Practical definition of EVA in controlling

Usually companies do not really need all the complicated adjustments to EVA which originally belong to the consept created by Stern Stewart & Co

EVA should be simplified to a degree where it is easily explained to employees and easily calculated in daily reporting as long as it does not cause any steering failures

Following slides (slide 4...) present how EVA can be defined in practical controlling and reporting (the following two slides (2,3) are only to remind the basic procedure of calculating EVA)

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The calculation of company´s cost of capital

Cost of debt = risk-free rate + company risk premium

Cost of equity (risk-free rate + about 6% equity risk premium)

- The equity risk premium is adjusted with the company´s risk level
- The risk level of a company depends on the business risk (business field) and on the financial risk (solvency)

A company´s cost of capital is calculated as a weighted average of the above costs of equity and debt.

- The cost of capital is calculated with the target solvency ratio (The cost of capital can not be decreased simply by increasing leverage since increasing leverage increases the risk (and cost) of both equity and debt.)
- Debt cost includes tax shield (1-tax rate) since interest on debt can be deducted from the taxable revenues

EXAMPLE:

- Cost of debt: 5,2% + 1% = 6,2% (in the long run)
- Cost of equity: 5,2% + 1,2 * 6% = 12,5%
- Weighted average cost of capital (WACC): 6,2% * 55% * (1-tax rate) + 12,5% * 45% = **9%**

The calculation of EVA

EVA is company´s operating profit (after taxes) subtracted with the total cost of capital

		=> minus Taxes =>
Net operating profit after taxes	**Operat. Profit 255 MFIM**	**184 MFIM**
-	**-**	**-**
Cost of capital	**9 % WACC x 1190 MFIM invested capital**	**104 MFIM**
=	**=**	**=**
EVA		**80 MFIM**

OR alternatively:

EVA = (ROI - WACC) x Invested capital

(15,5% - 9,0%) x 1190 MFIM = 80 MFIM

Practice: The capital base in calculating EVA

From the assets side all the items tie capital and thus all the items should have a cost of WACC

- Thus no asset item should be excluded e.g. because SBU managers can not affect them
- It is important that all the assets are treated similarly i.e. all the assets have equal cost (WACC) no matter what their nature is (working capital, fixed assets etc.)

However, the capital costs are not as big as WACC times total assets since company has also non-interest-bearing debt which do not have any capital costs

- These non-interest-bearing liabilities should be credited with a revenue item since they provide the company with capital which would otherwise have to be acquired from the alternative sources. Thus these items (accounts payable, deferred liabilities) should be credited with WACC
  - (if we want to be very precise then the crediting should be only on the level of debt cost since non-interest bearing liabilities are debt and increasing them must (in extreme) mean also increasing equity i.e. you can not finance all the operations with non-interest bearing liabilities)

Practice: Income statement

EVA calculation begins with Operating profit which is deducted with taxes and capital costs in order to get EVA

- Financial incomes can be added to Operating profit since they are part of normal operations (and besides cash and bank are with when capital costs are defined) but usually financial incomes are so small in industrial companies that they can be left out
- Taxes are calculated simply: Operating profit x tax rate
  - Taxes are of course not normally so high because of interest on debt and because of reserves or exeecss depreciation but these things are taken into account elsewhere (tax shield of interest rates are taken into account in calculating WACC and taxes on reserves etc. can be considered as non-interest bearing debt which do not have any capital costs)

Practice: Way of presenting capital costs in internal income statement (monthly report)

Capital costs from different sources are practical to present separately so that everyone can see the effects of different things

The capital cost can be divided e.g. in a following manner:

- Costs of sales receivables
- Costs of material inventories and WIP
- Costs of finished goods inventory
- Costs of fixed assets
- Costs of other capital items
- Credit from non-interest-bearing liabilities (+)

Of course the breakdown of capital costs changes from company to company since not all items are important in all companies

Practice: Operative (internal reporting) with and without EVA

Internal monthly profit report might look like this:

Without EVA:

Turnover	1000	
- variable costs		400
Gross margin	600	
- fixed costs		200
Net margin	400	
-depreciation		100
Operating Profit	**300**	

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Key ratios:

Return on capital employed 30%

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With EVA:

Turnover	1000	
- variable costs		400
Gross margin	600	
- fixed costs		200
Net margin	400	
-depreciation		100
Operating Profit	300	
- taxes from OP		100
Net operating profit after taxes	200	
-Costs of working capital		50
-Costs of fixed assets		75
+Credit of non-interest bearing debt		+25
EVA	**100**	