

EQUITY IN A



An introduction to valuation

Introduction:

Equity investment or divestment decisions are based partially on expected future share price increases (or depreciation). For this purpose, an opinion has to be established regarding the expected value of a given issuer. The valuation of an issuer is therefore relatively important, which is why we have set out the following description, focusing on the two main methods used: comparable ratios and discounted cash-flow analysis.

Valuation using the comparable ratios method ...

One of the most widely-used approaches by investors is the comparable ratios method. This method aims to value a given company by observing the market ratios of its so-called comparable peers. Business activities are generally used as a comparison, although the analysis can be fine-tuned by focusing on a narrower sample of companies within the same geographic region or those of similar size (in terms of sales, earnings, market capitalisation, etc.). One of the major difficulties associated with this method is the necessity to select a calculation sample which is broad enough, whilst remaining directly comparable to the company being valued.

Once the sample of comparable companies has been selected, the most pertinent ratios are chosen to value the company in question. These ratios can be complementary and may concern the current financial year (for example 2013) and also the following year (2014) in order to take trends into account. The most widely-used ratios are:

- sales multiples: this ratio (enterprise value compared to sales) particularly enables the valuation of a company brand or franchise;

- Earnings Before Interests Taxes Depreciations and Amortizations (EBITDA) or operational earnings multiples: these ratios gauge the number of times (compared to enterprise value) operational earnings are valued, i.e. before financial elements, taxes, exceptional items, etc.

- price earnings ratio: this ratio commonly referred to as P/E or PER compares net earnings for the year with market capitalisation.

Of course, the pertinence of these ratios depends on the business sector of the company being assessed. Furthermore, certain business sectors require the selection of specific ratios (EBITDAR offsetting the renting impacts, « REVPAR » or Revenue per Room for hotels).

Whichever ratio is used, the denominator is completely (market capitalisation) or mainly (enterprise value*) observable in the markets. On the other hand, the numerator (sales, operating or net earnings) is estimated, based on consensus data (available from specialist financial data providers) drawn from forecasts by the financial analysts covering the stock.

Once these ratios have been calculated, it may be necessary to fine-tune the ratios obtained, for example by excluding extreme values (the highest and/or lowest ratio in the sample) or selecting the sample's median value rather than the average.

... or comparable transactions

We have so far focused only on the comparable ratios method and have therefore excluded the so-called "comparable transactions" method which is based on the same logic as the comparable ratios method, but selects a sample based on comparable public or private transactions. This method can also be used, but is more complex to put in place, primarily on account of the difficulty in obtaining information regarding the transactions in question.

... these methods are compelling but not flawless

As can be observed in each of the stages outlined above, this method involves a number of choices: sample selection; choice of the ratio used; choice of data to be excluded, ... Therefore each stage harbours potential biases which may impact the final valuation and therefore weigh on the decision to buy or sell a stock.

* Enterprise value: market capitalisation adjusted for net debt and the value of stakes and minority interests.

More fundamentally, earnings figures frequently enhance (voluntarily or not) the numbers used to calculate the ratios (see our February 2013 publication: "How to read earnings' publications"). A write-back of provisions for example, will inflate net earnings and therefore improve the value of the company according to the price earnings ratio method (PER).

Finally, and in more fundamental terms, this method is based on the initial assumption that the company to be valued is priced inaccurately, whereas the market is pricing its peers correctly. Thus company A appears over/under-valued by investors (inefficient market) whereas the comparable companies B,C and D are presumably being perfectly valued by the same investors (efficient market)! Moreover, this relative valuation methodology has favoured the emergence of bubble or krach.

The Discounted Cash Flows method or DCF ...

This method aims to value a company on the basis of the free cash flow that it will be able to generate in the future. Estimated cash flows are then discounted to present value by using a discount rate.

The first stage aims to estimate "free" cash flow which corresponds to cash generated by business activity that is not allocated to investments (new assets) or to debt repayments. For valuation purposes, cash flow before financial charges is taken into account as the financial structure is reflected by the discount rate (see below).

Hypotheses regarding all aspects of company data for the forthcoming 3, 5 or 10 years are established to estimate free cash flow. Estimations primarily included projected sales growth, operating earnings forecasts, tax rates, operational financial requirements (working capital requirements or WCR) and future investments.

Next, in order to estimate the present value of the company in question, the identified cash flows need to be discounted to present value. Cash flow of EUR 100 million generated in 5 years does not have the same value as cash flow of EUR 100 million generated today.

There is a certain degree of doubt as to whether the projected 100 million of cash flow over 5 years will actually be generated. We effectively attribute a lower value to 5-year cash flow on account of the fact that if it had been available today, we would have benefitted from the EUR 100 million of cash flow by reinvesting in the company, or by investing in the market for a return determined by the degree of risk incurred.

The risk of future cash flow not being realised therefore has to be reflected. To reflect this risk, cash flow is discounted in order to determine present value which, in all cases, will necessarily be lower. The discount rate applied to estimate present value of future cash flow is therefore one of the key questions concerning valuation by this method. The standard method used is the Weighted Average Cost of Capital (WACC) method which consists of estimating the cost of financing required to generate cash flows.

The discount rate is composed of: - the cost of shareholders' equity (on a pro rata basis as a proportion of total financing) determined using risk-free rates (government bonds) incremented by the risk premium required by investors for equity investments and multiplied by a specific volatility coefficient (beta) applied to the company. This rate is currently estimated at between 8% and 12% in Europe for example;

- borrowing costs applied to the company (also on a pro rata basis as a proportion of total financing) before taxes, reflecting the cost for the company to raise debt at the time of the valuation.

Once cash flow has been established and discounted over the next few years, perpetual (or terminal) cash flow is then estimated which will define terminal value. Terminal value will then be added to near-term cash flow (3 or 5 years in our example). Terminal value is based on 3rd or 5th year cash flow plus a perpetual growth rate (usually close to the inflation rate) and discounted in the same way as other cash flows. Establishing the perpetual growth rate is a key issue as this rate influences terminal value.

The final stage, once enterprise value has been established, is to value shareholders' equity, primarily by adjusting for net debt and shareholdings (owned by the issuer in other companies) or minority interests (owned by other companies in the issuer's capital).

... needs to avoid the "Tell me how much you need" approach

The discounted cash flows method appears relatively precise as it involves complex calculations. There are a number of potential pitfalls however, regarding the forecasts and assumptions to be made.

The main difficulty clearly resides in the preponderance of terminal value, as it is determined primarily by the perpetual growth rate which is difficult to ascertain. Terminal value is highly important as it represents around 50% of enterprise value, as determined by this method, when using 10-year near-term cash flows. Terminal value is frequently based on longer-dated cash flows and is therefore particularly uncertain. A more reliable terminal value is based on very near-term cash flow (e.g. 3 years) but in this case, its weighting increases. A balance between cash-flow visibility and terminal value weighting therefore has to be established.

Two methods to estimate fundamental value

Although these methods are based completely or partially on market data (comparable valuations, risk-free rates, market risk premium), they provide a "fundamental" valuation of the company. This valuation may of course differ from current stock market value or the expected valuation for the issuer (examples of premiums or discounts).

Conclusion

It is important to understand the logic applied by professional investors in terms of valuation.

Two major methods have been developed: comparable ratios, which can be calculated relatively rapidly, and the discounted cash flows method which involves more complex calculations without necessarily being more precise.

As the drawbacks associated with each of these methods are not the same, a multi-criteria approach is recommended to estimate the value of a company.