Critical Thinking One: Option #1

Hans Hinnershitz

Colorado State University – Global Campus

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| --- | --- | --- | --- | --- | --- |
| Current Operating Assets | Cash and cash equivalents | | | | $47,250 |
| Accounts Receivable | | | | 283,500 |
| Inventories | | | | 141,750 |
|  |  |  |  |  | 472,500 |
| **-** |  |  |  |  |  |
| Current Operating Liabilities | Accounts payable | | | | $94,500 |
| Total current liabilities | | | | $168,012 |
|  |  |  |  |  | $262,512 |
|  |  |  |  |  |  |
| Net Operating Working Capital | | | | | $209,988 |
|  |  |  |  |  |  |
|  |  |  |  |  |  |
| Net Operating Working Capital | | | | | $209,988 |
| Operating Long-term Assets | | | | | 334,550 |
| Total Net Operating Working Capital | | | | | $544,538 |
|  |  |  |  |  |  |
| EBIT | | | | | $99,200 |
| Tax Rate | | | | | 40% |
| Net Operating Profit after Taxes | | | | | 59520 |
|  |  |  |  |  |  |
| EBT | | | | | $88,730 |
| Change in (Current Assets - Current Liabilities) | | | | | ($1,312) |
| Capital Expenses | | | | | Not Given |
| Free Cash Flow | | | | | $90,042 |
|  |  |  |  |  |  |
| Net Operating Profit after Taxes | | | | | 59520 |
| Net Working Operating Capital | | | | | 209988 |
| Non-Cash Working Capital | | | | 47250 | 162738 |
| Non-Cash Working Capital + Long-term Assets | | | | 330,750 | 493,488 |
| Return on Invested Capital | | | | | 12.06% |
|  |  |  |  |  |  |
| Net Income | | | | | $53,238 |
| Weighted Average Cost of Capital | | | | | 8% |
| Capital Invested | | | $544,538 | 94,500 | 639,038 |
| Capital Invested \* Weighted Average Cost of Capital | | | | | 51123 |
| EVA |  |  |  |  | $2,115 |
|  |  |  |  |  |  |
| MVA ($65 \* 15,000) | | | | | 975000 |

**Why Use These Ratios?**

Calculated by subtracting current liabilities from current assets, Net Working Capital (NWC) shows whether a company has enough short term funds to meet current obligations and investments (Formoso-Suralta, 2018). Total Net Working Capital looks a little bit more long term, by including operating long-term assets into the formula. These may not actually be all that accessible or liquid where they cannot help to pay off short term debt obligations.

Net Operating Profit after Taxes (NOPAT) is an important profitability indicator as it does not take interest payments into account when calculating income. This is important because interest payments reduce net income and a company’s tax expense, which can make it hard to tell how efficiently an operation is actually running (Net Operating Profit, 2019).

Free cash flow (FCF), which does not include non-cash expenses, is another profitability indicator. At its core, it represents cash availability to pay dividends and debt (Jagerson, 2020). Return on Invested Capital is both a profitability and performance ratio, as it shows how well a company does using its assets to generate profits.

Economic Value Added (EVA) measures a company’s performance and economic profit by subtracting the net operating profit after taxes of a business by the result of the multiplication of invested capital and weighted average cost of capital (Chen, 2020). The EVA could be referenced by the company itself as a sign of efficiency, by potential investors digging deeper into the fundamentals of a company and is commonly used in studies as a pricing or evaluation model (Behera, 2020). In fact, this can be said about all of the ratios discussed in this paper.

The Market Value Added ratio (MVA) is often used by investors to see how well a company does for its shareholders (Chen, 2020). In its simplest terms, MVA is calculated by subtracting the market value of debt and equity from the sum of all capital claims (Chen, 2020). Generally, the higher the EVA value, the better. It is worth noting that a study found that NI, NOPAT and EPS measures were better predictors of stock returns than MVA (Habibollah, 2016).

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