

Reorganizing wheeling pittsburgh



Analysis Perform traditional comparative and trend analysis as well as multivariate financial statement analysis for 1980 to 1990. Can you analyze the performance of Wheeling Pittsburgh in a manner that reveals if WHX was heading towards distress before 1985? The table below shows calculated financial ratios for the period 1980-1990. Calculation details include: ROE was calculated using Reported Net Income prior to preferred dividends and Total Common Equity without including Minority Interest or Preferred Stock * ROA was calculated using Reported Net Income prior to preferred dividends * ROE and ROA use Average Common Equity and Average Assets in the denominator, respectively * Total Debt includes the Current Portion of Long-term Debt and Long-term Debt * Total Capital includes Total Debt, Total Common Equity, and Preferred Stock. * EBITDA-CEx stands for EBITDA minus Capital Expenditures.

After improving Y/Y in 1981, WHX financial performance severely deteriorated in the period 1982-1983. Financial metrics mostly improved in 1984, led by revenue growth and margin expansion. However, the damage done the prior 2 years was severe enough to send the company to a distressed state. After annual increases during 1980-84, leverage reached a peak in 1984 as shown by Debt/Equity of 209.8% and Debt/Capital of 60%. EBITDA during 1982-84 was not enough to cover 1 year of interest expenses.

ROE was increasingly negative during 1982-84. Liquidity and cash balances deteriorated, primarily impacted by dismal profitability and increased cash conversion cycle (decreased efficiency) during 1981-83. The charts below show the evolution of cash balances, cash flow from operations, cash conversion cycle, total capital and leverage for the period 1980-1984. In

summary, the analysis of financial ratios and trends for the pre-bankruptcy period 1980-1984 clearly shows severe deterioration in WHX's financial performance.

EBITDA coverage was not enough to cover 1 year of interest and cash balances eroded to the point where 1984 cash of \$39M could not cover interest expenses for that year of \$64M. Financial distress is evident but not fully conclusive until 1984. Multivariate analysis using the Z-Score is congruent with the above conclusion. However, the perception of distress is evident during the entire pre-bankruptcy period when using the Z-Score. The table below shows the calculation of the Z-Score for the period 1980-1990. Note that Market Value of Equity (MVE) excludes preferred stock.

The Z-Score is calculated using the coefficients for a manufacturing U. S. firm. WHX was in the "distress" zone ($Z\text{-Score} < 1.8$) during the entire pre-bankruptcy period, reaching the lowest Z-Score of 0.73 in 1983. At this point, distress was a reality and the likelihood of bankruptcy had increased substantially. At the end of 1985, WHX had already filed for bankruptcy and financial performance was at its worst during the period 1980-90. After voiding the fixed-price iron ore supply contracts, gross margin improved dramatically to drive operating profitability during 1986-90.

However, after reaching a peak in 1988, operating profitability deteriorated the next 2 years leading to a net loss margin of -4.6% in 1990. Efficiency declined dramatically due to poor inventory turnover, leading to the worst cash conversion cycle in the period 1980-90. While the Z-Score improved post-bankruptcy, it stayed within the "distress" zone. In 1990, the Z-score

declined to 1.39 from a peak 1.60 the prior year, showing that WHX was still in distress. Stock Price Analysis 1. Research the stock price of WHX prior to, during, and after its filing for bankruptcy.

What were the trading ranges and closing price on the day that the company filed? What were they the day after filing? The table below shows the stock price ranges before, around, and after the bankruptcy filing. Prior to the filing the stock price reached a peak of \$30.50 on Dec-81 and a low of \$13.63 on Dec-84. The stock price performance followed closely WHX's poor financial performance through the period 1982-84, declining 55% from peak to low. The stock price traded between \$11.75 and \$6.62 during the days surrounding the bankruptcy filing. The price closed at \$7.25 the day of the filing, April 16, 1985.

The stock price closed at \$6.62 the day after the filing, an 8.7% decline from the price at filing. This price was also the lowest price during the period surrounding the filing. During the period starting in Dec-85 and ending in Dec-90, the stock price range was between a high of \$11.13 on Dec-89 and a low of \$3.63 on Dec-90. 2. If an investor acquired WHX stock before April 1985, what would it be worth as of the most current price? The closing price as Dec-90 was \$3.63. The table below shows the return of buying WHX stock at the end of every year from 1980-84. Investors would have lost at least 73.4% if invested prior to the filing.

If an investor bought at the peak price of \$30.50 in Dec-81, his investment would have yielded a loss of 88.1% at the end of 1990. Valuation Cost of Capital Calculation The first step in the valuation process was to determine

WACC. We utilized the following assumptions: * Used the 8.08% 10Y U. S. Treasury yield as of 12/31/1990 as the risk-free rate * Took the risk premium as of Dec-1990 from Damodaran's websites * Assumed a tax rate of 35%, consistent with the U. S. corporate tax rate established in 1993 (it was 34% from 1988-1992) * Calculated monthly stock and S&P 400 returns with stock prices in Table 14. and estimated a Beta of 1.45 on 60 monthly observations

The second step was to estimate the cost of debt. We used the following rationale: * Our estimate of the Z-score for 1990 was 1.39 * For the period 1992-95, Z-scores of 1.38 and 1.87 were equivalent to a B- and B rating, respectively (per our class slides) * WHX's financial condition is consistent with a B rating * Cost of debt is equal to 19.6%, equivalent to the yield to maturity of B rated bonds provided in the case

The third step was to estimate the market value of debt. We assumed the following: * Face value of senior secured debentures is \$276M Term on the debentures is 5 years * Coupon rate is 16% (provided in the case), paid semi-annually * Book value of total long term debt on the balance sheet in 1990 is \$309M, resulting in \$33M of additional revolver debt * We assume revolver debt at book value based on the expectation of quick repayment Our estimate of MV of total debt is \$283M. To estimate the MV of Equity, we used information provided in the case. Based on the October 1990 plan, 20M shares would be issued at prices ranging \$9.45 and \$19.60. We assume those shares would trade on average at the midpoint thus yielding a Market Cap of \$290.5M.

We used this value together with the MV of debt estimate to obtain the weights used in WACC (see table below). We then estimated the cost of equity. We utilized the 2 approaches suggested in the case: CAPM and bond-

yield plus risk premium (BYPRP). The BYPRP method adds a risk premium to the yield to maturity of the company's long-term debt (appropriate when a firm has publicly traded debt). The cost of equity estimate using CAPM and BYPRP was 13.9% and 23.6%, respectively. Finally, we estimated WACC using the above assumptions. The table below summarizes our estimates. Using CAPM and BYPRP cost of equity, we obtained WACC's of 13.0% and 18.2%, respectively.

Income Statement Projection

To project the income statement, we assumed the following for the period 1991-2000:

- * Revenue growth of 5% (provided in the case), realistic because of:
 - * Sales of higher value, better quality products
 - * Only player with 100% continuous casting capability versus 63% of the industry
 - * Substantially higher capacity utilization than industry over the last 5 years.
- * To estimate COGS, we split up the cost of the new labor agreement:
 - * For 1990, we took out \$75M of incremental labor costs (per the case) from total COGS of \$910M, resulting in COGS excl. labor adjustment of 75.7% of revenue
 - * COGS excl. labor adjustments is equal to 78%, consistent with the prior 5-year average
 - * Labor costs add \$42.5M annually for 1991-94 (total of \$245M for 1990-94 per the case); then they will add \$50M annually upon a new labor agreement
- * Selling and Administrative (SG; A) expenses are 5.5% of revenue, consistent with 5-year historical average
- * Depreciation expense was estimated assuming 10 year useful life for current and new CAPEX additions (more on CAPEX in the Free Cash Flow explanation).

The table below summarizes our estimate:

- * Non-operating income results from interest income in cash balances, accruing at the risk-free interest rate of 8%
- * Interest expense is calculated based on the forecasted debt schedule

below * Coupon rate on senior debentures is 16% * Interest rate on revolver is 12.5%, spread of 4.5% over the 10Y Treasury in 1990 * \$140M of senior debt is repaid in 1991 (per the case) * Minimum cash is assumed at \$25M * Current portion of revolver is equal to 20% of total balance in a given period The tax rate is equal to 35%, consistent to the rate used in the WACC calculation * We assume the company had fully used any NOLs prior to the forecast period * Number of shares remains constant at 20M to calculate EPS The projected income statement can be observed in the table below: Free Cash Flow Projection The forecast of Capital Expenditures includes the following: * Annual CAPEX of \$100M for the period 1991-96, totaling \$600M, \$47M below the company's plan for the period * Annual CAPEX of \$150M for the period 1997-2000, totaling \$600M * Total CAPEX for the forecast horizon is \$1. B, substantially higher the company expectation of \$800M for the period * The case implies WHX understated its CAPEX projection The table below shows our estimate of non-cash working capital. The following assumptions were used: * Trade receivables assume 40 days of sales outstanding, similar to the prior 5-year average * Inventory assumes 5x inventory turnover, slightly below the prior 5-year average * Prepaid expenses were estimated as 2. % of revenue, similar to the prior 5-year average * Trades payable assume 29 days of payables outstanding, similar to the prior 5-year average * Other current liabilities are equivalent to 7.5% of revenue, similar to the prior 5-year average * For simplicity, we assume taxes are paid within the year, making taxes payable 0 Taxes on EBIT are calculated with the 35% tax rate used in the WACC calculation and income statement projection. The following table shows our free cash flow projection using the above assumptions: A. Discounted Cash Flow Approach

We calculated the PV of Free Cash Flow using our 2 WACC estimates. We assume no growth during the terminal period, similar to the implied assumption in the case. The value of operations is equal to \$313M and \$216M under CAPM and BYPRP, respectively. As of 12/31/1990, WHX has \$65M of cash on the balance sheet. In addition, cash distribution to claimants is \$587 per the last reorganization plan. Adding both to the value of operations yields enterprise value of \$868M and \$965M under CAPM and BYPRP, respectively. We performed sensitivity analysis to the discount rate and terminal growth.

The valuation range results in an enterprise value range of \$839M (20% WACC, -2.5% growth) and \$1,028M (12.5% WACC, 2.5% growth). B. Discounted EBIT and EBITDA Approaches As of the 12/31/1990 and prior the approval of the reorganization plan, WHX had 5.1M shares outstanding trading at \$3.63 per share for a market cap of \$19M. The book value of debt was \$309M and cash on the balance sheet \$65M. The total enterprise value was \$328M. On 1990 EBITDA of \$131M, the EV/EBITDA multiple was 2.5x. On 1990 EBIT of \$82M, the EV/EBIT multiple was 4.0x.

We use WACC to discount both the EBIT and EBITDA valuation. Both EBIT and EBITDA are consistent with a firm valuation approach as they are independent of the capital structure. The table below shows valuation based on EBITDA. We applied 2.5x to 2000 EBITDA of \$246M to calculate the terminal value. Enterprise value is equal to \$1,021M and \$926M using CAPM and BYPRP WACC's, respectively. Applying sensitivity analysis to WACC and EBITDA Multiple, the valuation range is \$904M to \$1,110M. The table below

shows valuation based on EBIT. We applied 4.0x to 2000 EBIT of \$77M to calculate the terminal value.

Enterprise value is equal to \$933M and \$868M using CAPM and BYPRP WACC's, respectively. Applying sensitivity analysis to WACC and EBIT Multiple, the valuation range is \$882M to \$963M. C. Capitalization of Net Income Approach We believe both Wheeling and LTV should be excluded from the P/E calculation. First, Wheeling is the company being analyzed. The peer group calculation should be exclusive in this sense. Second, LTV has defaulted and its P/E is not a good indication of a business as a going concern. From the remaining companies, Weirton Steel's P/E is an outlier due to EPS close to 0.

Given this distortion, Weirton should be excluded. Acme Steel and USX Corporation are not the best comps due to their better financial standing. Their ZETA score is above 2 (Table 14. 9) while WHX's ZETA on 1989 was negative (Table 14. 3) and most likely deteriorated as did its balance sheet and profitability. That leaves Bethlehem Steel as the closest comp. We will use Bethlehem's P/E ratio of 12.9x. The peer P/E is substantially above those of the S; P and Value Line averages. The enterprise value for the Peer, S; P and Value Line estimates are \$1,025M, \$700M and \$518M, respectively.

This estimates yield a wide valuation range. D. Total Market Capitalization Approach Under this approach, the enterprise value can be estimated by adding equity and debt, and subtracting cash. The values should be at market value. To estimate the market value of equity we use the market capitalization as proxy. As 12/31/1990, the stock traded at \$3.63 per share

and there 5. 1M shares outstanding, resulting in a market cap of \$19M. The debt on the balance sheet is comprised primarily of \$276M of senior debentures at an interest rate of 16%. We assumed WHX will be rated B when estimating the cost of debt.

The yield to maturity of B rated bonds is 19. 55%. Assuming a typical debenture has a 5 year term and pays interest semiannually, the value of this debt would be \$250M. Adding \$33M in additional debt, results in total debt of \$283M. Adding the market capitalization of equity to the market value of debt yields an enterprise value of \$302M. Note that the case mentions this approach only adds elements of the right side of the balance sheet. Thus, it excludes cash. Valuation Summary The highest valuation of \$1, 025M was obtained using the Peer P/E. The lowest valuation of \$302M results from the market capitalization approach.

The average enterprise value resulting from all valuation approaches is \$813M. Excluding the market capitalization valuation, the average enterprise value is \$869M. We are comfortable with this last valuation. Does the going concern exceed liabilities? The total liabilities as at 12/31/1990 were \$970 million. The majority of our valuation estimates do not exceed the value of liabilities. The valuation estimate using the P/E multiple leads to a going concern value closest to the value of liabilities. However, we could only obtain one company as a reasonable comparable to WHX.

For that, reason, we should consider that estimate with caution. Approaches such as DCF or EBIT/EBITDA are more conservative in valuation in this case. Overall, we believe the value of the going concern is not sufficient to fully

cover the value of the claims against the company as of the valuation date. Our average valuation estimate of \$869M is \$100M short of the value of the claims. Identify which investors and claimants improved the amount of their settlement from the first to final plan. Discuss strategy employed by each investor group in improving their economic return.

Does it appear any creditor classes were penalized for not having appropriate representation at negotiations? Lloyd Lubensky made the best investment when taking over Paulson's stock. He sold the 1, 747, 796 shares he purchased for \$100, 000 for \$14M to Goldman Sachs. His bet on company turnaround led by him was the best performing strategy of any investor. Goldman Sachs bought out Lubensky at \$8 per share and was in desperate need of achieving a high valuation to earn a significant return. Goldman smartly aligned with creditors when its attempt to raise equity capital failed.

Equity came out the \$9. 45-\$19. 60 range, potentially yielding a moderate to significant return to Goldman. Labor improved its standing when the new labor agreement was reached. A strike is a powerful tool of negotiation, especially when the affected company depends on union labor. Ultimately, they improved their payoff substantially with the agreement signed. The raw material suppliers suffered as their claim settled at 31 cents on the dollar. It appears that they were penalized for not having appropriate representation in the negotiation.

PBGC and IRS also got the raw end of the settlement. The settlement for PBGC was \$97 million in cash and securities versus a claim of \$495 million; the settlement with IRS was \$16 million versus a claim of \$454 million. Do

you feel WHX will emerge as a successfully reorganized firm and continues as a going concern? What happened to the firm after? Based on our projection, we feel WHX will have a healthy financial condition for the period 1991-2000. Sales will grow moderately while profitability as measured by EBITDA will improve slightly over time.

Despite heavy capital expenditures to stay relevant in the industry, free cash flow is expected to be positive. However, our view was quite different from the actual outcome. The U. S. steel industry underwent substantial structural changes. In late 1990's, demand for steel by the auto industry was significantly subdued, as innovation in car manufacturing led to less steel requirements. The industry was also impacted by migration to overseas production facilities to seek cheaper manufacturing costs. As a result of a poor industry landscape, WHX filed for Chapter 22 in 2000.