RATIOS

In this sheet, we want to show you a brief of all ratios computed for our valuation and the different techniques used. Starting to profitability analysis

* ROA: the first ROA is computed dividing the EBIT net of taxes by the total asset, this index measures operating efficiency in generating profits from its assets.
* ROA: for the second ROA we’ve used a decomposition formula to separate effects of financing from operating effects; ain the numerator there is a sum of net income plus interest expense net of taxes, while in the denominator the item total asset
* ROIC: the first formula, used to compute it, is the standard one that has at the numerator EBIT net of taxes and the denominator the sum of book values of debt and equity
* ROIC: in the second formula we’ve used at the denominator an average of book values (we took the book value of equity/debt at time t and we made an average with value at t+1. Notice that the last value is inconsistent.
* ROIC: in the third ROIC we’ve made a product between EBIT net of taxes divided by sales and sales divided by the book value of capital. That is to say: pre-tax operating margin and capital turnover ratio. A firm can arrive at a high ROIC by either increasing its profit margin or efficiently using its capital to increase sales.
* ROE: the first one is computed using ROIC summed up to the product between debt to equity ratio and the ROIC minus interest rate net of taxes
* ROE: the second index is computed dividing net income by the book value of common equity
* ROE: the last index is computed as before, but with an average of book value of common equity. As before the last value is inconsistent because based on an average between t and t+1

After profitability analysis we’ve computed three ratios for liquidity analìysis:

* Current ratio: obtained dividing the current asset by current liabilities, in the first row we used the total current assent, while in the second one we’ve subtracted from current assets the current financial liabilities and the current tax asset.
* Quick ratio: is given by dividing the sum of cash and marketable securities by current liabilities
* Acid test: similar to quick ratio, is given by subtracting from the current asset the inventories and dividing the obtained value by current liabilities

For financing analysis, we’ve selected four different ratios:ù

* Interest coverage ratio: given dividing EBIT by interest expense, This ratio measures the capacity of a firm to meet interest payments but not whether it can pay back the principal of the outstanding debt.
* Debt to capital ratio: we’ve computed in two different ways. The first one dividing debt by the sum of debt and equity; the second one dividing debt by net invested capital
* Debt to equity ratio: obtained simply dividend debt by equity
* Reinvestment rate: given by the sum of net capital expenditures and changes in working divided by EBIT net of taxes

