Advice on how to set interest rates on inter-company loans

Contents

1 Inter-company loan interest rate-setting methodology

Foreword

- This document sums up Afi's advisory service on offer to multinationals faced with setting transfer prices for loan and deposit transactions between related parties.

- These loan and deposit transactions must be performed on an arm's length basis to comply with tax regulations and prevailing related-party transaction accounting standards.

Applicable regulations

Method	• The 'comparable uncontrolled price' (CUP) method
Definition	• The CUP method "compares the price charged for property or services transferred in a transaction with a related person or entity (controlled transaction) to the price charged for property or services transferred in a comparable transaction between independent persons or entities (uncontrolled transaction) making reasonable adjustments as necessary to ensure comparability and factor in transaction-specific circumstances." (article 16 of the Consolidated Text of Spain's Corporate Income Tax Act)
Inter-company loans	• Application of the CUP method requires identifying the borrowing cost which a financial institution would apply to the borrowing entity by using the credit risk analysis techniques customarily used by the banks.
Inter-company deposits	• Use of the CUP method requires identifying the remuneration which the depositing entity would obtain on deposits made in the same currency at any deposit-taking entity unrelated to the group.

2 Description of Afi's rating model

Structure of the model

Model inputs

- Afi's model uses quantitative and qualitative inputs:
  - Quantitative: financial ratios
  - Qualitative: sector, country, age, whether or not listed, size

Analysis

- The analysis is based on historical information, using the financial statements for the last five years, albeit ascribing greater weight to more recent years.
- The process uses the key ratios which define a company's creditworthiness
- The weighting of the inputs, the definition of cutoff points and the equivalence between scores and ratings was determined to maximise the success rate compared to real samples.

Model output

- The output is a credit rating which emulates the rating agencies' scale (AAA / C) and can be directly translated into a probability of default (PD)

Model inputs

Economic analysis + Financial analysis + Qualitative analysis = Rating

Economic analysis

- Revenue growth
- EBITDA margin
- Net profit margin
- Asset turnover
- ROA
- Average collection period
- Average payment period
- Inventory turnover

Financial analysis

- Liquidity
- Financial autonomy
- Leverage
- Debt coverage
- Interest coverage
- Cash generation
- Capex requirement

Qualitative analysis

- Sector
- Age
- Geographic location
- Size
- Listed or not

Rating

IG

- AAA
- AAA-
- AA+
- AA
- AA-
- A+
- A
- A-
- BBB+
- BBB
- BBB-

HY

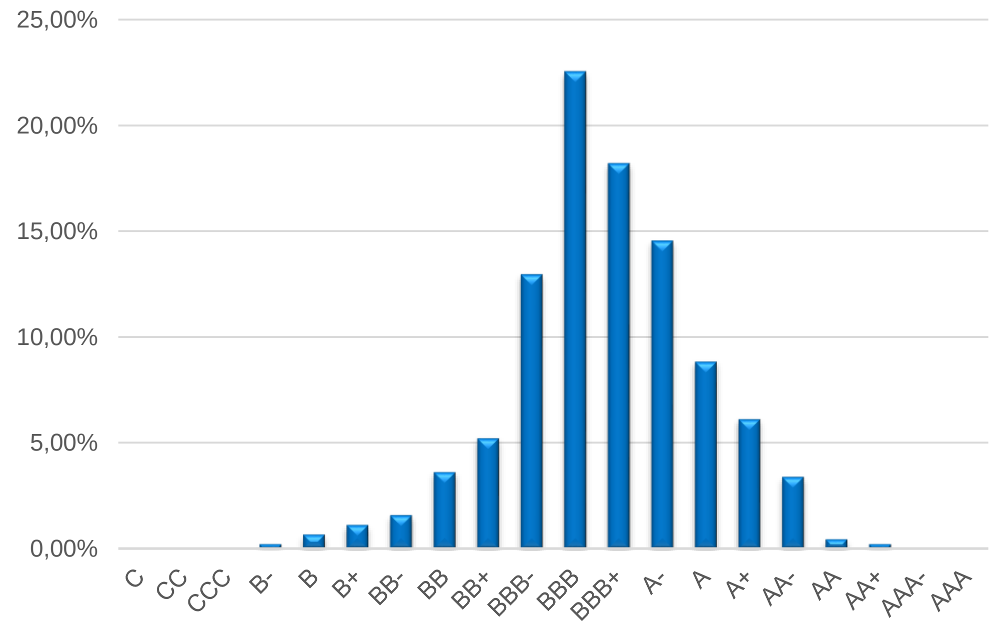
- BB+
- BB
- BB-
- B+
- B
- B-
- CCC
- CC
- C

The model is calibrated using samples of actual companies: real instances of company default + companies with public ratings

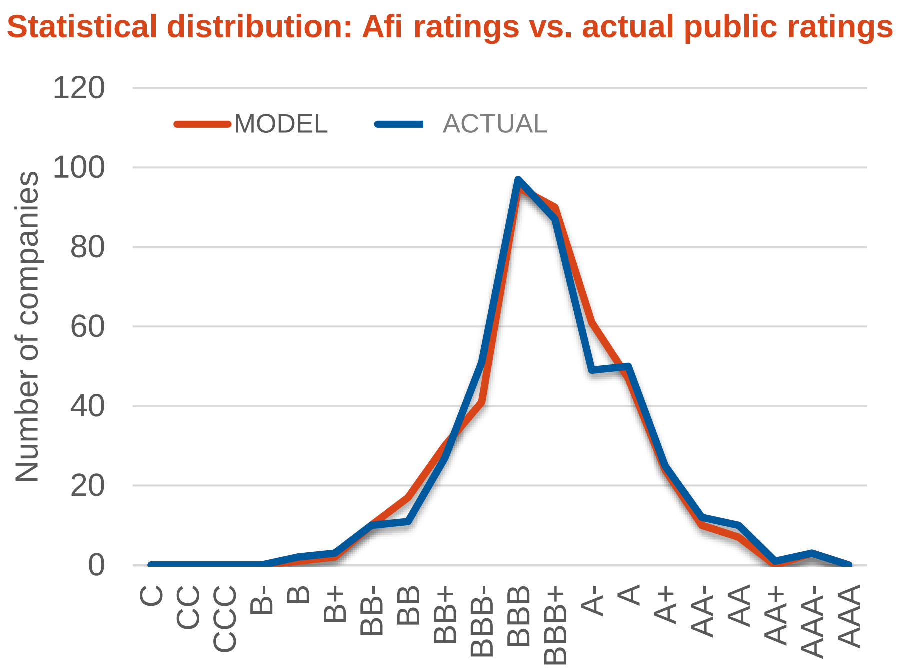
- A number of company samples were used to fine-tune the model:
  - Listed companies: over 500 EuroStoxx 600 and S&P 500 companies rated by Moody's and S&P.
  - Unlisted companies - over 500 companies between:
    - Companies with public ratings
    - Real default and non-default samples provided by the banks

- The model is recalibrated regularly to input the latest financial statements of the companies in the sample as well as rating updates.

Sample distribution by rating



Model predictability: cross-checking against public ratings



- **The results of Afi model's are distributed very similarly to the companies' actual public ratings (for Spanish and international companies)**
- **The standard deviation between Afi's model and the public ratings is just 1.6 notches**

3 Afi's advisory approach

3. Afi's advisory approach

1. Estimation of the theoretical rating applicable to subsidiaries and parent companies

2. Allocation of spread/cost to the rating outputs using market benchmarks and the company's cost of funding

3. Selection of benchmark rate for the transaction in question depending on term and currency of denomination

4. Establishment of reasonable interest rate range

1. Estimation of the theoretical ratings applicable to subsidiaries receiving loans

- The credit rating of each subsidiary will depend on three parameters
  - Country risk
  - Operating risk
  - Financial risk
- AFI's work is articulated its own shadow rating model which uses the following inputs for analytical purposes, among others:
  - Financial health
  - Financial performance
  - Borrower country risk
  - Listed or not
  - Company age
- AFI then analyses whether or not it should fine-tune the results from its model to reflect the specific characteristics of the financing transaction under analysis.

2. Allocation of spread/cost to the rating outputs using market benchmarks and the company's cost of funding

- AFI selects the debt issues it considers comparable to the terms of the loans extended by the company in terms of:
  - Issuer rating
  - Term
  - Sector
  - Geographic market
- In theory, the company's universe of comparables is assumed to be the bonds issued by non-financial corporates with equivalent ratings in the same geographic markets as the borrowing companies
- AFI will assess and substantiate the need to adjust bond trading spreads as a function of the specific terms of the company's loans, such as:
  - Term
  - Currency
  - Fixed vs. floating rate

3. Selection of benchmark rate for the transaction in question depending on term and currency of denomination

- AFI will substantiate the most appropriate benchmark rate for the issue depending on term and currency of denomination:
  - Euribor curve
  - IRS curve in multiple currencies
  - Other benchmarks

4. Establishment of reasonable interest rate range

- AFI will provide the company with the finance cost applicable to each subsidiary, defined within a reasonable range, specifically providing two reference points:
  - Total financing cost (reference for fixed-rate financing)
  - Spread with respect to the benchmark curve (floating-rate financing)

4 Contact details

Afi partners in charge of this project

Pablo Mañueco. Afi partner. Corporate Finance
pmanueco@afi.es
91 520 0102

Pablo Guijarro. Afi partner. Corporate Finance
pguijarro@afi.es
91 520 0102

Afi