

# Recovery analysis and instrument rating approach

The instrument rating of an issuer is derived from the corporate rating of this issuer. Rated entities with a corporate rating of BBB- (investment grade issuers) and above usually have senior unsecured instrument rating in line with their corporate rating. This reflects the fact that recovery rates for unsecured debt for investment grade issuers is in the 40% area. In general, instrument ratings for investment grade issuers will depend on their debt structure and jurisdiction but typically follow the same pattern which is:

- One notch higher than the corporate rating for senior secured debt
- One notch higher / lower or equal to the corporate rating for the senior unsecured debt
- One or two notches lower than the corporate rating for subordinated instrument

For entities rated BB+ and below (sub investment grade issuers), Qivalio will adopt a more tailored analysis with the instrument rating being a combination between the recovery rate and the corporate rating.

For sub investment grade issuers Qivalio performs an analysis which is based on 3 steps:

- Determining a post-restructuring enterprise value
- Estimating creditors' claims
- Distributing the value available for claims based on priority of claims

## 1 - Determining a post restructuring enterprise value

It is market practice to assess the post restructuring value of an issuer based on two different methods which are the going concern approach and liquidation approach. The post-restructuring enterprise value retained for calculating the recovery rate is the greater of the two approaches.

In most cases there is a restructuring on a going concern basis since this generally results in greater value for all stakeholders. Liquidations are only assumed if we believe the business model cannot be sustained

### 1.1 - Going concern approach

For this approach we use an EBITDA multiple approach which is based on the combination of the following two steps:

- Determining a distressed EBITDA
- Selecting a multiple reflecting the company's relative positioning within a sector. This multiple is generally based on historical multiples used for peer bankruptcy reorganizations

#### Determining a distressed EBITDA

This distressed EBITDA represents the level of EBITDA that will force the company to seek bankruptcy protection or push the company creditors to enforce their rights. It is a fixed charge proxy, the level of EBITDA under which the company cannot face its fixed obligations. This EBITDA is based on the current capital structure at the moment of default and is the sum of the following items:

- Interest expenses due in the hypothetical year of default

- Principal amortizations due in the hypothetical year of default. Amortizations are capped at 5% of the original principal and do not factor in bullet and ballooning payments due at maturity
- Minimum capex requirements to allow the company to continue as a going concern. This estimate should be relatively stable and should be below the company's ongoing capex but higher than minimum maintenance capex. If no information is available, we will generally assume that this level of capex is equal to 2% of the sales of the company.
- Qivalio has also the discretion to include in its calculation other selective cash items such as cash payments or effectively obligated to make and that are not already captured in our calculation of distressed EBITDA

### **Selection of multiples**

Multiples are taken from recent market transactions and/or historical distressed sales where available. We note however, that these data are more easily available in the US rather than in Europe. As such, Qivalio will make appropriate adjustments when needed in their analysis. As an indication the all sector mean in 6.0x

### **1.2 - Liquidation value approach**

The liquidation approach usually involves discounting the book value of balance sheet assets and summing the results. Qivalio generally applies the following discount to the following key assets:

- Account receivables: 20%
- Inventories: 50%
- PPE: 50%

These discount rates are not fixed for all companies and the analyst may deviate from these rates if he believes there is sufficient reason to do so.

## **2 - Estimating creditors' claims**

Qivalio assumes that unused portions of committed lines of RCF are fully drawn (this excludes capex lines and acquisition lines or other committed lines which need a specific corporate event in order to be drawn).

- Administrative claims: These claims are typically assumed to be up to 10% of the distressed EV. These claims include costs and expenses involved in operating and preserving the estate (wages, salaries, taxes, professional fees for lawyers...)
- Concession assumption: The value distributed to senior creditor may be reduced by a certain amount (up to 5%) distributed to junior claims in order to secure their consent for the restructuring plan
- Pension: Qivalio will typically take into account in its creditor claims pension obligations.
- Other non-debt and contingent claims: material lawsuit, environmental remediation obligations or employee claims will also be factored in our analysis depending on the level of information available

### **3 - Distribution value**

After the valuation processes are completed, the resulting post-restructuring EV is allocated to creditors according to their seniority in the waterfall.

In a number of jurisdictions, the waterfall approach is subject to country cap reflecting the creditor-friendliness of certain jurisdictions and enforceability of security in the event of a default. Instrument ratings for a given jurisdiction are subject to these caps, according to the country groupings listed in the criteria report and reflect the assumption that average recoveries are likely to be lower in regime that are debtor-friendly and / or have weak enforceability, and higher in jurisdiction that are creditor-friendly and / or have strong enforceability

### **4 - Recovery rating scale and instrument ratings**

Qivalio divides the spectrum of recovery percentages from 0% to 100% into 6 categories in order to define recovery rating and then to derive the notching of individual instrument ratings from the corporate rating of the issuer.

Some debt instruments' recovery rates will be capped (i.e. unsecured debt, contractually, subordinated debt etc.). Recovery rates are also capped by the country in which the issuer mainly operates in order to take into account the creditor-friendly (or otherwise) environment in this country.

We would like to mention that recovery rates are not intended to provide precise numerical estimates. There are several factors that we cannot capture in our recovery analysis, one being the composition of the lender pool, which we believe is outside of our scope. Concentration of the claims at a certain level of the capital structure, common ownership of claims at different levels in the capital structure, or even differing entry price of investors for the same within the same creditor class will have profound impact which are not captured by this analysis.

## Disclaimer

---



ALL INFORMATION CONTAINED IN THIS COMMUNICATION IS PROTECTED BY COPYRIGHT LAW AND NONE OF SUCH INFORMATION MAY BE COPIED, REPACKAGED, TRANSFERRED, REDISTRIBUTED OR RESOLD, OR STORED FOR SUBSEQUENT USE FOR ANY SUCH PURPOSE, IN WHOLE OR IN PART, BY ANY PERSON WITHOUT QIVALIO'S PRIOR WRITTEN CONSENT.

THIS INFORMATION IS DESTINED TO PRIVILEGED PERSONS ONLY, WHO ARE QIVALIO'S CLIENTS AND, AS SUCH, HAVE ACCEPTED AND SIGNED A CONFIDENTIALITY AGREEMENT PRIOR TO RECEIVING QIVALIO'S SERVICES. ANY UNAUTHORIZED PERSON RECEIVING THIS INFORMATION SHOULD PROMPTLY DELETE IT AND SHALL NOT, UNDER ANY CIRCUMSTANCES, MAKE ANY USE WHATSOEVER OF THIS COMMUNICATION, NOR TRANSFER IT TO ANY THIRD PERSON.

All information contained in this communication has been obtained by QIVALIO from generally accepted public sources and is believed to be accurate and reliable. QIVALIO makes no representation or warranty as to the accuracy and completeness of any such information. Under no circumstances shall QIVALIO have any liability to any person or entity for any loss or damage in whole or in part due to any error (negligent or otherwise) within or outside the control of QIVALIO or any of its directors, officers, employees or agents in connection with any such information. The credit analysis, if any, constituting part of the information contained herein, must be construed solely as statements of opinion and not statements of fact or recommendations to purchase, sell or hold any securities. Each analysis or other opinion must be considered as one factor in any investment decision made by or on behalf of any recipient of the information contained in this communication, and each user must accordingly make its own study and evaluation of each security and of each issuer and guarantor of, and each provider of credit support for, each security that it may consider purchasing, holding or selling. NO WARRANTY, EXPRESS OR IMPLIED, AS TO THE ACCURACY, TIMELINESS, COMPLETENESS OR FITNESS FOR ANY PARTICULAR PURPOSE OF ANY SUCH ANALYSIS OR OTHER OPINION OR INFORMATION IS GIVEN OR MADE BY QIVALIO IN ANY FORM WHATSOEVER.