Strategic Approach of Business Valuation

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Abstract

A comprehensive financial statement analysis and valuation framework that integrates strategy, industry, financial reporting, and business valuation draw an understanding of the company performance and provide a basis for making reasonable valuation estimates. The fundamental financial statement analysis uses various tools and techniques for business valuation. Topics include profitability analysis, evaluating sustainable growth, cash flow analysis and prospective analysis using various business valuation models such as income, market and cost approach.

Introduction

The Hershey Company is one of the leaders in the Confectioners Industry (Yahoo Finance, The Hershey Company). The company is organized into two business units; these are the chocolate business unit and the sweets and refreshment business unit. The company manufactures, markets, sells, and distributes along with its subsidiaries, chocolate candy, sugar confectionery, gum and mint, baking and pantry, and snacks throughout the world. The company's iconic brands are Hershey's, Reese's, Hershey's Kisses, Hershey's Bliss, Twizzlers, Almond Joy, Mounds, York, Kit Kat, and Pieces. The company is organized around geographic regions, and the company's key region is the United States, the Americas, Asia, Europe, the Middle East, and Africa. The company exports to approximately 70 countries worldwide. Sales representatives and food brokers sell a significant amount of the Hershey Company's products to wholesale distributors, chain grocery stores, mass merchandisers, chain drug stores, vending companies, wholesale clubs, convenience stores, dollar stores, concessionaires and department stores. The business was founded in 1894 by Milton S. Hershey and is headquartered in Hershey, Pennsylvania (The Hershey Company, Annual Report, 2012).

Business Analysis and Industry Analysis

Business analysis links firm's economics and strategy and analysis of its financial statements, with the objective of gaining insights about the firm's profitability and risk. The process of assessing strategy analysis has five major blocks. This Hershey's business and industry analysis is demonstrated in the following flow chart:

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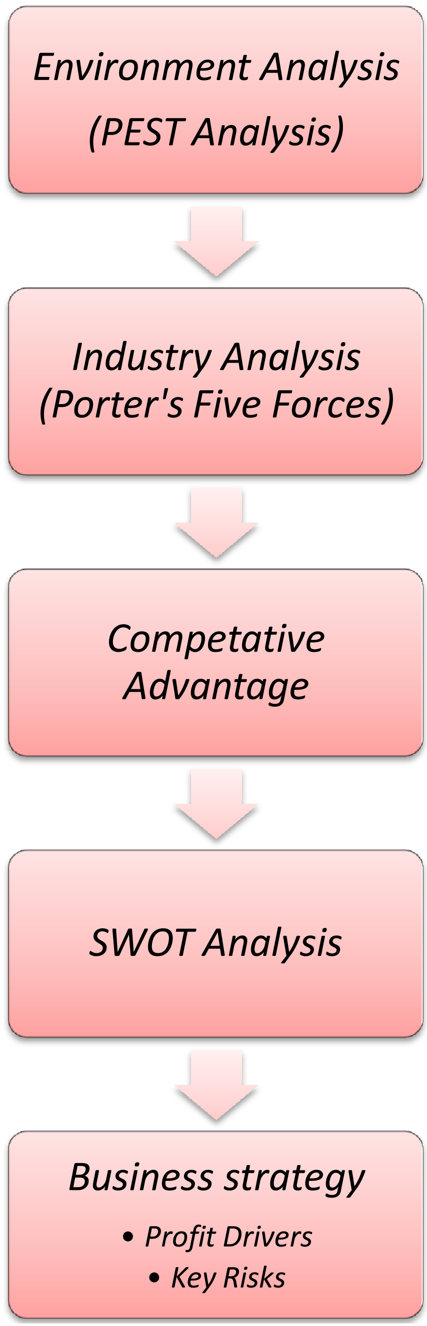

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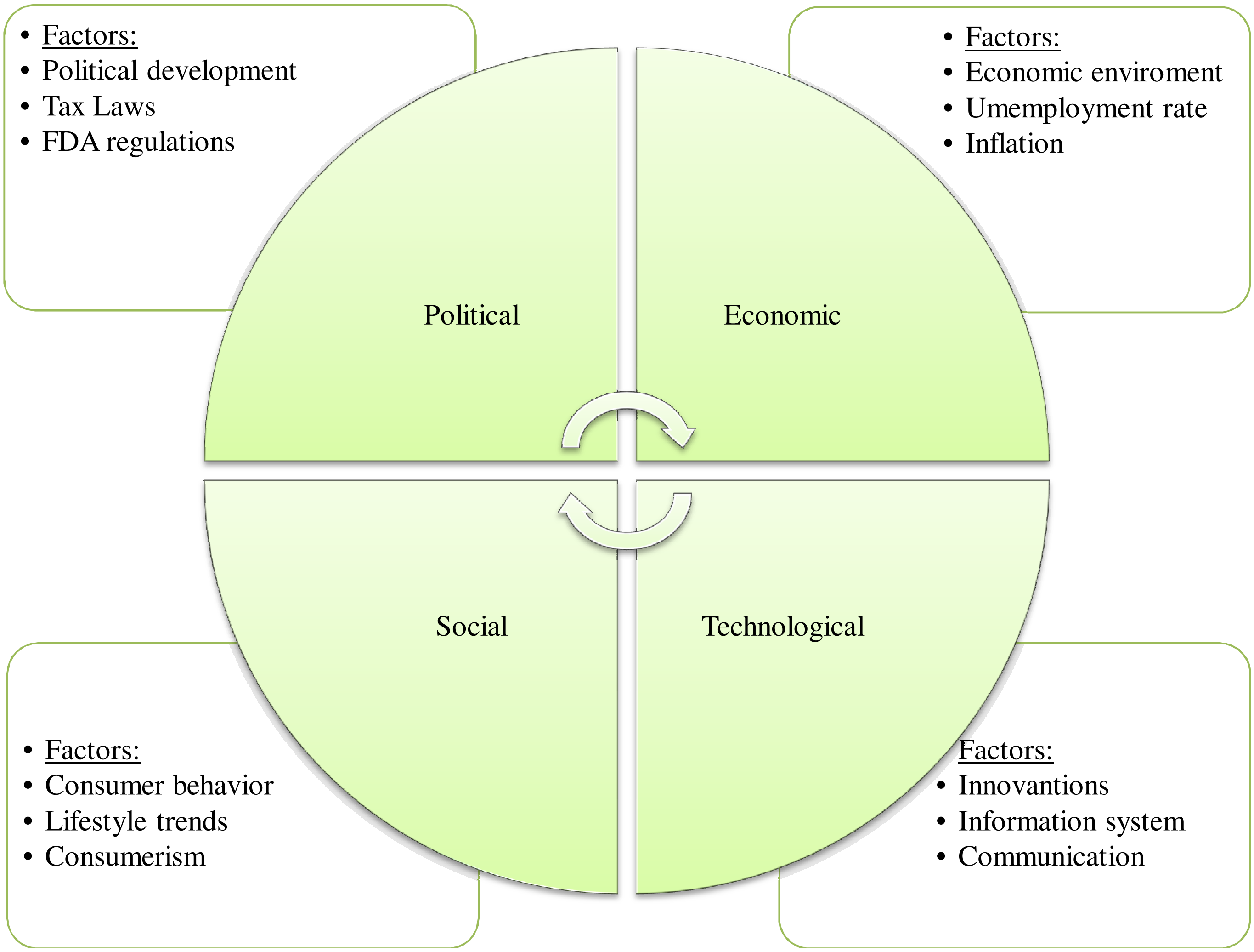
Environment Analysis (PEST)

Environment analysis is a part of strategic analysis. The broader business environment affects the level of profitability that a company can expect to achieve. This includes global economic forces, quality and cost of labor, government regulations, and borrowing procedures.



Understanding the environment and competitive forces within an industry helps with evaluating the quality of a particular firm's strategy and profitability.

Environmental factors, such as political, economic, social, and technological, affect the Hershey Company's activities.

Among many legal governmental laws and regulations that applied to the confectionary industry, the most important is the pricing practices. This is influenced by price floor legislation for chocolate and other ingredients. The FDA requirement for nutritional information is also a requirement that all food companies are subject to. Still another challenge for this and other corporations are legal challenges in the U.S. and in other nations. The Hershey Company, as it mentioned in its own annual report, became a subject to a law suit in Canada for its pricing practices and reached an agreement to settle the suit with $5.3 million in liability (Annual Report, 2012). Any changes

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in food or drug laws anywhere Hershey does can alter the affect its business. Lastly, child labor laws in Africa have a significant impact on chocolate production. An investor has filed a law suit in November of 2012 against the Hershey Company because the company is alleged to have received cacao from suppliers who used child labor (Milford, McCarty, & Church, 2012).
The company's revenue and profitability relies on spending levels and impulse purchases. The aspects are heavily depending on macroeconomic conditions, consumer confidence, employment, and availability of consumer credit (The Hershey Company, Annual Report, 2012). One factor that that can mitigate the fluctuation in the main ingredient of chocolate, cocoa is securing new sources for the commodity that are reliable. Hershey is finding new sources that include Jamaica.
The Hershey founder, Milton S. Hershey, established a responsible citizenship model for the company, and the company is continuing his legacy and corporate social responsibility by manufacturing high-quality Hershey products, operating the business with a social responsibility, and adjusting the business operations up to the environmental sustainability level. The company has established its environment, community, workplace, and marketplace goals, and reports their achievements through its corporate social responsibility ("CSR") report in 2009, 2010, and 2011. The other issue that the company is facing is the increasing national focus on obesity. Hershey as part of the confectionary industry is challenged to increase sales as well as maintain its reputation as a socially responsible corporate citizen.
The company invests considerable resources in technology to efficiently operate its business. Included in this effort to be more efficient are cutting edge agricultural practices which include improved milking machines and improvements to their distribution. Hershey is utilizing RFID to better track their products to the marketplace. This critical factor of the industry environment enables the company to manage manufacturing, financial, logistic, sales, marketing, and administrative processes in the company.

Accounting Analysis
The next critical step is accounting analysis. Accounting analysis identifies accounting principles and methods used to prepare financial statements and the ability to adjust these in order to increase their relevance and reliability. One of the steps is to make adjustments. Adjustments for accounting distortions enable financial reports to better reflect economic reality. This step requires:

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Identify key accounting policy

Assess accounting flexbility

Identify potential red flags

Undo any distortions and noise

Among the common adjustments there can be these infrequent items:

- Discontinued operations
- Extraordinary items
- Changes in accounting principles
- Impairment losses on long-lived assets
- Restructuring and other charges
- Changes in estimates
- Gains/losses from peripheral activities
- Items in other comprehensive income (on balance sheet).

All of these elements can be found in the Hershey Company's notes to consolidate financial statements, item 8 of the form 10-K, and management's discussion and analysis of financial conditions and results of operations (MD&A), item 7 of the form 10-K. The following information is found in the MD&A and notes of the Hershey Company's 10-K:

As part of the Project Next Century program, production will transition from the Company's century-old facility at 19 East Chocolate Avenue in Hershey, Pennsylvania, to an expanded West Hershey facility, which was built in 1992 (The Hershey Company, Annual Report, 2012).

The company completed an impairment evaluation of goodwill and other intangible assets associated with Godrej Hershey Ltd. Based on this evaluation, the firm recorded a non-cash goodwill impairment charge of $44.7 million, including a reduction to reflect the share of the charge associated with the noncontrolling interests (The Hershey Company, Annual Report, 2012).

In addition, the Hershey Company completed three-year supply chain transformation program (the "global supply chain transformation program"). Manufacturing facilities in Naugatuck, Connecticut and Smiths Falls, Ontario have been closed and are offered for sale. The carrying value of these properties was $6.9 million as of December 31, 2011. The fair value of these

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properties was estimated based on the expected sales proceeds. Actual proceeds from the sale of these properties could differ from expected proceeds which could cause additional charges or credits in 2012 or subsequent years (The Hershey Company, Annual Report, 2012).

Some of the important nonrecurring charges were:

1. **Next Century Program**
    a. $39,280 thousand recorded in cost of sales during 2011 related primarily to accelerated depreciation of fixed assets
    b. $13,644 thousand recorded in cost of sales during 2010 related primarily to accelerated depreciation of fixed assets
2. **Global Supply Chain Transformation Program**
    a. $5,816 thousand recorded in 2011 was due to a decline in the estimated net realizable value of two properties being held for sale
    b. $10,136 thousand recorded in cost of sales during 2009 related to start-up costs and the accelerated depreciation of fixed assets over the estimated remaining useful life (The Hershey Company, Annual Report, 2012).

The Next Century Program and the Global Supply Chain Transformation Program have future potential benefits for the Hershey Company. Both programs incurred the charges (credits) associated with business realignment initiatives and the impairment recorded during 2011 in amount of $(886) thousand, 2010 in the amount of $83,433 thousand, and 2009 in the amount of $82,875 thousand that is reflected in the company's income statement.

Financial Analysis

Financial analysis analyzes and evaluates financial risk, ratios and profitability. The Hershey's financial analysis determines the company's profitability, financial strength, management's efficiency, liquidity/solvency and cash flow predictability. The following financial ratios help to evaluate the company's previous performance:

Liquidity	*The company's ability to meet its short-term obligations*
Current Ratio	Total Current Assets/Total Current Liabilities
Quick Ratio	(Total Current Assets – Inventories)/ Total Current Liabilities
Average Collection Period	Average Accounts Receivable/(Total Sales/365)
Days Inventory Held	Days in a year/Inventory Turnover
Leverage	*The company's ability to meet its liabilities in the long term*
Financial Leverage Index	Return on Assets/Return on Equity
Debt/Assets	(Short Term Debt + Long Term Debt)/Total Assets
Debt/Equity	(Short Term Debt + Long Term Debt)/Total Equity
Operating Efficiency	*The assessment of operating management*
Accounts Receivable Turnover	Annual Credit Sales/Average Receivables
Inventory Turnover	Cost of goods sold/Average Inventory
Total Asset Turnover	Sales/Average Total Assets
Profitability	*The indication of the company's market share (rising, stable, falling)*
Gross Profit Margin	(Sales – Cost of Sales)/Sales

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Return on Assets (ROA)	Profit after taxes/Total Assets
Return on Equity (ROE)	Profit after taxes/Shareholders' Equity
Market Measures	*The assessment of investment opportunity*
Price/Earnings	Current Market Price per Share/After-tax Earnings per Share
Dividend Payout	Cash Dividends Paid/Net Income

Common-size financial statement ratio analysis

By comparing consecutive balance sheets, income statements, and statements of cash flows side by side, and reviewing those changes in individual categories on a year-to-year basis, financial analysts may be able to understand the historical record and future trends of a company. In this "trend" analysis, we need to focus on:

- Absolute direction, speed and extent of a trend
- Relative direction, speed and trend among different components

Two popular techniques of comparative analysis are:

- Year-to-year change analysis
- Index number trend series analysis

In a common-size balance sheet, each component of the balance sheet is expressed as a percentage of total assets. In a common-size income statement, each item is expressed as a percentage of sales.

Prospective Analysis

Another key component of the framework for analysis is a prospective analysis. Prospective analysis allows the company to improve its business strategy and maintain its sustainability and for investors to make proper decisions about their investments. Discounted dividends, abnormal earnings, and discounted cash flow methods are used to perform prospective analysis. The widely used approach is discounted cash flow method.

The Hershey Company demonstrated over three years' results from 2009 to 2011 the following integration of environmental analysis:

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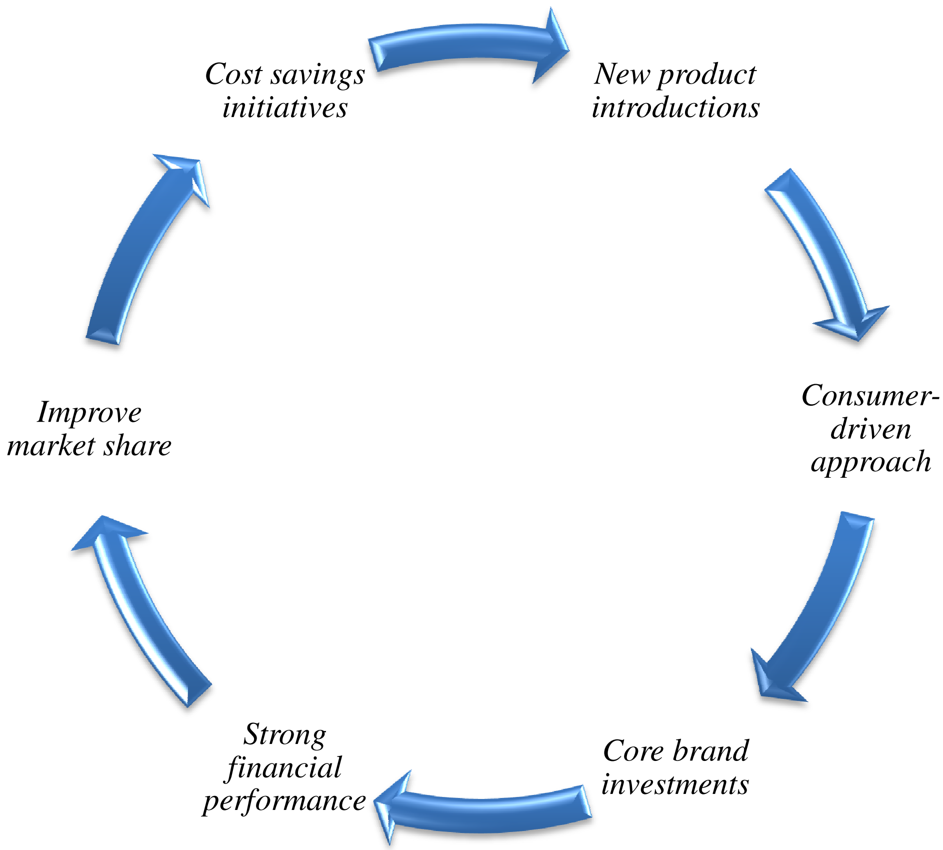

Prospective analysis uses the financial statement data to forecast future earnings, cash flow and valuation of the business. One of the key approaches to perform business valuation is the discounted cash flow (DCF) analysis.

Free Cash Flow for business valuation is a different approach from the statement of cash flow.

Sales
- Operating Expenses

Earnings Before Interest, Taxes, Dep. & Amort. (EBITDA)
- Depreciation and amortization

Operating Profit (EBIT)
* (1 - Average Tax Rate)

Operating Profits After Tax
+ Depreciation and amortization
- Capital Expenditures

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- Additions to Working Capital

Free Cash Flows

Next is to assess the Hershey's cost of capital (WACC). WACC has the following formula:

$$WACC = (R_d * D) + (R_e * (E/(D+E)))$$

R_d - Cost of Debt

R_e - Cost of equity

$$R_e = R_f + \beta * R_m$$

R_f - risk free rate (20-year U.S. Treasury Bond

R_m - equity risk premium

$$R_d = R_d^{1} * (1 - \text{Marginal corporate tax rate})$$

R_d^{1} - company's debt rate

Marginal corporate tax rate = Income tax expense / Pretax income

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This table consists of essential data for determining the Hershey's WACC:

Cost of Equity: $R_e = R_f + \beta * R_m$	
R_f or Risk Free Rate (20-year U.S.Treasury)	2.89
R_m or Equity risk premium	6%
β or Beta risk	0.12
Cost of Debt: $R_d = R_d^1$(1- Marginal corporate tax rate)	
R_d^1 or Company's before tax rate	5.11%
Marginal corporate tax rate	35%
Equity/(Debt+Equity)	Equity and Debt may be applied as a book value or a market value
Debt/(Debt+Equity)	Debt and Equity may be applied as a book value or a market value
Cost of Capital (WACC)	Cost of Equity and percentile of the company's equity in the last projected year (Equity/(Debt+Equity) Cost of Debt and percentile of the company's debt in the last projected year (Debt/(Debt+Equity)
Company's Growth Rate (g)	3%
Nominal growth rate in the economy	2.5%
Terminal Value (TV)	TV=($FCFF_{(last\ est.\ year)}$*(1+g))/(WACC-g)
Present Value Factor (PV Factor)	PV Factor = $1/(1+r)^n$, r = rate of return, n = number of periods
Present Value (PV)	PV = FCFF * PV Factor
Company Value	The sum of PV forecasted years
Company Value without Long-term Debt	Subtract the current portion of the long-term debt from the Company Value
Projected Price Stock	The Company Value without Long-term Debt divided by the number of outstanding shares; Provide the factors that indicate why the stock price is lower or higher than the current stock price

The Hershey Company has the following five-year goals:

- Revenue growth from $6.5 billion in 2012 to $10 billion in 2017
- International revenue growth by 25%
- An increase in growth margin up to 43%

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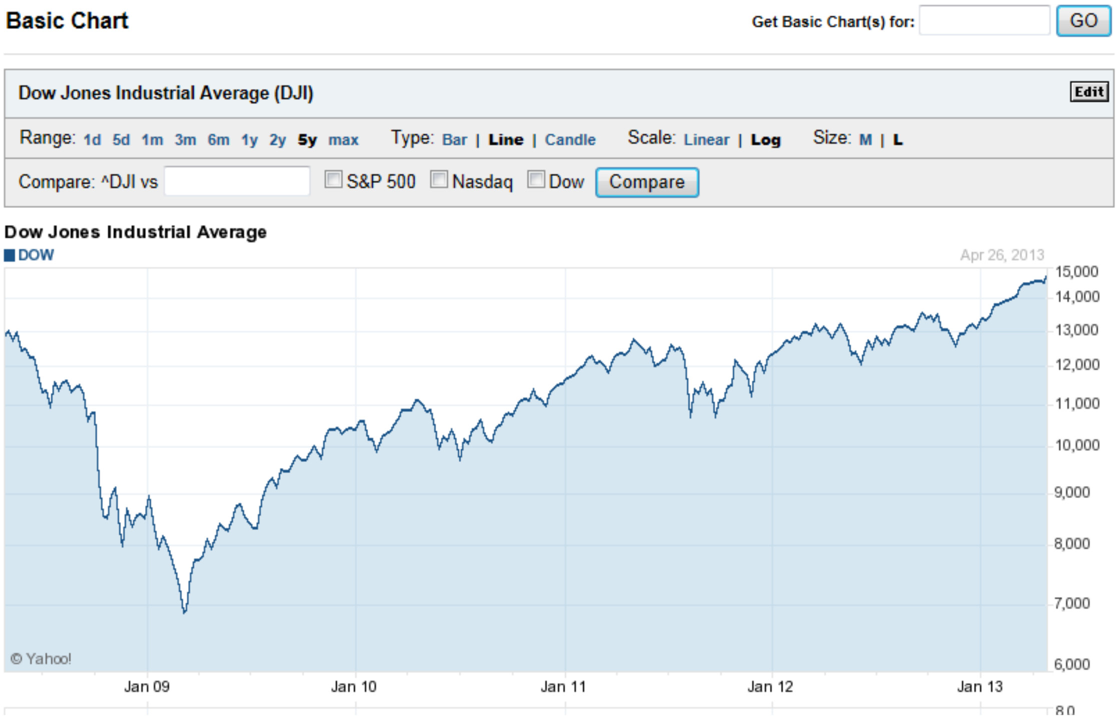
Stock market participation is gradually improved from 2009, and it is now comparable to the prerecession 2007 level. The chart below demonstrates this trend on the stock market from 2009 to 2013:



The Hershey Company has significantly improved its performance on the stock market from $30.30 in 2009 up to $87.57 in 2013, and it is reflected on the following graph:

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Requirements:

1. Provide an environmental analysis for the Hershey Company by using the template (see Environment Analysis section).

2. Identify the key items that need to be adjusted based on the information provided and the information from the MD&A section of the Hershey 10-K for 2011 to financial statements.

3. Determine the appropriate financial ratios for forecasted balance sheet and income statement, and provide a brief trend analysis.

4. Determine the value of stock using discounted cash flow and write brief summary based on your analysis.

Appendix A: Reported Income Statement

THE HERSHEY COMPANY			
CONSOLIDATED STATEMENTS OF INCOME			
Source SEC 10-K February 2012, REPORTED			
For the years ended December 31,	**2011**	**2010**	**2009**
In thousands of dollars except per share amounts			
Net Sales	**$ 6,080,788**	$ 5,671,009	$ 5,298,668
Costs and Expenses:			
Cost of sales	**3,548,896**	3,255,801	3,245,531
Selling, marketing and administrative	**1,477,750**	1,426,477	1,208,672
Business realignment and impairment (credits) charg	**(886)**	83,433	82,875
Total costs and expenses	**5,025,760**	4,765,711	4,537,078
Income before Interest and Income Taxes	**1,055,028**	905,298	761,590
Interest expense, net	**92,183**	96,434	90,459
Income before Income Taxes	**962,845**	808,864	671,131
Provision for income taxes	**333,883**	299,065	235,137
Net Income	**$ 628,962**	**$ 509,799**	**$ 435,994**

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Appendix B: Forecasted Balance Sheet

THE HERSHEY COMPANY STANDARDIZED, ADJUSTED, & FORECASTED BALANCE SHEETS								
	2009	2010	2011	Estimate 2012	Estimate 2013	Estimate 2014	Estimate 2015	Estimate 2016
ASSETS								
Cash and Marketable Securities	$ 253,605	$ 884,642	$ 693,686	$ 890,174	1,060,046	1,168,303	1,571,668	1,783,021
Accounts Receivable	410,390	390,061	399,499	423,306	441,130	463,450	484,972	508,476
Inventory	519,712	533,622	648,953	634,013	687,836	708,682	748,714	781,353
Other Current Assets	201,727	231,610	309,381	309,381	309,381	309,381	309,381	309,381
Total Current Assets	1,385,434	2,039,935	2,051,519	2,256,874	2,498,393	2,649,815	3,114,734	3,382,231
Property, plant, and equipment (PP&E)	3,242,868	3,330,279	3,602,994	3,950,364	4,322,834	4,722,219	5,150,463	5,609,650
Accumulated depreciation	(1,838,101)	(1,873,417)	(1,989,561)	(2,174,204)	(2,376,648)	(2,598,181)	(2,840,181)	(3,104,127)
Net property, plant, and equipment	1,404,767	1,456,862	1,613,433	1,776,160	1,946,186	2,124,038	2,310,282	2,505,524
Other assets	884,830	874,505	805,924	805,924	805,924	805,924	805,924	805,924
Total Long-Term Assets	2,289,597	2,331,367	2,419,357	2,582,084	2,752,110	2,929,962	3,116,206	3,311,448
Total Assets	$ 3,675,031	$ 4,371,302	$ 4,470,876	$ 4,838,959	5,250,503	5,579,777	6,230,940	6,693,679
LIABILITIES								
Accounts Payable	287,935	410,655	420,017	445,348	463,947	487,500	510,099	534,842
Current portion of long-term debt	15,247	261,392	97,593	97,600	250,200	200	250,200	500,100
Accrued expenses	108,633	120,258	117,939	127,704	131,697	139,072	145,167	152,389
Income taxes & other	498,813	543,011	564,794	595,473	625,972	658,488	695,958	726,516
Total Current Liabilities	910,628	1,335,316	1,200,343	1,266,125	1,471,816	1,285,260	1,601,424	1,913,847
Deffered income taxes and other liabilities	501,334	494,461	617,276	617,276	617,276	617,276	617,276	617,276
Long-Term Debt	1,502,730	1,541,825	1,748,500	1,650,900	1,400,700	1,400,500	1,150,300	650,200
Total long-Term Liabilities	2,004,064	2,036,286	2,365,776	2,268,176	2,017,976	2,017,776	1,767,576	1,267,476
Total Liabilities	$ 2,914,692	$ 3,371,602	$ 3,566,119	$ 3,534,301	3,489,792	3,303,036	3,369,000	3,181,323
STOCKHOLDERS' EQUITY								
Common Stock	(3,782,692)	(3,809,883)	(4,285,657)	(4,285,657)	(4,285,657)	(4,285,657)	(4,285,657)	(4,285,657)
Additional paid-in capital	394,678	434,865	490,817	490,817	490,817	490,817	490,817	490,817
Retained earnings	4,148,353	4,374,718	4,699,597	5,099,497	5,555,551	6,071,581	6,656,781	7,307,196
Total Shareholders' Equity	760,339	999,700	904,757	1,304,657	1,760,711	2,276,741	2,861,941	3,512,356
Total Liabilities and Shareholders' Equity	$ 3,675,031	$ 4,371,302	$ 4,470,876	$ 4,838,959	5,250,503	5,579,777	6,230,940	6,693,679

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Appendix C: Forecasted Statement of Income

THE HERSHEY COMPANY STANDARDIZED, ADJUSTED, & FORECASTED STATEMENT OF INCOME								
	2009	**2010**	**2011**	**Estimate 2012**	**Estimate 2013**	**Estimate 2014**	**Estimate 2015**	**Estimate 2016**
Sales	$5,298,668	$ 5,671,009	$ 6,080,788	$6,520,177	$6,991,316	$7,496,498	$8,038,184	$8,619,012
Cost of Sales	3,063,120	3,058,685	3,333,133	3,573,980	3,832,231	4,109,143	4,406,063	4,724,439
Gross Profit	2,235,548	2,612,324	2,747,655	2,946,197	3,159,085	3,387,356	3,632,121	3,894,573
SG&A	1,202,552	1,424,984	1,472,789	1,579,211	1,693,322	1,815,679	1,946,878	2,087,556
Depreciation and amortization expense	172,275	183,472	170,667	184,643	202,445	221,533	242,000	263,946
Interest Expense	90,459	96,434	92,183	94,375	89,386	84,396	71,606	71,596
Income before tax	770,262	907,434	1,012,016	1,087,968	1,173,932	1,265,747	1,371,638	1,471,475
Income tax expense	269,833	335,536	350,945	377,284	407,094	438,934	475,654	510,275
Income (loss) from extraordinary items and discontinued operations	-	-	-	-	-	-	-	-
Net Income	500,429	571,898	661,071	710,685	766,838	826,814	895,984	961,200

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