**Mini Case Solutions**

***CHAPTER 2***

**CASH FLOWS AND FINANCIAL**

**STATEMENTS AT NEPEAN BOARDS**

Below are the financial statements that you are asked to prepare.

1. The income statement for each year will look like this:

*Statement of Comprehensive Income*

|  |  |  |
| --- | --- | --- |
|  | *2017* | *2018* |
| Sales | 321,437.00 | 391,810.00 |
| Cost of goods sold | 163,849.00 | 206,886.00 |
| Selling & administrative | 32,223.00 | 42,058.00 |
| Depreciation | 46,255.00 | 52,282.00 |
| EBIT | 79,110.00 | 90,584.00 |
| Interest | 10,056.00 | 11,526.00 |
| EBT | 69,054.00 | 79,058.00 |
| Taxes (20%) | 13,810.80 | 15,811.60 |
| Net income | 55,243.20 | 63,246.40 |
|  |  |  |
| Dividends | 27,621.60 | 31,623.20 |
| Addition to retained earnings | 27,621.60 | 31,623.20 |

1. The balance sheet for each year will be:

*Balance Sheet as of December 31, 2017*

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| Cash | $23,643 |  | Accounts payable | $41,786 |
| Accounts receivable | 16,753 |  | Notes payable | 19,046 |
| Inventory | 32,255 |  | Current liabilities | $60,832 |
| Current assets | $72,651 |  |  |  |
|
|  |  |  | Long-term debt | $103,006 |
| Net fixed assets | $204,068 |  | Owners' equity | 112,881 |
| Total assets | $276,719 |  | Total liab. & equity | $276,719 |

In the first year, equity is not given. Therefore, we must calculate equity as a plug variable. Since total liabilities & equity is equal to total assets, equity can be calculated as:

Equity = $276,719 – 60,832 – 103,006

Equity = $112,881

*Balance Sheet as of December 31, 2018*

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| *Balance sheet as of Dec. 31, 2018* | | | | |
| Cash | $35,721 |  | Accounts payable | $47,325 |
| Accounts receivable | 21,732 |  | Notes payable | 20,796 |
| Inventory | 43,381 |  | Current liabilities | $68,121 |
| Current assets | $100,834 |  |  |  |
|
|  |  |  | Long-term debt | $116,334 |
| Net fixed assets | $248,625 |  | Owners' equity | 165,004 |
| Total assets | $349,459 |  | Total liab. & equity | $349,459 |

The owner’s equity for 2018 is the beginning of year owner’s equity, plus the addition to retained earnings, plus the new equity, so:

Equity = $112,881 + 31,623.20 + 20,500

Equity = $165,004.20

1. Using the OCF equation:

OCF = EBIT + Depreciation – Taxes

The OCF for each year is:

OCF2017 = $79,110 + 46,255 – 13,810.80

OCF2017 = $111,554.20

OCF2018 = $90,584 + 52,282 -15,811.60

OCF2018 = $127,052.40

1. To calculate the cash flow from assets, we need to find the capital spending and change in net working capital. The capital spending and net working capital change for 2018 year were:

|  |  |
| --- | --- |
| *Net Capital Spending* |  |
| Ending net fixed assets | $248,625.00 |
| – Beginning net fixed assets | $204,068.00 |
| + Depreciation | $52,282.00 |
| Net capital spending | $96,839.00 |
|  |  |
| *Change in Net Working Capital* | |
| Ending NWC | $32,713.00 |
| – Beginning NWC | $11,819.00 |
| Change in NWC | $20,894.00 |

These values are then used to calculate the *2018 Cash Flow From Assets.*

|  |  |
| --- | --- |
| *Cash flow from assets* |  |
| Operating cash flow | $127,052.40 |
| – Net capital spending | $96,839.00 |
| – Change in NWC | $20,894.00 |
| Cash flow from assets | $9,319.40 |

1. The cash flow to creditors was:

*Cash flow to creditors*

|  |  |
| --- | --- |
| Interest paid | $11,526.00 |
| – Net new borrowing | $13,328.00 |
| Cash flow to creditors | -$1,802.00 |

|  |  |
| --- | --- |
|  |  |
|  |  |
|  |  |
|  |  |

1. The cash flow to stockholders was:

|  |  |
| --- | --- |
| *Cash flow to stockholders* |  |
| Dividends paid | $31,623.20 |
| – Net new equity raised | $20,500.00 |
| Cash flow to stockholders | $11,123.20 |

*Answers to questions*

1. The firm had positive earnings in an accounting sense (NI > 0) and had positive cash flow from operations. The firm invested $20,894 in new net working capital and $96,839 in new fixed assets. The firm disbursed $9,321.20 to its bondholders and shareholders. It raised $1,802 from bondholders, and paid $11,123.20 to stockholders.
2. The expansion plans may be a little risky. The company does have a positive cash flow, but a large portion of the operating cash flow is already going to capital spending. The company has had to raise capital from creditors and stockholders for its current operations. So, the expansion plans may be too aggressive at this time. On the other hand, companies do need capital to grow. Before investing or loaning the company money, you would want to know where the current capital spending is going, and why the company is spending so much in this area already.