

Valuation Insights

Methodology

WACC - Weighted Average Cost of Capital

Weighted Average Cost of Capital is a numerical estimation of the return an investor expects to achieve. It includes all the company's financial resources.

Mathematically, the formula for WACC computation is: $WACC = k_d \times (1 - t) \times \frac{D}{D+E} + k_e \times \frac{E}{D+E}$

To compute WACC, the required parameters are: 1) the cost of the company's equity, 2) the cost of debt (e.g. interest rate with which a company attracts or could attract credit facilities) and 3) the share of obtained values to reflect the industry specific capital structure.

Cost of equity

The cost of equity is the return that an investor expects to obtain in terms of holding the asset and taking the associated risks. It is an appropriate benchmark for companies operating in the financial sector, due to the specificity of the activity and the specific financial structure.

To compute the cost of equity, we applied the CAPM Model, described by the following formula:
 $Ke = [1 + ((1 + Rf) \times (1 + CRP) - 1) \times (\text{Equity beta} \times ERP)] - 1$

Market approach

The market-based approach or the relative valuation assumes that the enterprise value can be estimated by observing the value at which titles for comparable businesses change, either on the capital market or on the mergers and acquisitions market. The approach assesses the value of a company by comparing the company in question with comparable listed companies (the method of comparable listed companies).

The comparable companies analysis is based on the hypothesis that the price multiples of listed companies can be used as value indicators, being applied in the valuation of the subject company. In order to use this method properly, the listed companies used must be comparable to the company being valued. Comparable companies will not be identical to the subject of the valuation, but they must be similar enough to guide the valuation analyst during the process.

A multiple is a ratio between two financial variables. In most cases, the numerator of the multiple is either the company's price (in the case of price multiples) or the Enterprise Value (in the case of the enterprise value multiples). The value of the Company's Enterprise is usually defined as the market value of the invested capital (net debts and equity). The denominator of the multiple is an accounting parameter, such as net profit, sales of the company or the book value of equity. The multiples can be calculated from values per share (market price per share, result per share, sales per share or book value per share) or from total amounts.



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The most often used multiples computed on the basis of equity are price-to-earnings, price-to-cash flow, price-to-book value and price-to-sales. Other common multiples are based on the Enterprise Value of a company (EV), such as: EV/Sales, EV/EBITDA, EV/EBIT, EV/NOPAT, EV/Total Assets. These multiples indicate the value of a company independent of its capital structure.

The market approach is based on the application of the valuation multiples derived from the data available for publicly traded comparable companies (the method of listed comparable companies).

Applying the market approach consists of the following steps:

- Identification of the companies;
- Estimation, selection and adjustment of the multiples;
- Applying multiples on financial indicators relevant to the company

EV/EBITDA: Represents the ratio between the enterprise value and the earnings before interests, tax, depreciation and amortization. This multiple is among the most used in the valuation practice, its application generating the value of the enterprise. Thus, the use of EV/EBITDA takes into account the impact of the level of indebtedness of the company. This multiple is also relevant when comparing to foreign entities, as it eliminates the effects of local tax policies.

EV/Revenues: Represents the ratio between the value of the company and its revenues. Thus, this multiple offers a perspective on the value of the company, by relating to the income generated or estimated to be generated annually. This approach is especially suitable for companies whose profit level is not stable, normalized. Thus, revenues offer a more relevant perspective in this case, leading to the use of the multiple EV/Revenues.

P/B (Price to book value) - Market capitalization / Book value of equity: Represents the ratio between market capitalization and book value of equity. This value is in fact the amount that would revert to the shareholders in case of insolvency or bankruptcy, after the payment of all debts to third parties. However, the carrying amount does not accurately reflect intangible assets, such as human capital. As in the case of the other multiples, however, depending on the specifics of the company and the sector, the value can be interpreted differently depending on the industry in which the analyzed company operates.

PER or P/E - Market capitalization/Net Profit: Represents the ratio between the market capitalization and the company's profit. PER is one of the most used multiples in valuation. P/E measures the price an investor is willing to pay for each monetary unit the company is able to generate. On the other hand, PER can also be seen as a unit of measurement of the recovery time of invested capital.



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To consider:

- This exercise did not include a liquidity analysis or an analysis of the individual characteristics (e.g. company size, income level) of each company in the comparable companies group used. The criteria for selection take into consideration the geographical region and the industry classification, as it is presented in the database used (S&P Capital IQ).
- The established discount rates do not include specific premiums (e.g. premium for the subject company size), as this analysis is sectoral and not an individual analysis, particular to a specific company. This premium can be applied, if applicable.
- The discount rates presented are expressed in euro. To ensure comparability of the data as well as the accuracy of the calculation, they should be applied to cash flows denominated in the same currency.
- In applying multiples, it must be taken into consideration that there are no identical companies, these being differentiated by multiple individual characteristics. Thus, the approach should be applied considering this aspect and applying the necessary adjustments, if necessary. Also, when using multiples, the financial indicator of the company to which the multiple is applied is very relevant (e.g. income, EBITDA). In order to have a clear perspective and as close to reality as possible, the indicator should be a normalized one, i.e. to reflect a level that the company expects to be able to achieve constantly.