Methodology used for equity valuation and investment recommendations on covered companies

Discounted Cash Flow (DCF)

We analyse companies using five-year forecast period (explicit forecast horizon). In certain cases, when industry characteristics justify it, the explicit forecast horizon can be longer or shorter than five years mentioned above. In such cases, the analyst has to describe the reason for choosing different time horizon. For the period after the explicit forecast horizon we set a terminal value considering the company's long-term growth expectation, earnings prospects and the long-term required rate of return. Cash flows are discounted in all cases unless stated otherwise.

Discounted Dividend Model (DDM)

We use DDM when the enterprise under research pays dividend, the dividend policy is clear and the future dividend payments can be properly forecast. In this case, dividend payments are the cash flows in the model calculations, and the discount rate is the cost of equity only. DDM can be used on condition that the company has a recorded dividend history, no changes are expected in future dividend payment and the amount of dividend depends on the company's earnings.

Sum-of-the-parts Valuation (STP)

If a company has different, individual parts, the analyst can value these segments of the firm one-by-one and add them up to determine the value for the company as a whole. In this case, financial modelling and valuation happens separately in terms of different segments. When adding up the value of the individual parts, it is reasonable to adjust the total company value with whole company net debt, non-operating assets and liabilities and expenses.

Multiples Approach (Relative Valuation)

The theoretic background behind the multiples approach is the idea that similar assets sell at similar prices ('one price theory'). This approach supposes that companies operating in the same industry have similar firm-specific variables. That is, if the companies are comparable within the peer group then the value of one firm can be determined based on the value of another. The multiples approach seeks to capture many of a firm's financial and operating characteristics in a single number that can be multiplied by a financial variable to yield an enterprise (equity) value. The multiples approach can be used on condition that a well-defined peer-group exists. We basically use EV/EBITDA, P/BV, P/E and P/S, but other industry specific measures can also be appropriate.

Discount rate, calculation, sensitivity and weighting

When calculating company value, the use of WACC or the cost of equity is appropriate depending on the industry and the company's indebtedness. For the cost of equity, we use the CAPM model, and we calculate with our own forecasts in terms of future risk-free rates[1]. For equity risk premium, a beta based on historical returns would be employed. If the analyst differs from this, an explanation has to be provided in the research paper. We calculate with an actual 4.7% equity risk premium. In case of small-caps, we think the use of a 3% small company discount is appropriate.

[1] *If not, it must be specified in the research paper.*

The sensitivity analysis regarding factors that could affect the valuation significantly is also part of our Equity Research product on earnings revision. The sensitivity analysis reflects how the changes in different factors (e.g. discount rate, beta, growth rate) would modify the firm's value.

We may combine the valuation methods detailed above and set the target prices by applying weighted average valuation. In that case, all weights are assigned to the different valuation methods and if it is not obvious, the reason for the weights must be explained.

Frequency of the equity research updates

We set our target price on a 12-month basis (if not, it must be explained), ex-dividend, while our investment recommendation considers the total return. We revise our recommendations and the target prices on a quarterly basis, the regular quarterly revisions are linked to the companies' quarterly earnings reports. We also put the target price and the recommendation under revision if new information emerges that could impact the company's valuation materially.

Investment recommendations from January 1, 2018

Rating	Trigger
BUY	Total return is expected to exceed 10% in the next 12 months.
HOLD	Total return is expected to be in the range of 0–10% in the next 12 months.
SELL	Total return is expected to be lower than 0% in the next 12 months.
Under Revision	New information may change the valuation significantly, and the new research report may take more time