

# The USA Coffee market: Computational Analysis

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**Abstract:** Coffee in the United States is viewed as an everyman's type of beverage--something that many need to wake up in the morning and get the job done. The retail market for coffee in the U.S. is regulated by consumers who dictate supply and demand and government organisations that monitor bean quality and ensure fair competition. In this paper an analysis is being made on the stated arguments.

## I. Introduction

The monopolistic competitive market is identified with the following primary conditions

- (1) The firms sell differentiated products and hence compete with highly competitive, but not perfectly substitute products of each other
- (2) The entry and exit is free from the market.
- (3) Number of firm is large but share of each firm is small
- (4) In spite of like a perfect competitive market, any firm has power to fix price like a monopoly

When any new firm to seek profits enters in the market, for each of the incumbent firm the demand curve shifts inward. It reduces the quantity and price received by the incumbents.

When a new product is introduced by a firm the price and sold quantity of existing products gets slashed. "The elasticity of the firm's demand curve is greater than the elasticity of market demand because it is easier for consumers to switch to another firm's highly substitutable product than to switch consumption to an entirely different product."

In the short term profits induce entry of other firms that reduces the quantity of profit-maximization and in the long run a monopolistic competitor achieves breakeven at the point where ATC is tangent to the demand curve, as is evident from the Figure 1. Eventually, profits reduce to Zero; leave no room for entry of more firms.

In the US, more than 99% of the over 23 million firms are in fact monopolistic competitors, which compete not on prices only: rather compete more vigorously over differentiation factors like quality, service, ambience, brand, convenience etc.

## II. The Coffee Market in USA

The Coffee market is one of them. There are many firms in the market like perfect competitive market and there is no barrier on the entry and exit of the firms yet each firm sells a differentiated but not a perfect substitute product. The product is differentiated in the sense that it has a brand value and its own taste. The two dominating firms in this market are McDonalds and Starbucks. For a customer the McD coffee is quite different from that of the Starbucks.

Although more customers like McD coffee than Starbucks, yet the charges of Starbucks for a cup are more than that of McD. The reason is that Starbucks not sells the coffee only, but it sells the entire experience of going to its coffee shop and till McD or any other vender come up with a way to take the value that customers place on the entire Starbucks experience, Starbucks will continue to remain on the price edge.

## III. Analysis of the McDonalds

In spite of the recession McDonalds has not straggled; it is rather the one among the Great Recession's winners. Its sales growth has been rising since 2006-07. Although, many Coffee shops scaled back, in 2008-09 alone it opened nearly 600 stores

worldwide. As is evident from Figure 2 over the last five years, its stock has been outperforming S&P500 and investor relation website of the company proclaims that it is "firing on all cylinders."

This success can be attributed to a combination of savvy moves and smart planning. Due to McD's higher income shoppers and low prices, in the 2009-10, McD's sales in the US alone stood at \$255.7 billion dollars. (Table 2) During the recession, when discretionary spending plumbed rapidly, just to keep coming of customers through the doors McD's not only ran plenty of bargains & distributed free coupons but also promoted higher-margin products for appealing to "new class of trading-down consumers: coffee". The result was Starbucks retrenched. The launch of McCafé eschew Starbucks because of "premium coffee line-up". Over the past two years, the stock of McD has grounded the stock of Starbucks into a fine coffee powder.

Besides the US, McD has been benefitting around the developing economies because of weakening of USD and rising of incomes there. The *Wall Street Journal* (2009) reported that McDonald's opened 286 units abroad so far this year, compared with just 53 domestically. The company plans to add 150 stores to its current total of 1,000 in China."

In spite of stunning growth, investors have been asking if McDonald's will survive the recovery or not because in general if customers feel flusher they stop buying. It is evident from the fact that the in the recent months in the US same-store sales growth has remained moderated a little. As compared to April 2010 sales of 6.1%, in July 2010 sales rose by 2.6% only. The reason is the a large number of McD's customers have been growing accustomed to eat better and healthier. This implies that going forward, large cultural barriers may

be faced by McD in the US itself than in Asia.

#### IV. Analysis of the Starbucks

Starbucks is a world renowned name in the field of specialty coffee, with operations in more than 60 nations. Starbucks not only roasts and sells whole bean coffees but handcrafted coffee along with fresh food products also (Figure 3). Besides its flagship brand Starbucks, it also sells Seattle's Best Coffee and Tazo tea. In spite of economy's slump, in 2010-11, it took acquisition of Magic Johnson Enterprise and Evolution Fresh, Inc.

However it seems that the Starbucks has been following the same path familiar with Coke and Pepsi. Its growth has been very fast and the recession has slowed down its growth. As evident from the figure 4, for stock of Starbucks, phenomenal growth has finally subsided and it has been left in a precarious situation. As of July 2008 the customer traffic declined for the first time ever and its stock price lost nearly half of its value since 2006 (PBS). Although the overseas business of Starbucks has remained strong, its each of US 10500 stores have been seeing footfall of sales nearly by 1%. Although the many companies have been disrupted by the current recession, Starbucks has been especially affected because most consumers view Starbucks as a luxury item.

The loss of sales has forced the company to make difficult decisions in order to remain profitable. The announcement to close 1000 company-owned stores globally during the 2010 fiscal year is one of those difficult decisions. It also announced about the opening fewer than 100 stores in the U.S. and 200 internationally. This is a drastic reduction compared to the 1700 new stores opened in the U.S. in 2007 alone, and far cry from the aggressive expansion

that made Starbucks most successful coffee chain in the world. Starbucks labour costs it approx \$2.5 billion, which is 24% of its per annum revenue. (Table 1) At the time of strong economy, workers were added but now Starbucks has been using lean methods. "everywhere from manufacturing to in-store organization and work flow." It seems that Starbucks has been saturated.

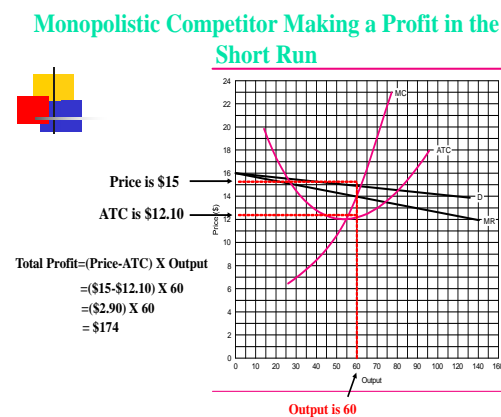
As per an article of CNN "The economy has forced Starbucks to plan for the closure of 900 stores, renegotiate rents and trim its number of bakery suppliers it uses. The company recently cut the price on "grande" iced coffees, and began offering pairings of breakfast sandwiches and drinks for \$3.95."

### V. Summary and Conclusion

The efficiency quest of Starbucks can be seen as an example re-engineering of premium brands to do business amid a recession. The offer of ever-fancier products and inauguration of new outlets is now a recipe of past. The heightened competition from **McD** has forced it to offer new, special cheaper drinks to lure customers. "We continued to add things, but we'd never had a real pressure on us to look at an optimal way to do the work," says Cliff Burrows, president of Starbucks.

### Figures and Tables

Figure 1: Monopolistic Competition



As per the estimates of the National Coffee Association the US coffee market in 2011 is of \$29 billion and both competitors have different targets to tap it. The aim of McD is to offer cheaper coffee, whereas the Starbucks aims to go with its luxury price with a premium experience. Although McD's larger retail chain may overlap core markets of Starbucks, "but their bleak dissimilarities are reflective of the general differences between their core customers."

### VI. References

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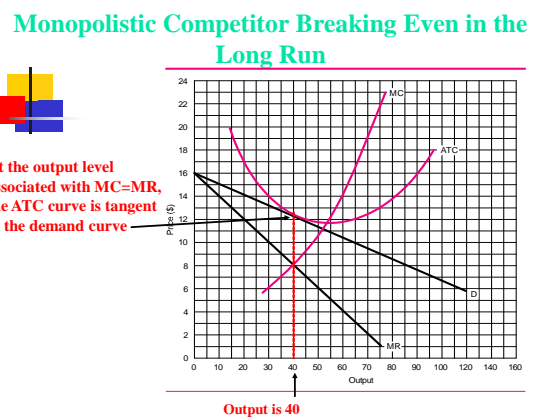


Figure 2: Stock Quote McDonalds



Figure 3: Volume of sales for different products: Starbucks

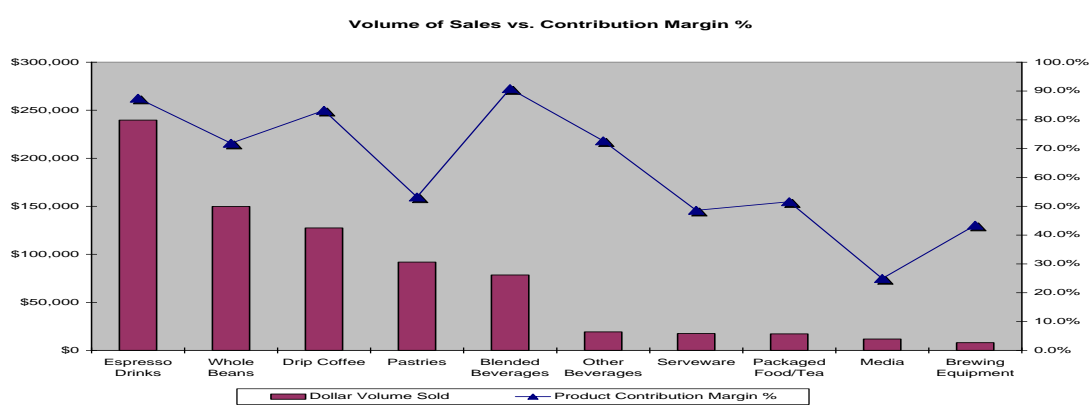


Figure 4: Stock quote: Starbucks



**Table 1: Key Statistics Starbucks****Valuation Measures**

Market Cap (intraday) <sup>5</sup> :	32.73B
Enterprise Value (Dec 3, 2011) <sup>3</sup> :	30.99B
Trailing P/E (ttm, intraday):	27.10
Forward P/E (fye Oct 2, 2013) <sup>1</sup> :	19.87
PEG Ratio (5 yr expected) <sup>1</sup> :	1.32
Price/Sales (ttm):	2.78
Price/Book (mrq):	7.40
Enterprise Value/Revenue (ttm) <sup>3</sup> :	2.65
Enterprise Value/EBITDA (ttm) <sup>6</sup> :	14.74

**Financial Highlights****Fiscal Year**

Fiscal Year Ends:	Oct 2
Most Recent Quarter (mrq):	Oct 2, 2011

**Profitability**

Profit Margin (ttm):	10.65%
Operating Margin (ttm):	13.27%

**Management Effectiveness**

Return on Assets (ttm):	14.12%
Return on Equity (ttm):	30.93%

**Income Statement**

Revenue (ttm):	11.70B
Revenue Per Share (ttm):	15.64
Qtrly Revenue Growth (yoy):	6.80%
Gross Profit (ttm):	6.75B
EBITDA (ttm) <sup>6</sup> :	2.10B

**Trading Information****Stock Price History**

Beta:	1.14
52-Week Change <sup>3</sup> :	34.20%
S&P500 52-Week Change <sup>3</sup> :	1.73%
52-Week High (Nov 7, 2011) <sup>3</sup> :	44.70
52-Week Low (Jan 31, 2011) <sup>3</sup> :	30.75
50-Day Moving Average <sup>3</sup> :	42.46
200-Day Moving Average <sup>3</sup> :	39.11

**Share Statistics**

Avg Vol (3 month) <sup>3</sup> :	7,392,570
Avg Vol (10 day) <sup>3</sup> :	5,116,660
Shares Outstanding <sup>5</sup> :	745.40M
Float:	725.36M
% Held by Insiders <sup>1</sup> :	2.70%
% Held by Institutions <sup>1</sup> :	75.50%
Shares Short (as of Nov 15, 2011) <sup>3</sup> :	10.34M
Short Ratio (as of Nov 15, 2011) <sup>3</sup> :	1.50
Short % of Float (as of Nov 15, 2011) <sup>3</sup> :	1.60%
Shares Short (prior month) <sup>3</sup> :	11.54M

**Dividends & Splits**

Forward Annual Dividend Rate <sup>4</sup> :	0.68
Forward Annual Dividend Yield <sup>4</sup> :	1.60%
Trailing Annual Dividend Yield <sup>3</sup> :	0.56
Trailing Annual Dividend Yield <sup>3</sup> :	1.30%

Net Income Avl to Common (ttm):	1.25B	5 Year Average Dividend Yield <sup>4</sup> :	N/A
Diluted EPS (ttm):	1.62	Payout Ratio <sup>4</sup> :	32.00%
Qtrly Earnings Growth (yoy):	28.50%	Dividend Date <sup>3</sup> :	Dec 1, 2011
<b>Balance Sheet</b>		Ex-Dividend Date <sup>4</sup> :	Nov 15, 2011
Total Cash (mrq):	2.05B	Last Split Factor (new per old) <sup>2</sup> :	2:1
Total Cash Per Share (mrq):	2.75		
Total Debt (mrq):	550.90M		
Total Debt/Equity (mrq):	12.56		
Current Ratio (mrq):	1.83		
Book Value Per Share (mrq):	5.89		
<b>Cash Flow Statement</b>			
Operating Cash Flow (ttm):	1.61B		
Levered Free Cash Flow (ttm):	972.06M		

## Table 2: Key Statistics MCD

### Valuation Measures

Market Cap (intraday) <sup>5</sup> :	97.92B
Enterprise Value (Dec 3, 2011) <sup>3</sup> :	108.06B
Trailing P/E (ttm, intraday):	18.77
Forward P/E (fye Dec 31, 2012) <sup>1</sup> :	16.76
PEG Ratio (5 yr expected) <sup>1</sup> :	1.83
Price/Sales (ttm):	3.70
Price/Book (mrq):	7.33
Enterprise Value/Revenue (ttm) <sup>3</sup> :	4.09
Enterprise Value/EBITDA (ttm) <sup>6</sup> :	11.46

### Financial Highlights

#### Fiscal Year

Fiscal Year Ends:	Dec 31
Most Recent Quarter (mrq):	Sep 30, 2011

#### Profitability

Profit Margin (ttm):	20.34%
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Operating Margin (ttm):	30.49%
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### Management Effectiveness

Return on Assets (ttm):	15.86%
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Return on Equity (ttm):	39.80%
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### Income Statement

Revenue (ttm):	26.40B
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Revenue Per Share (ttm):	25.37
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Qtrly Revenue Growth (yoy):	13.70%
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Gross Profit (ttm):	9.64B
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EBITDA (ttm) <sup>6</sup> :	9.43B
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Net Income Avl to Common (ttm):	5.37B
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Diluted EPS (ttm):	5.10
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Qtrly Earnings Growth (yoy):	8.60%
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### Balance Sheet

Total Cash (mrq):	2.40B
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Total Cash Per Share (mrq):	2.35
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Total Debt (mrq):	12.54B
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Total Debt/Equity (mrq):	94.02
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Current Ratio (mrq):	0.87
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Book Value Per Share (mrq):	13.04
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### Cash Flow Statement

Operating Cash Flow (ttm):	7.09B
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Levered Free Cash Flow (ttm):	3.60B
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### Trading Information

#### Stock Price History

Beta:	0.36
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52-Week Change <sup>3</sup> :	20.26%
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S&P500 52-Week Change <sup>3</sup> :	1.73%
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52-Week High (Dec 2, 2011) <sup>3</sup> :	96.47
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52-Week Low (Jan 14, 2011) <sup>3</sup> :	72.14
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50-Day Moving Average <sup>3</sup> :	92.72
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200-Day Moving Average <sup>3</sup> :	87.38
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#### Share Statistics

Avg Vol (3 month) <sup>3</sup> :	6,537,780
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Avg Vol (10 day) <sup>3</sup> :	5,046,340
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Shares Outstanding <sup>5</sup> :	1.02B
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Float:	1.02B
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% Held by Insiders <sup>1</sup> :	0.07%
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% Held by Institutions <sup>1</sup> :	71.20%
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Shares Short (as of Nov 15, 2011) <sup>3</sup> :	10.57M
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Short Ratio (as of Nov 15, 2011) <sup>3</sup> :	1.80
Short % of Float (as of Nov 15, 2011) <sup>3</sup> :	1.00%
Shares Short (prior month) <sup>3</sup> :	10.93M
<b>Dividends &amp; Splits</b>	
Forward Annual Dividend Rate <sup>4</sup> :	2.80
Forward Annual Dividend Yield <sup>4</sup> :	2.90%
Trailing Annual Dividend Yield <sup>3</sup> :	2.53
Trailing Annual Dividend Yield <sup>3</sup> :	2.70%
5 Year Average Dividend Yield <sup>4</sup> :	2.90%
Payout Ratio <sup>4</sup> :	48.00%
Dividend Date <sup>3</sup> :	Dec 14, 2011
Ex-Dividend Date <sup>4</sup> :	Nov 29, 2011
Last Split Factor (new per old) <sup>2</sup> :	2:1
Last Split Date <sup>3</sup> :	Mar 8, 1999