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Operating Profits, Free Cash Flows, and Firm Value: An Application

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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 an examination of the company's free cash flows over the 2005-2007 period as a potential factor that may influence the company's stock price. Students will go through several steps in order to calculate the company's free cash flows during that three year period and then to evaluate the trend in the free cash flows. Students are encouraged to consider what changes to Starbucks' strategies could increase the company's free cash flows.

Keywords: financial statement analysis, free cash flows, Starbucks, coffee business
JEL classifications: L25, G30, M41, F23

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. May I have a muffin?" Sandy said.

[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

"Sure, take one," Ronnie offered.

"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 their 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 financial statements. Have you seen the latest financial report? Let's start with 2004 to the most recent 2007 statement (see Exhibit 1 – Income Statement, and Exhibit 2 – Balance Sheet)"

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 2005-2007 (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 (BUCX- Historical Prices for Starbucks Co –Yahoo! Finance 2009). Shareholders did not seem to agree with Starbucks' business strategy," Sandy stated. Ronnie concurred.

[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

Exhibit 1 -Starbucks' Income Statements for Years Ending December 31 (in millions of dollars)				
	2007	2006	2005	2004
INCOME STATEMENT				
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	$0.90	$0.74	$0.63	$0.49
Dividends per share (DPS)	$0.00	$0.00	$0.00	$0.00
Book value of Equity per share (BVPS)	$3.04	$2.91	$2.65	$3.12

g = the compounded growth rate of EPS = (2007 EPS/2004 EPS) 21.87%

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

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 under-trained 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.

Financial Analysis

"Can you believe the revenues had increased 20.9% over the last year resulting in a 19.2% increase in net income in 2007?" Sandy exclaimed.[3]

"I know. It is interesting to have this increase and then this drop in the stock price," Ronnie remarked. 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 examine the free cash flows of the company over the 2005-2007 period. It would be a good idea to start reviewing information from the financial statements and footnotes to financial statements (see Exhibits 1-3). I have also collected some historical data on Starbucks (see Exhibit 4). We should first calculate the NOPAT (i.e. Net operating profit after taxes)," Sandy recommended.

"Then, we can find the NOWC (i.e. Net operating working capital) and the Net Investment in Operating Capital, which would lead us to the free cash flows", Ronnie exclaimed.

"Once we find out the company's free cash flows as a possible 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.

"So, here is our to-do list then" Ronnie adds. "We need to calculate these items:

1. Net Operating Profit after taxes
2. Net operating working capital
3. Net Investment in Operating Capital
4. Free cash flows

After that, we can decide whether the firm's free cash flows might have had a negative impact on Starbucks stock performance." Ronnie concludes.

[3] Net sales increased from $7,787m in 2006 to $9,411m in 2007 and net income increased from $564.7m to $673.3m in 2007 per Exhibit 1

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%	35%	35%
State income taxes, net of federal income tax benefit	3.4	3.4	3.9
Other, net	(2.1)	(2.6)	(1.0)
Effective tax rate	36.30%	35.80%	37.90%

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%	35%	35%
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	35.80%	37.90%	37.90%

Source – Starbucks 2006 Annual Report

Exhibit 4 - Historical Data Collected for the Analysis

	2007	**2006**	**2005**	**2004**
Average common stock price (based on monthly prices)	**$27.85**	**$35.34**	**$26.78**	**$22.59**
Weighted Average of Shares Outstanding (in millions)	**750**	**766**	**790**	**794**
Tax rate	**36.30%**	**35.80%**	**37.90%**	**37.30%**
Beta of Starbucks (1)	**1.25**	**1.24**	**0.32**	**0.44**
Yield of Treasury Bond (2)				**6%**
Market returns (3)				**10%**

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.

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