Practical exercises: Acquisitions and takeovers

1. BIOMETRICS AND MEDIATECH

The following are the details on two potential merger candidates, Biometrics and Mediatech, in 2017 (in thousands of euros):

	Biometrics	Mediatech
Revenues	4.400	3.125
Operating Expenses - OPEX (without Depreciation)	87,50%	89,00%
Depreciation	200	74
Tax rate	35%	35%
Working Capital - WC	10% of Revenue	10% of Revenue
Market value of Equity	2.000	1.300
Outstanding Debt	160	250

Both firms are in steady state and are expected to grow 5% a year in the long term. Capital spending is expected to be offset by depreciation. The beta for both firms is 1, and both firms are rated BBB, with an interest rate on their debt of 8,5%. (The treasury bond rate is 7% and the market risk premium is 5,5%).

As a result of the merger, the combined firm, which will be named Biotech, is expected to have operating expenses of only 86% of total revenues. The new firm Biotech does not plan to borrow additional debt.

a) Estimate the value of Biometrics, operating independently.
b) Estimate the value of Mediatech, operating independently.
c) Estimate the value of the combined firm Biotech, with no synergy.
d) Estimate the value of the combined firm Biotech, with synergy.
e) How much is the operating synergy worth?

2. BIOTECH (Cont.)

In the new combined firm Biotech, as result of the merger, the firm's optimal debt ratio increases to 20% of total capital from current levels. At that level of debt, the combined firm will have an A rating, with an interest rate on its debt of 8%. If it does not increase debt, Biotech's rating will be A+, with an interest rate of 7,75%.

With this new information:

a) Estimate the value of the combined firm Biotech, if it stays at its existing debt ratio.
d) Estimate the value of the combined firm Biotech, if it moves to its optimal debt ratio.
c) Who gains this additional value if the firm moves to the optimal debt ratio?