

EQUITY IN A



Financial statements unravelled

A balance sheet is a financial snapshot of what a company owns and how these assets are financed, i.e., its liabilities. 'Assets equal liabilities' is a basic and universal rule of accounting. Just like the profit and loss account, the balance sheet shows static data, i.e., the result of any set of accounting rules, or more simply, a company's situation at any particular moment in time.

The cash flow statement, by contrast, is more dynamic as it gives insights into money flows and explains the difference in cash balances from a period to another. It is only by combining the balance sheet and the profit and loss data with the cash flows that things become really interesting for the management, board, shareholders and all other stakeholders.

On the asset side of the balance sheet, we find a breakdown of current and non-current assets. Current assets belong to a company for a short period of time and this category is further classified into inventories, receivables, marketable securities or current financial assets, and cash and cash equivalents. Non-current or fixed assets are a company's long-term possessions, i.e. its property, land and equipment, non-current financial assets (participation in other companies bought with a long-term perspective) and its intangible assets (goodwill,

intellectual rights, and capitalised R&D expenses).

Total assets do not indicate what a company is worth as fixed assets gradually depreciate, as the true value of intangible assets is debatable, and as the value of non-current financial assets does not necessarily reflect the stakes' market value.

Liabilities are broken down into equity and debt, the two ways of financing. Equity is the sum of the funds that shareholders inject in the company during its foundation and through subsequent capital rounds, plus the profits that were not distributed as dividends. If a company is loss-making, the loss is deducted from equity. Hence, book value per share (equity divided by the number of shares outstanding) is neither the minimum nor the maximum value of a stock.

Firstly, the evolution of a company's equity (and thus book value per share) depends on future net results (which are impacted by depreciation) and its dividend policy. Moreover, even if a company is expected to remain profitable in the foreseeable future, its shares can (and will) trade below book value if its return on equity (ROE = profit/equity) is below its cost of equity. While equity does not imply any periodic compensation, it does have a cost. What's more, the cost of equity is higher than the cost of debt.

This brings us to debt, the second building block of the liability side of the balance sheet. Balance sheet debt can take two forms, i.e., interest-bearing and non-interest-bearing debt. Interest-bearing debt is composed of bank debts and bonds, involving periodic payment of interest and thus leading to a cash outflow. Non-interest-bearing debt, on the other hand, mainly includes trade payables and pensions and provisions, but it does not require interest payments and hence does not induce a cash outflow.

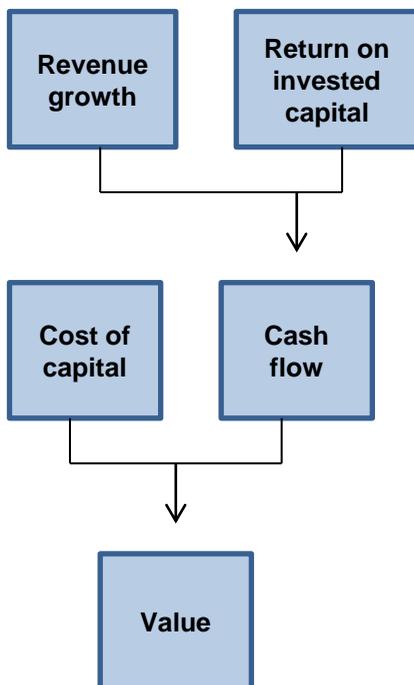
Again, while interest-bearing debt comes at a cost, the non-existence of obligatory cash outflow does not imply that non-interest-bearing debt has no cost. A company often has the choice of paying immediately for the goods or services it receives and getting a small discount, or to settle the invoice within a fixed time frame. Hence, opting for trade credit comes at a cost, which is easily calculable.

Another way of breaking down debt is by looking at its maturity. By analogy with assets, debts with a maturity of less than one year are called current liabilities, while those maturing after a year are known as non-current liabilities. This breakdown provides an insight into what cash flow will need to be generated to cover the debt (both interest- and non-interest-bearing) that will be due in the next 12 months.

In valuing companies by using the discounted cash-flow model, next to accurately forecasting the future cash flows, it is of utmost importance to determine the cost of capital at which the forecasted cash flows are to be discounted. In brief, the discount factor is the weighted average of the cost of equity and the company's cost of debt, i.e., its weighted average cost of capital (WACC). A company can create value only if its return on invested capital (ROIC) exceeds its WACC.

McKinsey's "Valuation, Measuring and Managing the Value of Companies" summarises this as follows: "The guiding principle of value creation is that companies create value by investing capital they raise from investors to generate future cash flows at rates of return exceeding the cost of capital (the rate investors require to be paid for the use of their capital). The faster companies can increase their revenues and deploy more capital at attractive rates of return, the more value they create. The combination of growth and return on invested capital (ROIC) relative to its cost is what drives value."

Growth and ROIC Drive Value



Free cash flow (FCF), ROIC, cost of equity, cost of debt, and WACC are not readily available in most companies' annual reports. To get these figures, the financial statements, which mix operating and non-operating performance and capital structure, have to be reworked thoroughly. As this involves a lot of searching, separating and putting things together in another way, it should be done with the greatest attention, because as per McKinsey, "although this task seems mundane, it is crucial for avoiding the common traps of double-counting, omitting cash flows, or hiding leverage that artificially boosts reported performance." This article however limits itself to defining concepts using the cited McKinsey publication as reference.

FCF can be defined as the after-tax operating income generated by the company's invested capital, available to all investors (net operating profit less adjusted taxes or NOPLAT), from which net investments are subtracted. Invested capital is the capital needed to fund operations, and hence can be defined as the sum of fixed assets and working capital. ROIC then is NOPLAT divided by invested capital. As stated before, a company will create value only if its ROIC exceeds its WACC, which is the appropriate rate for discounting estimated future cash flows. According to McKinsey, "the cost of capital is the price charged by investors for bearing the risk that the company's future cash flows may differ from what they anticipate when they make the investment. The cost of capital to a company equals the minimum return that investors expect to earn from investing in the company."

Because of its fundamental characteristics, equity is riskier than debt, and hence the return required by investors on it is higher than that for debt. The cost of equity consists of three factors: (1) the risk-free rate, (2) the market risk premium and (3) the company risk premium. There are quite a few models to compute the cost of equity, of which the capital asset pricing model (CAPM) is the most widely used one. The CAPM postulates that the cost of debt (or the required/expected return) for any given equity is the risk-free rate plus the security's beta (measure for a stock's volatility relative to the market's) times the market risk premium.

Despite the apparent complexity of the formula and the plethora of equities, the average cost of equity for a large non-financial company will hover at ~9%, with most large companies' cost of equity falling in the 8–10% range. The yield of government bonds with the longest maturity and with the highest possible liquidity can be considered as a good proxy for the risk-free rate.

Using the coupon rate as the cost of debt is tempting but can be meaningful only if the bond trades at or near its par value. The right approximation for a company's cost of debt is the yield to maturity for its different series of debt. And this is quite a challenge. For quoted bonds for which there is a liquid market, the yield to maturity is relatively easy to find. Things become a bit harder for short-term bonds that have no regular market, and one needs to resort to using the yield to maturity of a portfolio of long-term bonds with the same credit rating. It gets even more difficult for bank loans, for which one is obliged to use the best available proxy. As interest payments on debt are tax-deductible, the just estimated cost of debt has to be multiplied by 1 minus the tax rate to arrive at the after-tax cost of debt.

Blending the fair estimates for the current cost of equity and after-tax cost of debt results in the WACC. This is easy to do in theory as all it needs is for one to calculate the equity and debt to enterprise value and use these for computing the weighted average of the cost of equity and after-tax cost of debt. In practice however it is difficult to arrive at. As with the calculation of the cost of equity and cost of debt, weightings need to be determined on market values and preferably on the company's target capital structure. Although some data may be readily available, one generally winds up relying on estimates, and at times, even seeking inputs from the company in question.

Source: "Valuation, Measuring and managing the value of companies." McKinsey.