|  |  |
| --- | --- |
|  | **2010** |
|  | **Group 3****Inge, Kennith | Parker, Richard | Phillips, Robert | Boynton, William** |

|  |
| --- |
| **[Tootsie Roll and Hershey company analysis]** |
| This document contains financial analysis between Tootsie Roll and Hershey Company. Found are financial calculations and analysis along with recommendations in regards to the company that has the best-foreseen financial outlook for future investments. |


# INTRO

In the following document, analysis is provided for two companies. Based on financial data current and historical, a recommendation will be provided determined by information available from both companies.

The first company is Tootsie Roll Industries. Tootsie Roll Industries has been in business for 111 years. They business is the manufacture and sale of confectionery products. Sales in 2007 were $493 million compared with 2006 sales of $496 million. In 2007, they paid cash dividends of .32 cents per share and distributed a 3% stock dividend. This was the 66th year Tootsie Roll Industries has paid a cash dividend (Paul Kimmel, 2010).

The Hershey Company is the largest producer of quality chocolate in North America and a global leader in chocolate and sugar confectionary. The Hershey Company has been in business for over 100 years. Sales in 2007 were $4, 946, 716 million compared with 2006 sales of $4.944, 230 million. In 2007, they paid cash dividends of $1.35 dollars.

# FINANCIAL RATIO CALCULATIONS AND ANALYSIS

In this section, you will find descriptions of each ratios used along with group analysis pertaining to each company evaluated.

#### Earnings per Share | Indicates: Net Income earned on each share of common stock.

|  |  |  |
| --- | --- | --- |
| Ratio | Tootsie Roll Industries | The Hershey Company |
| Earnings per Share | 0.94 | 0.93 |

Earnings per share are a measure of the net income earned on each share of common stock. **Each company currently is even in earnings per share. Neither company has a significant advantage in regards to income earned from each share of common stock owned per investor.**

#### **Current Ratio | Indicates: Short-term debt paying ability.**

|  |  |  |
| --- | --- | --- |
| Ratio | Tootsie Roll Industries | The Hershey Company |
| Current Ratio  | 3.4 | 0.9 |

Current ratio expresses the relationship of current assets to current liabilities. Tootsie Roll Industries currently boasts a 3.4 ratio compared to .9 for The Hershey Company. Tootsie Roll Industries has a better asset ratio by nearly 4 times as much. Ratios less than 1 are an indication that Hershey may not be able to pay off current obligations if they became due.

#### **Gross Profit Rate | Indicates: Margin between selling price and cost of goods sold.**

|  |  |  |
| --- | --- | --- |
| Ratio | Tootsie Roll Industries | The Hershey Company |
| Gross Profit Rate  | 34% | 33% |

Gross Profit Rate is an indication that a company can maintain an adequate selling price above the cost of goods sold. With Tootsie Roll Industries displaying a slight edge in GPR, they will have a slight gain in profit over Hershey Company. .01 may not seem like much, but this can be a difference of millions of dollars to large corporations.

#### Profit Margin Ratio | Indicates: Net Income generated by each dollar of sales

|  |  |  |
| --- | --- | --- |
| Ratio | Tootsie Roll Industries | The Hershey Company |
| Profit Margin Ratio   | 10.40% | 4.30% |

Profit Margin Ratio, also known as rate of return on sales, is a measure of the percentage of each dollar of sales that results in net income. Tootsie Roll Industries is generating nearly 2 times more net income in sales than The Hershey Company is. However, high volume business will typically have a lower profit margin.

#### Inventory Turnover Ratio | Indicates: Liquidity of Inventory

|  |  |  |
| --- | --- | --- |
| Ratio | Tootsie Roll Industries | The Hershey Company |
| Inventory Turnover Ratio  | 5.40 | 5.31 |

Inventory Turnover Ratio Measures the number of times average inventory sold during the period. This rate indicates that store shelves need restocking with Tootsie products around every two months. Hershey’s products require restocking around every month and a half. Hershey Company is moving product faster than Tootsie Roll.

#### Days in Inventory | Indicates: Liquidity of inventory and inventory management

|  |  |  |
| --- | --- | --- |
| Ratio | Tootsie Roll Industries | The Hershey Company |
| Days in Inventory | 68 | 69 |

The days in inventory are higher for The Hershey Company by one point. Analyzed with the Inventory Turnover Ratio, Tootsie products stay on the store shelves longer than The Hershey Company does. The Hershey Company moves more products off shelves faster than Tootsie Roll Industries and this can increase and generate a faster return on investment when compared with Tootsie Roll.

#### Receivable Turnover Ratio | Indicates: liquidity of receivables

|  |  |  |
| --- | --- | --- |
| Ratio | Tootsie Roll Industries | The Hershey Company |
| Receivable Turnover Ratio | 10.87 | 9.8 |

Receivable Turnover Ratio measures the number of times, on average; a company collects receivables during the period. This ratio is an accounting measure used to quantify a firm’s effectiveness in extending credit along with collecting debts. Tootsie Roll Industries is able to collect on their outstanding receivables due better than The Hershey Company thereby bringing in cash revenue faster than Tootsie Roll.

#### Average Collection Period | Indicates: liquidity of receivables and collection success

|  |  |  |
| --- | --- | --- |
| Ratio | Tootsie Roll Industries | The Hershey Company |
| Average Collection Period  | 33.57 | 37.3 |

Average Collection Period converts the receivable turnover ratio into days. This ratio determines the time required for a firm to liquidate its accounts receivable, measured from the date each receivable is posted until the last payment is received. The Hershey Company, as indicated by the Receivable Turnover Ratio, requires a little more than a month in order to collect on their receivables. Tootsie Roll Industries exhibits a better ratio compared to Hershey.

#### Assets Turnover Ratio | Indicates: How efficiently assets are used to generate sales

|  |  |  |
| --- | --- | --- |
| Ratio | Tootsie Roll Industries | The Hershey Company |
| Assets Turnover Ratio  | .61 | 1.18 |

Assets Turnover Ratio measures how efficiently a company uses its assets to generate sales. A low asset turnover ratio shows inefficient utilization of obsolescence of fixed assets, which may be caused by excess capacity or interruptions in the supply of raw materials. The Tootsie Roll Industries more efficiently uses their assets to generate sales. This probably ties into why Tootsie Roll enjoys a higher Profit Margin Ratio compared to The Hershey Company.

#### Return on Assets Ratio | Indicates: Overall profitability of assets

|  |  |  |
| --- | --- | --- |
| Ratio | Tootsie Roll Industries | The Hershey Company |
| Return on Assets Ratio   | 6.44% | 5.04% |

Return on Assets Ratio measures the overall profitability of assets in terms of the income earned on each dollar invested in assets. This shows how efficient management is at using their assets to generate earnings. Tootsie Roll Industries is doing a good job of managing the income received by the company and turning it into additional revenue.

#### Debt to Total Assets Ratio | Indicates: Percentage of total assets provided by creditors

|  |  |  |
| --- | --- | --- |
| Ratio | Tootsie Roll Industries | The Hershey Company |
| Debt to Total Assets Ratio  | 70% | 38% |

Debt to Total Assets Ratio indicates the degree of financial leveraging. This ratio provides some indication of the company’s ability to withstand losses. The Hershey Company would have to liquidate 85% of their assets in order to pay off their debt. Tootsie Roll Industries, on the other hand, would only have to liquidate 28.31% of their assets.

#### Times Interest Earned Ratio | Indicates: Ability to meet interest payments as they come due

|  |  |  |
| --- | --- | --- |
| Ratio | Tootsie Roll Industries | The Hershey Company |
| Times Interest Earned Ratio | 144.7 | 3.9 |

Times Interest Earned Ratio, also called interest coverage, shows the company’s ability to meet interest payments as they come due. The Hershey Company has a better TIER and is in a better position to pay interest than Tootsie Roll Industries.

#### Payout Ratio | Indicates: Percentage of earnings distributed in the form of cash dividends

|  |  |  |
| --- | --- | --- |
| Ratio | Tootsie Roll Industries | The Hershey Company |
| Payout ratio | 33.75% | 117.8% |

Payout Ratio measures the percentage of earnings distributed in the form of cash dividends. This percentage is distributed is determined mainly on the basis of the company’s self-financing needs and the return expected by shareholders. The Hershey Company is showing a higher percentage of earnings paid in the form of cash dividends than the Tootsie Roll Industries.

#### Return on Common Stockholders Equity Ratio | Indicates: Profitability of common stockholders' investment

|  |  |  |
| --- | --- | --- |
| Ratio | Tootsie Roll Industries | The Hershey Company |
| Return on Common Stockholders' Equity Ratio | 8.14% | 33.56% |

Return on Common Stockholder’s Equity Ratio shows how many dollars of net income the company earned for each dollar invested by the owners. This is a measure of the return that a firm's management is able to earn on common stockholders**'** investment. A return of over 10% indicates enough to pay common share dividends and retain funds for business growth. Indicates what return a company is generating on the owner’s investment. For high growth companies you should expect a higher averaging ROE over the past 5-10 years can give you a better idea of the historical growth.

#### Free Cash Flow | Indicates: Cash available for paying dividends or expanding operations

|  |  |  |
| --- | --- | --- |
| Ratio | Tootsie Roll Industries | The Hershey Company |
| Free Cash Flow | $29,177 | $222,220 |

Free Cash Flow is the company’s ability to pay dividends or expand operations. Each company displays enough free cash to reinvest in the company as well as pay dividends. The Hershey Company has more available cash available for use than the Tootsie Roll Industries.

#### Current Cash Debt Coverage | Indicates: Short-term debt-paying ability (cash basis)

|  |  |  |
| --- | --- | --- |
| Ratio | Tootsie Roll Industries | The Hershey Company |
| Current Cash Debt Coverage ratio | 1.50 | 0.51 |

Current Cash Debt Coverage ratio indicates a company’s ability to repay its liabilities from cash generated from operating activities without having to liquidate the assets used in its operations. The cash debt coverage ratio shows the percent of debt that current cash flow can retire. Companies that have a 1:1 (100%) ratio or greater demonstrate that the company can repay all of its debt within one year. This is a cash-basis ratio that accounts for the changing liabilities and cash flows that a company experiences during the course of a time period. Tootsie Roll Industries have a better leverage than The Hershey Company in terms of liquidity.

#### Cash Debt Coverage Ratio | Indicates: Long-term debt-paying ability (cash basis)

|  |  |  |
| --- | --- | --- |
| Ratio | Tootsie Roll Industries | The Hershey Company |
| Cash Debt Coverage ratio | 0.54 | 0.22 |

Cash Debt Coverage ratio indicates a company’s ability to repay its liabilities from cash generated from operation activities without having to liquidate the assets used in its operations. Cash debt coverage ratio is a measure of solvency that is calculated as cash provided by operating activities divided by average total liabilities. Net cash generated from Tootsie Roll Industries allows them to pay off 51% of their total liabilities.

#### Price Earnings Ratio | Indicates: Relationship between market price per share and earnings per share

|  |  |  |
| --- | --- | --- |
| Ratio | Tootsie Roll Industries | The Hershey Company |
| Price/Earnings Ratio [For the purpose of this ratio, use the market price per share as of the last working day of the year 2007 for each company] | 29.20 | 42.37 |

Price Earnings Ratio reflects investors’ assessments of a company’s future earnings. This ratio provides an indication of a company's ability to cover total debt with its yearly cash flow from operations. Companies with a higher the percentage ratio can carry their total debt. The Hershey Company is showing a higher P/E ratio when compared to Tootsie Roll Industries.

# CURRENT FINANCIAL INFORMATION

(Accurate as of 4/14/2010)



|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| http://www.thehersheycompany.com/general/images/spacer.gif | http://www.thehersheycompany.com/general/images/spacer.gif | http://www.thehersheycompany.com/general/images/spacer.gif | http://www.thehersheycompany.com/general/images/spacer.gif | http://www.thehersheycompany.com/general/images/spacer.gif | http://www.thehersheycompany.com/general/images/spacer.gif |
| **Price** | 44.14 |  | **Day's Range** | 43.52 - 44.15 |  |
| **Last Trade** | Apr 14 2010 4:01PM ET |  | **52 wk Range** | 33.7 - 44.47 |  |
| **Change** | 0.21 |  | **Volume** | 1041481 |  |
| **Prev. Close** | 43.93 |  | **Market Cap** | 10060496016.06 |  |
| **Open** | 43.89 |  | **P/E (ttm)** | 23.2316 |  |
| **Bid** | 43.23 |  | **EPS (ttm)** | 1.90 |  |
|  |  |  |  |  |  |
| (Investor Relations: Stock Quotes & Charts, 2010) |  |  |  |  |  |

## Tootsie Roll Industries, Inc. C (NYSE: TR)

|  |  |
| --- | --- |
| **Last Trade:** | **27.25** |
| **Trade Time:** | 4:02pm ET |
| **Change:** | Up0.15 (0.55%) |
| **Prev Close:** | 27.10 |
| **Open:** | 27.12 |
| **Bid:** | N/A |
| **Ask:** | N/A |
| **1y Target Est:** | 20.39 |

|  |  |
| --- | --- |
| **Day's Range:** | 26.97 - 27.25 |
| **52wk Range:** | 21.83 - 28.75 |
| **Volume:** | 45,233 |
| **Avg Vol (3m):** | 85,693.5 |
| **Market Cap:** | 1.56B |
| **P/E (ttm):** | 29.43 |
| **EPS (ttm):** | 0.93 |
| **Div & Yield:** | 0.32 (1.20%) |

(Tootsie Roll Industries Inc. (TR), 2010)

# 2 Year Comparison Chart



(Tootsie Roll Industries Inc. (TR), 2010)

# FORMULAS AND CALCULATIONS

|  |  |  |  |
| --- | --- | --- | --- |
| Ratio | Forumula | Tootsie Roll Industries | The Hershey Company |
| Earnings per Share | Net Income – Preferred Stock Dividends / Average Common shares outstanding | **(51625-0)/37517.5** | **(214154-0)/676650.5** |
| Current Ratio  | current assets / Current Liabilities  | **199726000/57972000** | **1426574/1618770** |
| Gross Profit Rate  | Gross Profit / Net Sales | **168673/492742** | **1631569/4946716** |
| Profit Margin Ratio   | Net Income / Net Sales | **51625/492742** | **214154/4946716** |
| Inventory Turnover Ratio  | Costs of Goods Sold / Average Inventory  | **327695/60679.5** | **3315147/624502.5** |
| Days in Inventory | 365 days / Inventory Turnover Ratio | **365/5.40** | **365/5.31** |
| Receivable Turnover Ratio  | Net credit sales/Average net receivables | **492742/37145.5** | **4946716/504979** |
| Average Collection Period  | 365/Recievable Turnover Ratio | **365/10.8** | **365/9.8** |
| Assets Turnover Ratio  | Net Sales/Average total Assets | **492472/(812725+791639); 492472/802162 [AVERAGE]** | **4946716/4202339** |
| Return on Assets Ratio   | Net income/Average total assets | **51625/802182** | **214154/4202339** |
| Debt to Total Assets Ratio  | Total liabilities/Total assets | **57,972,000 / 812,725,000** | **1,618,770 / 4,247,113**  |
| Times Interest Earned Ratio | Net Income + Interest Expense + Tax Expense/Interest Expense | **51625+25542+537/537** | **214154+118585+126088/118585** |
| Payout ratio | Cash dividents declared on common stock/Net Income | **.32 / .94**  | **1.135 / .96**  |
| Return on Common Stockholders' Equity Ratio | Net Income-Preferred stock dividends/Average common stockholders' equity | **51625/634455.5** | **214154/638172.5** |
| Free Cash Flow | Cash provided by operations - Capital expenditures - Cash dividends | **90064-43345-17542** | **222220** |
| Current Cash Debt Coverage ratio | Cash provided by operations - Capital expenditures - Cash dividends | **90064/(120183/2)** | **778836/(3072308/2)** |
| Cash Debt Coverage ratio | Cash provided by operations/Average total liabilities | **90864/167726.5** | **778836/3548867.5** |
| Price/Earnings Ratio [For the purpose of this ratio, use the market price per share as of the last working day of the year 2007 for each company] | Stock price per share/Earnings per share | **27.42/.94** | **39.40/.93** |

# Conclusion

Based on analysis of both companies, the company of choice recommended is The Hershey Company. There are three initial factors that lead to this decision with further, detailed explanations explained below. First, The Hershey Company is trading at a higher price than Tootsie Roll Industries. Hershey Co. is trading at 43.87 dollars a share while Tootsie is currently valued on the market at 27.17 dollars a share. The Hershey Company is also paying a higher dividend than Tootsie Roll Industries (Hershey's). The dividend paid by Hershey Co. is $1.35 per share while Tootsie comes in at .32 per share owned. It is worth noting that this is Tootsie’s 66th year paying a dividend (Tootsie Roll). Third, Hershey has a higher P/E ratio than Tootsie Co. indicating more market value by investors.

## Comparative analysis

**Horizontal Analysis**. The Hershey Company had a net income in 2006 of 559,061 and in 2007 214,154, looking at change in base period first, we would use the formula current year less base year divided by base year. This gives us a .62 or 62 percent decrease in its net income. As for Tootsie Roll Industries which had in 2006 a net income of $51,625,000 and $65,919,000 in 2007 it’s change since base period is a .22 or 22 percent decrease. Comparatively making Tootsie Roll Industries the better company for the year ending 2007 net income even though they both had a decrease in net income, Hersey’s was sizably more of a loss.

The next way to make a horizontal comparison is by looking at the Current results in relations to the base period which is current year amount divided by base year amount. Looking at Tootsie Roll Industries first its net income for 2007 was $51,625,000 and $65,919,000 for 2006 when divided it gives you .78 or 78 percent. This means in 2007 only 78% of what was made in 2006’s net income was reached.

As for Hersey, only 38% using the current results in relation to base period formula of the net income was obtained from 2007 than it was in 2006.

**Vertical analysis.** Only Hersey’s current asset for 2006-07 will be analyzed vertically.

|  |
| --- |
| Current assets are... 2007 % 2006 % |
| Cash and cash equivalents 129,198 9.1 97,141 6.9  |
| Accounts receivables 487,285 34.2 522,673 36.9 |
| Inventories 600,185 42.1 648,820 45.8 |
| Deferred income taxes 83,668 5.8 61,360 4.2  |
| Prepaid expenses and other 126,238 8.8 87,818 6.2  |
|  Total current assets 1,426,574 100 1,417,812 100  |

Looking at this, percentage wise, there was an increase or decrease in current assets for the Hersey Company between the years 2006 and 2007. Looking a little closer, we also see that cash increased from 2007 by 2.2 percent.

## Ratio Analysis

One of the ways an owner or financial analyst can determine the financial status of a company is by performing an analysis of three main ratios, those being Liquidity, Solvency and Profitability. Each of these ratios has specific items and meanings, for example the Liquidity ratios indicate the ease in which a company can turn its assets into cash. These ratios include the Current Ratio, the Quick Ratio and Working Capital. Generally speaking, the greater the ratios, the higher the risk factor associated with the company, thereby making it more difficult to obtain credit if necessary.

 Of these, the current ratio is best suited to answer the question, does the company have adequate current assets to satisfy the current payment schedule of its obligated debts taking into account a safety margin for risks involved in the loss of current assets such as collectable accounts or inventory shrinkage.  A current ratio of 1:1 is minimal, but typically more generally accepted ratios are 2:1 but this figure can fluctuate depending on the basic nature of the business.

The second ratio to discuss is the Quick ratio also called the “acid test”. This ratio is more detailed than the current ratio since it concentrates chiefly on the most liquid assets the company possesses. In a comparison of Tootsie Roll and Hershey’s, some of the quick ratio aspects would need to consider assets other than sales inventory, other assets that could be converted to cash to meet company expenditures. One of the pros for Tootsie Inc, is that it is relatively debt free, giving it an advantage in this aspect. The final category in this group is Working Capital. This is somewhat misleading as it is more of a measure of cash flow than a true ratio but lenders determine financial lending practices based mainly in this ratio. Hershey’s  has a 2/3 larger working capital over Tootsie Roll meaning that percentage wise, it has more money to spend on capital assets, however it’s liabilities are also greater and Tootsie has much smaller debts.

Solvency is a company’s ability to survive over the long term. Financially speaking, Tootsie is in better condition than Hershey’s simply due to its low debt to asset ratio. While sales are the driving factor and income are always looked at closely, the residual income is available at the bottom, is what matters in the long run. Since most loans are based on long terms, lenders are very much interested in a company’s ability to repay that loan over a long period of time. The solvency ratios consist of (1) Debt to Asset Ratio (2) Cash Debt Coverage Ratio (3) Times Interest Earned Ratio and (4) Free cash flow. Understanding each of the ratios independently, as well as in conjunction and comparison with each other in relationship to each company can give lenders a good understanding of where the company is heading. In the case of Tootsie and Hershey’s, both have good long term solvency ratios. They both have established history’s a dedicated clientele, and plenty of goodwill. Solvency, and a good historical background alone will not guarantee a company’s future survival, it must be profitable to continue to grow and survive.

While 2007 was an untypical year in the recent history, especially in the confectionary and candy markets that dealt a blow to many industries, both Tootsie and Hershey have survived due to diversity, popularity, goodwill and some luck. Each company must make a profit to pay company expenses, and Tootsie and Hershey’s are no different than any others. Tootsie roll actually has a slight edge over Hershey percentage speaking. There are eight separate ratios that fall under the Profitability ratio umbrella. While each has its own unique area of focus, together they paint a bigger picture that makes it much clearer to understand a company’s future of profitability.

## Quality of earnings

Quality of earnings is an important aspect of a company. The key analysis used in the evaluation of Tootsie and Hershey are P/E ratios. Hershey currently has a higher P/E ratio than Tootsie. Their P/E ratio of 42.37 compared to 29.20 shows that investor’s assessment of the company’s future earnings are high. The lower P/E ratio for Tootsie indicates that investors feel that the earnings for Tootsie are going to be low. Based on the P/E ratio and the indicating factor of this ratio, this further supports our analysis of the Hershey Company as the better company.

Additional research shows that investors are staying away from Tootsie Roll Industries. The rise in Cost of Goods Sold is having an effect on the company’s profits and is reported as 64% of sales in 2007 for the 1st quarter. Profit margins are on a steady decline leading into a stagnation in stock price (Shuering, 2008).

In summary, The Hershey Company is the better investment when doing a comparative analysis between the two companies.

# Bibliography

(n.d.). Retrieved 4 14, 2010, from Tootsie Roll: http://www.tootsie.com/about.php

(n.d.). Retrieved 4 14, 2010, from Hershey's: http://www.hersheys.com/

*Investor Relations: Stock Quotes & Charts*. (2010). Retrieved 4 14, 2010, from Hershey's: http://www.thehersheycompany.com/ir/quote.asp

*Tootsie Roll Industries Inc. (TR)*. (2010). Retrieved 4 14, 2010, from Yahoo Finance!: http://finance.yahoo.com/q?s=TR

Paul Kimmel, J. W. (2010). *Financial Accounting.* Daryaganj, New Delhi: John Wiley & Sons, Inc.

Shuering, M. (2008, 3 18). *Treat Yourself to Tootsie Roll Industries*. Retrieved 4 18, 2010, from SeekingAlpha: http://seekingalpha.com/article/77688-treat-yourself-to-tootsie-roll-industries