# FCFF from operating income

Highlighted equation



two-stage procedure, the form of which, according to both Damodaran (2006) and Mařík et al. (2018) is as follows:

$$EV = \sum_{t=1}^{T} \frac{FCFF_t}{(1 + WACC)^t} + \frac{TV}{(1 + WACC)^T} \quad (1)$$

where "EV" represents enterprise value, "FCFF" free cash flow to the firm, "TV" terminal value, "WACC" weighted average cost of capital, "$T$" represents the length of the first phase, and "$t$" represents the sequential number of years from the valuation date.

The above implies the necessity of determining the variable TV, i.e. the terminal value. The method of calculation is given below under the subsection Terminal Value.

Once the present value of the first and second phase is established, the enterprise value is calculated. Equity value can then be determined by reducing the enterprise value by interest-bearing and non-operating debt and increasing it by non-operating assets, all as of the valuation date. The length of the first phase will be set at 10 years due to the application of the Wenger approach to the determination of the risk-free rate (see chapter 3.3).

### 3.2.1 Free Cash Flow Calculation (FCFF)

The above procedure implies the need to determine the free cash flow at the level of the whole enterprise (FCFF). This free cash flow is normally calculated according to the following formula:

$$FCFF = EBIT \times (1 - d) + DA - I - \Delta WC \quad (2)$$

where "EBIT" represents earnings before interest expense and tax, "$d$" represents the corporate tax rate, "DA" represents depreciation and amortization, "$I$" represents investment in operating fixed assets and "ΔWC" represents the change in working capital.

The above general approach is in line with Damodaran (2006). Mařík et al. (2018) further adjust EBIT by excluding non-operating income and expenses as well as non-recurring items[3] (e.g. non-recurring sales of fixed assets or materials, insurance refunds, litigation compensation, etc.) and referring to it as adjusted operating profit. This designation is not used by Damodaran (2006), but the procedure is not inconsistent with what he recommends, so this article will also make

3 Non-recurring items are included in the FCFF only if there is a serious indication that they will occur in the future. If these items have occurred at some point in history without justification that they will occur in the future, they will not be planned.

**Relative Valuation of Private Held Companies: Valuation Multiples in the Czech Brewing Industry**
Michal Drábek, 2022. Journal of Business Valuation and Economic Loss Analysis, 17(1). Printed page 70, equation (2).
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