

# Instructional Case: Java & Holes

Clare D. Burns, Lamar University, USA  
Gisele J. Moss, Lamar University, USA  
Jimmy D. Moss, Lamar University, USA

## ABSTRACT

*The primary subject matter of this case concerns a review of earnings per share, ratio analysis, and cost of capital concepts. A secondary issue includes evaluation of alternative strategies within the constraints of debt covenants. The case was designed to use as a review of financial accounting concepts in a MBA managerial accounting course. However, the case has a difficulty level appropriate for seniors or first or second year graduate students. The case is designed as a review and should be completed entirely outside of class. Depending on financial background, students will require approximately ten to fifteen hours to complete the case.*

**Keywords:** financial accounting case, earnings per share, ratio analysis, cost of capital

**Information to Instructors:** A solution is available to instructors only. Please contact the second author via e-mail for the solution.

## INTRODUCTION

The Java & Holes case describes a setting in which a company is examining several strategies in an effort to increase earnings per share. (Java & Holes is a fictionalized version of an actual company). Students assume the role of an accounting intern responsible for making a “first pass” at evaluating the effectiveness of these strategies in meeting management’s objective, while continuing to meet the provisions of the Company’s debt agreements. In this role, students are required to perform analytical procedures by calculating financial ratios and the weighted average cost of capital as well as consider other financial implications of the strategies from a managerial accounting viewpoint.

## COMPANY BACKGROUND

Java & Holes (the Company) is a publicly-owned corporation specializing in retail sales of premium quality donuts and gourmet coffee. They operate 400 stores (established stores) across the United States and are located primarily in metropolitan areas. The established stores consist of company - owned and franchised store locations. These stores have the capability of producing 4,000 to 10,000 dozen donuts daily. In addition to selling their product on premises, the company markets their product off premises to convenience, grocery and discount stores under branded and private labels. The Company purchases ingredients and equipment from a related party entity ensuring they maintain a consistent, premium quality product. Over the past three years, the Company has focused their expansion efforts into major markets. Management believes they have currently exhausted this strategy.

## CURRENT BUSINESS

Because of the recent focus of Americans on low carbohydrate diets, donut sales have been below anticipated levels over the last three quarters, resulting in lower than projected earnings. Benjamin Hayward, Chief Executive Officer, called a management meeting to discuss potential strategies to increase earnings per share (EPS) to the projected level of 2009 of .95 per share. After extensive discussion of plausible strategies, management narrowed their focus to three options for further consideration.

**OPTIONS**

The first option entails opening “mini-cafes” in student centers in large university campuses around the United States. Elizabeth Collier, Chief Operating Officer, stated that research indicates the majority of college age students are not likely to engage in low carbohydrate diets. She recommended opening 50 mini cafes in large universities located in California, Texas, Louisiana Oklahoma, Arkansas and Mississippi. The mini-cafes will receive their inventory of donuts several times a day from nearby established stores, thus utilizing the excess capacity of the established stores. In addition to having the target market concentrated in a specific location, Ms. Collier believes the mini cafes will experience a higher gross margin over the established stores due to the following: (1) When marketing their product off-premises, the Company sells the product at a lower price than on-premises sales. As the mini-cafes will sell on-premises only, the gross margin will be higher than that of the established stores. (2) It is anticipated the mini-cafes will experience a higher percentage of coffee sales (frappuccino, cappuccino, espresso, etc.) than the established stores because of the characteristics of the target market. Coffee sales have a higher contribution margin than donut sales, ultimately resulting in higher profitability. Because the mini-cafes will not be producing donuts, equipment purchases will be significantly less than that of an established store, consisting primarily of re-heating and glazing equipment. In addition, the space necessary for a mini-café will be significantly less than that of an established store, resulting in a reduced rental rate. Opening the mini-cafes will primarily entail signing operating leases and borrowing funds for the purchase of operating equipment and leasehold improvements. Although this type of arrangement would typically be structured as a kiosk whereby the University would pay the Company royalties based on sales, Ms. Collier believes the Company can negotiate with the universities in the form of a leasing arrangement. Roberta Stevens, Chief Accounting Officer, has prepared projected financial statements for the 50 cafes for the first year of operations. See Exhibit I.

The second option, closing or selling stores with lower than expected performance, is considered attractive by several members of management as no additional debt will be incurred. Management expects that the Company will reduce their debt with the equity remaining in these stores after all liabilities have been settled. Harold Dune, Controller, has identified 22 stores (Identified stores) with same store sales lagging the Company average of 109%. The Identified stores have experienced same store sales of 100% or less. Mr. Dune compiled the financial statements of the identified stores for the fiscal year ended 2/1/ 08. See Exhibit II.

The third option, a treasury share buy - back program, will reduce the number of shares of common stock outstanding and could result in an increase in EPS, depending upon the source of financing and its impact on earnings. Michael Donovan, Chief Financial Officer, stated this option should only be chosen if the impact on the Company’s cost of capital supports the buy-back decision.

Mr. Donovan reminded the management team that under the Company’s current debt agreements, the Company is required to maintain certain financial ratios including a long-term debt-to-equity ratio of .50, an interest coverage ratio of 10.0, a working capital/current ratio of 1.75, and a quick ratio of .75. As an intern working under the supervision of Mr. Dune, you have been given the assignment of taking a first pass at “crunching the numbers” to determine which option results in the highest level of EPS while maintaining the ratios required under the debt agreements. This is a prime opportunity to demonstrate your business analytical skills in your search for a permanent job position with Java & Holes after graduation. You will want to identify additional financial implications management should consider when analyzing these strategic options.

**REQUIREMENTS**

1. Based upon the 2008 actual operating results of Java & Holes (Exhibit 3) and the projected financial statements of the mini-cafes (Exhibit 1), prepare the projected Balance Sheet and Income Statement of the Company under Option 1. Calculate projected earnings per share, the projected working capital ratio, quick ratio, long-term debt-to equity ratio, and interest coverage ratio. Determine whether the Company will continue to be in compliance with the debt agreements under this option.
2. Based upon the 2008 actual operating results of Java & Holes (Exhibit 3) and the Identified stores (Exhibit 2), prepare the projected Balance Sheet and Income Statement of the Company under Option 2. Note that the balance sheet and income statement of the Identified stores contain long-term debt and interest expense,

- respectively. Although the debt is maintained at the corporate level, it has been allocated to the individual stores for managerial accounting purposes. When preparing the projected Balance Sheet and Income Statement under Option 2, assume (1) that this amount of debt, as well as additional debt equivalent to the equity remaining in these stores, is prepaid when the stores are closed/sold and (2) the transaction occurs at the beginning of the fiscal year. A prepayment penalty will not be assessed under the current debt agreements. For purposes of determining the impact of the store closures/sales, Mr. Dune has said to assume that the stores' assets are realized and the liabilities are settled at their net book value. No impairment charge or gain on sale will be considered at this time. Calculate projected earnings per share, the projected working capital ratio, quick ratio, long-term debt-to-equity ratio, and interest coverage ratio. Determine whether the Company will continue to be in compliance with the debt agreements under this option.
3. Compute the cost of the treasury share buy-back assuming 2,000,000 shares are purchased by Java & Holes at the current market price (Exhibit 3). Assume the purchase is financed via 80% debt/ 20% cash. Management believes the Company can secure a five-year note with an interest rate of 3.2%, with interest payments due monthly and principal payments due annually over the term of the loan. Prepare the projected Balance Sheet and Income Statement of the Company utilizing the Company's 2/01/08 Balance Sheet and Income Statement (Exhibit 3) adjusted for the effects of the transaction, including future debt service. Assume the transaction occurs at the beginning of the year. Calculate projected earnings per share utilizing the number of shares of common stock outstanding adjusted for the buy-back. Calculate the projected working capital ratio, quick ratio, long-term debt-to-equity ratio and interest coverage ratio. Determine whether the Company will continue to be in compliance with the current debt agreements under this option.
  4. Compute the Company's weighted average cost of capital before and after the treasury share buy-back transaction. When calculating the cost of debt capital, assume that the market value of the Company's debt is equivalent to the book value and the Company's marginal tax rate is 39.73%. When calculating the cost of equity capital using the Capital Asset Pricing Model, consideration will have to be given to a risk-free rate, a beta coefficient and an equity risk premium. The risk-free rate and the beta coefficient can be obtained from a variety of sources. Specifically, the 10-year treasury yield can be utilized as the risk-free rate and can be obtained on the front page of the Business section of the New York Times' web site at [www.nytimes.com](http://www.nytimes.com). The beta coefficient for a particular company can be obtained from Yahoo through its company profile service. Select a company with the same profile as Java & Holes to determine a reasonable beta coefficient. Assume an equity risk premium of 4 and a 5% increase in the market price of the stock after the buy-back.
  5. Compare the results of the EPS calculations for options #1-3 above. Determine which option results in the highest level of EPS while continuing to meet the financial covenants required by the Company's debt agreements.
  6. Discuss additional implications management should consider when analyzing the three strategic options from a managerial accounting viewpoint.

#### **AUTHOR INFORMATION**

**Clare D. Burns**, CPA, received her B.B.A. in Accounting and M.B.A. at Lamar University. She is an accounting instructor at Lamar University who teaches Auditing and Financial Accounting courses. She has taught at Lamar since 2000. Prior to teaching at Lamar, Clare was an audit manager for Arthur Andersen & Co., specializing in the Financial Services Division.

**Gisele J. Moss**, Ph.D, CPA, is an Associate Professor of Accounting at Lamar University. She received her Ph.D. from Louisiana State University. Prior to her academic career, she spent a number of years in industry specializing in corporate reporting. Her research interests include financial/managerial reporting issues and accounting education.

**Jimmy D. Moss** is a Professor of Finance and Chair of the Economics and Finance Department at Lamar University. He obtained a DBA in Finance in 1986 from Mississippi State University. His research interests include efficient markets, investments, and finance education.

Exhibit 1: University Mini-Cafes Projected Balance Sheet and Income Statement

<b>Balance Sheet</b>		
Assets		
Cash and Equivalents	\$ 917,113	3.63%
Accounts Receivable	1,145,345	4.53%
Inventory	1,120,256	4.43%
Other Current Assets	150,000	0.59%
<b>Total Current Assets</b>	<b>3,332,714</b>	<b>13.18%</b>
Property, Plant & Equipment	24,600,000	97.31%
Accumulated Depreciation	-3,571,429	-14.13%
Net Property, Plant & Equipment	21,028,571	83.18%
Other Non-Current Assets	918,250	3.63%
<b>Total Non-Current Assets</b>	<b>21,946,821</b>	<b>86.82%</b>
<b>Total Assets</b>	<b>\$25,279,535</b>	<b>100.00%</b>
Accounts Payable	2,719,721	10.76%
Accrued Expenses	786,786	3.11%
Current Maturities of Long-Term Debt	2,000,000	7.91%
<b>Total Current Liabilities</b>	<b>5,506,507</b>	<b>21.78%</b>
Long-Term Debt	16,000,000	63.29%
Other Non-Current Liabilities	439,493	1.74%
<b>Total Non-Current Liabilities</b>	<b>16,439,493</b>	<b>65.03%</b>
<b>Total Liabilities</b>	<b>\$21,946,001</b>	<b>86.81%</b>
<b>Equity</b>	<b>3,333,534</b>	<b>13.19%</b>
<b>Total Liabilities and Equity</b>	<b>\$25,279,535</b>	<b>100.00%</b>
<b>Income Statement (for a one-year period)</b>		
Revenues	\$57,267,250	
Operating Expenses	43,523,110	
SG&A Expense	3,178,332	
Depreciation/Amortization Expense	3,971,429	
<b>Operating Income</b>	<b>6,594,379</b>	
Non-Operating Expense	213,378	
Interest Expense	850,000	
Income before Taxes	5,531,001	
Provision for Taxes	2,197,467	
<b>Net Income</b>	<b>\$3,333,534</b>	
Weighted Average Shares Outstanding	38,156,739	

**Exhibit 2: Identified Stores Balance Sheet and Income Statement**  
As of February 1, 2008

<b>Balance Sheet</b>	
Assets	
Cash and Equivalents	\$ 1,072,346
Accounts Receivable	7,943,652
Inventory	4,600,072
Other Current Assets	986,114
<b>Total Current Assets</b>	14,602,184
Property, Plant & Equipment	36,985,000
Accumulated Depreciation	-8,756,273
Net Property, Plant & Equipment	28,228,727
Intangibles	18,796,000
Other Non-Current Assets	519,284
<b>Total Non-Current Assets</b>	47,544,011
<b>Total Assets</b>	62,146,195
Accounts Payable	2,698,000
Short-Term Debt and Current Maturities	1,063,431
Other Current Liabilities	3,856,635
<b>Total Current Liabilities</b>	7,618,066
Long-Term Debt	13,059,159
Other Non-Current Liabilities	1,877,410
<b>Total Non-Current Liabilities</b>	14,936,569
<b>Total Liabilities</b>	22,554,635
<b>Equity</b>	39,591,560
<b>Total Liabilities and Equity</b>	\$62,146,195
<b>Income Statement (for a one-year period ending 2/1/08)</b>	
Revenues	\$62,132,875
Operating Expenses	53,413,928
SG&A Expense	4,650,049
Depreciation/Amortization Expense	3,362,273
<b>Operating Income</b>	706,625
Non-Operating Expense	294,563
Interest Expense	426,502
Income before Taxes	-14,440
Income Tax Expense	
<b>Net Income</b>	-14,440

**Exhibit 3: Java & Holes Balance Sheet and Income Statement  
As of February 1, 2008**

<b>Balance Sheet</b> (in 000's)	
Current Assets	
Cash and Equivalents	\$ 12,915,225
Accounts Receivable	47,048,326
Inventory	17,774,125
Other Current Assets	7,503,548
<b>Total Current Assets</b>	\$85,241,224
Property, Plant & Equipment	215,988,622
Accumulated Depreciation	-40,898,951
Net Property, Plant & Equipment	175,089,671
Intangibles	127,674,219
Other Non-Current Assets	18,204,226
<b>Total Non-Current Assets</b>	\$320,968,116
<b>Total Assets</b>	\$406,209,340
Current Liabilities	
Accounts Payable	\$11,747,691
Current Maturities of Long-Term Debt	6,765,325
Other Current Liabilities	14,391,589
<b>Total Current Liabilities</b>	\$32,904,605
Non-Current Liabilities	
Long-Term Debt	83,087,950
Other Non-Current Liabilities	12,238,759
<b>Total Non-Current Liabilities</b>	\$95,326,709
<b>Total Liabilities</b>	\$128,231,314
<b>Equity</b>	\$277,978,026
<b>Total Liabilities and Equity</b>	\$406,209,340
<b>Income Statement (for the year ended-2/1/08)</b>	
Revenues	\$409,337,850
Operating Expenses	312,051,000
SG&A Expense	22,699,650
Depreciation/Amortization Expense	12,127,800
<b>Operating Income</b>	62,459,400
Non-Operating Expense	1,525,200
Interest Expense	2,712,150
Income before Taxes	58,222,050
Provision for Taxes	23,117,850
<b>Net Income</b>	\$35,104,200
Weighted Average Shares Outstanding	38,156,739
Earning per share	\$0.92
Market price of stock	\$15.75