**Mini Case Solutions**

**Chapter 2: Cash Flows and Financial Statement of Deep Water Experts**

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

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

|  |  |  |
| --- | --- | --- |
| **Income Statement** | **2013** | **2014** |
| Sales | 50,000 | 55,000 |
| Cogs | 33,500 | 37,185 |
| SG&A | 7,500 | 8,250 |
| Depreciation | 3,495 | 3,857 |
| EBIT | 5,505 | 5,708 |
|  |  |  |
| Interest paid @8% | 1,195 | 1,732 |
| Taxable Income | 4,310 | 3,976 |
| Taxes @28% | 1,207 | 1,113 |
| Net Income | 3,103 | 2,863 |
|  |  |  |
| Dividends | 620 | 573 |
| Addition to Retained Earnings | 2,483 | 2,290 |

**2.** The balance sheet for each year will be:

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
|  | **Balance Sheet 2013** | | |  |
| Cash | 3,236 |  | Accounts payable | 1,865 |
| AR | 2,139 |  | Notes payable | 1,123 |
| Inventory | 2,598 |  | Current liabilities | 2,988 |
| Current assets | 7,973 |  |  |  |
|  |  |  | Long-term debt | 14,935 |
| Net fixed assets | 34,950 |  | Total debt | 17,923 |
|  |  |  |  |  |
|  |  |  | Equity | 22,517 |
|  |  |  | RE | 2,483 |
|  |  |  | Total equity | 25,000 |
|  |  |  |  |  |
| Total assets | 42,923 |  | Total debt and equity | 42,923 |
|  |  |  |  |  |
|  |  |  |  |  |

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 = Dh215,168 – 46,794 – 79,235

Equity = Dh89,139

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
|  |  |  |  | |  |
|  | **Balance Sheet 2014** | | | |  |
| Cash | Dh5,712 |  | | Accounts payable | Dh2,310 |
| AR | 2,355 |  | | Notes payable | 1,350 |
| Inventory | 3,998 |  | | Current liabilities | 3,660 |
| Current assets | 12,065 |  | |  |  |
|  |  |  | | Long-term debt | 21,655 |
| Net fixed assets | 38,565 |  | | Total debt | 25,315 |
|  |  |  | |  |  |
|  |  |  | | Equity | 20,542 |
|  |  |  | | RE | 4,773 |
|  |  |  | | Total equity | 25,315 |
|  |  |  | |  |  |
| Total assets | Dh50,630 |  | | Total debt and equity | Dh50,630 |

Equity = Dh89,139 + 24,326 + 15,600

Equity = Dh129,065

**3.** Using the OCF equation:

OCF = EBIT + Depreciation – Taxes

The OCF for each year is:

OCF2010 = Dh5,050 + 3,495 – 1,207

OCF2010 = Dh7,338

OCF2011 = Dh5,708 + 3,857 – 1,113

OCF2011 = Dh8,452

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

|  |  |  |
| --- | --- | --- |
|  | *Capital spending* |  |
|  | Ending net fixed assets | Dh38,565 |
|  | – Beginning net fixed assets | 34,950 |
|  | + Depreciation | 3,857 |
|  | Net capital spending | Dh7,472 |

And the change in net working capital was:

|  |  |  |
| --- | --- | --- |
|  | *Change in net working capital* | |
|  | Ending NWC | Dh8,405 |
|  | – Beginning NWC | 4,985 |
|  | Change in NWC | Dh3,420 |

So, the cash flow from assets was:

|  |  |  |
| --- | --- | --- |
|  | *Cash flow from assets* |  |
|  | Operating cash flow | Dh8,452 |
|  | – Net capital spending | 7,472 |
|  | – Change in NWC | 3,420 |
|  | Cash flow from assets | -Dh 2,440 |

**5.** The cash flow to creditors was:

|  |  |  |
| --- | --- | --- |
|  | *Cash flow to creditors* |  |
|  | Interest paid | Dh1,732 |
|  | – Net new borrowing | 6,720 |
|  | Cash flow to creditors | –Dh4,988 |

**6.** The cash flow to stockholders was:

|  |  |  |
| --- | --- | --- |
|  | *Cash flow to stockholders* |  |
|  | Dividends paid | Dh573 |
|  | + Equity reduced | 1,975 |
|  | Cash flow to stockholders | Dh2,548 |

**7**. The cash flow equation was:

|  |  |
| --- | --- |
| Cash flow to creditors | -Dh4,988 |
| + Cash flows to shareholders | 2,548 |
| = Cash flow from assets | -Dh2,440 |

*Answers to questions*

**1.** The company generated a net income in 2014 of Dh2,863. While this is still a positive result from an accounting point of view (NI > 0), it is a reduction of about 7.7% compared to the previous year. Cash flow resulting from operating activities for 2014 was also positive, Dh8,452. However, high capital spending of Dh7,472 and net working capital investments of Dh3,420 left the company with a negative cash flow from assets of Dh2,440, thereby relying on external financing. It raised Dh4,988 from bondholders, and paid Dh2,548 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 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.