# What Went Wrong with Starbucks? Financial Analysis and Business Evaluation 

# Case Study 

By
Julia S. Kwok*
Elizabeth C. Rabe**
Gene Kozlowski***
Northeastern State University

* Corresponding author: Associate Professor of Finance, Department of Accounting and Finance, College of Business and Technology, Northeastern State University, Broken Arrow, OK 74014; Email: kwok@ nsuok.edu; Phone: 918-449-6516.
** Instructor of Accounting, Certified Public Accountant, Northeastern State University *** Professor of Management Information Systems, Northeastern State University


# What Went Wrong with Starbucks? Financial Analysis and Business Evaluation 

Julia S. Kwok, Northeastern State University
Elizabeth C. Rabe, Northeastern State University
Gene Kozlowski, Northeastern State University


#### Abstract

After decades of grande growth in the price of Starbucks stocks, Starbucks Coffee Company experienced continuous drop of stock price from the beginning of 2007 to the end of 2007. Upon first glance of their financial statements, there was about a $20 \%$ increase in both revenues and net income in 2007. The $40 \%$ drop of market price of Starbucks' shares from 2006 to 2007 appears to be counter intuitive when viewed in terms of actual revenues and net incomes. This case encourages a more in depth analysis of how the expansion impacted financial performance. Students will examine free cash flows, return on invested capital, and financial ratios. The case provides detailed information that allows students to investigate the impact of the economic and business conditions, the competition and Starbucks' business strategies on its firm performance. They will evaluate the relative contribution of factors leading to the drop of the stock price. Students are encouraged to consider what changes to Starbucks' strategies could increase the economic value added of the expansion and help to reverse their road to failure. This case illustrates the importance of analyzing financial statements, free cash flows, weighted average cost of capital and return on capital when making capital budgeting decisions.


Keywords: financial statement analysis, ratio analysis, free cash flows, expansion, economic value added, weighted average cost of capital, marketing strategies, business, management

JEL classifications: L25, G31, M41, F23, L22

## INTRODUCTION

It was a chaotic January morning in Java Investment. Ronnie, a new analyst, came into the office carrying a bag from Starbucks and a tall coffee. "Where have you been? The Nekki has just fell five percentage points last night. Ooo, you've brought Starbucks!" Senior Analyst Sandy exclaimed. "I haven't had a blueberry muffin from them in ages. I used to stop there a couple of times a week for latte, but since they closed the one closest to here, I am latte deficient."
"I know," Ronnie replied. "I had to drive three miles out of my way for this, but I really like their hazelnut Mocha on a cold morning. I either have to make a drive or stop at Caribou to get my full-bodied grande Espresso. It's just not the same."

Sandy replied, "That is true. I used to sit and listen to the music while I sipped my coffee at Starbucks. As they open a lot more stores, the atmosphere of the new ones is not as enjoyable as the old ones. It is starting to feel like Dunkin Donuts. Starbucks has really grown since that first Seattle store in 1971. In the last three years, from 2005 to 2007, they have opened 5515 stores (Starbucks World 2009)."1
"Sandy, you seem to know a lot about Starbucks. Do you know why they closed the nearby store?" said Ronnie.
"Well, Tom, our boss, has asked me to evaluate the impact of their expansion. I started looking at their free cash flows, return on invested capital and financial ratios. May I have a muffin?" Sandy said.
"Sure, take one," Ronnie offered.

[^0]"Besides expanding locations, Starbucks offers a variety of products. I can buy the music I like listening to from Starbucks. They also sell coffee beans and those double shot packaged drinks. You can even buy your own Espresso brewing machine from them," Sandy continued.
"I saw that the last time I went to Starbucks. But I think they make more money selling coffee," Ronnie commented.
"Yes, in fact, $65 \%$ of the revenue comes from coffee. (Starbucks - Revenue Analysis -Data Monitor 2009). Do you want to work with me on my new assignment since you are a Starbucks fan?" asked Sandy. "Let's start reviewing their business environment and financial statements. Have you seen the latest financial report? Let's start with 2004 to the most recent 2007 annual report (see Exhibit 1 - Income Statement, Exhibit 2- Balance and Exhibit 3 - Footnotes to Financial Statements)"

## COMPANY HISTORY

Sandy had already collected some basic company information about Starbucks. Starbucks Company, Inc. sold coffees, teas, and other drinks, foods items, accessories and equipment through retail outlets. It also sold coffee beans, teas, and cold drinks wholesale. The company began in 1971 in the Pikes Place area of Seattle, WA. It had expanded its number of retail stores to over 15,000 located in both the US and internationally by 2005. In 2005 Starbucks management announced its intention to double the number of retail stores and increase the number of customers to all stores (Starbucks Corporation 2009).

Starbucks had added 1672 stores during 2005. It continued to open new stores with 2199 openings in 2006 and 3316 openings in 2007. Earnings per share grew from 63 cents to 90 cents per share over the period of 20052007 (see Exhibit 1). At the close of the 2007 fiscal year, the management was forecasting the opening of an additional 2500 stores in 2008 (Starbucks World 2009) . ${ }^{2}$

Stock prices during this time span rose from the $\$ 30.10$ per share in December 2005 to $\$ 35.42$ per share a year later. Then stock prices began a steady downward slide to $\$ 20.47$ per share as of December of 2007 (BUCXHistorical Prices for Starbucks Co -Yahoo! Finance 2009). Shareholders did not seem to agree with Starbucks' business strategy," Sandy stated. Ronnie concurred.

## THE STARBUCKS EXPERIENCE

The transformation of a small coffee shop to an "authentic Italian coffee bar" was led by Mr. Howard Schultz (Maney 2009). He felt Starbucks should be a "great experience, and not just a retail store" (Maney 2009). It should involve the aroma of robust coffee, theater and romance. Started in Seattle, sprawling around the northwest region of the county, Starbucks provided a "Third Place" for customers to meet, relax, and enjoy themselves. A Starbucks barista would grind the coffee beans and hand-prepared coffee specific to the customer's order, making it a personal experience.

The experience drove significant growth of Starbucks over the years. To standardize the experience, the barista's fine touch of the creation of a perfect cup of coffee was replaced by an automatic espresso machine and the vacuum-packed ground coffee in the new cookie-cutter stores that mushroomed during 2005-2007. Ironically, that standardization and rapid growth started to diminish the branding of the Starbucks experience. Inexperienced undertrained new staff was offering sub-standard services. New stores could be found at small strip malls and in grocery stores, representing convenience instead of unique experience.

## FIERCE COMPETITION

Direct competition from smaller companies such as Caribou Coffee and locally owned independent cafés provided comparable products and an atmosphere of community. The largest company that directly competed with Starbucks

[^1]was Caribou Coffee, the second largest specialty coffee house. Net sales from the Caribou Coffee were only $3 \%$ of that of Starbucks. As a result, Caribou Coffee is not a good comparable in terms of size and therefore will not be included in the analysis. ${ }^{3}$ While the competitors each lack the size, geographical coverage and market share of Starbucks, in aggregate they are large in numbers and they are providing the experience that Starbucks has lost.

McDonalds started the more intense competition when it upgraded its coffee in 2006. They were planning to install coffee bars in all US locations in 2008. The existing customer base and demographic coverage gave McDonalds an upper hand on access to those breakfast coffee drinkers who are sensitive to the price differentials and appreciate convenience of McDonalds locations. In 2007, Starbucks had 14,000 locations in 43 countries and McDonalds had 25,600 locations in 118 countries. McDonalds had almost twice the number of units than that of Starbucks (Aboutmcdonalds.com 2009, Malkin 2007, and NationMaster.com 2009). Exhibit 5 and Exhibit 6 show the financial ratios of Starbucks and McDonald respectively.

With 13,000 locations, the privately held Dunkin' Brands Inc. offered quick and convenient to-go-coffee. In 2007, they introduced a new line of Espresso drinks to position itself between Starbucks and Krispy Kreme (Shepherd 2007). However, health conscious Yuppies were less likely to have low cost, high cholesterol donuts every day. Dunkin was likely to compete more directly for McDonalds' customers than for Starbucks' customers.

Catering to the health conscious Yuppies, Panera Bread bakery and cafe offered salad, soup, sandwiches and coffee. There was also a selection of tea and flavored iced coffee. The modern and relaxing dining atmosphere that Panera Bread Company provided was similar to that of Starbucks. But Panera Bread is a much smaller company. Its revenues represented less than $10 \%$ of that of Starbucks. Exhibit 7 shows the financial ratios of Panera Bread.

Starbucks maintained that the quality of their products and services differentiated themselves from the competition. Therefore, increasing geographical coverage domestically and internationally had been their corporate focus. They planned to open 20,000 locations in the US and 20,000 internationally in four years. In Washington State, Starbucks already had one store for every 12,000 people (Palmer 2007). The extreme rate of growth caused Starbucks to cannibalizing their own stores through over-saturation of an area (see footnote 1).

## ECONOMIC AND BUSINESS ENVIRONMENT

The increase of oil prices had dramatic effect on consumer spending. Oil prices had been dramatically increased from 2003 to 2007. The inflation-adjusted price of a barrel of crude oil on NYMEX price rose from $\$ 30$ per barrel to over $\$ 65$ per barrel in 2007. The prediction was that it would go up to over $\$ 90$ per barrel (inflationdata.com 2009). More than two thirds of US consumers were reducing their spending. Around $50 \%$ of the consumers were now eating out less and $35 \%$ were buying less expensive brands. Traditionally, Starbucks' first-time customers had an average income of $\$ 92,000$ per year, and were willing to pay for the experience and not just the coffee. As the increase of Starbucks' accessibility and convenience attracted less affluent customers, the average income of firsttime customers had dropped to $\$ 80,000$ a year, which was roughly a $13 \%$ drop. In the past, raising prices per cup of coffee had little effect on demand. However, the declining customer's spending power would change the traditional inelasticity of customer demand (Helm and Goudreau, 2007). Starbucks' susceptibility to economic downturn was already reflected in their flat-to-negative transaction count trend (Starbucks 2007 Annual Report 2007). Revenue increases were due to an increase in price and not to an increase in customers. (Helm and Goudreau, 2007). Starbucks had an average five-cent and nine-cent increases per cup of coffee in years 2006 and in 2007 (Allison, 2007).

Starbucks' profit was affected by the increasing cost of goods sold. The price of coffee beans had skyrocketed. There was a $20 \%$ increase over the 2005-2007 three-year period. The price of 100 pounds of coffee beans had increased from $\$ 95.75$ in 2006 to $\$ 107.68$ in 2007 (dev.ico.org/prices/p2.htm). According to a 2007 economic research report published by USDA, a $10 \%$ change in coffee beans' commodity prices would translate into a $3 \%$ increase in the retail price of coffee beans(Leibtag E., Nakamura A. and Nakamura, E. and Zerom D. 2007). So the retail prices of coffee beans would increase $3.74 \%$ in the past year. The cost of goods sold was further affected by the increase of minimum wage. The minimum wage rose from $\$ 5.15$ to $\$ 5.85$ in July 2007 which represented a $14 \%$ increase (Laborlawcenter.com 2009).

[^2]Starbucks Coffee Company

## FINANCIAL ANALYSIS

"Can you believe despite economic downturn and the increase in costs, there was only $2.2 \%$ drop of operating margin from 2006-2007?" Sandy exclaimed (see Exhibit 5).
"I know, the revenues had increased $20.9 \%$ over the last year resulting in a $19.2 \%$ increase in net income in 2007," Ronnie remarked. "However, Starbucks' stock price had dropped by $40 \%$ from January to December 2007. The price plummeted from $\$ 37.76$, the highest monthly price in its fiscal year 2006 to $\$ 20.47$, the lowest monthly price in its fiscal year 2007 (Yahoo-Finance 2009)."
"So our charge is to investigate the disparity between the accounting and financial performance. It would be a good idea to start reviewing information from the financial statements (see Exhibits 1-2). and ratio analysis of Starbucks as well as its competitors that I gathered (see Exhibits 5-7). We should evaluate the impact of expansion on the return of the capital investment, economic value added as well as the company's free cash flows and financial ratios. This may help us to understand their liquidity issues mentioned by the press," Sandy recommended.
"I happen to have the beta of Starbucks stocks handy. It was 1.25 based on a 3 year estimates ended in 2007. From my previous project, I have found the average of 25 years of annual returns of S\&P 500 Index ended in December 2007 is $9.60 \%$, and the average annual return of a 25 -year Treasury note ended in December 2007 is $5.50 \%$ for the past 25 years (S \& P 500 Index, RTH - Monthly Returns for S \& P 500 -Yahoo-Finance 2009). We can use this information to calculate the weighted average cost of capital of Starbucks and compared that with the return on invested capital," Ronnie exclaimed.
"Once we find out the root cause of the drop of stock price, we should also consider what changes to Starbucks' strategies could reverse their road to failure. I am sure Tom will be interested in that," Sandy said.

## BIOGRAPHY

## Dr. Julia Kwok

is an Associate Professor of Finance at Northeastern State University. Dr Kwok teaches graduate and undergraduate investment and corporate finance. Her research interests include sustainability, neural network, corporate governance, venture capital and spectrum licensing issues. She has recently published and presented at conferences on sustainability, institutional structure, telecommunications, academic assessment and pedagogy. Dr Kwok serves as officials of the Southwestern Finance Association as well as the Southwestern Case Research Association. She is also a member of the Financial Management Association, Southern Finance Association, Phi Beta Delta International Scholars, Phi Kappa Phi, Golden Key Honor Society and Beta Gamma Sigma.

## Ms. Elizabeth Rabe

Ms. Elizabeth Rabe is an Instructor of Accounting at Northeastern State University. She is an active Certified Public Accountant. Ms. Rabe teaches accounting courses in managerial accounting, accounting information systems, business policy and intermediate accounting areas. Her research interests include writing teaching cases, life-cycle accounting, business sustainability and student assessment. She participated in American Accounting Association and presented at Southwestern Case Research Association and 2010 National Conference on Learner Centered Teaching. She is a member of the Institute of Management Accountants, Oklahoma Society of Certified Public Accountants, Petroleum Accountant Society of Oklahoma and Southwestern Case Research Association.

## Dr. Gene Kozlowski

is a Full Professor of Information Systems at Northeastern State University. Dr Kozlowski teaches graduate and undergraduate Information Systems courses. Areas of Interest: analysis of business information systems; design of business information systems; implementation of business information systems. Areas Taught: information systems; information technologies; management information systems; computer and information science; statistics; quantitative methods; and economics.

[^3]
## References

Allison, M. Starbucks raises prices again. The Seattle Times (2007). Retrieved September 18, 2009 from http://seattletimes.nwsource.com/html/businesstechnology/2003803039_starbucks24.html
BUCX- Historical Prices for Starbucks Co -Yahoo! Finance (2009). Yahoo.com. Retrieved September 15, 2009
from http://finance.yahoo.com/q/hp?s=SBUX\&a=08\&b=30\&c=2005\&d=08\&e=30\&f=2009\&g=m
Caribou Coffee - 2007 Annual Report (2007). Retrieved September 18, 2009 from
http://library.corporate-ir.net/library/19/192/192910/items/303798/CBOU-2007-Annual_Report.pdf
Federal Minimum Wage History (2009). Retrieved September 18, 2009 from
http://www.laborlawcenter.com/t-federal-minimum-wag.aspx
Founder Sees Lots of Room for Lots More Starbucks: [Interview] Elisabeth Malkin. New York Times. (Late Edition (East Coast). New York, N.Y.: Sep 22, 2007. P.C. 2
"Food Statistics $>$ McDonalds restaurants (most recent) by country"NationMaster.com (2009). Retrieved September 15, 2009 from http://www.nationmaster.com/graph/foo_mcd_res-food-mcdonalds-restaurants
Helm and Goudreau. IS Starbucks Pushing Prices Too High? - BusinessWeek.com (2007). Retrieved September 18, 2009 from
http://www.businessweek.com/bwdaily/dnflash/content/jul2007/db20070801_030871.htm?campaign_id=twxa
Historical Crude Oil Prices (Table) - inflationdata.com (2009). Retrieved September 18, 2009 from
http://www.inflationdata.com/inflation/Inflation_Rate/Historical_Oil_Prices_Table.asp.
ICO Indicator Prices Annual and Monthly Averages: 1998 to 2009. (2009). Retrieved September 18, 2009 from http://dev.ico.org/prices/p2.htm
It's a Starbucks World - portfolio.com(2010). Retrieved February 28, 2010 from
http://74.125.95.132/search?q=cache:BduXV_ELLdEJ:www.portfolio.com/interactive-features/2008/06/Starbucks-World/+starbucks+number+of+store+openings+2005\&cd=3\&hl=en\&ct=clnk\&gl=us\&client=firefox-a
Leibtag E., Nakamura A. and Nakamura, E. and Zerom D. Cost Pass-Through in the US Coffee Industry. Economic Research Report No. (EER-38) 28 pp, March 2007. Retrieved September 18, 2009 from http://www.ers.usda.gov/Publications/ERR38/
Maney, Kevin. How Starbucks Lost its 'Fidelity" from CNNMoney.com (2009). Retrieved September 15, 2009
from http://money.cnn.com/2009/09/16/news/companies/kevin maney starbucks.fortune/index.htm
MCD - Getting to Know Us - aboutmcdonalds.com (2009). Retrieved September 18, 2009 from
http://www.aboutmcdonalds.com/mcd/our_company.html
Panera Bread - 2007 Annual Report (2007). Retrieved September 18, 2009 from
http://www.panerabread.com/pdf/ar-2007.pdf
Palmer, Jay. A Latte Room to Grow. Barron's. New York, N.Y: Mar 26, 2007. Vol. 87, Iss. 13, P22, 24 (2 pp.) Shepherd, Lauren. Starbucks competition heats up from THE ASSOCIATED PRESS, NEW YORK (2007).
Retrieved September 18, 2009 from http://www.businessweek.com/ap/financenews/D8O0SPE80.htm
S \& P 500 Index, RTH - Monthly Returns for S \& P 500 - Yahoo! Finance (2009). Yahoo.com. Retrieved February
28, 2010 from http://finance.yahoo.com/q?s=\^GSPC
Starbucks Company 2007 Annual Report (2007). Starbucks Form 10-K.
www.edgar-online.com. Retrieved September 122008 from file://E:\Starbucks\v33834e10vk
Starbucks 2007.htm
"Starbucks Corporation." (n.d.). Datamonitor Company Profiles Authority. EBSCO. [Library name], [City], [State abbreviation]. 15 Sep. 2009 [http://search.ebscohost.com/login.aspx?direct=true\&db=dmhco\&AN=E86AFA79-07E1-4115-AA0C-0016416541FE\&site=ehost-live](http://search.ebscohost.com/login.aspx?direct=true%5C&db=dmhco%5C&AN=E86AFA79-07E1-4115-AA0C-0016416541FE%5C&site=ehost-live).

| Exhibit 1 -Starbucks' Income Statements for Years Ending December 31 (in millions of dollars) |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: |
|  | 2007 | 2006 | 2005 | 2004 |
| INCOMESTATEMENT |  |  |  |  |
| Net sales | \$9,411 | \$7,787 | \$6,369 | \$5,294 |
| Operating costs | \$7,509 | \$6,120 | \$4,963 | \$4,160 |
| Selling., general and administrative expense | \$489 | \$479 | \$362 | \$304 |
| Earnings before interest, taxes, depreciation, and amortization (EBITDA)* | \$1,413 | \$1,188 | \$1,044 | \$830 |
| Depreciation and amortization | \$467 | \$387 | \$340 | \$280 |
| Earnings before interest and taxes (EBIT) | \$946 | \$801 | \$704 | \$550 |
| Non-operating income /expense (Income from Equity Investees and Net interest | \$152 | \$117 | \$93 | \$75 |
| Less interest | \$42 | \$11 | \$1 | \$0 |
| Earnings before taxes (EBT) | \$1,056 | \$907 | \$796 | \$625 |
| Taxes | \$384 | \$325 | \$302 | \$232 |
| Net Income before preferred dividends | \$672 | \$582 | \$494 | \$393 |
| Preferred dividends | - | - | - | \$0 |
| Income from continuing operations before extra ordinary items | \$672 | \$582 | \$494 | \$393 |
| Adjustment for extraordinary items |  | \$17 |  |  |
| Net Income before preferred dividends | \$672 | \$565 | \$494 | \$393 |
| Common dividends | \$0 | \$0 | \$0 | \$0 |
| Addition to retained earnings | \$672 | \$565 | \$494 | \$393 |


| Per-share Data |  |  |  |
| :--- | :--- | :--- | :--- |
| Earnings per share, Basic (EPS) - not include diluted stocks | $\mathbf{\$ 0 . 9 0}$ | $\mathbf{\$ 0 . 7 4}$ | $\mathbf{\$ 0 . 6 3}$ |
| Dividends per share (DPS) | $\mathbf{\$ 0 . 0 0}$ | $\mathbf{\$ 0 . 0 . 4 9}$ | $\mathbf{\$ 0 . 0 0}$ |
| Book value of Equity per share (BVPS) | $\mathbf{\$ 0 . 0 0}$ |  |  |

$$
\mathrm{g}=\text { the compounded growth rate of EPS }=(2007 \mathrm{EPS} / 2004 \mathrm{EPS}) 21.87 \%
$$

Source - Starbucks 2007 Annual Report. Data is provided by Research Insight

| Exhibit 2 - Starbucks' Balance Sheet (in millions of dollars) |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: |
|  | 2007 | 2006 | 2005 | 2004 |
| Assets |  |  |  |  |
| Cash and equivalents | \$281 | \$313 | \$174 | \$145 |
| Short-term investments | \$157 | \$141 | \$133 | \$508 |
| Accounts receivable | \$288 | \$224 | \$191 | \$140 |
| Inventories | \$692 | \$636 | \$546 | \$423 |
| Prepaid Insurance and Lease | \$149 | \$127 | \$94 | \$71 |
| Deferred Income taxes (net) -Income taxes not paid | \$129 | \$89 | \$71 | \$64 |
| Total current assets | \$1,696 | \$1,530 | \$1,209 | \$1,351 |
| Long term investment (available for sale) | \$21 | \$6 | \$60 | \$136 |
| Equity and other investment | \$259 | \$219 | \$202 | \$168 |
| Net plant and equipment (net of depreciation) | \$2,890 | \$2,288 | \$1,842 | \$1,551 |
| Other assets | \$219 | \$187 | \$73 | \$87 |
| Other intangible assets (cash deposit from unearned sale) | \$42 | \$38 | \$35 | \$28 |
| Goodwill | \$216 | \$161 | \$93 | \$69 |
| Total assets | \$5,343 | \$4,429 | \$3,514 | \$3,390 |
| Liabilities and equity |  |  |  |  |
| Accounts payable | \$391 | \$341 | \$221 | \$199 |
| Commercial paper and short term borrowings (Notes Payable) | \$710 | \$700 | \$277 | \$0 |
| Accruals (Compensation, Occupancy) | \$664 | \$568 | \$475 | \$362 |
| Accrued taxes | \$93 | \$94 | \$78 | \$63 |
| Other Liabilities | \$296 | \$231 | \$175 | \$121 |
| Current portion of long term debt | \$1 | \$2 | \$1 | \$1 |
| Total current liabilities | \$2,155 | \$1,936 | \$1,227 | \$746 |
| Deferred income taxes | \$0 | \$0 | \$0 | \$21 |
| Long-term bonds | \$550 | \$2 | \$3 | \$4 |
| Other long term liabilities (Deferred Rent, asset retirement obligations, etc.) | \$354 | \$263 | \$194 | \$145 |
| Total debt | \$3,059 | \$2,201 | \$1,424 | \$916 |
| Common stock (50,000,000 shares) | \$1 | \$1 | \$0 | \$0 |
| Paid in capital | \$39 | \$39 | \$130 | \$996 |
| Retained earnings (include repurchase of common stocks) | \$2,244 | \$2,188 | \$1,960 | \$1,478 |
| Total common equity | \$2,284 | \$2,228 | \$2,090 | \$2,474 |
| Total liabilities and equity | \$5,343 | \$4,429 | \$3,514 | \$3,390 |

Source - Starbucks 2007 Annual Report. Data is provided by Research Insight

## EXHIBIT 3- FOOTNOTES TO FINANCIAL STATEMENTS

DEBT
Note 9: (abstracted from footnote Note 9 of the 2007 10K)

## Revolving Credit Facility and Commercial Paper Program

As of September 30, 2007, the Company had $\$ 710$ million in borrowings outstanding under the (commercial paper) program with a weighted average interest rate of $5.4 \%$.

As of October 1, 2006, the Company had $\$ 700$ million outstanding under the facility with a weighted average interest rate of $5.5 \%$.

## Long-term Debt

In August 2007, the Company issued $\$ 550$ million of $6.25 \%$ Senior Notes (the "notes") due in August 2017, in an underwritten registered public offering. Interest is payable semi-annually on February 15 and August 15 of each year, commencing February 15, 2008. The notes were priced at a discount, resulting in proceeds to the company of $\$ 549$ million, before expenses.

In 1999, Starbucks purchased the land and building comprising its York County, Pennsylvania roasting plant and distribution facility and assumed certain related loans from the York County Industrial Development Corporation.

As of September 30, 2007, $\$ 2.0$ million remained outstanding on these loans. The remaining maturities of these loans range from three to four years, with interest rates from $0.0 \%$ to $2.0 \%$.

Note 10: Long-term Debt and Short-term Borrowings: (abstracted from footnote Note 9 of the 2006 10K)

As of October 1, 2006, the Company had $\$ 700$ million outstanding, as well as a letter of credit of $\$ 11.9$ million which reduces the borrowing capacity under the credit facility. The Company had net borrowings under its credit facility of \$423 million during fiscal 2006.

As of October 2, 2005, the Company had $\$ 277$ million outstanding, with no letters of credit.
The weighted average contractual interest rates at October 1, 2006 and October 2, 2005 were $5.5 \%$ and $4.0 \%$ respectively.

As of October 1, 2006, the Company had $\$ 2.7$ million outstanding. The remaining maturities of these loans range from four to five years, with interest rates from $0.0 \%$ to $2.0 \%$.

Note 10: Long-term Debt and Short-term Borrowings (abstracted from footnote Note 9 of the 2005 10K)
The Facility is scheduled to expire in August 2010 and is available for working capital, capital expenditures and other corporate purposes, which may include acquisitions and share repurchases.

As of October 2, 2005, the Company was in compliance with each of these covenants. There were borrowings of $\$ 277$ million outstanding under the Facility as of October 2, 2005, with no outstanding letters of credit, and the weighted average contractual interest rate was $4.0 \%$.

The Company assumed loans totaling $\$ 7.7$ million from the York County Industrial Development Corporation. The remaining maturities of these loans range from five to six years, with interest rates from $0.0 \%$ to $2.0 \%$. Interest expense was $\$ 1.3$ million, $\$ 0.4$ million and $\$ 0.3$ million in fiscal 2005, 2004 and 2003, respectively.

Note 12: Shareholders' Equity (abstracted from footnote Note 9 of the 2007 10K)
In addition to 1.2 billion shares of authorized common stock with $\$ 0.001$ par value per share, the Company has authorized 7.5 million shares of preferred stock, none of which was outstanding at September 30, 2007.

Note 14: Income Taxes (abstracted from footnote Note 14 of the 2007 10K)
A reconciliation of the statutory federal income tax rate with the Company's effective income tax rate is as follows:

| Fiscal Year Ended | Sept 30, 2007 | Oct 1, 2006 | Oct 2,2005 |
| :--- | :---: | :---: | :---: |
|  |  |  |  |
| Statutory rate | $35.0 \%$ | $35.0 \%$ | $35.0 \%$ |
| State income taxes, net of federal income tax benefit | 3.4 | 3.4 | 3.9 |
| Other, net |  | $(2.1)$ | $(2.6)$ |
| Effective tax rate |  | $36.3 \%$ | $35.8 \%$ |

Source - Starbucks 2007 Annual Report
Note 15: Income Taxes (abstracted from footnote Note 15 of the 2006 10K)

A reconciliation of the statutory federal income tax rate with the Company's effective income tax rate is as follows:

| FISCAL YEAR ENDED | Oct 1,2006 | Oct 2, 2005 | Oct 3,2004 |
| :--- | :---: | :---: | :---: |
| Statutory rate | $35.0 \%$ | $35.0 \%$ | $35.0 \%$ |
| State income taxes, net of federal income tax benefit | 3.4 | 3.9 | 3.5 |
| Other, net | $(2.6)$ | $(1.0)$ | $(1.2)$ |
| Effective tax rate | $35.8 \%$ | $37.9 \%$ | $37.3 \%$ |

Source - Starbucks 2006 Annual Report

| Exhibit 4 - Historical Data Collected for the Analysis |  |  |  |  |
| :--- | ---: | ---: | ---: | ---: |
|  | 2007 | 2006 | 2005 | $\mathbf{2 0 0 4}$ |
| Average common stock price (based on monthly prices) | $\mathbf{\$ 2 7 . 8 5}$ | $\mathbf{\$ 3 5 . 3 4}$ | $\mathbf{\$ 2 6 . 7 8}$ | $\mathbf{\$ 2 2 . 5 9}$ |
| Weighted Average of Shares Outstanding (in millions) | $\mathbf{7 5 0}$ | $\mathbf{7 6 6}$ | $\mathbf{7 9 0}$ | $\mathbf{7 9 4}$ |
| Tax rate | $\mathbf{3 6 . 3 0 \%}$ | $\mathbf{3 5 . 8 0 \%}$ | $\mathbf{3 7 . 9 0 \%}$ | $\mathbf{3 7 . 3 0 \%}$ |
| Beta of Starbucks (1) | $\mathbf{1 . 2 5}$ | $\mathbf{1 . 2 4}$ | $\mathbf{0 . 3 2}$ | $\mathbf{0 . 4 4}$ |
| Yield of Treasury Bond (2) |  |  | $\mathbf{6 \%}$ |  |
| Market returns (3) |  |  | $\mathbf{1 0 \%}$ |  |

Note:

1. Beta of Starbucks is estimated from 3 years of monthly returns ended in December 2007.
2. Annual Yield of Treasury Bond is estimated from an average of 25 years of annual returns of a 10-year Treasury Note, based on monthly basis, ended in December 2007.
3. Annual Market return is estimated from an average of 25 years of annual returns, based on the monthly S\&P 500 Index, ended in December 2007.

## EXHIBIT 5 - STARBUCKS CORP RATIO REPORT

| RATIOS | $\mathbf{2 0 0 7}$ | $\mathbf{2 0 0 6}$ | $\mathbf{2 0 0 5}$ | $\mathbf{2 0 0 4}$ |
| :--- | :---: | :---: | :---: | :---: |
|  |  |  |  |  |
| LIQUIDITY |  |  |  |  |
| Current Ratio | 0.79 | 0.79 | 0.986 | 1.81 |
| Quick Ratio | 0.34 | 0.35 | 0.406 | 1.06 |
| EFFICIENCY |  |  |  |  |
| Inventory Turnover |  |  |  |  |
| Receivables Turnover | 13.60 | 12.24 | 11.67 | 12.52 |
| Total Asset Turnover | 32.68 | 34.76 | 33.35 | 37.81 |
| Average Collection Period (Days) | 1.76 | 1.758 | 1.81 | 1.56 |
| Days to Sell Inventory | 11.17 | 10.50 | 10.95 | 9.65 |
| PROFITABILITY | 26.84 | 29.81 | 31.29 | 29.16 |
| Operating Margin (EBIT) (\%) |  |  |  |  |
| Net Profit Margin (\%) | 10.05 | 10.29 | 11.05 | 10.39 |
| Return on Average Assets (\%) | 7.15 | 7.26 | 7.76 | 7.42 |
| Return on Average Equity (\%) | 13.75 | 14.23 | 14.32 | 12.85 |
| LEVERAGE | 29.79 | 26.19 | 21.66 | 17.25 |
| Interest Coverage After Tax |  |  |  |  |
| Total Debt/Total Assets (\%) |  |  |  |  |
| DIVIDENDS |  |  |  |  |
| Dividend Payout (\%) | 0.00 | 0.00 | 0.00 | 0.00 |
| Dividend Yield (\%) | 0.00 | 0.00 | 0.00 |  |

Source - Research Insight Database

## EXHIBIT 6 - MCDONALD RATIO REPORT

| RATIOS | 2007 | 2006 | 2005 | 2004 |
| :---: | :---: | :---: | :---: | :---: |
|  |  |  |  |  |
| LIQUIDITY |  |  |  |  |
| Current Ratio | 0.80 | 1.21 | 1.45 | 0.81 |
| Quick Ratio | 0.68 | 1.01 | 1.25 | 0.60 |
| Free Cash Flow per share | 2.99 | 3.37 | 3.00 | 2.69 |
| EFFICIENCY |  |  |  |  |
| Inventory Turnover | 100.16 | 90.69 | 87.94 | 86.42 |
| Receivables Turnover | 23.28 | 25.39 | 26.55 | 25.76 |
| Total Asset Turnover | 0.78 | 0.73 | 0.71 | 0.72 |
| Average Collection Period (Days) | 15.47 | 14.18 | 13.56 | 13.97 |
| Days to Sell Inventory | 3.59 | 3.97 | 4.09 | 4.17 |
| PROFITABILITY |  |  |  |  |
| Operating Margin (EBIT) (\%) | 24.31 | 21.53 | 20.056 | 20.89 |
| Net Profit Margin (\%) | 10.25 | 13.31 | 12.718 | 11.95 |
| Return on Average Assets (\%) | 7.99 | 9.74 | 9.000 | 8.54 |
| Return on Average Equity (\%) | 15.19 | 18.78 | 17.734 | 17.40 |
| LEVERAGE |  |  |  |  |
| Interest Coverage After Tax | 6.60 | 8.05 | 8.21 | 7.29 |
| Total Debt/Total Assets (\%) | 31.65 | 29.06 | 33.81 | 33.12 |
| DIVIDENDS |  |  |  |  |
| Dividend Payout (\%) | 75.62 | 42.34 | 32.36 | 30.50 |
| Dividend Yield (\%) | 2.55 | 2.26 | 1.99 | 1.72 |

Source - Research Insight Database

## EXHIBIT 7 PANERA BREAD RATIO REPORT

| RATIOS | $\mathbf{2 0 0 7}$ | $\mathbf{2 0 0 6}$ | $\mathbf{2 0 0 5}$ | $\mathbf{2 0 0 4}$ |
| :--- | :---: | :---: | :---: | :---: |
|  |  |  |  |  |
| LIQUIDITY |  |  |  |  |
| Current Ratio | 1.19 | 1.16 | 1.18 | 1.05 |
| Quick Ratio | 1.00 | 0.94 | 0.99 | 0.88 |
| Free Cash Flow per share | 3.66 | 3.25 | 2.73 | 2.10 |
| EFFICIENCY |  |  |  |  |
| Inventory Turnover |  |  |  |  |
| Receivables Turnover | 83.78 | 78.22 | 74.73 | 52.89 |
| Total Asset Turnover | 31.51 | 29.57 | 30.19 | 32.33 |
| Average Collection Period (Days) | 1.72 | 1.69 | 1.68 | 1.68 |
| Days to Sell Inventory | 11.43 | 12.18 | 11.92 | 11.14 |
|  | 4.30 | 4.60 | 4.82 | 6.81 |
| PROFITABILITY |  |  |  |  |
| Operating Margin (EBIT) (\%) | 8.45 | 10.95 | 12.67 | 12.91 |
| Net Profit Margin (\%) | 5.39 | 7.10 | 8.15 | 8.05 |
| Return on Average Assets (\%) | 9.26 | 12.01 | 13.69 | 13.52 |
| Return on Average Equity (\%) | 13.62 | 16.47 | 18.69 | 17.65 |
| LEVERAGE |  |  |  |  |
| Interest Coverage After Tax |  |  |  |  |
| Total Debt/Total Assets (\%) | 0.00 | 0.00 | 0.00 | 0.00 |
| DIVIDENDS | 0.00 | 0.00 | 0.00 | 0.00 |
| Dividend Payout (\%) | 119.96 | 640.66 | $1,044.67$ | $2,144.33$ |
| Dividend Yield (\%) | 10.73 | 0.00 | 0.00 | 0.00 |

Source - Research Insight Database

# What Went Wrong with Starbucks? Financial Analysis and Business Evaluation 

## Teaching Manual

By<br>Julia S. Kwok*<br>Elizabeth C. Rabe<br>Gene J. Kozlowski<br>Northeastern State University

* Corresponding author: Department of Accounting and Finance, College of Business and Technology, Northeastern State University, Broken Arrow, OK 74014; Email:
kwok@nsuok.edu; Phone: 918-449-6516.


# What Went Wrong with Starbucks? Financial Analysis and Business Evaluation Teaching Notes 

## Case Overview

During 2007 Starbucks Coffee Company's stock price continuously dropped resulting in a drop of approximately $40 \%$, $\$ 35.42$ on December 29, 2006 to $\$ 20.47$ on December 31, 2007. This was vastly different from a decade of over $15 \%$ annual growth of average monthly stock prices. Such growth could be counter intuitive to the over $40 \%$ drop of market, especially when profit indicators, such as net income, return on equity and cash flow per share, have been increasing for the past 4 years, i.e. from 2003-2007.

What triggered the drop of stock price in fiscal year of 2007? Did Starbucks' 2006 expansion plan go wrong? This case provides financial data for upper level or graduate finance and accounting students to conduct an in-depth financial examination of Starbucks based on the free cash flows, financial ratios, weighted average cost of capital, return on capital, economic value added, market value added and value of operations that would shed light on the impact of expansion on the company's financial performance.

## Synopsis and Objectives

## Synopsis

1. The analysts need to:
a. Find out reasons for the decline of Starbucks' stock price in 2007.
b. Use data from financial statement to perform financial statement analysis:
i. Calculate key financial statistics
ii. Interpret those statistics and financial ratios
iii. Evaluate the impact of the expansion in 2006. Examples of those statistics are: free cash flows per share, return on invested capital (ROIC), weighted average cost of capital (WACC), economic value added (EVA), market value added (MVA) and value of operations (VOP).
c. Consider non-quantitative factors that impact the company. Such factors include economic contraction, increasing cost of goods sold, demand for coffee beans and cruel oil prices.
d. Suggest strategic changes to improve market value of the company
2. The case has provided:
a. Financial statement and related footnotes, additional historical data for calculation of weighted average cost of capital (WACC), which is required for the EVA calculation.
b. Financial ratios of Starbucks and its competitors for comparison and calculation of the industry average.

## Objectives

The case can be used to perform analysis which allows:

1. Evaluation of the financial impact of Starbuck's business strategy. Various return and performance measurements such as return on invested capital economic-value-added and market value added on business expansion and value of operations are used to assess the impact of expansion strategy.
2. Consideration of the impact of standardization and horizontal expansion on value-added activities.
3. Non-value added expansion and cannibalization of existing markets.
4. Interpretation and use of free cash flow (FCF) and financial ratio analysis.
5. Calculation and application of weight average cost of capital.

## Suggested Questions Students Need To Answer After Reading the Case

1. What is free cash flow? What was Starbucks' free cash flow per share in 2005-2007?
2. Why was there a drop of free cash flow in 2006 when the cash position actually increased $50 \%$ ?
3. What was Starbucks' return on invested capital (ROIC) for years 2005, 2006, and 2007?
4. What would be the appropriate opportunity cost of capital for Starbucks' expansion?
5. What is Starbucks' weighted average cost of capital (WACC)?
6. What is the appropriate financial tool to analyze the financial impact of an expansion strategy? How do we know whether the 2006-2007expansion was value-enhancing to the company?
7. How did Starbucks perform in terms of liquidity, leverage, efficiency and profitability before and after the expansion? Who were Starbucks’ competitors? How did Starbucks compare to the industry average?
8. What were the costs and benefits of standardization and horizontal expansion to Starbucks?
9. How did changes in the demand for coffee beans and cruel oil prices affect the value of the expansion?
10. What were other quantitative and qualitative considerations that should have been taken into consideration prior to changes of the expansion strategy?

## Teaching Plan

The case includes both qualitative and quantitative analysis. Since the case is set at the beginning of the downward spiral of financials, the qualitative analysis will help to: (1) highlight structural weaknesses which were associated with how Starbucks was attempting to expand its market share; (2) illuminate changes in raw materials purchased by Starbucks; and, (3) recognize the downturn in the National economy. The quantitative analysis addresses the issue of whether
the 2005-2007 expansion adds value to the company. It involves the calculation of the free cash flows, the comparison of return on invested capital and weighted average cost of capital, economic value, market value added and changes of the value of operations.

1. What is free cash flow? What was Starbucks' free cash flow per share in 2005-2007?

Free cash flow (FCF) is cash that is actually available for distribution to all investors, which includes debt-holders and share-holders. It is equal to net after-tax operating income, (NOPAT), minus net investment in operating capital, (CAPITAL),
i.e. $\mathrm{FCF}=$ NOPAT $-\left(\mathrm{CAPITAL}_{t}-\right.$ CAPITAL $\left._{t-1}\right)$,
where
$t$ is the current year and $t-1$ is the previous year.
NOPAT $=$ EBIT $^{*}(1-\mathrm{T})$ and
NOWC = Operating Current Assets - Operating Current Liabilities
For the calculation of operating current assets, short term investment and deferred income taxes should be deducted from the total current asset figure. For the calculation of operating current liabilities, account payable and accruals should be deducted from the total current liabilities figure.

Please refer to the Exhibit 1 for the definition of terms and the numerical calculation of FCF. Part 1-4 shows the step-by-step calculation of NPAT, NOWC and FCF per share.

Starbucks had an unstable free cash flow per share fluctuating from 14 cents in 2005 to 6 cents in 2006 and rose back to 14 cents. This represents a decrease of $57 \%$ to an increase of $133 \%$ during the 2005-2007 time period. Despite the ups and down, cash flows per share in 2007 reverted back to the 2005 level. But the FCF per share remained quiet low, -50 to- $60 \%$ below its competitors.
2. Why was there a drop of free cash flow in 2006 when the cash position actually increased $50 \%$ ?

Even though the cash position had increased $80 \%$ in 2006, the free cash flow has dropped by $65 \%$. The free cash flow position worsened because the $31 \%$ increase of operating current liability (included $54 \%$ increase of account payables and $20 \%$ increase of accrued expenses) were not enough to cover the $20 \%$ increase of operating current assets and $24 \%$ increase in plant and equipment.

On the other hand, there was a $80 \%$ increase of cash position because the company also got access to cash flows through increase of long term and short term external and internal financing through notes payable, long term debt and retained earnings. The concern here was that the company had increased its short-term borrowing to cover its
long term investment. The company issued $\$ 550 \mathrm{~m}$ long term debt in 2007. There was only $\$ 2 \mathrm{~m}$ long term debt in 2006.
3. What was Starbucks' return on invested capital (ROIC) for years 2005, 2006, and 2007?

The motive for calculating return on invested capital (ROIC) is that ROIC is one of the many ways to evaluate growth and expansion. The growth or expansion will add value if return on invested capital is greater than weighted average cost of capital (i.e. ROIC $\geq$ WACC) even though high growth may bring some negative free cash flows periods. Question 4 and 5 will address the weight cost of capital issues. The questions of whether the expansion of Starbuck will increase firm value will be addressed in question 6.

$$
\begin{aligned}
\text { ROIC }= & \text { NOPAT } / \text { Last year's Total Operating capital, }=\text { NOPAT/ CAPITAL t- } 1 \\
& \text { i.e. Answers of Part } 1 \text { of Exhibit } 1 \text { divided by Part } 3 \text { of Exhibit } 1 .
\end{aligned}
$$

For example, in 2006, ROIC $\mathrm{t}=$ NOPAT $\mathrm{t} / \mathrm{CAPITAL} \mathrm{t}-1=\$ 514.24 / \$ 1,976=21.01 \%$ Where:

$$
\begin{aligned}
&\text { NOPAT }=\text { EBIT }(1-\mathrm{T})=\$ 801 * 64.20 \%=\$ 514.24 \mathrm{~m} \text { (in Part } 1 \text { of Exhibit } 1) \\
& \text { CAPITAL }_{\mathrm{t}-1}=(\text { net operating working capital }+ \text { net fixed assets }) \\
&=\left(\text { NOWC }_{\mathrm{t}-1}\right)+\left(\text { NFA }_{\mathrm{t}-1}\right) \\
&=\$ 134+\$ 1,842=\$ 1,976 \text { (in year } 2005 \text { of Part } 3 \text { of Exhibit } 1)
\end{aligned}
$$

The calculation of NOWC in 2005 is shown in Part 2 of Exhibit 1.
NOWC $=$ operating current assets - operating current liabilities $=\$ 1,005-\$ 871=\$ 134$ where:
Operating current asset = current assets - short term investment -deferred income taxes. Operating current liabilities $=$ account payable + accruals

But the return on invested capital (ROIC) decreased from $21.01 \%$ in 2006 to $20.43 \%$ in 2007 resulting in a $2.561 \%$ drop. The drop of profitability was reflected in the continuing $3.4 \%\left(3.4 \%=1.0686^{0.5}-1\right)$ reduction of the percentage of operating profits in Exhibit 5part 3 from 2005-2007. The percentage of operating profit was also reduced by $4 \%$ $(4 \%=(6.6 \%-6.86 \%) / 6.86 \%)$ from 2005 to 2006 in Exhibit 5-part 3. The operating profits were around $6.62 \%$, but the expansion, in general, required more than $31 \%$ in capital requirement as noted in Exhibit 5- part 2. It seemed that part of the expansion cost more than the existing ones, thus reducing the percentage of operating profits. The increased of crude oil prices and the bad economy might contribute to the reduced potential income from sales.

To give perspective to the ROIC measurement, one can compare ROIC with the appropriate cost of capital. As stated earlier, ROIC $\geq$ WACC signifies the investment meeting the minimum required rate of return.
4. What would be the appropriate cost of capital for Starbucks expansion?

Starbucks announced its plan of doubling its stores in 2005. The pattern of expansion in 2005-2007 was similar to that in 2004. $70 \%$ of the new stores would be in the US and the rest would be in international countries. One might argue that there would be additional risks when Starbucks moved further into the global world. But international expansion also enhanced geographical diversification lowering business risk. Since there was no significant increase of risks and the expansion did not involve a significant change of product or services, the company's weighted average cost of capital would be a good approximation for the cost of capital related to the expansion.
5. What was the weight average cost of capital (WACC) of Starbucks?

WACC is the required rate of return for an investment that has a risk level comparable to an average project of the company. WACC would be the appropriate discount rate if the project, expansion or growths are in line with the company's existing business.
$\mathrm{WACC}=\mathrm{Wd}(\mathrm{Rd})(1-\mathrm{T})+\mathrm{Ws}(\mathrm{Rcs})$, where
$\mathrm{Wi}=$ the percentage of investment based on market value of all securities, e.g. $\mathrm{Wd}=$ weight of debt and $\mathrm{Ws}=$ weight of equity.
(1-T) Rd = after-tax cost of debt
Rcs $=$ Cost of equity
Starbucks did not issue any preferred stocks. It was financed mainly by equity and it carried a low level of debt. The yield of a 10-year Treasury Bond in 2007 was used to proxy for the risk free rate. Treasury notes instead of Treasury bills were used to match the potential length of the project considered.

The return of the market was based on 5 years of the average 10 -year annual return of S\&P 500 Index. The $7.18 \%$ average was lower than the $8.44 \%$ of the 10 years average of the 10 -year annual returns. $7.18 \%$ was preferred because of the concern for the applicability of historical data.

A three year average of the year-end common stock price is used to calculate the market value of the stocks. The average of the three years' (2005-2007) stock prices was $\$ 29.97$. The three-year (2005-2007) average of the shares outstanding 769 m was used in the calculation. The details of the figures used can be found in Exhibit 4 of the case. Each year's WACC is used on EVA calculation because of a much lower beta (0.32) in 2005 compared to the 1.25 beta in 2007.

The company's WACC was found to be $7.7 \%$. Since ROIC was greater than WACC, the expansion added value to the company. Please refer to Exhibit 3 of the teaching notes for details.
6. What is the appropriate financial tool to analyze the financial impact of an expansion strategy? How do we know whether the 2006-2007expansion was value-enhancing to the company?

In general, if an expansion is value-enhancing, it is expected that it will increase the free cash flow of the company because the price of stock is the present value of its future free cash flows. In examining the free cash flow per share in part 4 of Exhibit 2, FCF/per share dropped significantly in 2006 when Starbucks had a $\$ 700 \mathrm{~m}$ in short term borrowing. It was waiting for a long term loan for capital expansion. FCF per share in 2007 was the same as that of 2005. So the expansion had not really increased the FCF. However, there are projects that may take time to develop, so it may have a period of low or negative free cash flow prior to positive periods.

Another measure of the performance of a given year or the company growth would be economic-value added (EVA), which is an estimate of a business' economic profit for the year. It is the residual income after taking the cost of capital into consideration. We can use EVA to measure the value of the expansion. An expansion adds value if its EVA $\geq 0$, or its return on invested capital is greater than or equal to the cost of capital (i.e. ROIC $\geq$ WACC). EVA is defined as:

## EVAt $=$ NOPAT $_{t}-$ CAPITAL $_{t-1}\left(W_{A C C}^{t}\right)$

Exhibit 4 - part 1 shows that EVA is positive and a general increasing trend over the years 2005-2007. EVA of Starbucks ranged from $\$ 309.55$ to $\$ 348.04$ in the period of 2005-2007 indicating the increase of after-tax operating earnings brought in by the expansion was higher than the operating capital invested, i.e. after tax EBIT was covering the cost of capital. As shown in Exhibit 3 - part 7 and Exhibit 2, WACC were significantly lower than ROIC in 2005-2007. The positive EVA results were consistent with the findings of the relationship between ROIC and WACC (2005: 22.12\%>6.71\%; 2006: $22.01 \%>10.36 \%$; 2007: $20.43 \%>10.40 \%$ ). So in general, the operations and the expansion added value to the company in the period of 2005-2007.

But the return on invested capital (ROIC) decreased from $21.01 \%$ in 2006 to $20.43 \%$ in 2007 resulting in a $2.561 \%$ drop. The drop of profitability was reflected in the continuing $3.4 \%\left(3.4 \%=1.0686^{0.5}-1\right)$ reduction of the percentage of operating profits in Exhibit 5 part 3 from 2005-2007. The percentage of operating profit was also reduced by $4 \%$ ( $4 \%=(6.6 \%-6.86 \%) / 6.86 \%)$ from 2005 to 2006 in Exhibit 5- part 3. The operating profits were around $6.62 \%$, but the expansion, in general, required more than $31 \%$ in capital requirement (CR) as noted in Exhibit 5- part 2. It seemed that part of the expansion cost more than the existing ones, thus reducing the percentage of operating profits.

The higher the CR, the lower the ROIC will be. The increased of crude oil prices and the bad economy might contribute to the reduced potential income from sales.

For the long run, stockholders did not seem to be concerned with the profit realization of the potential future opportunities brought by the expansion plan. Stock price of the stock dropped about $40 \%$ in from January to December in 2007. Stock price is a reflection of the present value of the expected cash flows in the future. The significant drop in price indicated the investors' concern for the management of the rapid expansion and the realization of those opportunities.

The price drop affected the market value added (MVA) and the value of operations (VOOC). VOOP $=$ MVE + MVD - non-operating assets. MVE and MVD are market value of equity and debt respectively. VOOP shows the value of current operations with the expansion taken place. MVA is the difference of market and book value of firms. MVA measures the performance of the company since inception. MVA and VOCC decreased by $25 \%$ and $22 \%$ from 2006-2007. The sudden negative change of both figures at the expansion phase of Starbucks was consistent with the investors' worry about the over-extension of Starbucks and the future cash flows. Please refer to Exhibit 7 and 8 for calculation details. Exhibit 10 summarizes all the key statistics for the evaluation of the expansion. Instead of relying on single indicators, the evaluation should be based on a combination of factors that contribute to various aspect of performance measure.
7. How did Starbucks perform in terms of liquidity, leverage, efficiency and profitability? How did Starbucks compare to the industry average? Who were Starbucks' competitors?

Students are expected to be able to interpret the financial ratios provided in Exhibit 4-6 of the case. The instructor will have the option to ask students to use the financial information provided to calculate the various ratios and industry averages. Students should examine more than one ratio within each of the liquidity, leverage, efficiency and profitability categories as well as the overall trend for each group. They should also interpret those ratios and compare them to the industry average to get a relative perspective. Please refer to Exhibit 9 of the teaching notes for the results of the ratios.

## Liquidity

Liquidity ratios measure the extent a company is able to meet its short term liabilities. There was a general decrease of liquidity. Current ratio was decreasing significantly $(-46 \%)$ in 2005 and ( $-20 \%$ ) in 2006 and started to stabilize in 2007. Quick ratio followed a similar pattern with a different set of numbers.

Starbucks's liquidity ratios were consistently below industry average. The current and quick ratio averaged $20 \%$ and $52 \%$ below the industry average respectively. Starbucks should pay attention to the potential liquidity issue especially when it used short term notes payable to finance those long term assets prior to 2007.

## Leverage

Leverage ratios measure the extent a company uses debt and be able to meet its long term liabilities. There was a substantial increase of leverage in 2005-7. They had very low debt ( $\$ 2 \mathrm{~m}$ ) in 2006 and had around $24 \%$ debt ( $\$ 550 \mathrm{~m}$ ) in 2007. Interest coverage decreased from 53 times in 2006 to 17 times in 2007.

Even with the increase of debt, Starbucks had a $10 \%$ lower leverage and much better interest coverage (on average $50 \%$ better) than McDonalds in 2006 and 2007. For this category, Panera Bread's figures had skewed the industry figure significantly, so the comparison should be limited to McDonald's figures.

## Efficiency

Efficiency ratios measure how well a company manages its assets. Inventory turnover had increased approximately $10.29 \%$ over a three-year period (2005-2007). However, for the same period, account receivables turnover had gone down $4.5 \%$. Total asset turnover has been increasing at around $6 \%$ in the past 2 years. But it had come down by $2 \%$ in 2007.

Compared to the industry, Starbucks' inventory turnover was only one sixth of the industry average. It was holding the inventory more than twice as long as the industry average. This would be an area that needed improvement.

Starbucks was predominately a cash business, so its account receivables turnover was much better than the industry average ( $20 \%$ higher or two days shorter than the industry in terms of average collection period).

Overall, Starbucks' total asset turnover has been more than $30 \%$ higher than the industry average in the past two years. The company maintained similar total asset turnover in 2007.

Note that average collection period is calculated as receivables/daily sales, and days to sell inventory was calculated as inventory divided by daily sales.

## Profitability

Profitability ratios measure how well a company is doing. There was a $7 \%$ drop of operating margin in 2006. Return on asset was on average $6 \%$ lower in 2007, $2 \%$ higher in 2006. On the other hand, the return on equity was on average $10.72 \%$ higher in 2007 and $24.38 \%$ in 2006. The increase of leverage ratio was the major contributor of the increase of ROE during that period.

The ROE and ROA of Starbucks were compared favorably with the industry, and they had been increasing over the years. In 2007, ROA and ROE were $33 \%$ and $53 \%$ higher than the industry. The operating margins ranged from $24 \%-30 \%$ lower than the industry average for the past 4 years. Operating expenses, particularly the administrative expenses, were increasing faster than the increase of sales as the company expanded its business in 2005.

The downward trend of profitability ratio was troublesome. The gross margin was squeezing due to the increase of cost of coffee beans as well as the de-valuation of the American dollars. The change from using fix-priced contracts with the farmers to the non-fixed price ones increased the variability of costs of goods sold. The expansion required higher expenditures in general and administrative areas as well as capital investment in stores at various locations. Even though earnings were increasing, the rate of increase was getting lower than that of sales.
8. What were the costs and benefits of standardization and horizontal expansion to Starbucks?

Starbucks' expansion and the hiring of new inexperienced employees created a need for standardization. This standardization targeted both service and product. Students may discuss the impact of standardization on the "Starbucks' experience" and determine if standardization produced value added activities. Starbucks introduced standardization to control quality and increase through-put-time of their process. Many customers complained that it decreased the value of their service and quality of their product.

Starbucks' horizontal expansion was based on the concept of being more available to customers, thus increasing the number of customers per store. In practice it caused the cannibalization of established stores' customers. Not only did the expansion not meet the company's goals of increasing its customer base, it decreased individual stores' daily customer count.
9. How did changes in the demand for coffee beans and cruel oil prices affect the value of the expansion?

The changes of the demand of coffee beans directly affected Starbucks' cost of goods sold. As demand for the beans increased, the price increased. In the past Starbucks could pass this cost increase on without affecting customer demand. However, a downturn in the economy and rising fuel costs due to increased crude prices became a concern. With more than two thirds of consumers changing their spending habits, an increase in the price of a tall latte could reduce sales.

This effect of the economic downturn was magnified for Starbucks due to its expansion. The expansion spanned economic boundaries as well as geographical boundaries. With the average income of customers dropping $13 \%$ the company was more vulnerable to economic events.

As the expansion changed the make-up of its customer base to less affluent consumers it also increased Starbucks' exposure to competition. Customer who were looking for convenience and lower costs were more likely to switch to McDonalds or Dunkin Donuts, two of Starbucks' major competitors, than the original customer base interested in an excellent Carmel Macchiato and ambiance.
10. What were other quantitative and qualitative considerations that should have been taken into consideration prior to changes of the expansion strategy?

Other quantitative factors students should consider include the relevant costs and relevant revenues related to continuing the expansion and discontinuing the expansion. Sunk costs, costs that have already been paid and allocated overhead would be irrelevant to the decision. Savings experienced by changing the expansion plan and revenues losses would be relevant, as would current disposal value of equipment and costs of buying out leases that would no longer be needed.

Other qualitative factors students should consider include the affects of expansion on product and service quality. Starbucks has used a differentiation strategy to achieve its success in the market place. The company developed the persona of having a special atmosphere that customer would go out of their way to experience. Referred to as the "Third Place" Starbucks was the place you would want to spend time in with coffee beans freshly ground and baristas’ creating each cup of coffee with care. Expansion and the standardization of products and services had reduced the quality of those products and services. Without the differentiation, Starbucks would become like any convenience store with help-your-self coffee service.

## Epilogue

By the middle of fiscal year 2008 Starbucks management decided to curtail expansion. They announced the closing of 600 US stores and 61 international stores. The company's stock dropped an additional $43 \%$ to $\$ 13.13$ a share between 2007 and 2008. Exhibit 9 shows the changes of stock price from 2005-2009.

## EXHIBIT 1 - FREE CASH FLOW CALCULATION

```
Free Cash Flow (FCF)
FCF = NOPAT - Net Investment in Operating Capital
where
NOPAT = EBIT (1-T) and EBIT = ( Sales - operating expenses - depreciation)
NOWC = Operating CA - Operating CL
CAPITALt = NOWC + Net Fixed Assets-
see part 3 below
FCF = NOPAT - Net Investment in Operating Capital-
see part 4 below
where Net Investment in operating Capital = changes of total operating capital = CAPITALt- CAPITALt-1
    FCF per share = FCF / shares outstanding
```


## EXHIBIT 1 -FREE CASH FLOW CALCULATION

Exhibit 1 - PART 1:

Net Operating Profit After Taxes (NOPAT) and Operating Profit

NOPAT $=$ EBIT (1-T) and EBIT $=($ Sales - operating expenses - depreciation);
Operating Profit $=$ NOPAT as a Percentage of Sales $=$
NOPAT/SALES

| 2007 | NOPAT $=$ |  | x | ( 1-T ) |  |
| :---: | :---: | :---: | :---: | :---: | :---: |
|  |  | \$946.00 | $\mathbf{x}$ | 63.7\% |  |
| 2007 | NOPAT $=$ | \$602.60 | = | 6.4\% | of Sales |
| 2006 | NOPAT $=$ | EBIT | x | ( 1-T) |  |
|  |  | \$801.00 | x | 64.2\% |  |
| 2006 | NOPAT $=$ | \$514.24 |  | 6.6\% | of Sales |
| 2005 | NOPAT $=$ | EBIT | X | ( 1 - T ) |  |
|  |  | \$704.00 | X | 62.1\% |  |
| 2005 | NOPAT $=$ | \$437.18 |  | 6.9\% | of Sales |
| 2004 | NOPAT $=$ | EBIT | x | ( 1-T) |  |
|  |  | \$550.00 | X | 62.7\% |  |
| 2004 | NOPAT $=$ | \$344.85 |  | 6.5\% | of Sales |

## EXHIBIT 1 -FREE CASH FLOW CALCULATION

Exhibit 1 - PART 2:

## Net Operating Working Capital (NOWC)

NOWC = Operating CA - Operating CL
Operating current asset are total current assets excluding short term investment and deferred income taxes.
Operating current liabilities include account payable, accruals (compensation, occupancy and other accruals) and other liabilities.

| 2007 | NOWC = | Operating current assets | - | Operating current liabilities |  |
| :---: | :---: | :---: | :---: | :---: | :---: |
|  |  | \$1,410 | - | \$1,351 |  |
| 2007 | NOWC = | \$59 | which represents | -63\% | growth from last year |
| 2006 | NOWC = | Operating current assets | - | Operating current liabilities |  |
|  |  | \$1,300 | - | \$1,140 |  |
| 2006 | NOWC = | \$160 | which represents | 19\% | growth from last year |
| 2005 | NOWC = | Operating current assets | - | Operating current liabilities |  |
|  |  | \$1,005 | - | \$871 |  |
| 2005 | NOWC = | \$134 | which represents | 38\% | growth from last year |
| 2004 | NOWC = | Operating current assets | - | Operating current liabilities |  |
|  |  | \$779 | - | \$682 |  |

## EXHIBIT 1 -FREE CASH FLOW CALCULATION

Exhibit 1 - PART 3:

Total Operating Capital (CAPITAL)

CAPITALt $=$ NOWC + Net Fixed Assets
Net fixed assets are plant and equipment net of depreciation.

| 2007 | CAPITAL $=$ | NOWC | $+$ <br> $+$ which represents | Net Fixed Assets of 2007$\$ 2,890$ |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  | \$59 |  |  |  |  |
| 2007 | CAPITAL $=$ | \$2,949 |  |  | growth from last year; net fixed assets increases by | 26\% |
| 2006 | CAPITAL $=$ | NOWC | + | Net Fixed Assets of 2006 |  |  |
|  |  | \$160 | which represents | \$2,288 |  | 24\% |
| 2006 | CAPITAL $=$ | \$2,448 |  | 24\% g | growth from last year; net fixed assets increases by |  |
| 2005 | CAPITAL $=$ | NOWC | $+$ <br> $+$ <br> which represents | Net Fixed Assets of 2005 |  |  |
|  |  | \$134 |  | \$1,842 |  |  |
| 2005 | CAPITAL $=$ | \$1,976 |  | 20\% g | growth from last year; net fixed assets increases by | 19\% |
| 2004 | CAPITAL $=$ | NOWC | + | Net Fixed Assets of 2004 |  |  |
|  |  | \$97 | + | \$1,551 |  |  |
| 2004 | CAPITAL $=$ | \$1,648 |  |  |  |  |

## EXHIBIT 1 -FREE CASH FLOW CALCULATION

## Exhibit 1 - PART 4:

## Free Cash Flow (FCF)

FCF = NOPAT - Net Investment in Operating Capital
Net Investment in operating Capital = changes of total operating capital = CAPITALt- CAPITALt-1
FCF per share $=$ FCF / shares outstanding

| 2007 | FCF $=$ | $\begin{gathered} \text { NOPAT } \\ \$ 603 \end{gathered}$ | - | Net investment in operating capital $\$ 501$ |  |
| :---: | :---: | :---: | :---: | :---: | :---: |
| 2007 | FCF $=$ | \$101.60 |  |  |  |
|  | FCF per share = | \$0.14 | ; | Growth of Net Investment in Operating Capital = | 6\% |
| 2006 | $\mathrm{FCF}=$ | NOPAT | - | Net investment in operating capital |  |
|  |  | \$514 | - | \$472 |  |
| 2006 | FCF = | \$42.24 |  |  |  |
|  | FCF per share = | \$0.06 | ; | Growth of Net Investment in Operating Capital = | 44\% |
| 2005 | FCF $=$ | NOPAT | - | Net investment in operating capital |  |
|  |  | \$437 | - | \$328 |  |
| 2005 | FCF = | \$109.18 |  |  |  |
|  | FCF per share = | \$0.14 |  |  |  |

EXHIBIT 2 - RETURN ON INVESTED CAPITAL

Return on Invested Capital (ROIC)

ROICt $=$ NOPAT $_{t} /$ CAPITAL $_{t}$

| 2007 | $\mathbf{R O I C t}=$ | $\begin{gathered} \text { NOPATt } \\ \$ 603 \end{gathered}$ | $\div$ $\div$ | $\begin{gathered} \text { CAPITALt } \\ \$ 2,949 \end{gathered}$ |
| :---: | :---: | :---: | :---: | :---: |
| 2007 | $\mathbf{R O I C t}=$ | 20.43\% |  |  |
| 2006 | ROICt $=$ | NOPATt | $\div$ | CAPITALt |
|  |  | \$514 | $\div$ | \$2,448 |
| 2006 | ROICt $=$ | 21.01\% |  |  |
| 2005 | ROICt $=$ | NOPATt | $\div$ | CAPITALt |
|  |  | \$437 | $\div$ | \$1,976 |
| 2005 | $\mathbf{R O I C t}=$ | 22.12\% |  |  |

## EXHIBIT 3- WEIGHTED AVERAGE COST OF CAPITAL CALCULATION

Weighted Average Cost of Capital (WACC)
$\mathbf{W A C C}=\mathbf{W}_{\mathrm{d}} * \mathbf{R}_{\mathrm{d}}(\mathbf{1 - T})+\mathbf{W s} * \mathbf{R c s}$

The weight Wd and Wcs are based on market value of debt and equity.
Exhibit 3 part 1: Calculation of Market Value of Equity based on three year average of stock prices and shares outstanding.
Exhibit 3 part 2: Calculation of Market Value of Debt outstanding based on coupon rate, maturity of bond and market interest rates.

Exhibit 3 part 3: Calculation of Market Value of Assets (MVA) which is Market Value of Stocks plus Market Value of Bonds.
Exhibit 3 part 4: Calculation of Wd and Wcs (percentage of debt and equity investment) based on market values.
Exhibit 3 part 5: Calculation of Cost of Equity (Rcs) based on the CAPM model. Beta is calculated based on three years of monthly data.
Exhibit 3 part 6: Calculation of Cost of Debt (Rd) based on the Time Value of Money (TVM) model.
Exhibit 3 part 7: Calculation of Weighted Average Cost of Capital.

## EXHIBIT 3- WEIGHTED AVERAGE COST OF CAPITAL CALCULATION

## Exhibit 3 - PART 1:

Market value of the Common stock (MVE)

| Year | Average Stock Price | Shares <br> Outstanding | Weighted Average <br> Stock Price | Market Value of <br> Equity (MVE) |
| :---: | :---: | :---: | :---: | :---: |
| 2007 | $\$ 27.85$ | 750 | 9.06 | $\$ 20,887.5$ |
| 2006 | $\$ 35.34$ | 766 | 11.74 | $\$ 27,070.4$ |
| 2005 | $\$ 26.78$ | 790 | 9.17 | $\$ 21,156.2$ |
|  | Sum $=$ | 2,306 | 29.97 | $\$ 69,114.14$ |

The average number of shares of common stock in the past three years (2005-2007) = Sum of Shares Outstanding/Number of Years
$=\quad 2,306 \quad / 3$
$=\square 769$ Million shares.

The average common stock price in the past three years (2005-2007) = Sum of MVE/Sum of Shares Outstanding
$=\quad \mathbf{6 9 , 1 1 4} / 2,306$
$=\square \mathbf{\$ 2 9 . 9 7}$

Average Market value of the Common stock (MVE) from 2005-2007 = Stock Price X Shares Outstanding


## EXHIBIT 3- WEIGHTED AVERAGE COST OF CAPITAL

## Exhibit 3 -PART 2:

Market value of the Bonds (MVD)
Assume semi-annual compounding of all loans.

| 2007 | Types of Loans | \# of periods | Annual <br> Interest rate | PV |
| :---: | :---: | :---: | :---: | :---: |
|  | Corporate Notes (1) | 7.0 | 1.0\% | \$2.00 |
|  | Corporate Notes (2) | 20.0 | 6.3\% | \$549.00 |
|  | Commercial paper | 2.0 | 5.4\% | \$710.00 |
|  |  |  | MVD = | \$1,261.00 |
| 2006 | Types of Loans | \# of periods | Annual Interest rate | PV |
|  | Corporate Notes (1) | 9.0 | 1.0\% | \$2.7 |
|  | Revolving Credit facility | 2.0 | 5.5\% | \$700.0 |
|  | Revolving Credit facility | 5.0 | 5.5\% | \$423.0 |
|  |  |  | MVD $=$ | \$703 |
| 2005 | Types of Loans | \# of periods | Annual <br> Interest rate | PV |
|  | Corporate Notes (1) | 11.0 | 1.0\% | \$8 |
|  | Revolving Credit facility | 10.0 | 4.0\% | \$277 |
|  |  |  | MVD $=$ | \$285 |
| 2005-2007 | Types of Loans |  |  | Average PV of Bonds |
|  | Corporate Notes (1) |  |  | \$4 |
|  | Corporate Notes (2) |  |  | \$183 |
|  | Revolving Credit facility |  |  | \$326 |
|  | Commercial paper |  |  | \$237 |
|  |  |  |  | \$749 |
|  | Total Average Market Val | Bonds (MVD) f | from 2005-2007 = | \$749 |

## EXHIBIT 3- WEIGHTED AVERAGE COST OF CAPITAL

Exhibit 3 - PART 3:
$\underline{\text { Market Value of Assets (MVA) }}$

| Market Value of Assets (2007) = | Market Value of Stocks $\$ 20.888$ | + + | Market Value of Bonds $\$ 1.261$ |
| :---: | :---: | :---: | :---: |
|  | \$22,149 m |  |  |
|  | Market Value of Stocks | $+$ | Market Value of Bonds |
| Market Value of Assets (2006) = | \$27,070 | + | \$703 |
|  | \$27,773 m |  |  |
|  | Market Value of Stocks | + | Market Value of Bonds |
| Market Value of Assets (2005) = | \$21,156 | + | \$285 |
|  | \$ 21,441 m |  |  |
|  | Market Value of Stocks | + | Market Value of Bonds |
| Average Market Value (2005-2007) = | \$ 23,038 | + | \$749 |
|  | \$ 23,788 m |  |  |

## EXHIBIT 3- WEIGHTED AVERAGE COST OF CAPITAL

Exhibit 3 - PART 4:

Weights (Wd and Wcs) - -based on average of 2005-2007 data

| a. Weights for Bonds (Wd) = | Market Value of Individual Bonds |  |  | 1 | Market Value of all securities |  |  | Weight |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | Corporate Notes (1) | = | \$4 | 1 | \$ | 23,788 | = | 0.000 |
|  | Corporate Notes (2) | = | \$183 | 1 | \$ | 23,788 | = | 0.008 |
|  | Revolving Credit facility | = | \$326 | 1 | \$ | 23,788 | = | 0.014 |
|  | Commercial paper | = | \$237 | 1 | \$ | 23,788 | = | 0.010 |
|  |  |  |  |  | Total | eight for Debt | = | 0.03 |
|  | Average Stock prices | 2007 |  | 1 | Market Va | of all securities |  |  |
| b. Weights for Stocks (Ws) | Stocks | = | \$23,038 | 1 | \$ 23,7 |  | $=$ | 0.97 |

## EXHIBIT3- WEIGHTED AVERAGE COST OF CAPITAL

## Exhibit 3 - PART 5:

## Cost of Equity (Rcs) :

CAPM method is used. The company does not pay dividends, we cannot use dividend discount model.

2007 - Beta of Starbucks (estimated from the past 3 years' monthly data ending in December 2007) $=1.25$
2006 - Beta of Starbucks (estimated from the past 3 years' monthly data ending in December 2006)
$=1.24$
2005 - Beta of Starbucks (estimated from the past 3 years' monthly data ending in December 2005)
$=0.32$

The Risk free rate (estimated from an average of 25 years of annual returns of a 10-year Treasury Bond in $2007=5.50 \%$
The market return (estimated from an average of 25 years of $S \& P 500$ Index's annual returns $=\quad=\mathbf{9 . 6 0 \%}$

| 2007 | Rcs | = |  | + | $\beta$ |  | ( $\mathbf{R m}$ - $\mathbf{R f}$ ) |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  | = | 5.50\% | + | 1.25 | * | 4.10\% |
|  |  | = | 10.63\% |  |  |  |  |
| 2006 | Res | = | Rf | + | $\beta$ |  | ( $\mathbf{R m}$ - $\mathbf{R f}$ ) |
|  |  | = | 5.50\% | + | 1.24 | * | 4.10\% |
|  |  | $=$ | 10.58\% |  |  |  |  |
| 2005 | Res | = | Rf | + | $\beta \quad *$ |  | ( $\mathbf{R m}$ - $\mathbf{R f}$ ) |
|  |  | = | 5.50\% | + | 0.32 | * | 4.10\% |
|  |  | = | 6.81\% |  |  |  |  |

## EXHIBIT3- WEIGHTED AVERAGE COST OF CAPITAL

Exhibit 3 - PART 6:

## Cost of $\operatorname{Debt}(\mathrm{Rd})$ : based on average of 2005-2007 bond values

| Types | Annual Interest rate | Weights from part 4 | Weighted Average Cost of Debt (Rd) |
| :--- | ---: | ---: | ---: |
| Corporate Notes (1) | $1.00 \%$ | 0.000 | $0.00 \%$ |
| Corporate Notes (2) | $6.25 \%$ | 0.008 | $0.05 \%$ |
| Revolving Credit facility | $5.07 \%$ | 0.014 | $0.07 \%$ |
| Commercial paper | $5.40 \%$ | 0.010 | $0.05 \%$ |
| Weight Average Cost of Debt = |  |  | $0.17 \%$ |

## EXHIBIT 3 - WEIGHTED AVERAGE COST OF CAPITAL

Exhibit 3 - PART 7:


## EXHIBIT 4 - ECONOMIC VALUE-ADDED, MARKET VALUE ADDED AND VALUE OF OPERATION

Exhibit 4: Part 1: Economic Value Added (EVA) = Net Operating Income After Tax - Operating Capital x Weighted Average Cost of Capital
Exhibit 4: Part 2: Market Value Added (MVA) = Market value of Equity + Market Value of Debt - Book Value of Equity and Debt
Exhibit 4: Part 3: Value of Operations (VOP) = Market Value of Equity + Market Value of Debt - Non-operating Assets

| Exhibit 4 - PART 1: |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| $\underline{\text { Economic Value Added (EVA) }=\text { Net Operating Income After Tax - Operating Capital x Weighted Average Cost of Capital }}$ |  |  |  |  |  |  |  |
| 2007 | EVA = | NOPAT |  | - | (CAPITAL | $\mathbf{x}$ | WACC) |
|  | = | \$602.6 |  | - | \$2,448 | x | 10.40\% |
|  | = | \$602.6 |  | - |  | \$254.56 |  |
| 2007 | EVA = | \$348.04 | m |  | $=$ | 14\% | of CAPITAL |
| 2006 | EVA $=$ | NOPAT |  | - | (CAPITAL |  | WACC) |
|  | = | \$514.2 |  | - | \$1,976 | $\mathbf{x}$ | 10.36\% |
|  | = | \$514.2 |  | - |  | \$204.70 |  |
| 2006 | EVA $=$ | \$309.55 | m |  | = | 16\% | of CAPITAL |
| 2005 | EVA $=$ | NOPAT |  | - | (CAPITAL |  | WACC) |
|  | $=$ | \$437.2 |  | - | \$1,648 | x | 6.71\% |
|  | $=$ | \$437.2 |  | - |  | \$110.51 |  |
| 2005 | EVA $=$ | \$326.67 | m |  | = | 20\% | of CAPITAL |


| Exhibit 4 -PART 2: |  |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Market Value Added = Market value of Equity + Market Value of Debt - Book Value of Equity and Debt |  |  |  |  |  |  |  |  |
| 2007 | MVA = | MVE | + | MVD | - | (Total common equity) | - | TD |
|  |  | \$20,887.50 | + | 1,261 | - | \$2,284 |  | \$3,059 |
| $=$ |  |  | \$22,149 |  | - | \$5,343 |  |  |
| 2007 | MVA = | \$16,805.99 | $=$ | 315\% | of Total Assets |  |  |  |
| 2006 | MVA $=$ | MVE | + | MVD | - | (Total common equity) | - | TD |
|  |  | \$27,070.44 | + | \$702.70 | - | \$2,228 |  | \$2,201 |
| $=\quad \square$ |  |  | \$27,773 |  | - | \$4,429 |  |  |
| 2006 | MVA $=$ | \$23,343.98 | = | 527\% | of Total Assets |  |  |  |
| 2005 | MVA $=$ | MVE | + | MVD | - | (Total common equity) | - | TD |
|  | = | \$21,156.20 | + | \$284.70 | - | \$2,090 |  | \$1,424 |
|  | = |  | \$21,441 |  | - | \$3,514 |  |  |
| 2005 | MVA = | \$17,926.95 | = | 510\% | of Total Assets |  |  |  |

## EXHIBIT 4 - ECONOMIC VALUE-ADDED, MARKET VALUE ADDED AND VALUE OF OPERATION

Exhibit 4 - PART 3:
$\underline{\text { Value of Operations }(V O P)=\text { Market Value of Equity }+ \text { Market Value of Debt - Non-operating Assets }}$

| 2007 | VOP = |  | MVE |  | $+$ | MVD | - |  | Non-operating Assets |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | = | \$ | 20,887.50 |  | + | \$1,261.00 | - |  | \$157.00 |
| 2007 | = | \$ | 21,991.50 | m |  | = |  | 746\% | of CAPITAL |
| 2006 | VOP = |  | MVE |  | + | MVD | - |  | Non-operating Assets |
|  | = | \$ | 27,070.44 |  | + | \$702.70 | - |  | \$141.00 |
| 2006 | = | \$ | 27,632.14 | m |  | = |  | 1129\% | of CAPITAL |
| 2005 | VOP = |  | MVE |  | + | MVD | - |  | Non-operating Assets |
|  | = | \$ | 21,156.20 |  | + | \$284.70 | - |  | \$133.00 |
| 2005 | = | \$ | 21,307.90 | m |  | = |  | 1078\% | of CAPITAL |

## EXHIBIT 5- OPERATING PROFIT, CAPITAL REQUIREMENT AND MARKET VALUE ADDED

Exhibit 5: Part 1: Growth in Sales (SG) = (This Year's Sales / Last Year's Sales )-1
Exhibit 5: Part 2: Capital Requirement (CR) = Operating Capital / Sales
Exhibit 5: Part 3: Operating Profits $(\mathbf{O P})=$ Net Operating Income After Tax / Sales

Exhibit 5 -PART 1:
Growth in Sales (SG) = (This Year's Sales / Last Year's Sales )-1

| 2007 | SG= | (SALES t | / | SALES t-1) | - 1 |
| :---: | :---: | :---: | :---: | :---: | :---: |
|  | = | \$9,411 | 1 | \$7,787 |  |
| 2007 | $\mathbf{S G}=$ | 20.86\% |  |  |  |
| 2006 | SG = | (SALES t | 1 | SALES t-1) | - 1 |
|  | = | \$7,787 | / | \$6,369 |  |
| 2006 | $\mathbf{S G}=$ | 22.26\% |  |  |  |
| 2005 | SG = | (SALES t | 1 | SALES t-1) | 1 |
|  | = | \$6,369 | 1 | \$5,294 |  |
| 2005 | $\mathbf{S G}=$ | 20.31\% |  |  |  |

Exhibit 5 - PART 2:

| Capital Requirement (CR) = Operating Capital / Sales |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: |
| 2007 | $\mathrm{CR}=$ | CAPITAL | 1 | SALES |
|  | = | \$2,949 | / | \$9,411 |
| 2007 | $\mathrm{CR}=$ | 31.34\% |  |  |
| 2006 | $\mathbf{C R}=$ | CAPITAL | / | SALES |
|  | = | \$2,448 | / | \$7,787 |
| 2006 | $\mathrm{CR}=$ | 31.44\% |  |  |
| 2005 | $\mathbf{C R}=$ | CAPITAL | / | SALES |
|  | = | \$1,976 | / | \$6,369 |
| 2005 | $\mathrm{CR}=$ | 31.03\% |  |  |

## EXHIBIT 5- OPERATING PROFIT, CAPITAL REQUIREMENT AND MARKET VALUE ADDED

| Exhibit 5-PART 3: |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: |
| 2007 | $\mathrm{OP}=$ | NOPAT | 1 | SALES |
|  | = | \$602.60 | / | \$9,411.00 |
| 2007 | $\mathrm{OP}=$ | 6.40\% |  |  |
| 2006 | $\mathrm{OP}=$ | NOPAT | 1 | SALES |
|  | = | \$514.24 | / | \$7,787.00 |
| 2006 | $\mathrm{OP}=$ | 6.60\% |  |  |
| 2005 | $\mathrm{OP}=$ | NOPAT | 1 | SALES |
|  | = | \$437.18 | / | \$6,369.00 |
| 2005 | $\mathrm{OP}=$ | 6.86\% |  |  |

## EXHIBIT 6- CALCULATION OF WORKING CAPITAL

Working Capital $=$ Current Assets - Current Liabilities

| 2007 | $\mathbf{W C =}$ | CA | / | CL |
| :---: | :---: | :---: | :---: | :---: |
|  | = | \$1,696 | / | \$2,155 |
| 2007 | $\mathbf{W C =}$ | -\$459 |  |  |
| 2006 | $\mathbf{W C =}$ | CA | / | CL |
|  | = | \$1,530 | / | \$1,936 |
| 2006 | $\mathbf{W C =}$ | -\$406 |  |  |
| 2005 | $\mathbf{W C =}$ | CA | 1 | CL |
|  | = | \$1,209 | / | \$1,227 |
| 2005 | $\mathbf{W C =}$ | -\$18 |  |  |

## EXHIBIT 7 - SUMMARY OF STATISTICS

| Financial Measures | 2007 | Annual \% Change | 2006 | Annual \% Change | 2005 |
| :---: | :---: | :---: | :---: | :---: | :---: |
| Growth of Sales (SG) | 20.86\% | -6.33\% | 22.26\% | 9.64\% | 20.31\% |
| Capital Requirement (CR) | 31.34\% | -0.32\% | 31.44\% | 1.33\% | 31.03\% |
| Growth of Net Fixed Assets | 26.31\% | 8.67\% | 24.21\% | 29.05\% | 18.76\% |
| Working Capital | -\$459 | 12.89\% | -\$406 | 2189.84\% | -\$18 |
| NOWC | \$59 | -63.13\% | \$160 | 19.40\% | \$134 |
| Growth of Net Investment in Operating Capital | 6\% |  | 44\% |  |  |
| Operating Profit (OP) | 6.40\% | -3.04\% | 6.60\% | -3.79\% | 6.86\% |
| Expected Return on Invested Capital (EROIC) | 20.43\% | -2.73\% | 21.01\% | -5.05\% | 22.12\% |
| Weight Average Cost of Capital (WACC) | 10.40\% | 0.38\% | 10.36\% | 54.48\% | 6.71\% |
| Current Value of Operation in millions (VOP) | \$21,992 | -20.41\% | \$27,632 | 29.68\% | \$21,308 |
| VOP/CAPITAL | 746\% | -33.93\% | 1129\% | 4.68\% | 1078\% |
| Economic Value Added (EVA) in millions | \$348.04 | 12.44\% | \$309.55 | -5.24\% | \$326.67 |
| EVA/CAPITAL | 14\% | -9.24\% | 16\% | -20.97\% | 20\% |
| Market Value Added (MVA) in millions | \$16,806 | -28.01\% | \$23,344 | 30.22\% | \$17,927 |
| Market Value Added/ Total Assets = MVA/TA | 315\% | -40.32\% | 527\% | 3.32\% | 510\% |
| Free Cash Flow (FCF) | \$102 | 140.52\% | \$42 | -61.31\% | \$109 |
| Shares Outstanding | 750 | -2.09\% | 766 | -3.04\% | 790 |
| Free Cash Flow (FCF) per share | \$1.35 | 2356.55\% | \$0.06 | -60.10\% | \$0.14 |
| Stock Price | \$28 | -21.19\% | \$35 | 31.96\% | \$27 |
| Beta of the Company | 1.25 | 0.81\% | 1.24 | 287.50\% | 0.32 |

EXHIBIT 8.1 - 2007 ANNUAL RATIO REPORT

|  | 2007 |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: |
| LIQUIDITY <br> Current Ratio Quick Ratio | McDonald | Starbucks | Panera | \% <br> difference: <br> Starbucks and Industry | Industry AVG |
|  |  |  |  |  |  |
|  | 0.796 | 0.787 | 1.191 | -15\% | 0.925 |
|  | 0.675 | 0.337 | 1.004 | -50\% | 0.672 |
| EFFICIENCY |  |  |  |  |  |
| Inventory Turnover | 100.156 | 11.310 | 83.773 | -83\% | 65.080 |
| Receivables Turnover | 23.275 | 36.750 | 31.507 | 20\% | 30.511 |
| Total Asset Turnover | 0.780 | 1.926 | 1.719 | 31\% | 1.475 |
| Average Collection Period (Days) | 15.467 | 9.796 | 11.426 | -20\% | 12.230 |
| Days to Sell Inventory | 3.594 | 31.830 | 4.297 | 140\% | 13.241 |
| PROFITABILITY |  |  |  |  |  |
| Operating Margin (EBIT) (\%) | 24.305 | 10.051 | 8.445 | -30\% | 14.267 |
| Net Profit Margin (\%) | 10.247 | 7.147 | 5.386 | -6\% | 7.594 |
| Return on Average Assets (\%) | 7.994 | 13.765 | 9.257 | 33\% | 10.339 |
| Return on Average Equity (\%) | 15.193 | 29.811 | 13.618 | 53\% | 19.541 |
| LEVERAGE |  |  |  |  |  |
| Interest Coverage After Tax | 6.600 | 16.977 | 119.957 | -65\% | 47.844 |
| Total Debt/Total Assets (\%) | 31.645 | 23.658 | 10.733 | 7\% | 22.012 |
| DIVIDENDS |  |  |  |  |  |
| Dividend Payout (\%) | 75.615 | 0.000 | 0.000 | -100\% | 25.205 |
| Dividend Yield (\%) | 2.546 | 0.000 | 0.000 | -100\% | 0.849 |

48/53

EXHIBIT 8.2-2006 ANNUAL RATIO REPORT

|  | 2006 |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: |
|  | McDonald | Starbucks | Panera | \% <br> difference: <br> Starbucks and Industry | Industry AVG |
| LIQUIDITY |  |  |  |  |  |
| Current Ratio | 1.205 | 0.790 | 1.164 | -25\% | 1.053 |
| Quick Ratio | 1.011 | 0.350 | 0.940 | -54\% | 0.767 |
| EFFICIENCY |  |  |  |  |  |
| Inventory Turnover | 90.689 | 10.362 | 78.215 | -83\% | 59.755 |
| Receivables Turnover | 25.394 | 37.524 | 29.565 | 22\% | 30.828 |
| Total Asset Turnover | 0.732 | 1.961 | 1.691 | 34\% | 1.461 |
| Average Collection Period (Days) | 14.176 | 9.594 | 12.176 | -20\% | 11.982 |
| Days to Sell Inventory | 3.970 | 34.742 | 4.603 | 141\% | 14.438 |
| PROFITABILITY |  |  |  |  |  |
| Operating Margin (EBIT) (\%) | 21.525 | 10.274 | 10.952 | -28\% | 14.250 |
| Net Profit Margin (\%) | 13.309 | 7.467 | 7.099 | -20\% | 9.292 |
| Return on Average Assets (\%) | 9.737 | 14.641 | 12.007 | 21\% | 12.128 |
| Return on Average Equity (\%) | 18.775 | 26.925 | 16.469 | 30\% | 20.723 |
| LEVERAGE |  |  |  |  |  |
| Interest Coverage After Tax | 8.052 | 53.385 | 640.663 | -77\% | 234.033 |
| Total Debt/Total Assets (\%) | 29.060 | 15.959 | 0.000 | 6\% | 15.006 |
| DIVIDENDS |  |  |  |  |  |
| Dividend Payout (\%) | 42.342 | 0.000 | 0.000 | -100\% | 14.114 |
| Dividend Yield (\%) | 2.256 | 0.000 | 0.000 | -100\% | 0.752 |


| EXHIBIT 8.3-2005 ANNUAL <br> RATIO REPORT | 2005 |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: |
|  | McDonald | Starbucks | Panera | \% <br> difference: <br> Starbucks and Industry | Industry AVG |
| LIQUIDITY |  |  |  |  |  |
| Current Ratio | 1.449 | 0.986 | 1.183 | -18\% | 1.206 |
| Quick Ratio | 1.253 | 0.406 | 0.988 | -54\% | 0.882 |
| EFFICIENCY |  |  |  |  |  |
| Inventory Turnover | 87.941 | 10.255 | 74.730 | -82\% | 57.642 |
| Receivables Turnover | 26.548 | 38.487 | 30.192 | 21\% | 31.742 |
| Total Asset Turnover | 0.708 | 1.845 | 1.680 | $31 \%$ | 1.411 |
| Average Collection Period (Days) | 13.561 | 9.354 | 11.924 | -19\% | 11.613 |
| Days to Sell Inventory | 4.094 | 35.106 | 4.817 | 139\% | 14.672 |
| PROFITABILITY |  |  |  |  |  |
| Operating Margin (EBIT) (\%) | 20.056 | 11.051 | 12.666 | -24\% | 14.591 |
| Net Profit Margin (\%) | 12.718 | 7.763 | 8.150 | -19\% | 9.544 |
| Return on Average Assets (\%) | 9.000 | 14.323 | 13.690 | 16\% | 12.338 |
| Return on Average Equity (\%) | 17.734 | 21.664 | 18.692 | 12\% | 19.363 |
| LEVERAGE |  |  |  |  |  |
| Interest Coverage After Tax | 8.208 | 381.359 | 1,044.660 | -20\% | 478.076 |
| Total Debt/Total Assets (\%) | 33.813 | 8.060 | 0.000 | -42\% | 13.958 |
| DIVIDENDS |  |  |  |  |  |
| Dividend Payout (\%) | 32.357 | 0.000 | 0.000 | -100\% | 10.786 |
| Dividend Yield (\%) | 1.987 | 0.000 | 0.000 | -100\% | 0.662 |

EXHIBIT 8.4-2004 ANNUAL RATIO REPORT

|  |  |  | 200 |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: |
| LIQUIDITY | McDonald | Starbucks | Panera | \% difference: Starbucks and Industry | Industry AVG |
|  |  |  |  |  |  |
| Current Ratio | 0.812 | 1.810 | 1.045 | 48\% | 1.222 |
| Quick Ratio | 0.604 | 1.063 | 0.878 | 25\% | 0.848 |
| EFFICIENCY |  |  |  |  |  |
| Inventory Turnover | 86.419 | 10.850 | 52.885 | -78\% | 50.051 |
| Receivables Turnover | 25.763 | 41.577 | 32.320 | 25\% | 33.220 |
| Total Asset Turnover | 0.715 | 1.730 | 1.679 | 26\% | 1.375 |
| Average Collection Period (Days) | 13.973 | 8.659 | 11.139 | -23\% | 11.257 |
| Days to Sell Inventory | 4.166 | 33.181 | 6.807 | 125\% | 14.718 |
| PROFITABILITY |  |  |  |  |  |
| Operating Margin (EBIT) (\%) | 20.885 | 10.342 | 12.906 | -30\% | 14.711 |
| Net Profit Margin (\%) | 11.951 | 7.377 | 8.052 | -19\% | 9.127 |
| Return on Average Assets (\%) | 8.540 | 12.763 | 13.522 | 10\% | 11.608 |
| Return on Average Equity (\%) | 17.404 | 17.142 | 17.645 | -1\% | 17.397 |
| LEVERAGE |  |  |  |  |  |
| Interest Coverage After Tax | 7.286 |  | 2,144.334 |  | 1,075.810 |
| Total Debt/Total Assets (\%) | 33.119 | 0.128 | 0.000 | -99\% | 11.082 |
| DIVIDENDS |  |  |  |  |  |
| Dividend Payout (\%) | 30.503 | 0.000 | 0.000 | -100\% | 10.168 |
| Dividend Yield (\%) | 1.716 | 0.000 | 0.000 | -100\% | 0.572 |

EXHIBIT 8.5-2007 ANNUAL RATIO REPORT

|  | 2008 |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: |
| LIQUIDITY | McDonald | Starbucks | Panera | \% <br> difference: <br> Starbucks and Industry | Industry AVG |
|  |  |  |  |  |  |
| Current Ratio | 1.386 | 0.798 | 1.214 | -30\% | 1.133 |
| Quick Ratio | 1.180 | 0.298 | 0.897 | -62\% | 0.791 |
| EFFICIENCY |  |  |  |  |  |
| Inventory Turnover | 115.892 | 12.493 | 88.276 | -83\% | 72.220 |
| Receivables Turnover | 23.700 | 33.633 | 41.943 | 2\% | 33.092 |
| Total Asset Turnover | 0.813 | 1.885 | 1.892 | 23\% | 1.530 |
| Average Collection Period (Days) | 15.190 | 10.704 | 8.583 | -7\% | 11.492 |
| Days to Sell Inventory | 3.106 | 28.816 | 4.078 | 140\% | 12.000 |
| PROFITABILITY |  |  |  |  |  |
| Operating Margin (EBIT) (\%) | 26.714 | 7.028 | 8.970 | -51\% | 14.237 |
| Net Profit Margin (\%) | 18.337 | 3.039 | 5.192 | -66\% | 8.856 |
| Return on Average Assets (\%) | 14.911 | 5.728 | 9.826 | -44\% | 10.155 |
| Return on Average Equity (\%) | 30.097 | 13.215 | 14.328 | -31\% | 19.213 |
| LEVERAGE |  |  |  |  |  |
| Interest Coverage After Tax | 9.064 | 6.206 | 42.990 | -68\% | 19.420 |
| Total Debt/Total Assets (\%) | 35.900 | 22.270 | 0.000 | 15\% | 19.390 |
| DIVIDENDS |  |  |  |  |  |
| Dividend Payout (\%) | 42.275 | 0.000 | 0.000 | -100\% | 14.092 |
| Dividend Yield (\%) | 2.613 | 0.000 | 0.000 | -100\% | 0.871 |

## EXHIBIT 9 - STOCK PRICE FROM 2005-2009.

Source: Hoovers' Stock Chart



[^0]:    ${ }^{1} 2005$ number of stores 10,241 ; 2007 number of stores 15,756 ; number of news stores 5,515 . See Starbucks World, http://74.125.95.132/search?q=cache:BduXV ELLdEJ:www.portfolio.com/interactive-features/2008/06/Starbucks-World/+starbucks+number+of+store+openings+2005\&cd=3\&hl=en\&ct=clnk\&gl=us\&client=firefox-a

[^1]:    ${ }^{2}$ Number of stores each year was: 2004 number of stores 8,$569 ; 2005$ number of stores 10,$241 ; 2007$ number of stores 15,756; . Number of news stores from 2005 to 2007 was 5,515 . Starbucks forecasted 2,500 new stores in 2007 but actually opened 1470 in 2007. See Starbucks World,
    http://74.125.95.132/search?q=cache:BduXV ELLdEJ:www.portfolio.com/interactive-features/2008/06/Starbucks-World/+starbucks+number+of+store+openings+2005\&cd=3\&hl=en\&ct=clnk\&gl=us\&client=firefox-a

[^2]:    ${ }^{3}$ Net income for each year 2007; 2006; 2005; 2004 for: SBUX $\$ 9,411 \mathrm{~m} ; ~ \$ 7,787 \mathrm{~m} ; ~ \$ 6,305 \mathrm{~m} ; ~ \$ 5,290 \mathrm{~m}$ and Caribou $\$ 256 \mathrm{~m} ; \$ 834 \mathrm{~m} ; \$ 108 \mathrm{~m} ; \$ 236 \mathrm{~m}$ per annual reports of both companies.

[^3]:    ${ }^{4}$ Net sales increased from $\$ 7,787 \mathrm{~m}$ in 2006 to $\$ 9,411 \mathrm{~m}$ in 2007 and net income increased from $\$ 564.7 \mathrm{~m}$ to $\$ 673.3 m$ in 2007 per Exhibit 1

