Report on Marvel’s Restructuring Dilemma

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Background

Ronald Perelman bought Marvel in January 1989 for $82.5 million, out of which only $10.5 million was debt. In line with his reputation he quickly eliminated unprofitable lines of business, resulting in an increase in revenue from $68.8 million to $81.8 million and net income from $2.4 million to $5.4 million during his first year in the company. His long term vision was to create a diversified youth entertainment company, and to achieve this he acquired Fleer (trading card manufacturer) and Toy Biz (children’s toys manufacturer) in 1992 and 1993 respectively. In an attempt to consolidate the comic book industry he also acquired other comic books publishers Harvey Comics and Malibu Comics. Through his various holding companies Perelman spread any net operating loss that would occur in one firm across other firms thus skilfully avoiding paying large taxes. The other strengths, weaknesses, opportunities and threats are summarized in Appendix 1.

Another strategy Perelman used in the mid-90’s was to collateralize equity in Marvel Holding companies and in return issue debt instruments to finance open market purchases. Using this financing strategy of issuing equity-backed debt through MacAndrews & Forbes Perelman significantly increased the leverage of the company. Even as Marvel was going on a acquisition spree and sales were increasing, interest expense was also increasing commensurately causing a decline in Net Income Margins (Appendix 2).

But starting in 1994, Marvel started to experience declining sales in both comic books and trading cards markets, resulting in a loss of $48.5 million in 1995. In October 1996, Marvel announced that it would violate specific loan covenants which precipitated in the crash of both debt and equity values. Perelman suggested a restructuring plan early in 1996. This was declined by the debtors, especially by Carl Icahn, one of the “vulture investors” who had purchased the massively discounted Marvel bonds. And as a result Marvel filed for Chapter 11 bankruptcy. Subsequently, the bankruptcy court granted Marvel Debtor-In-Possession and gave 120 day period to present a debt restructuring plan. One month later, Perelman presented an amended reorganization plan. He suggested that he would inject equity worth $365 million in exchange for 427 million new shares implicitly priced at $0.85/share. This would give Perelman a 80% ownership in the company. The raised equity would be used to purchase the remaining shares of Toy Biz. Under this plan, the debt holders in possession of collateralized equity would swap $894.1 million worth of debt for 77.3 million shares. Also, Perelman would arrange for $100 million in DIP financing from Chase Manhattan Bank.

Problem statement

The problem statement for Marvel Entertainment Group’s debt restructuring could be summarized as follows: to arrive at a debt restructuring plan that maximizes the value of the firm, and is, within reasonable limits, acceptable to both the creditors (secured and unsecured) represented on one side by Carl Icahn and on the
other side the owners and management of the company represented by Ronald Perelman. This shall be done by analyzing the values of the company and the returns for the various stakeholders under different scenarios mainly: (a) if the company were to file for chapter 7 bankruptcy immediately as of January 1, 1997 and undergo liquidation of its assets and (b) payoffs to various stakeholders if the company were to restructure under the plan proposed by Ronald Perelman (Marvel Entertainment Group’s largest shareholder, possibly with some alterations, and continue as a going concern). The possible outcomes in this bankruptcy case are summarized by the chart in Appendix 3. The ideal solution arrived at would be the one that would pay off money owed by creditors in all its entirety in case of immediate liquidation, or provide complete coverage of the debts held from the asset valuation (in case the company continues its operations), and maximizes the value of the residual assets left over for shareholders. Thus, the debt restructuring problem will be approached with the goal of value maximization of shares.

**Scope and Perspective**

This report shall analyze the restructuring plan proposed, and its effect on the value of the firm. However, it will take into account the interest of the different stakeholders and shall attempt to arrive at a solution that will be beneficial for all the parties involved as explained in the problem statement. In the end a win-win recommendations will be proposed. The acceptance or rejection of the recommendations made by the parties concerned will be beyond the scope of this report. The report shall include both Marvel and Toys Biz Inc as a single consolidated entity in this analysis, even though Marvel does not own majority stake in Toy Biz Inc. Also, various assumptions will be made, the validity and rationale of which will be explained.

**Alternatives**

Because this report examines the viability of the restructuring plan proposed by Mr. Perelman, it shall analyze two alternatives. The first alternative will value the equity of Marvel when it files for Chapter 7 bankruptcy. To calculate the value of the firm under Chapter 7 bankruptcy, the report will not only use the available Bear Sterns’ liquidation costs analysis, but will also make independent assessments of what Marvel will be worth when it undergoes liquidation. Chapter 7 liquidation will be one of the possible pathways to analyzing the problem as stated in the problem statement above.

Conversely, the second alternative will analyze the value of the company assuming that the final proposal made by Ronald Perelman is found viable and accepted. Under this alternative the valuation of the company as a going concern will be done out in two ways: The first method will calculate the spot value of the equity of the company using the balance sheet figures immediately after the proposed restructuring is carried out. This will be
the valuation according to the book value of the assets. Secondly, the cash flow from the assets will be calculated for each year starting with 1997 and into perpetuity assuming a constant growth model after 5 years. Using the discounted free cash flow model we will then evaluate the value of the firm. Consequently, the alternative that yields the highest returns to both the stakeholders (i.e. owners and the creditors) as well as presents the best viable working solution will be recommended.

Analysis of Alternatives

Alternative 1: Immediate Chapter 7 Bankruptcy

Bear Sterns has already provided Marvel with an analysis of the liquidation costs. This analysis can be referred in Appendix 4. It calculates a asset valuation of $447 million after discounting the low end of the asset value by 20% in consideration of ‘fire sale’ of the assets. The downgrading in the value of the asset is the indirect cost of liquidation. There would be another $10.5 million in direct costs associated with liquidation. Marvel would also liquidate its interests in Toy Biz would be left with a net proceed of $369.1 million to satisfy all the debtors’ claims after paying off the Panini debt. Following the liquidation the secured creditors would only receive 68.9 cents per-dollar. The shareholders would be left with a negative equity value of -$3.43 (Appendix 5: Book Value Per Share).

International Consulting Group is of the opinion that the values of the asset are massively downgraded under the Bear Sterns estimate, and as such present a much pessimistic scenario for liquidation. It would be prudent to investigate the values of the assets using more neutral estimates. The group made an attempt at estimating the values of the enterprise and the ending equity value under liquidation using logical subjective judgements. The results are summarized in Appendix 6: Fire Sale Liquidation Analysis. Sure enough, both the liquidation value as well as equity value under our independent estimation was higher than that for Bear Sterns. For instance, the residual equity value after all the claims of credit holders are satisfied is -$348.7 million under the Bear Sterns evaluation whereas it is -$215.54 million according to the estimate of International Consulting Group. Please Refer to Appendix 4- Appendix 6 for a comparison of the two values. Although the liquidation analysis done by the group hinted that Bear Sterns’ figures for liquidation were slightly pessimistic, there was no denying that equity value would be rendered worthless if the company were to be liquidated immediately. Furthermore, to decisively confirm this fact, the group referred to a journal article from a scholarly journal and sure enough the figures obtained for the value of the equity after all the creditors’ claims are met would be -$256 million (Appendix 5: Book Value per Share), close to our estimate. (1. Joseph Calandro Jr, (2009), "Distressed M&A and Corporate Strategy: Lesson from Marvel Entertainment Group’s bankruptcy", Strategy & Leadership, Vol. 37 Iss: 4 pp. 23-32)
Alternative 2: Going Concern with the Proposed Restructuring

The analysis of the value of the company as a going concern assumes that the proposed restructuring plan offered by Perelman has been accepted. The gist of the proposed plan is as summarized below:

- An injection of equity of $365 million from Ronald Perelman in exchange for 425 million common shares.
- Use of the proceeds from the investment to finance the acquisition of Toy Biz Inc shares in the open market at 32% premium
- Arrangement of $100 million of Debtor-in-possession financing through Chase Manhattan Bank
- The conversion of public debt with a face value of $894.1 million into 77.3 million shares which were collateralized at the time of issuing of the debt.

The effect on the pre-conformation balance sheet of the proposed restructuring plan is summarized in Appendix 7 in the middle two columns. The net effect of the restructuring results in the projected pro-forma balance sheet. To evaluate the firm value as a going concern we could use this pro-forma balance sheet (post-restructuring) relying on the book value of the assets. Even though this method does not yield accurate figures for the value of equity, we can use this figure to obtain a ballpark figure of what the equity would be worth on the books under Perelman’s restructuring plan.

As we can see from the balance sheet, the book value of equity under this plan would be difference in the book value of the assets minus the total liabilities. This gives us a figure of approximately $107 million. Here we should be aware that by paying $365 million for 425 million shares Perelman is buying the each share at $0.85/share whereas the shares are trading at $2/share. This is a discount of $1.15 per share and represents a capital shortfall of $427 million. If the shares were bought at the prevailing market prices, the value of the equity would be higher at $596 million. This will be seen an unfair by the creditors especially when the public debt holders are being asked to swap debts worth $894.1 million in exchange for 77.3 million shares at $11.57/share, a premium of $9.57/share!

The second (and preferred) method of evaluating enterprise value is the discounted cash flow method. The discounted cash flow method is summarized in Appendix 9. The calculations involving the appropriate discount rates are summarized in Appendix 8. There are various assumption that have been made while calculating the free cash flow: (a) The tax rate will be a steady 40% (b) Marvel doesn’t earn enough EBT in 1997 and 1999 as projected and avoids paying taxes in those years, possibly carrying the NOL over to other subsidiaries (c) Marvel will grow at a modest 2.5% beyond 2001 and into perpetuity (d) The market risk premium is assumed to be at 5% (e) The cost of equity will be the appropriate discount rate since under conditions of considerable financial distress debt and equity start becoming equally risky.
Using the discounted cash flow analysis we obtain an enterprise value of $1,278.36 million as of January 1997. Although slightly more than the book value estimate, the enterprise value obtained using the discounted cash flow method corroborates our finding that the value of the equity will be slightly positive. As we can see from Appendix 5, under the proposed restructuring plan the price per share will be at $0.32 per share. This might seem like a reduction from the current market price of $2/share, but wit should be remembered that 504 million additional shares have been issued. In effect, the issuance of the new shares under the restructuring plan is like a 5 for 1 stock split.

**Recommendations:**

International Consulting Group recommends that the adoption of the restructuring proposal put forth by Mr. Perelman because under the circumstances it is the only option with positive enterprise valuation. The creditors might be tempted to press for immediate liquidation of the assets. Even under normal conditions creditors generally would much rather get paid in the present than sometime in the future. The added risk of completely losing their investment under threats of continual devaluation of assets might make the call for immediate liquidation even more strident. But our analysis shows that if the company were to be liquidated without the restructuring of debt many unsecured creditors would receive nothing. Even the secured creditors would receive only partial value on the dollar.

However, the recommendation comes with certain conditions. Firstly, Mr. Perelman ought to pay a fairer market value for the additional shares. The deeply discounted rates he pays will be perceived as unfair by other stakeholders and will increase their resistance to his plan. Mr. Perelman should not object to paying more for the shares since he would not want to be left with worthless shares in case the company underwent another bankruptcy. Also, the proposed restructuring only addresses the problem temporarily. The root cause of the malaise for Marvel lies in the highly leveraged capital structure of the firm. The restructuring does absolutely nothing to reduce the debt burden. The Debt Ratio continues to hover around 80% well into the future (Appendix 10). Continuing with the current style of aggressive buyout with leveraged stock will certainly land the company in further bankruptcy problems. Perhaps, Mr. Perelman should considering divesting some business and product lines.
Appendix 2: Sales, Interest Expense and Net Income Margin Percentages

Sales (In Millions)

Interest Expense (In Millions)

Net Income Margin (Percentage)
Appendix 3: Pathways to Framing the Problem

- **Highest Enterprise Valuation?**
  - **Going Concern**
  - **Chapter 7 Bankruptcy**
    - **Accept Proposed Restructuring**
    - **Amended Restructuring**
      - **Change Management**
      - **Continue with existing Management**
### Appendix 4: Liquidation Analysis (millions)

<table>
<thead>
<tr>
<th>Description</th>
<th>Amount</th>
</tr>
</thead>
<tbody>
<tr>
<td>Gross proceeds from disposition of operating assets</td>
<td>$447.0</td>
</tr>
<tr>
<td><strong>Chapter 7 costs</strong></td>
<td></td>
</tr>
<tr>
<td>Transaction costs</td>
<td>$4.5</td>
</tr>
<tr>
<td>Case related administrative expenses</td>
<td>$6.0</td>
</tr>
<tr>
<td>Total Chapter 7 costs</td>
<td>$10.5</td>
</tr>
<tr>
<td><strong>Net proceeds from disposition of operating assets</strong></td>
<td>$436.5</td>
</tr>
<tr>
<td>Less Panini debt</td>
<td>$192.1</td>
</tr>
<tr>
<td><strong>Net proceeds available for other creditors</strong></td>
<td>$244.4</td>
</tr>
<tr>
<td>Net proceeds available for other creditors from sale of Toy Biz shares</td>
<td>$124.7</td>
</tr>
<tr>
<td>Total net proceeds available for other creditors</td>
<td>$369.1</td>
</tr>
<tr>
<td>Secured claims</td>
<td>$535.4</td>
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<tr>
<td>Percent recovery against secured claims (mainly debt)</td>
<td>68.9%</td>
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<tr>
<td><strong>Proceeds available for other claims</strong></td>
<td>0.00</td>
</tr>
<tr>
<td>Other administrative claims</td>
<td>$94.1</td>
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<tr>
<td>Percent recovery against other administrative claims</td>
<td>0%</td>
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<tr>
<td>Unsecured deficiency claims</td>
<td>$166.3</td>
</tr>
<tr>
<td>Percent recovery against unsecured deficiency claims</td>
<td>0.0</td>
</tr>
<tr>
<td><strong>Proceeds available for common equity shareholders</strong></td>
<td>$0.0</td>
</tr>
</tbody>
</table>

*Net Equity Value stands at *(348.7)* under this estimate*
### Appendix 5: Book value per share

<table>
<thead>
<tr>
<th></th>
<th>Bear Sterns</th>
<th>Journal *</th>
<th>Going Concern-DCF</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Total Value of Assets</strong></td>
<td>447</td>
<td>664</td>
<td>1297.78</td>
</tr>
<tr>
<td><strong>Net Proceed from sale of Toy Biz Shares</strong></td>
<td>124.7</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td><strong>Total Liabilities</strong></td>
<td>920.4</td>
<td>920.4</td>
<td>1105.9</td>
</tr>
<tr>
<td><strong>Total Value of Equity</strong></td>
<td>-348.7</td>
<td>-256.4</td>
<td>191.88</td>
</tr>
<tr>
<td><strong>Common Shares Issued</strong>*</td>
<td>101.8</td>
<td>101.8</td>
<td>606.1</td>
</tr>
<tr>
<td><strong>Price per Share</strong></td>
<td>-3.43</td>
<td>-2.52</td>
<td>0.32</td>
</tr>
</tbody>
</table>

**Footnotes:**


*** 101.8 million shares issued and outstanding

**ADD:**

- 427 million shares issued to Ronald Perelman in exchange for $365 million
- 9.3 million shares issued to 9.125% bondholders
- 20 million shares issued to 11.875% bondholders
- 48 million shares issued to 11.25% bondholders

Totalling 606.1 million shares
### Fire Sale Liquidation Analysis (Millions)

**Assuming Liquidation**

**As of September 1996**

<table>
<thead>
<tr>
<th>Assets</th>
<th>Fire Sale* Adjustment</th>
<th>Fire Sale Value</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Current Assets</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Cash</td>
<td>100%</td>
<td>$35.90</td>
</tr>
<tr>
<td>Accounts Receivable</td>
<td>85%</td>
<td>$218.62</td>
</tr>
<tr>
<td>Inventories</td>
<td>75%</td>
<td>$74.33</td>
</tr>
<tr>
<td>Deferred income taxes</td>
<td>0%</td>
<td>$0.00</td>
</tr>
<tr>
<td>Income tax receivable</td>
<td>100%</td>
<td>$18.20</td>
</tr>
<tr>
<td>Prepaid expenses</td>
<td>0%</td>
<td>$0.00</td>
</tr>
<tr>
<td>Total Current Assets</td>
<td></td>
<td>$347.05</td>
</tr>
<tr>
<td>Property, Plant and Equipment</td>
<td>80%</td>
<td>$70.16</td>
</tr>
<tr>
<td>Goodwill and other intangibles</td>
<td>50%</td>
<td>$297.85</td>
</tr>
<tr>
<td>Investment in Subsidiaries</td>
<td>75%</td>
<td>$2.40</td>
</tr>
<tr>
<td>Deferred Charges</td>
<td>0%</td>
<td>$0.00</td>
</tr>
<tr>
<td>Minority Interest in Toy Biz</td>
<td>50%</td>
<td>51.45</td>
</tr>
<tr>
<td><strong>Total Assets</strong></td>
<td></td>
<td>$771.96</td>
</tr>
<tr>
<td><strong>Less: Chapter 7 Costs</strong></td>
<td>$10.50</td>
<td></td>
</tr>
<tr>
<td><strong>Net Proceeds Available</strong></td>
<td></td>
<td>$761.46</td>
</tr>
<tr>
<td><strong>Liabilities and Stockholders Equity</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Current Liabilities:</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Accounts payable</td>
<td>100%</td>
<td>$95.80</td>
</tr>
<tr>
<td>Accrued expenses</td>
<td>100.0%</td>
<td>$170.10</td>
</tr>
<tr>
<td>Short term borrowings</td>
<td>100%</td>
<td>$28.70</td>
</tr>
<tr>
<td>Currentportion of long term debt</td>
<td>100%</td>
<td>$625.80</td>
</tr>
<tr>
<td>Total current liabilities</td>
<td></td>
<td>$920.40</td>
</tr>
<tr>
<td>Long-term debt</td>
<td>100%</td>
<td>$0.00</td>
</tr>
<tr>
<td>Other long-term liabilities</td>
<td>100%</td>
<td>$56.60</td>
</tr>
<tr>
<td><strong>Total Liabilities</strong></td>
<td>100%</td>
<td>$977.00</td>
</tr>
<tr>
<td><strong>Residual Enterprise Value</strong></td>
<td></td>
<td>($215.54)</td>
</tr>
</tbody>
</table>

*The indirect costs of liquidation (adjusted asset values) are only an estimate.*
### Appendix 7: Marvel Entertainment Group, Inc.--Projected Pro Forma consolidated Balance Sheet

<table>
<thead>
<tr>
<th></th>
<th>Projected Pre-confirmation</th>
<th>Proposed Toy Biz Investment</th>
<th>Proposed Bank Debt Agreement</th>
<th>Projected Pro Forma as Reorganized</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Assets</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Current Assets:</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Cash</td>
<td>$13.3</td>
<td>$33.5</td>
<td>$52.0</td>
<td>$98.8</td>
</tr>
<tr>
<td>Accounts receivable, net</td>
<td>$210.0</td>
<td>$210.0</td>
<td></td>
<td>$210.0</td>
</tr>
<tr>
<td>Inventories, net</td>
<td>$77.5</td>
<td></td>
<td></td>
<td>$77.5</td>
</tr>
<tr>
<td>Deferred income taxes</td>
<td>$40.1</td>
<td>$48.5</td>
<td></td>
<td>$88.6</td>
</tr>
<tr>
<td>Income tax receivable</td>
<td>$11.1</td>
<td></td>
<td></td>
<td>$11.1</td>
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<tr>
<td>Prepaid expenses and other</td>
<td>$55.0</td>
<td></td>
<td></td>
<td>$55.0</td>
</tr>
<tr>
<td>Total current assets</td>
<td>$407.0</td>
<td>$541.0</td>
<td></td>
<td>$541.0</td>
</tr>
<tr>
<td>Property, plant and equipment, net</td>
<td>$78.7</td>
<td></td>
<td></td>
<td>$78.7</td>
</tr>
<tr>
<td>Goodwill and other intangibles, net</td>
<td>$317.4</td>
<td>$202.3</td>
<td></td>
<td>$519.7</td>
</tr>
<tr>
<td>Deferred charges and other</td>
<td>$65.9</td>
<td>$8.0</td>
<td></td>
<td>$73.9</td>
</tr>
<tr>
<td>Total assets</td>
<td>$869.0</td>
<td></td>
<td></td>
<td>$1,213.3</td>
</tr>
</tbody>
</table>

| **Liabilities and Stockholders' Equity** |                             |                             |                              |                                   |
| **Current Liabilities:**                |                             |                             |                              |                                   |
| Accounts payable                     | $99.4                       |                              |                              | $99.4                             |
| Accrued expenses and other            | $143.1                      | $10.0                       |                              | $153.1                            |
| Short-term borrowings                | $40.0                       |                              |                              | $40.0                             |
| DIP Financing                        | $50.0                       | ($50.0)                     |                              | $0.0                              |
| Current portion of long-term debt     | $635.4                      | ($624.7)                    |                              | $10.7                             |
| Total current liabilities             | $967.9                      |                              |                              | $303.2                            |
| Long-term debt                       |                              | $20.0                       | $624.7                       | $754.7                            |
| Other long-term liabilities           | $49.7                       | ($1.7)                      |                              | $48.0                             |
| Total liabilities                    | $1,017.6                    | ($1.7)                      | $1,105.9                     |                                   |
| Minority interest in Toy Biz          | $109.0                      | ($109.0)                    |                              | $0.0                              |
| **Stockholders’ equity:**             |                             |                             |                              |                                   |
| Common stock                         | $1.0                        |                              |                              | $1.0                              |
| Additional paid-in-capital            | $93.1                       | $365.0                      |                              | $458.1                            |
| Retained earnings                    | ($351.7)                    |                              | ($351.7)                     |                                   |
| Total stockholders' equity            | ($257.6)                    |                              | $107.4                       |                                   |
| Total liabilities and stockholders' equity | $869.0                     |                              |                              | $1,213.3                          |

| **Restructured Residual Enterprise Value*** | $107.00 |

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Appendix 8: The Costs of Capital

Yields on U.S. Treasury Bills, Notes, and bonds

<table>
<thead>
<tr>
<th>Tenure</th>
<th>Yield</th>
</tr>
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<tbody>
<tr>
<td>3 month</td>
<td>5.04%</td>
</tr>
<tr>
<td>6 month</td>
<td>5.10%</td>
</tr>
<tr>
<td>1-year</td>
<td>5.62%</td>
</tr>
<tr>
<td>2-year</td>
<td>6.03%</td>
</tr>
<tr>
<td>5-year</td>
<td>6.36%</td>
</tr>
<tr>
<td>10-year</td>
<td>6.62%</td>
</tr>
<tr>
<td>10-year inflation indexed bonds</td>
<td>3.33%</td>
</tr>
<tr>
<td>30 year</td>
<td>6.89%</td>
</tr>
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</table>

Yields on Long-term Corporate Bonds

<table>
<thead>
<tr>
<th>Credit Rating</th>
<th>Yield</th>
</tr>
</thead>
<tbody>
<tr>
<td>Aaa</td>
<td>7.48%</td>
</tr>
<tr>
<td>Aa</td>
<td>7.69%</td>
</tr>
<tr>
<td>A</td>
<td>7.75%</td>
</tr>
<tr>
<td>Baa</td>
<td>8.12%</td>
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Interest Rates

<table>
<thead>
<tr>
<th>Rate Type</th>
<th>Rate</th>
</tr>
</thead>
<tbody>
<tr>
<td>Federal Funds</td>
<td>5.18%</td>
</tr>
<tr>
<td>3-month Commercial Paper</td>
<td>5.45%</td>
</tr>
<tr>
<td>3-month Certificate of Deposit</td>
<td>5.42%</td>
</tr>
<tr>
<td>Prime Rate</td>
<td>8.25%</td>
</tr>
</tbody>
</table>

Marvel Entertainment Group Asset Beta 0.65

Marvel Equity Beta:

\[ B(\text{Equity}) = B(\text{Asset})(1 + \frac{D}{E}) = 2.890825688 \]
\[ 0.65(1 + \frac{977}{180}) \]
(Taken from 9 months ending 1996)

Rate of Equity:

\[ R_f + B \times \text{Market Risk Premium} \]

\[ R_f = 6.89 \]

Under conditions of distress the riskiness of debt starts to become equal to the cost of Debt
ie As we incur more and more debt the cost of debt rises and equals the cost of equity
ie \( R_d = R_e \)

Modigliani and Miller Proposition II

Ie. Cost of Capital 21.3400
### Appendix 9: Discounted Cash Flow Analysis

<table>
<thead>
<tr>
<th></th>
<th></th>
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<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>EBIT</strong></td>
<td>$45.30</td>
<td>$110.50</td>
<td>$109.90</td>
<td>$115.20</td>
<td>$119.90</td>
</tr>
<tr>
<td>Deduct: Tax @ Rate of 40%</td>
<td>-</td>
<td>$44.20</td>
<td>-</td>
<td>$46.08</td>
<td>$47.96</td>
</tr>
<tr>
<td>Add: Depreciation</td>
<td>$34.50</td>
<td>$43.40</td>
<td>$44.10</td>
<td>$44.80</td>
<td>$45.90</td>
</tr>
<tr>
<td>Add: Amortization</td>
<td>$30.50</td>
<td>$21.80</td>
<td>$21.50</td>
<td>$21.20</td>
<td>$21.50</td>
</tr>
<tr>
<td><strong>Operating Cash Flow</strong></td>
<td>$110.30</td>
<td>$131.50</td>
<td>$175.50</td>
<td>$135.12</td>
<td>$139.34</td>
</tr>
<tr>
<td>Add: Provision for deferred taxes</td>
<td>$9.8</td>
<td>$8.3</td>
<td>$6.3</td>
<td>$8.1</td>
<td>$5.8</td>
</tr>
<tr>
<td>Deduct: Undistributed earnings in unconsolidated subsidiaries</td>
<td>($0.1)</td>
<td>($0.2)</td>
<td>$2.2</td>
<td>$3.2</td>
<td>$4.4</td>
</tr>
<tr>
<td>Add: Minority interest in Toy Biz earnings</td>
<td>$34.5</td>
<td>$43.4</td>
<td>$44.1</td>
<td>$44.8</td>
<td>$45.9</td>
</tr>
<tr>
<td>Deduct: Change in net working capital</td>
<td>$75.4</td>
<td>$11.5</td>
<td>($44.3)</td>
<td>$42.0</td>
<td>($2.0)</td>
</tr>
<tr>
<td>Deduct: Capital expenditures</td>
<td>$83.0</td>
<td>$67.4</td>
<td>$47.4</td>
<td>$46.7</td>
<td>$45.1</td>
</tr>
<tr>
<td><strong>Terminal Cash Flow</strong></td>
<td>$312.90</td>
<td>$261.90</td>
<td>$231.20</td>
<td>$279.92</td>
<td>$238.54</td>
</tr>
<tr>
<td><strong>Cash Flow from Assets</strong></td>
<td>257,870.44</td>
<td>177,880.24</td>
<td>129,412.40</td>
<td>129,127.30</td>
<td>90,686.21</td>
</tr>
</tbody>
</table>

**Discounted Cash Flow @21.34%**

<table>
<thead>
<tr>
<th></th>
<th>2002</th>
<th>2003</th>
<th>2004</th>
<th>2005</th>
<th>2006</th>
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</thead>
<tbody>
<tr>
<td><strong>Discounted Cash Flow @21.34%</strong></td>
<td>$257,870.44</td>
<td>$177,880.24</td>
<td>$129,412.40</td>
<td>$129,127.30</td>
<td>$90,686.21</td>
</tr>
</tbody>
</table>

**Re**

0.2134

**Total Value of Asset**

1,278.36
### Exhibit 4 Marvel Entertainment Group, Inc.--Consolidated Balance Sheets (millions)

<table>
<thead>
<tr>
<th>9 months ending</th>
<th>For years Ended December 31,</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Assets</strong></td>
<td></td>
</tr>
<tr>
<td><strong>Current Assets:</strong></td>
<td></td>
</tr>
<tr>
<td>Cash</td>
<td>$35.9</td>
</tr>
<tr>
<td>Accounts receivable, net</td>
<td>$257.2</td>
</tr>
<tr>
<td>Inventories</td>
<td>$99.1</td>
</tr>
<tr>
<td>Deferred income taxes</td>
<td>$32.5</td>
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<tr>
<td>Income tax receivable</td>
<td>$18.2</td>
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<tr>
<td>Prepaid expenses and other</td>
<td>$58.2</td>
</tr>
<tr>
<td>Total current assets</td>
<td>$501.1</td>
</tr>
<tr>
<td>Property, plant and equipment, net</td>
<td>$87.7</td>
</tr>
<tr>
<td>Goodwill and other intangibles, net</td>
<td>$595.7</td>
</tr>
<tr>
<td>Investment in and advances to unconsolidated subsidiaries</td>
<td>$3.2</td>
</tr>
<tr>
<td>Deferred charges and other</td>
<td>$72.7</td>
</tr>
<tr>
<td>Total assets</td>
<td>$1,260.4</td>
</tr>
<tr>
<td><strong>Liabilities and Stockholders’ Equity</strong></td>
<td></td>
</tr>
<tr>
<td><strong>Current Liabilities:</strong></td>
<td></td>
</tr>
<tr>
<td>Accounts payable</td>
<td>$95.8</td>
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<tr>
<td>Accrued expenses and other</td>
<td>$170.1</td>
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<tr>
<td>Short-term borrowings</td>
<td>$28.7</td>
</tr>
<tr>
<td>Current portion of long-term debt</td>
<td>$625.8</td>
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<tr>
<td>Total current liabilities</td>
<td>$920.4</td>
</tr>
<tr>
<td>Long-term debt</td>
<td>$581.3</td>
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<tr>
<td>Other long-term liabilities</td>
<td>$56.6</td>
</tr>
<tr>
<td>Total liabilities</td>
<td>$977.0</td>
</tr>
<tr>
<td>Minority interest in Toy Biz</td>
<td>102.9</td>
</tr>
<tr>
<td><strong>Stockholders’ equity:</strong></td>
<td></td>
</tr>
<tr>
<td>Preferred stock, $.01 par value; 50,000,000 shares authorized, none issued</td>
<td></td>
</tr>
<tr>
<td>Common stock, $.01 par value; 250,000,000 shares authorized, 101,702,664 and 100,655,724 shares issued and outstanding on Dec. 31, 1995 and 1994 respectively</td>
<td></td>
</tr>
<tr>
<td>Additional paid-in-capital</td>
<td>$93.1</td>
</tr>
<tr>
<td>Retained earnings</td>
<td>$86.1</td>
</tr>
<tr>
<td>Cumulative translation adjustment</td>
<td>$0.3</td>
</tr>
<tr>
<td>Total stockholders’ equity</td>
<td>$180.5</td>
</tr>
<tr>
<td>Total liabilities and stockholders’ equity</td>
<td>$1,260.4</td>
</tr>
<tr>
<td></td>
<td>9 months ending</td>
</tr>
<tr>
<td>------------------------------</td>
<td>-----------------</td>
</tr>
<tr>
<td>Net revenues</td>
<td>$581,20</td>
</tr>
<tr>
<td>Cost of sales</td>
<td>$372,40</td>
</tr>
<tr>
<td>SG&amp;A expenses</td>
<td>$168,00</td>
</tr>
<tr>
<td>Restructuring charges</td>
<td>$25,00</td>
</tr>
<tr>
<td>Amortization of goodwill,</td>
<td></td>
</tr>
<tr>
<td>intangibles and deferred</td>
<td></td>
</tr>
<tr>
<td>charges</td>
<td></td>
</tr>
<tr>
<td>Interest expense, net</td>
<td>$42,70</td>
</tr>
<tr>
<td>Other income</td>
<td>$19,80</td>
</tr>
<tr>
<td>Equity in net income of</td>
<td></td>
</tr>
<tr>
<td>unconsolidated subs.</td>
<td></td>
</tr>
<tr>
<td>(Loss) Income before provision for income taxes, minority interest and extraordinary item</td>
<td>($15,10)</td>
</tr>
<tr>
<td>Provision for income taxes</td>
<td></td>
</tr>
<tr>
<td>(Loss) income before minority interest and extraordinary item</td>
<td>($14,40)</td>
</tr>
<tr>
<td>Minority interest in earnings of Toy Biz</td>
<td>$13,50</td>
</tr>
<tr>
<td>(Loss) income before extraordinary item</td>
<td>($27,90)</td>
</tr>
<tr>
<td>Extraordinary item, net of taxes</td>
<td>($3,30)</td>
</tr>
<tr>
<td>Net (loss) income</td>
<td>($27,90)</td>
</tr>
<tr>
<td>(Loss) earnings per share:</td>
<td>($0,27)</td>
</tr>
<tr>
<td>(Loss) income before extraordinary item</td>
<td>($0,27)</td>
</tr>
<tr>
<td>Extraordinary item</td>
<td>$0,03</td>
</tr>
<tr>
<td>Net (loss) income</td>
<td>($0,27)</td>
</tr>
<tr>
<td>Weighted average number of common and common equivalent shares outstanding (in millions)</td>
<td>$101,80</td>
</tr>
</tbody>
</table>
### Exhibit 6 Marvel Public Debt at the Time of the Reorganization Plan

<table>
<thead>
<tr>
<th>Issue</th>
<th>Face Value</th>
<th>Promised Interest Rate</th>
<th>Market Price on 08.10.1996</th>
<th>Market Price on 31.01.1997</th>
<th>Collateral Shares (millions)</th>
<th>Percent of Old Shares</th>
<th>Percent of New Shares</th>
</tr>
</thead>
<tbody>
<tr>
<td>Marvel Holdings senior secured discount notes</td>
<td>$517,4</td>
<td>11,250%</td>
<td>$0,774</td>
<td>$0,175</td>
<td>48</td>
<td>47,2%</td>
<td>9,1%</td>
</tr>
<tr>
<td>Marvel Parent Holdings senior secured discount notes</td>
<td>$251,7</td>
<td>11,875%</td>
<td>$0,781</td>
<td>$0,140</td>
<td>20</td>
<td>19,6%</td>
<td>3,8%</td>
</tr>
<tr>
<td>Marvel III Holdings senior secured notes</td>
<td>$125,0</td>
<td>9,125%</td>
<td>$0,899</td>
<td>$0,139</td>
<td>9,3</td>
<td>9,1%</td>
<td>1,8%</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td><strong>$894,1</strong></td>
<td></td>
<td><strong>$77,3</strong></td>
<td></td>
<td><strong>75,9%</strong></td>
<td></td>
<td><strong>14,7%</strong></td>
</tr>
</tbody>
</table>

**Average Rate of Debt**

\[
\text{Rd1} \times \frac{w_1}{\text{Debt(Total)}} + \text{Rd2} \times \frac{w_2}{\text{Debt(Total)}} + \text{Rd3} \times \frac{w_3}{\text{Debt(Total)}} = 11,129
\]

Adjusted for Risk @ 5% risk premium

\[
16,129
\]
### Exhibit 9  Projected Financial Data (in millions)

<table>
<thead>
<tr>
<th></th>
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<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>INCOME STATEMENT</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Net revenues</td>
<td>$929.8</td>
<td>$1,128.3</td>
<td>$1,155.8</td>
<td>$1,200.6</td>
<td>$1,247.5</td>
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<tr>
<td>Cost of sales</td>
<td>$550.4</td>
<td>$647.2</td>
<td>$666.9</td>
<td>$694.9</td>
<td>$724.2</td>
<td></td>
</tr>
<tr>
<td>Gross profit</td>
<td>$379.4</td>
<td>$481.1</td>
<td>$488.9</td>
<td>$505.7</td>
<td>$523.3</td>
<td></td>
</tr>
<tr>
<td>SG&amp;A expense</td>
<td>$262.4</td>
<td>$305.4</td>
<td>$313.4</td>
<td>$324.5</td>
<td>$336.0</td>
<td></td>
</tr>
<tr>
<td>Depreciation and amortization</td>
<td>$34.5</td>
<td>$43.4</td>
<td>$44.1</td>
<td>$44.8</td>
<td>$45.9</td>
<td></td>
</tr>
<tr>
<td>Reorganization expense</td>
<td></td>
<td>$6.7</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Amortization of goodwill</td>
<td>$30.5</td>
<td>$21.8</td>
<td>$21.5</td>
<td>$21.2</td>
<td>$21.5</td>
<td></td>
</tr>
<tr>
<td>EBIT</td>
<td>$453</td>
<td>$110.5</td>
<td>$109.9</td>
<td>$115.2</td>
<td>$119.9</td>
<td></td>
</tr>
<tr>
<td>Interest expense, net</td>
<td>$71.0</td>
<td>$68.0</td>
<td>$64.6</td>
<td>$61.0</td>
<td>$56.6</td>
<td></td>
</tr>
<tr>
<td>Toy Biz performance plan expenses</td>
<td>$55.0</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Equity in net (loss) income in unconsolidated subsidiaries</td>
<td>($0.1)</td>
<td>($0.2)</td>
<td>$2.2</td>
<td>$3.2</td>
<td>$4.4</td>
<td></td>
</tr>
<tr>
<td>(Loss) income before taxes</td>
<td>($25.8)</td>
<td>$42.3</td>
<td>($7.5)</td>
<td>$57.4</td>
<td>$67.7</td>
<td></td>
</tr>
<tr>
<td>Provision for income taxes</td>
<td>$6.9</td>
<td>$24.8</td>
<td>$4.6</td>
<td>$29.8</td>
<td>$34.1</td>
<td></td>
</tr>
<tr>
<td>(Loss) before minority interest</td>
<td>($32.7)</td>
<td>$17.5</td>
<td>($12.1)</td>
<td>$27.6</td>
<td>$33.6</td>
<td></td>
</tr>
<tr>
<td>Minority interest in Toy Biz</td>
<td>$3.0</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Net (loss) income</td>
<td>($35.7)</td>
<td>$17.5</td>
<td>($12.1)</td>
<td>$27.6</td>
<td>$33.6</td>
<td></td>
</tr>
</tbody>
</table>

### CASH FLOW DATA

<p>| | | | | | | |</p>
<table>
<thead>
<tr>
<th></th>
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<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Provision for deferred taxes</td>
<td>$9.8</td>
<td>$8.3</td>
<td>$6.3</td>
<td>$8.1</td>
<td>$5.8</td>
<td></td>
</tr>
<tr>
<td>Undistributed earnings in unconsolidated subsidiaries</td>
<td>$0.1</td>
<td>$0.2</td>
<td>($2.2)</td>
<td>($3.2)</td>
<td>($4.4)</td>
<td></td>
</tr>
<tr>
<td>Minority interest in Toy Biz earnings</td>
<td>$3.0</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Change in net working capital</td>
<td>($75.4)</td>
<td>($11.5)</td>
<td>$44.3</td>
<td>($42.0)</td>
<td>$2.0</td>
<td></td>
</tr>
<tr>
<td>Capital expenditures</td>
<td>($83.0)</td>
<td>($67.4)</td>
<td>($47.4)</td>
<td>($46.7)</td>
<td>($45.1)</td>
<td></td>
</tr>
</tbody>
</table>

### BALANCE SHEET DATA

<p>| | | | | | | |</p>
<table>
<thead>
<tr>
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<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Cash balance</td>
<td>$98.8</td>
<td>$19.1</td>
<td>$2.0</td>
<td>$2.0</td>
<td>$2.0</td>
<td>$2.0</td>
</tr>
<tr>
<td>Goodwill and other intangibles</td>
<td>$519.7</td>
<td>$504.8</td>
<td>$484.9</td>
<td>$465.1</td>
<td>$452.2</td>
<td>$425.4</td>
</tr>
<tr>
<td>Total assets</td>
<td>$1,213.3</td>
<td>$1,213.5</td>
<td>$1,234.5</td>
<td>$1,230.3</td>
<td>$1,206.6</td>
<td>$1,191.6</td>
</tr>
<tr>
<td>Short-term debt</td>
<td>$40.0</td>
<td>$33.0</td>
<td>$28.7</td>
<td>$40.8</td>
<td>$37.3</td>
<td>$37.3</td>
</tr>
<tr>
<td>Long-term debt</td>
<td>$765.4</td>
<td>$769.5</td>
<td>$744.4</td>
<td>$612.2</td>
<td>$389.8</td>
<td>$120.0</td>
</tr>
<tr>
<td>Refinanced long-term debt</td>
<td>$65.5</td>
<td>$281.2</td>
<td>$492.5</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Shareholders equity</td>
<td>$107.4</td>
<td>$102.7</td>
<td>$120.3</td>
<td>$108.3</td>
<td>$135.9</td>
<td>$169.4</td>
</tr>
<tr>
<td>Total capital</td>
<td>$912.8</td>
<td>$905.2</td>
<td>$893.4</td>
<td>$826.8</td>
<td>$844.2</td>
<td>$819.2</td>
</tr>
<tr>
<td>Debt-to-Total Capital (book value)</td>
<td>88.2%</td>
<td>88.7%</td>
<td>86.5%</td>
<td>86.9%</td>
<td>83.9%</td>
<td>79.3%</td>
</tr>
<tr>
<td>Interest Coverage Ratio</td>
<td>0.64</td>
<td>1.63</td>
<td>1.70</td>
<td>1.89</td>
<td>2.12</td>
<td></td>
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<tr>
<td>EBIT/Interest Expense</td>
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<td></td>
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</tbody>
</table>