Bankruptcy, Liquidation, and Reorganization

Learning Problems

Answer Keys

Problem: Financial Distress at Motorway

1. Warning signs of financial distress
* The cash ratio is declining rapidly and is approaching zero. The company has nearly no cash on hand which could soon lead to bankruptcy.
* The inventory turnover ratio is well above the industry average and getting much worse each year. Cash is being tied up in excessive inventory.
* Credit terms of 2/10, net 30 are provided to customers which the industry does not match. Generous credit terms are being used to accelerate cash collections but they are expensive
* The company did not take advantage of 3/15, net 60 terms on its accounts payable over the last year. It is “stretching” its payables to generate cash but at a high cost.
* Fixed asset turnover is falling rapidly and is below the industry average. The cost of store refurbishments and new store openings are growing faster than sales.
* The debt ratio has risen dramatically and well exceeds the industry average. Sufficient retained earnings are not being generated to finance the expansion.
* The company is violating the current ratio and times interest earned conditions of its bank loans. The loans can be called by lenders.
* The effective borrowing rate is rising and is above the industry average. Increased financial leverage is leading to higher borrowing costs.
* Gross profit has shown a slight improvement but is still below the industry average. The company is using price discounts to reduce excessive inventory balances. The benefits of international parts sourcing are not being fully realized.
* The operating profit margin is falling. Higher advertising, head office, and depreciation expenses are hurting profitability.
* The net profit margin is falling. Higher interest expenses related to financing the expansion are hurting profitability.
* ROA and ROE are near zero. Falling profitable and asset turnover have reduced these return measures.
1. Causes of financial distress

Motorway is experiencing serious financial distress because of its expansion strategy. Increased sales have not kept pace with added expenses resulting in a serious cash shortage. Cash has fallen due to below-average gross profit margins; large capital expenditures; a buildup in inventory; higher fixed interest and principal payments; and increased advertising and head office expenditures. The company has generated cash by borrowing heavily but this has placed it in violation of two of its loan conditions and it is in jeopardy of having them called. The company used expensive sales credit terms and did not take advantage of lucrative purchase discounts to generate needed cash. It cannot “stretch” its payables much further or risks being cut off by its suppliers.

1. Recommended actions

An action plan for managing Motorway’s financial distress includes:

* Discontinue store refurbishments and expansion after completing existing projects.
* Reduce inventory levels at all stores to industry average levels through improved inventory management techniques such as just-in-time inventory.
* Increase the gross profit margin through greater international sourcing.
* Return to taking advantage of purchase credit terms 2/15, net 45 once feasible which will also improve the gross profit margin.
* Replaced sales credit terms 2/10, net 30 with the industry-standard net 30 once feasible.
* Reverse increases in head office expenses.
* Examine advertising expenditures to determine if efficiencies can be realized without compromising sales.
* Put all available cash towards paying down debt until the industry average debt ratio is met.

After completing the first draft of the action plan, meet with lenders to discuss it and gain valuable input. Emphasize a willingness to collaborate with them in finding a solution and to bring in any outside consultants they feel are necessary. Ask for further time to improve operations before the loans are called. Explore with lenders the possibility of extending loan terms to preserve cash flow until Motorway has had an opportunity to recover. Do not ask for reduced interest rates or that principal be forgiven.

Problem: Using Altman Z-Scores at Success Industries

1. Altman’s Z-Score = 3.3 1(.0862) + 1.2 2(.0517) + 1.0 3(.4310) + .6 4(1.1290) + 1.4 5(.0948) = 1.5876

1 = $\frac{1,000,000}{11,600,000}$ 2 = $\frac{4,100,000-3,500,000}{11,600,000}$ 3 = $\frac{5,000,000}{11,600,000}$ 4 = $\frac{\left(1,000,000\right)(3.50)}{3,100,000}$

5 = $\frac{1,100,000}{11,600,000}$

No, based on Altman’s Z-Score, Success Industries is displaying a high probability of bankruptcy (Z ≤ 1.80) in the next one or two years and should not receive a loan.

Problem: Liquidation at Juno Enterprises

1. **Priority of claims in a liquidation**

|  |  |
| --- | --- |
| Unpaid suppliers | 0 |
| Trust claims: EI, CPP, Tax | 100,000 |
| Secured creditors | 7,550,000 |
| Preferred creditors |  |
|  Bankruptcy costs | 4,800,000 |
|  Wages payable | 300,000 |
| Total | 12,750,000 |

**Allocation to unsecured creditors**

Remaining assets

31,580,000 – 12,750,000 = 18,830,000

|  |  |  |  |
| --- | --- | --- | --- |
|  | **Amount** | **2Claim** | **Claim After Subordinator** |
| Accounts payable | 6,500,000 | 3,007,550 | 3,007,550 |
| Notes payable | 19,250,000 | 8,906,975 | 312,839,925 |
| 1Secured creditors | 6,450,000 | 2,984,415 | 2,984,415 |
| Subordinate debenture | 8,500,000 | 3,932,950 | 3- |
| Total | 40,700,000 | 18,831,890 | 18,831,890 |

1 14,000,000 – 7,550,000

2 $\frac{18,830,000}{40,700,000}$ = .4627

3 8,906,975 + 3,932,950

1. **Allocation to unsecured creditors**

|  |  |  |  |
| --- | --- | --- | --- |
|  | **Amount** | **1Claim** | **Claim After Subordination** |
| Accounts payable | 6,500,000 | 4,302,350 | 4,302,350 |
| Notes payable | 7,000,000 | 4,633,300 | 27,000,000 |
| Secured creditors | 6,450,000 | 4,269,255 | 4,269,255 |
| Subordinate debentures | 8,500,000 | 5,626,150 | 23,259,450 |
| Total | 28,450,000 | 18,831,055 | 18,831,055 |

1 $\frac{18,830,000}{28,450,000}$ = .6619

2 5,626,150 – (7,000,000 – 4,633,300)

1. Unsecured creditors would be paid in full (CAD 40,700,000). The remainder is allocated to the preferred shareholders who would be paid in full and the common shareholders who would receive the residual.

45,000,000 – 40,700,000 = 4,300,000

|  |  |
| --- | --- |
| Preferred shareholders | 2,350,000 |
| Common shareholders | 1,950,000 |
|  Total | 4,300,000 |

**Problem: Liquidation at Passchendaele Industries**

1. **Priority of claims in a liquidation**

|  |  |
| --- | --- |
| Unpaid suppliers  | 8,000,000 |
| Trust claims: EI, CPP, Tax  | 7,090,000 |
| Secured creditors  |  |
|  Line of credit  | 22,000,000 |
|  Term loan  | 60,000,000 |
|  Mortgage loan  | 79,000,000 |
| Preferred creditors  |   |
|  Bankruptcy costs  | 10,000,000 |
|  Wages payable$ $ | 8,500,000 |
|  1Rent (back 3 months, forward 3 months)  | 6,660,000 |
| Total | 201,250,000 |

1 (11,100,000 / 10) (6)

**Allocation to unsecured creditors**

Remaining assets

240,000,000 – 201,250,000 = 38,750,000

|  |  |  |  |
| --- | --- | --- | --- |
|  | **Amount** | **6Claim** | **Claim After Subordinator** |
| 2Trade accounts payable  | 9,200,000 | 3,406,760 | 3,406,760 |
| 3Rent payable  | 4,440,000 | 1,644,132 | 1,644,132 |
| Secured creditors |  |  |  |
|  4Term loan  | 19,000,000 | 7,035,700 | 719,000,000 |
|  5Mortgage loan  | 6,000,000 | 2,221,800 | 76,000,000 |
| Subordinate debenture  | 66,000,000 | 24,439,800 | 78,697,300  |
| Total | 104,640,000 | 38,748,192 | 38,748,192 |

2 17,200,000 – 8,000,000 = 9,200,000

3 11,100,000 – 6,660,000 = 4,440,000

4 79,000,000 – 60,000,000 = 19,000,00

5 85,000,000 – 79,000,000 = 6,000,000

6 $\frac{38,750,000}{104,640,000}$ = .3703

7 24,439,800 – (19,000,000 – 7,035,700) – (6,000,000 – 2,221,800) = 8,697,300

**Problem: Liquidation of Molotov Ltd.**

1. **Priority of claims in a liquidation**

|  |  |
| --- | --- |
| Unpaid suppliers  | 5,000,000  |
| Trust claims: EI, CPP, Tax  | 7,799,000 |
| Secured creditors  |  |
|  Line of credit  | 34,200,000 |
|  Term loan  | 66,000,000 |
|  Mortgage loan  | 93,500,000 |
| Preferred creditors  |   |
|  Bankruptcy costs  | 8,000,000 |
|  Wages payable$ $ | 9,350,000 |
|  Rent  | 12,210,000 |
| Total | 236,059,000 |

**Allocation to unsecured creditors**

Remaining assets

281,600,000 – 236,059,000 = 45,541,000

|  |  |  |  |
| --- | --- | --- | --- |
|  | **Amount** | **4Claim** | **Claim After Subordinator** |
| 2Trade accounts payable  | 23,920,000 | 9,276,176 | 9,276,176 |
| Secured creditors |  |  |  |
|  3Term loan  | 20,900,000 | 8,105,020 | 20,900,000 |
| Subordinate debenture  | 72,600,000 | 28,154,280 | 515,359,300 |
| Total | 117,420,000 | 45,535,476 | 45,535,476 |

2 28,920,000 – 5,000,000 = 23,920,000

3 86,900,000 – 66,000,000 = 20,900,000

4 $\frac{45,541,000}{117,420,000}$ = .3878

5 28,154,280 – (20,900,000 – 8,105,020) = 15,359,300

**Problem: Reorganization at Richard Enterprises**

1. Different Proposals can be developed to successfully reorganize Richard’s operations. The following is one possible plan:

**Step 1: Priority of claims in a liquidation**

|  |  |
| --- | --- |
| Unpaid suppliers | 10,000 |
| Trust claims: EI, CPP, Tax | 4,900 |
| Secured creditors |  |
|  Line of credit | 25,000 |
|  1Term loan | 65,000 |
|  2Mortgage loan | 81,000 |
| Preferred creditors |  |
|  Administration costs | 400 |
|  Wages | 8,000 |
|  3Rent (bank 3 months, forward 3 months) | 7,500 |
|  WCB | 400 |
| Total | 202,200 |

1 Unsecured creditor for the remaining claim (75,000 – 65,000)

2 Unsecured creditor for the remaining claim (98,000 – 81,000)

3 (10,000 / 8) (6)

**Step 2: Trust claims and wages that must be paid immediately**

259,000 – 4,900 – 8,000 = 246,100

**Step 3: Residual remaining after paying other priority claims**

246,100 – 10,000 – 25,000 – 65,000 – 82,000 – 400 - 7,500 – 400 = 55,800

**Step 4: Allocation to unsecured creditors in a liquidation**

|  |  |  |  |
| --- | --- | --- | --- |
|  | **Amount** | **3Claim** | **Claim After Subordination** |
| 1Trade accounts payable | 6,300 | 3,465 | 3,465 |
| 2Rent payable | 2,500 | 1,375 | 1,375 |
| Term loan payable | 10,000 | 5,500 | 410,000 |
| Mortgage loan payable | 17,000 | 9,350 | 9,350 |
| Subordinate debentures | 66,000 | 36,300 | 531,800 |
| Total | 101,800 | 55,990 | 55,990 |

1 16,300 – 10,000

2 10,000 – 7,500

3 $\frac{55,800}{101,800}$ = .55

4 Full claim paid by subordinate debentures

5 36,300 – (10,000 - 5,500)

**Step 4: Total claims**

|  |  |  |  |
| --- | --- | --- | --- |
| Line of credit | 25,000 | 0 | Unsecured |
| 25,000 | Priority claim |
| Trade accounts payable | 13,465 | 3,465 | Unsecured |
| 10,000 | Priority claim |
| Administration costs | 400 | 0 | Unsecured |
| 400 | Priority claim |
| WCB payable | 400 | 0 | Unsecured |
| 400 | Priority claim |
| Rent payable | 8,875 | 1,375 | Unsecured |
| 7,500 | Priority claim |
| Term loan payable | 75,000 | 10,000 | Unsecured |
| 65,000 | Priority claim |
| Mortgage loan payable | 91,350 | 9,350 | Unsecured |
| 82,000 | Priority claim |
| Subordinate debentures | 31,800 | 31,800 | Unsecured |
| 0 | 0 | Priority claim |
| Total | 246,290 | 246,290 |  |

This table shows the approximate claim of the remaining creditors in a liquidation. The trust claims and wages payable must be paid immediately as part of a Proposal. The claim is divided into an unsecured portion and the portion that will have priority in a liquidation. Knowing these amounts will help determine what each creditor may accept in a Proposal. All classes of unsecured creditors must approve the Proposal. Individual classes of the secured creditors must approve the Proposal if the company wants to keep using its security.

**Step 5: Proposed new capital structure**

Based on the average industry debt ratio of 60%, the following capital structure is recommended:

|  |  |  |
| --- | --- | --- |
| Debt | 147,774 | 60% |
| Equity | 98,516 | 40% |
| Total | 246,290 | 100% |

**Step 6: Recommended Proposal with rationale**

|  |  |
| --- | --- |
| Current liabilities |  |
|  1Line of credit | 25,000 |
|  2Trade accounts payable | 13,465 |
|  3Administration costs | 400 |
|  3WCB payable | 400 |
|  4Rent payable | 8,875 |
| Long-term liabilities |  |
|  5Term loan payable | 65,000 |
|  5Mortgage loan payable | 82,000 |
| Total liabilities | 195,140 |
| Shareholders’ Equity |  |
|  5Preferred shares  |  |
|  Term loan payable | 10,000 |
|  Mortgage loan payable | 9,350 |
|  6Common shares |  |
|  Subordinate debentures | 31,800 |
| Total Equities | 51,150 |
| Total liabilities and equities | 246,290 |

1 Line of credit would receive their Step 4 claim as a current liability that will be paid in the normal course of business. Since they would receive this in liquidation, they are unlikely to accept anything less in a Proposal. The loan would continue to be secured by inventory and accounts receivable. These creditors are expected to accept because of the potential future lending business if the company recovers and their continued secured position.

2 Trade accounts payable were given their Step 4 claim as a current liability. Having reliable suppliers is critical to the success of the Proposal, so the entire Step 4 claim was classified as a current liability and will be paid in the normal course of business. Trade creditors are expected to accept because of the potential for future business if the company recovers.

3 Administration costs and WCB payable would receive their reduced Step 4 claim as a current liability and be paid in the normal course of business. They would receive this amount in liquidation and are unlikely to accept anything less in a Proposal.

4 Rent payable was given their Step 4 claim as a current liability. Having suitable facilities is critical to the success of the Proposal, so their Step 4 claim was classified as a current liability and will be paid in the normal course of business. The trade creditors are expected to accept due to the potential for future business as the company recovers.

5 Term and mortgage loan payable would receive the portion of their Step 4 claim with a priority claim as a long-term liability. These loans would continue to be secured by land, building, and equipment. The unsecured portion will be converted to preferred shares to reduce the company’s debt ratio to the industry average. Giving preferred shares instead of common shares protects these creditors if the Proposal is unsuccessful. The preferred shares will also be given a conversion feature that allows them to be converted into common shares so they can participate in the success of the Proposal. These creditors are expected to accept because of the potential to recover more than in liquidation if the Proposal is successful and the common shares appreciate. If necessary, the company may attempt to negotiate a longer maturity and lower interest rate for the term loan and mortgage to help the reorganization, but the creditor does not have to accept.

6 Subordinate debentures will be converted to common shares as their Step 4 claim is unsecured. These creditors are expected to accept because of the potential to recover more than in liquidation if the Proposal is successful and the equity appreciates.

The debt ratio is 79% under this Proposal and not the 60% first planned.

Debt ratio = $\frac{195,140,000}{246,290,000}$ = .792 or 79.2%

A major reason why Proposals fail is that companies do not go far enough in reducing their debt and continue to have difficulties making the fixed interest and principal payments. To address this concern, the company may attempt to find new equity investors willing to invest CAD 78,943,000 (CAD 325,233,000 – CAD 246,290,000).

Debt ratio = $\frac{195,140,000}{325,233,000}$ = .600 or 60.0%

Vulture capitalists may be willing to invest the funds required and could be interested in purchasing the convertible long-term debt, convertible preferred shares, and common shares of the creditors who want to sell to avoid the risks of a reorganization. This would allow the vulture capitalist to control the firm and provide needed expertise and possibly additional financing as the Proposal is implemented.

**Problem: Reorganization at Alexa**

1. Different Proposals can be developed to successfully reorganize Alexa’s operations. The following is one possible plan:

**Step 1: Priority of claims in a liquidation**

|  |  |
| --- | --- |
| Unpaid suppliers | 200,000 |
| Trust claims: EI, CPP, Tax | 200,000 |
| Secured creditors: Bonds | 400,000 |
| Preferred creditors |  |
|  Administration costs | 60,000 |
|  Wages payable | 300,000 |
| Total | 1,160,000 |

**Step 2: Trust claims and wages that must be paid immediately**

3,500,000 – 200,000 – 300,000 = 3,000,000

**Step 3: Residual remaining after paying other priority claims**

3,000,000 – 200,000 – 400,000 – 60,000 = 2,340,000

**Step 4: Allocation to unsecured creditors**

|  |  |  |  |
| --- | --- | --- | --- |
|  | **Amount** | **3Claim** | **Claim After Subordination** |
| 1Accounts payable | 1,200,000 | 662,280 | 662,280 |
| 2Bond payable | 250,000 | 137,975 | 137,975 |
| Senior debentures | 1,300,000 | 717,470 | 1,300,000 |
| Subordinate debentures | 1,490,000 | 822,331 | 4239,801 |
| Total | 4,240,000 | 2,340,056 | 2,340,056 |

1 (1,400,000 – 200,000)

2 (650,000 – 400,000

3 $\frac{2,340,000}{4,240,000}$ = .5519

4 822,331 – (1,300,000 – 717,470)

**Step 5: Total claim**

|  |  |  |  |
| --- | --- | --- | --- |
| Accounts payable | 862,280 | 200,000 | Priority claim |
| 662,280 | Unsecured |
| Bond payable | 537,975 | 400,000 | Priority claim |
| 137,975 | Unsecured |
| Administration costs | 60,000 | 60,000 | Priority claim |
| Senior debentures | 1,300,000 | 1,300,000 | Unsecured |
| Subordinate debentures | 239,801 | 239,801 | Unsecured |
| Total | 3,000,056 | 3,000,056 |  |

**Step 5: Proposed new capital structure**

Based on the typical industry debt ratio of 40%, the following capital structure is recommended:

|  |  |  |
| --- | --- | --- |
| Debt | 1,200,022 | 40% |
| Equity | 1,800,034 | 60% |
| Total | 3,000,056 | 100% |

**Step 6: Recommended Proposal with rationale**

|  |  |
| --- | --- |
| Current liabilities |  |
|  Accounts payable | 862,280 |
|  Administration costs | 60,000 |
| Long-term liabilities |  |
|  1Bonds payable | 400,000 |
| Total liabilities | 1,322,280 |
| Shareholders’ equity |  |
|  1Preferred shares  |  |
|  Bonds payable | 137,975 |
|  Common shares |  |
|  Senior debentures | 1,300,000 |
|  Subordinate debentures | 239,801 |
| Total equities | 1,677,776 |
| Total liabilities and equities | 3,000,056 |

1 The bonds payable will be given new bonds for the secured portion of their claim and preferred shares for the remainder. The bonds will retain a lien on the machinery and equipment. The bonds payable and preferred shares will have a conversion feature to provide holders with equity participation if the reorganization is successful and the share price rises but protection if it is not successful and the company is liquidated. If necessary, the company may attempt to negotiate a longer maturity and lower interest rate for the new bonds to help the reorganization, but the creditor does not have to accept.

The debt ratio is 44.1% after the reorganization which is close to the industry average. Hopefully, this will be enough for a successful reorganization. If not, new equity could be raised.

Debt ratio = $\frac{1,322,280}{3,000,056}$ = .441 or 44.1%