

Company Valuation Mastercourse

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EVA, MVA and CFROI

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Hugh J Osburn

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Economic Value Added (EVA) and Market Value Added (MVA)

- MVA = Market Value – Capital Invested
- EVA = $(r - c^*) \times \text{Capital}$
 - r = return on capital
 - c^* = overall cost of capital (i.e. WACC)
- MVA = NPV of all future EVA generated
 - A projection of EVA implicitly subtracts the cost of capital, in place and of the capital to be raised in the future, from the firm's forecast operating profits

Economic Value Added (EVA) and Market Value Added (MVA)

- The Excel template was prepared by John Richardson, Cornhill Consultants (10/2001)
- It facilitates calculation of the EVA, by year, using historical accounts, based on:
 - **Capital Invested**, net of Depreciation & Amortization, plus capitalized R&D and PV of Operating Leases, less Non-Interest bearing Current Liabilities
 - Net Operating Profits after Tax (NOPAT)
- A worksheet for forecasting EVAs into the future gives the company's MVA

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Economic Value Added (EVA) and Market Value Added (MVA)

- The Excel template has complex formulae e.g.: derivation of PV(Operating Leases)
 - But be warned: the formulas may contain errors!
- Critical to the original concept of EVA by Stern Stewart, was correctly calculating c^*
- e.g. an in-house credit rating system (with 5 key measures) predicted a company's Bond Rating and hence its Cost of Debt
 - The template merely requires these key values to be input; i.e. Risk-free Rate, Debt Spread, ERP (Market Risk Premium), Equity Beta, etc.

CFROI: Cashflow Return on Investment

- The simple CFROI spreadsheet model was taken from Aswath Damodaran (11/1999)
- Notes have been added, however, to highlight key assumptions and limitations:
 - Key: Salvage value of the assets, upon disposal
 - Add back Depreciation to get Original Investment which is Inflation-adjusted to Present-day prices
 - Current level of EBIT over whole life of asset base
 - Removes dependency on terminal value calculation
 - No provision for analysis of changes in Invested Capital
 - Collins Stewarts' write-up explains CFROI makes the shift from an accounting-based to a cash-based framework to calculate the economic rate of return earned by a company on its operations.

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Comparison of EVA, CFROI and DCF, as valuation methodologies

- Both EVA and CFROI aim to evaluate Earnings which a company is generating from its Invested Capital +/- or Asset base
 - Fundamentally this is a “Portfolio Management” approach to investment appraisal
 - The main focus is on “return on investment” and financial metrics rather than on analysis and economic modeling of the business itself
 - Across sufficient numbers of investments, the EVA and CFROI approaches may allow “an edge” over alternative approaches (e.g. cash-based versus accounting-based metrics),
 - But both will be supported by other metrics.

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Comparison of EVA, CFROI and DCF, as valuation methodologies

- DCF Analysis aims to evaluate the Cash Flows which a company can be expected to generate from its Operations
 - Fundamentally the DCF approach is specific to each company being appraised, and so tends to be less appropriate for Portfolio Managers with large numbers of investments to make.
 - The main focus of DCF is on analysis and economic modeling of each specific business
 - With this approach, the emphasis is on identifying specific opportunities for out-performance
 - But DCF should also be supplemented by using other approaches too (e.g. Market Multiples)

Questions
