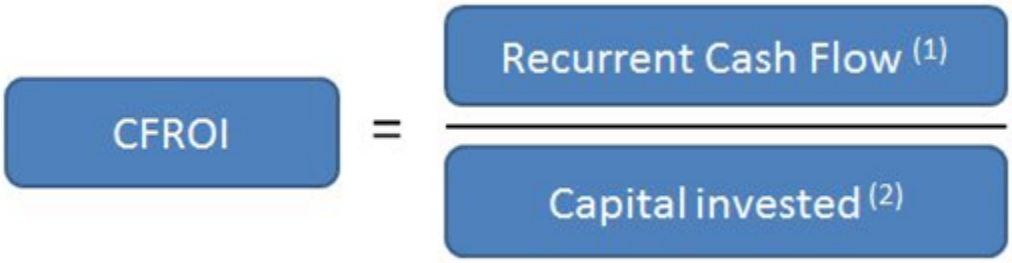
S07.05-CFROI

Cash Flow Return On Investments (CFROI)

A recent performance indicator to measure the capital profitability and therefore measures the Value Creation, whereas

- **Underlying EBITDA** and **Cash Flow** indicators do not take into account the capital invested
- The RCE (Return of Capital Employed) is based on the net assets value and favor businesses having highly depreciated assets

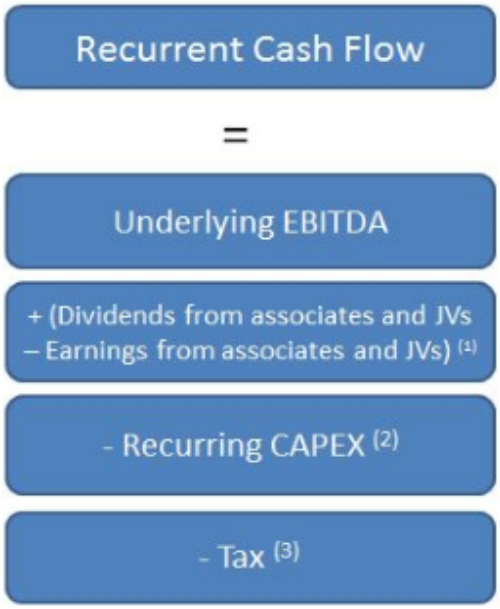
Formula



(1) **Recurrent cash flow** of the business if no growth and no deterioration

(2) **Capital invested** as a full replacement value, including Working Capital

Numerator:



(1) The "**Earnings from associates and JVs**" are removed from Underlying EBITDA as these are non-cash items

(2) **Recurring CAPEX** are normalized at 2.3% of the replacement value of assets for all GBUs, i.e.: maintenance CAPEX = 2.3% x (gross tangible + intangible assets).

The 2.3% are also a rule-of-thumb in the Industry.

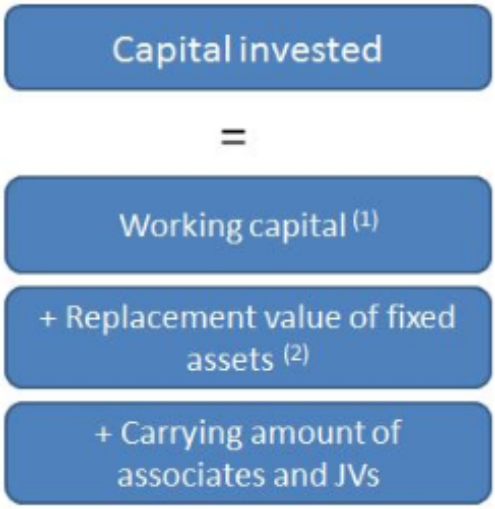
> Recurring CAPEX are the maintenance Capital Expenditures necessary to keep existing assets running (= the minimum to keep the level of Underlying EBITDA).

(3) **Tax** is normalized at 28% for all GBUs (30% until 2018), i.e. 28% x (Underlying EBIT - Equity JV earnings).

> Tax rate based on Solvay expected tax rate
>
> Underlying EBIT **less** earnings from associates and joint ventures, as equity earnings already include tax charges

The values of recurring CAPEX and Tax are not directly extracted from the financial statements.

Denominator:



(1) Working Capital (WC):

Annual average value = 0,25 x (Q1 + Q2 + Q3 + Q4)

WC at Group level = Inventories + Trade and Other receivables (including customer prepayments) + Trade and Other payables (including advance payments)

WC at GBU level = Inventories + Trade receivables + Other receivables + Trade payables + Other payables

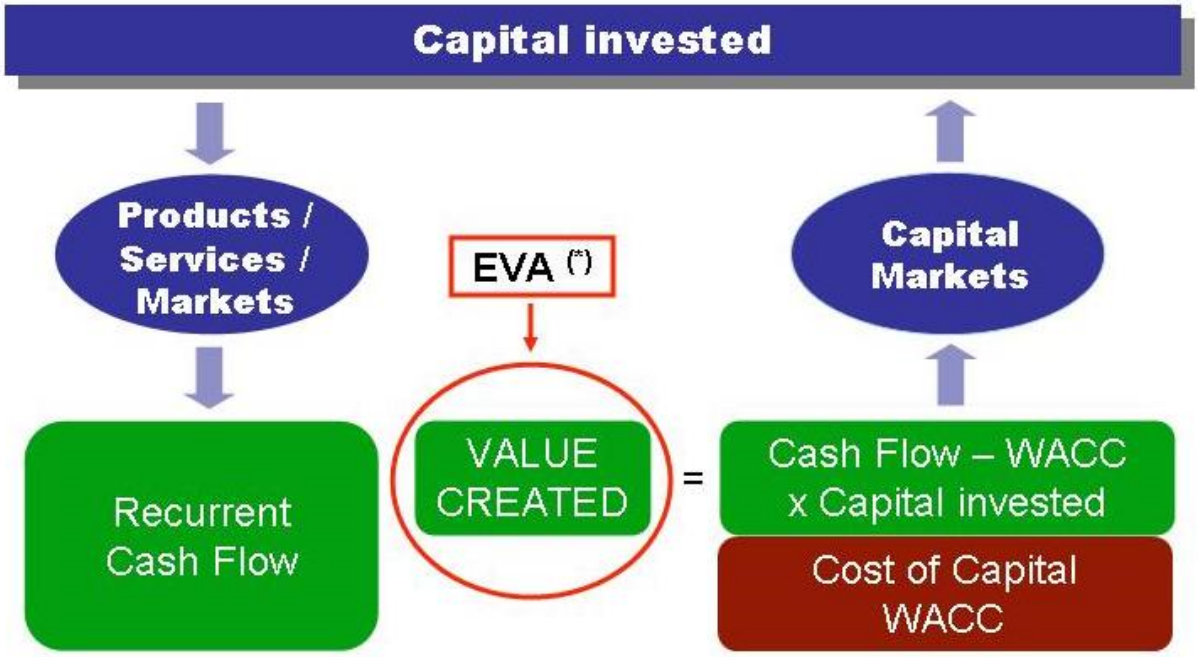
(2) Replacement value of fixed assets = gross tangible and intangible assets as a proxy to replacement value

Goodwill is excluded

In the absence of replacement value, take the gross value

The values of replacement value of assets are not directly extracted from the financial statements.

Financial dimensions of Value Creation



(*) EVA = **E**conomic **V**alue **A**dded (or created)

See EVA indicator.

Also see point related to CFROI versus EVA

WACC = **W**eighted **A**verage **C**ost of **C**apital:

Broadly speaking, a company's assets are financed by either debt or equity. WACC is the average of the costs of these sources of financing, each of which is weighted by its respective use in the given situation. By taking a weighted average, we can see how much interest the company has to pay for what it finances.

WACC is often used to determine the economic feasibility of expansionary opportunities and mergers. It is the appropriate discount rate to use for cash flows.

Economic interpretation of CFROI

CFROI is to be compared to WACC: **Everything ABOVE WACC is Value Creation**

CFROI is equivalent to the **IRR (Internal Rate of Return)** of an existing business; IRR being the discount rate bringing the Net Present Value to zero.