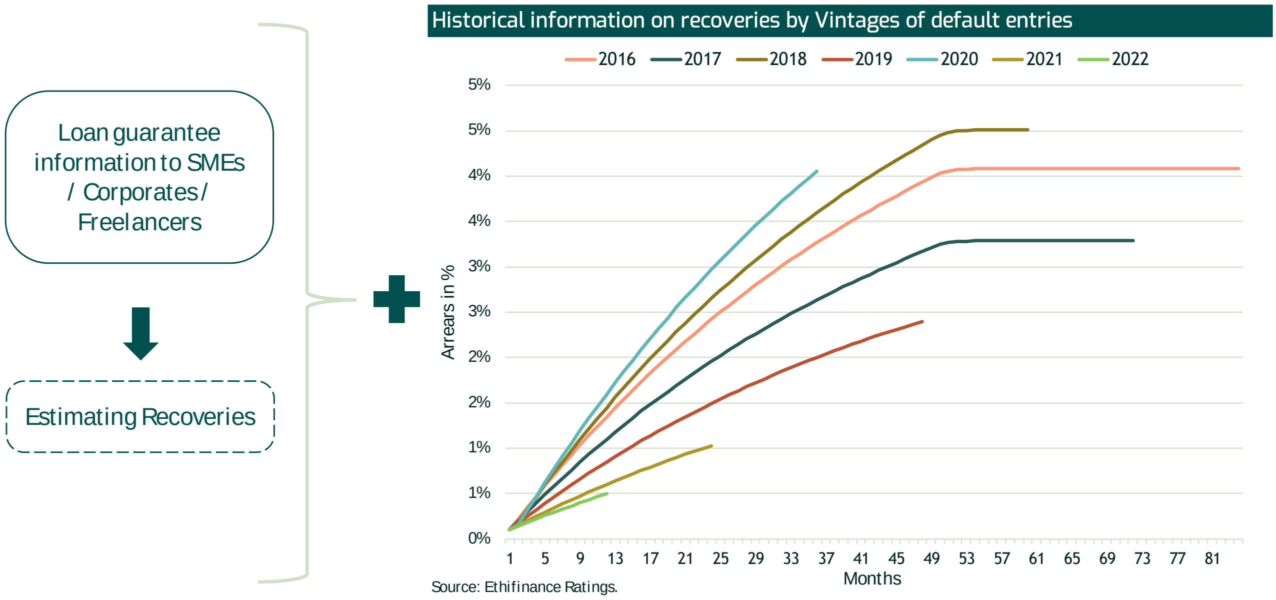
- Number of guarantors
- Guarantor / guarantee
- Guarantee type
- Initial value of the guarantee
- Current value of the guarantee
- Valuation type of the collateral
- Last valuation
- Zip code of the guarantee
- Shared guarantee?
- Construction year of the guarantee

Recoveries Distribution

- Recovery information by vintages of default entries (quarterly) and breakdown of assets if necessary (i.e., freelance vs. corporates, personal loans vs. collateralized loans, specific CNAE as in real estate development and construction).

Source: Ethifinance Ratings.

The recovery value depends on collateral types (secured, unsecured or subordinated), its seniority (first or second) and macroeconomic factors. It is estimated applying different haircuts levels for each rating level.



Source: Ethifinance Ratings.

For secured assets (residential and commercial real estate loans).

1. The appraisal value of the guarantee may be adjusted to indicate possible drops or increases based on its collateral type and geographical location. EthiFinance Ratings would rely on a published home price index within the relevant jurisdiction to estimate the expected appraisal value.
2. Legal elements across each jurisdiction that affect the foreclosure process and potential regulatory changes may have an impact on the guarantees.
3. The guarantee is adjusted to the market value decline (MVD) assumptions for each rating level to capture sales discount.

Expected recovery rate = Min (Max (Stressed value - Foreclosure costs - Prior ranking balance;0)/ Outstanding balance; 100%)

Stressed value = Appraisal value adjusted * (1-MVD)

Collateral	AAA AAA (sf)	AA AA (sf)	A A (sf)	BBB BBB (sf)	BB BB (sf)	B B (sf) or below
Market Value Decline in Residential Properties	70%	66%	60%	56%	49%	45%
Market Value Decline in Commercial Properties	80%	76%	70%	66%	59%	55%

*Source: Ethifinance Ratings.

MVD assumed for commercial properties are higher to reflect the lower liquidity, the higher price volatility, and larger average size among other factors.

For unsecured assets, the recovery rates will generally be capped at the levels shown in the table below.

Finally, the resulting recovery assumption for the portfolio will be compared to the historical recovery data from the originator with adjustments in some cases.

3.2 Cashflow and Sensitivity

This section summaries our assumptions for modelling SME CLOs transactions.

The analysis performed will focus on current portfolio information but also consider potential variations that may take place in the future composition.

In case of a revolving transaction, adding new loans can result in portfolio credit deterioration if riskier assets are added. It is expected to be partially mitigated by tight eligibility asset criteria, concentration limits and early amortization triggers. On this specific case, the Agency would assume the worst-case scenario for loans added to the portfolio.

Modelling the transaction, we aim to capture the main structural features described in the transaction documentation. Cash flow analysis reflects how principal and interest collections are allocated according to the priority of payments established throughout the life of a transaction under different stress scenarios. For this purpose, EthiFinance Ratings relies on the scheduled amortization, the default rates, the default timing distribution, the recovery rates, the recovery lag, prepayment rates and interest rates scenarios to estimate the cash flows for each rating level.

Cash flow analysis lets the Agency test the ability of the issuer to make timely interest and principal payments on the notes. Elements such as payment frequency, reference rate and structural features would be essential to determine the default risk of the notes.

For more detail consult the sections Qualitative Assessment, Quantitative Assessment and the section Review and Monitoring from the “General Structured Finance Methodology”.

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.