FINA 5310

Case Study

This Case Study is designed to evaluate your understanding of the concepts of asset valuation and the cost of capital. Evaluation of your response will concentrate more on your explanation of the steps that need to be taken to arrive at the correct answer, as opposed to actually arriving at the correct answer. In other words, I will be grading more on your ability to discuss the process and less on your final conclusion.

Better papers will be 4 pages or more, including any appendices. The rubric for grading will be:

|  |  |
| --- | --- |
| Grammar/Ease of Reading | 10% |
| Development/Explanation of Free Cash Flows | 20% |
| Computation of Free Cash Flows | 10% |
| Development/Explanation of Weighted Average Cost of Capital | 20% |
| Computation of WACC | 10% |
| Development/Explanation of Stock Valuation | 20% |
| Computation of Stock Valuation | 10% |

Universal Technologies, Inc.

William (Bill) Smith, CFO of Universal Technologies, Inc. (UT), has received an offer from Bigalow General Corporation (BG) to purchase the common stock of UT for the price of $20.00 per share. Based on this offer, Bill has asked you construct a valuation of UT’s common stock.

Based upon this request you have constructed a set of projections for UT for years 2019 – 2023 (See Attached Appendix “A”). After 2023, you have determined that Free Cash Flows will grow at a constant rate or 4% per year. In addition to the projections, you have the following information about UT and the financial markets.

UT has a $1.5 billion Commercial Line of Credit that carries a variable interest rate priced at the Prime Rate of interest as published from time to time by the Wall Street Journal.UT has $1.2 billion of $1,000 par value bonds that carry a coupon interest rate of 5.75%, payable annually. The bonds mature 7 years from now, and currently sell in the secondary market at $887 per bond.

UT has issued $500 million of $100 par value perpetual preferred stock that carries a preferred dividend of 6.50%. UT’s preferred stock currently sells in the secondary market at $92.50 per share.

UT has 68.5 million shares of common stock outstanding.

You have noted that the yield on the short-term Treasury Bill is 1.50%. You have estimated that the beta for UT’s stock is 1.2 and that the anticipated stock market return is 11.25%.

In order to estimate the value of UT’s stock, you have determined that you must calculate the future Free Cash Flows for UT, estimate UT’s Weighted Average Cost of Capital and then use the Corporate Valuation Model to compute the value of UT’s stock. Based upon your findings, Bill has requested that you recommend whether or not UT should accept BG’s offer.

Appendix “A”

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| Universal Technologies, Inc. |
|  |  |  |  |  |  |  |
| Balance Sheet |
| (In Millions of Dollars) |
|  |  |  |  |  |  |  |
|  | 2018 | 2019 | 2020 | 2021 | 2022 | 2023 |
|  | Actual | Est. | Est. | Est. | Est. | Est. |
|  |  |  |  |  |  |  |
| Assets |  |  |  |  |  |  |
|  Current Assets |  |  |  |  |  |  |
|  |  |  |  |  |  |  |
| Cash |  $ 550  |  $ 616  |  $ 682  |  $ 719  |  $ 762  |  $ 800  |
| Inventory |  1,153  |  1,291  |  1,408  |  1,506  |  1,596  |  1,676  |
| Accounts Receivable |  775  |  868  |  946  |  1,012  |  1,073  |  1,126  |
|  Total Current Assets |  2,478  |  2,775  |  3,035  |  3,237  |  3,431  |  3,603  |
|  |  |  |  |  |  |  |
|  Long Term Assets |  |  |  |  |  |  |
| Machinery, Plant & Equipment |  2,225  |  2,492  |  2,716  |  2,906  |  3,081  |  3,235  |
|  |  |  |  |  |  |  |
| Total Assets |  $ 4,703  |  $ 5,267  |  $ 5,751  |  $ 6,143  |  $ 6,512  |  $ 6,837  |
|  |  |  |  |  |  |  |
| Liabilities & Owner's Equity |  |  |  |  |  |  |
|  |  |  |  |  |  |  |
|  Current Liabilities |  |  |  |  |  |  |
| Accounts Receivable |  $ 225  |  $ 252  |  $ 275  |  $ 294  |  $ 312  |  $ 327  |
| Accruals |  110  |  123  |  135  |  144  |  153  |  160  |
| Line of Credit |  904  |  1,169  |  1,200  |  1,336  |  1,302  |  1,190  |
|  Total Current Liabilities |  1,239  |  1,544  |  1,720  |  1,774  |  1,766  |  1,677  |
|  |  |  |  |  |  |  |
| Long-term Bonds |  1,200  |  1,200  |  1,200  |  1,200  |  1,200  |  1,200  |
|  |  |  |  |  |  |  |
|  Owner's Equity |  |  |  |  |  |  |
| Preferred Stock |  500  |  500  |  500  |  500  |  500  |  500  |
| Common Stock |  1,500  |  1,500  |  1,500  |  1,500  |  1,500  |  1,500  |
| Retained Earnings |  264  |  523  |  831  |  1,169  |  1,546  |  1,960  |
|  Total Owner's Equity |  2,264  |  2,523  |  2,831  |  3,169  |  3,546  |  3,960  |
|  |  |  |  |  |  |  |
|  Total Liabilities & Owner's Equity |  $ 4,703  |  $ 5,267  |  $ 5,751  |  $ 6,143  |  $ 6,512  |  $ 6,837  |
|  |  |  |  |  |  |  |

|  |
| --- |
| Statement of Income & Expenses |
| (In Millions of Dollars) |
|  |  |  |  |  |  |  |
| Sales |  $ 4,612  |  $ 5,165  |  $ 5,630  |  $ 6,024  |  $ 6,386  |  $ 6,705  |
| Costs of Goods Sold |  3,321  |  3,874  |  4,223  |  4,518  |  4,789  |  5,029  |
| Gross Profit |  1,291  |  1,291  |  1,408  |  1,506  |  1,596  |  1,676  |
| Fixed Overhead |  526  |  547  |  569  |  592  |  615  |  640  |
| EBITDA |  765  |  744  |  839  |  914  |  981  |  1,036  |
| Depreciation |  247  |  277  |  302  |  323  |  342  |  359  |
| EBIT |  518  |  467  |  537  |  592  |  639  |  677  |
| Interest Expense |  95  |  123  |  126  |  140  |  137  |  125  |
| EBT |  423  |  345  |  411  |  451  |  502  |  552  |
| Taxes (25%) |  106  |  86  |  103  |  113  |  126  |  138  |
| Net Income |  $ 317  |  $ 259  |  $ 308  |  $ 338  |  $ 377  |  $ 414  |