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### Going Green in the Coffee Business: A Stock Market Perspective

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**Going Green in the Coffee Business:**  
*A Stock Market Perspective*

An honors thesis presented to the  
Department of the School of Business,  
University at Albany, State University Of New York  
in partial fulfillment of the requirements  
for graduation with Honors in Accounting  
and  
graduation from The Honors College.

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# **Going Green in the Coffee Business:**

## *A Stock Market Perspective*

### **Abstract**

Concern for the environment has been freely expressed by many individuals across the globe. Research has shown that customers, employees, and stockholders are more trustworthy of a company that practices socially responsible behavior. This paper will examine whether investors will prefer to invest in a company that has committed itself to reducing its environment footprint over a company that has done little or nothing to reduce its environmental impact. This will be done by comparing and contrasting the beta coefficients, share price movement, and the price to earnings ratio of two companies that differ in their attitude towards the environment. It was discovered that the green company had a beta less than the market, a higher price to earnings ratio, and a higher change in its stock price.

### **Introduction**

Since the start of the industrial revolution, business has had an enormous effect on the environment. Technological advances over the last hundred years has allowed for human populations to skyrocket. Every day, there is an increasing demand for the world's finite resources and this demand is expanding exponentially as the population grows and becomes more affluent. As the standard of living rises, so does the demand for consumption products. For example, the demand for fresh water is so high that consumption outpaces natural replenishment (Kummu, Ward, Moel, and Varis, 2010). By 2030, it is speculated that the demand for water will be higher than the demand for energy resources (Dumaine, 2012). There are alternative resources for energy such as renewable resources like solar energy but there is no alternative for water. The world is also facing numerous other environmental challenges such as pollution, energy and resource depletion, and global warming.

Over the recent years, concern for our climate has been increasing. This can be seen across the world as both individuals and corporations have been trying to reduce their carbon footprint. Today, numerous companies publish environmental reports to accompany their annual reports. It is more than fair to say that these reports are the result of a growing public concern

for the environment. Companies are starting to take responsibility for their actions and act in more environmentally friendly ways. This is known as corporate social responsibility. A company that is perceived to be responsible maintains a positive image to the public. Thus, a company that is seen as responsible may actually have a competitive advantage above competitors who are not perceived as responsible. Fishman, Heal, and Nair found that corporate social responsibility expenditures that are unrelated to a company's products but visible to the consumer indicate that the firm is more trustworthy and that their product is of a higher quality (Fishman, Heal, and Nair 2007).

Thus, it is no wonder that companies try to make themselves appear as environmentally friendly as possible. Sadly, more and more companies have been adopting the practice of green washing. Green washing is when a company generously labels themselves or their products more environmentally friendly than what they really are. Often, these companies spend a minimal amount of money on green practices just to boost or repair their image. Essentially, these companies are window dressing to maintain a better public image when in reality many of their practices are harmful to the environment. One just has to look at BP to see this. After the oil spill, the company has spent millions to try to repair their image by running commercials explaining the clean up process when that money could have actually been spent for clean up purposes.

Green technology is a relatively new and expensive advancement. Thus, it can be very costly for companies to adopt more environmentally friendly facilities and practices. However, more efficient machinery and practices will cut down on operating expenses. To a company, in this sense, the costs may exceed the benefits. But to the public, the exact opposite is true. The public is better off when the company uses more costly but environmentally favorable

technology and practices. With the further degradation of our environment, it is fundamental that companies recognize the environment in which we all share as an important stakeholder in the business model. To some top management teams, going green could actually be a genuine concern or it could be a means to gaining a competitive advantage. The goal of this paper is to show the effects of going green and protecting the environment will have on a company's investor relations.

### **Literature Review**

Lindgreen, Swaen and Johnston define corporate social responsibility as “business decision making related to ethical values, compliance with legal requirements, and respect for people, communities, and the environment” (Lindgreen, Swaen, and Johnston, 2009). A socially responsible firm recognizes that a company's stakeholders exceeds far beyond that of the shareholder. A company that loses sight of this may see profits increase in the short run only to see them plummet in the future. At the very least, the trios study also found that managers feel that CSR does not hurt performance. However, many agree that it actually improves a company's financials making it more appealing to investors.

Singh, Sanchez and Bosque have found that the goal of many large corporations is to maximize shareholder value by increasing profits. However, the study has found that many of these companies create this value for stockholders by focusing on other interest groups as well. These groups include employees, the government, suppliers, the environment, customers, and the communities in which they operate (Singh, Sanchez, and Bosque, 2008). Ultimately, companies are realizing that in order to create additional value for their shareholders, they must first satisfy the wants and needs of these other stakeholders. For example, Singh, Sanchez and Bosque found that companies who satisfy these other interest groups have a large base of customers and

investors who are loyal to the brand. They also found that if a company acts irresponsibly towards any of these stakeholders, profits were adversely affected. Severe reputations loss is observed when companies who claim to be responsible are then accused of unethical behavior. It is increasingly seen that consumers are more likely to question what they are being told. A company with a declining customer base is not good for investors. Simply declaring an ethical code is not enough. Today's consumers are actually looking at what a company is doing. They are not longer satisfied by what a company says.

Maintaining a positive corporate brand image has become very important when it comes to developing a company's strategy. An individual's perception of a company could make the difference from gaining of losing a lifetime customer. Socially responsible behavior weighs heavily on brand perception. A company that is seen as responsible generates trust within a consumer and investor. These practices also further differentiate one brand from another (Fishman, Heal, and Nair, 2007). In an industry where there is very little product differentiation, this can be especially important. Their research has also shown a positive correlation between social responsibility and profits.

Over recent decades, concern for the environment has significantly increased. People are now starting to realize the negative effects that an industrial society has on the environment. Thus, it is not surprise that recent research has focused on businesses that are going green. Eileen Claussen, a director at the EPA, states that energy efficient companies save money by reducing their energy consumption. With energy prices on the rise, these savings really have the potential of building up. She also emphasizes that "It's cheaper to clean up sooner rather than later." Research has found that an increasing number of stockholders don't want to be responsible when laws are passed that require polluting companies are required to clean up

(Menagh, 1991). Menagh also found that environmental responsibility saves money. Although green technology is more expensive in the short run, long run savings simply outweigh the additional upfront expenditure. Managers who are extremely focused on increasing next quarters profits often times fail to implement these cleaner practices. A company can significantly decrease energy consumption by simply installing energy efficient light bulbs. Menagh expressed that many international companies have gained a competitive advantage by focusing on green management. Data has shown that these companies generally outperform global companies who are not environmentally friendly.

A survey by the Boston Consulting group found that 34% of consumers in North America specifically search for and consume green products (Shah, 2010). Shah also notes that some companies are going green not because they are trying to be altruistic but simply because reduced energy consumption is very economical. During the recent recession it was originally expected that consumers would be less concerned with the environment and purchase more affordable products. This simply was not the case as research shows that consumers still valued purchasing from environmentally responsible companies (Shah, 2010). In fact, companies were so desperate to appear green that they resorted to the practice of greenwashing. Companies were so desperate for added consumer attention that they over emphasized how green they were really going. As a result, consumers have become increasingly skeptical. Shah believes that this increased skepticism has actually benefited companies who have actually committed themselves to limiting their effects on the environment.

Consumers have shown an increasing concern for the environment. Companies have certainly taken note to this as more companies are publishing annual sustainability and responsibility reports. Managers have recognized the competitive advantage going green brings



to their company. Consequently, it is no surprise that today's companies are willing to do whatever it takes to gain this advantage. Some are even willing to stretch the truth by telling customers that they are striving to protect the environment when in reality their actions state otherwise. However, consumers and investors will not be fooled for long as actions speak louder than words.

### **Research Questions & Hypotheses**

Concern for the environment is freely expressed by a wide range of individuals. The underpinning question of this research is whether investors are willing to put their investments funds behind their belief in a greener environment. The overriding assumption is that shareholders will be inclined to invest in a company with green initiatives. This study attempts to answer these questions by assessing a firm's stock market presence at three financial points. These are (1) stock volatility, (2) change in share price, and (3) the price to earnings ratio. A stock with a low beta (less than 1) is considered to be less volatile than a stock with a high higher beta. In other words, it fluctuates in price, less than the market as a whole. This may imply that investors are more committed to a corporation's vision and strategy. Changes in market price of shares can be driven by multiple factors. Perhaps an increasing share price not only reflects faith in a firm's future but also may be another measure of shareholder agreement with management strategies. The price to earnings ratio can be a measure of the strength and extent of confidence in the strategies and future of an organization.

**Q1** Will the stock of a firm in the beverage industry that attempts to go green, experience a high volatility in its stock price? The beta coefficient tells how a stock will move when compared to the market.

**Q2:** Will a firm in the beverage industry that is going green experience a positive influence on the market price of its stock?

**Q3** Will a firm in the beverage industry that is going green experience, an increasing price to earnings ratio? The price earnings ratio is a reflection of the confidence the stock market has in a firm.

**H-1:** Companies in the beverage industry that commit to going green will be less volatile than a firm in the beverage industry that has not committed to going green.

**H-2:** A green company in the beverage industry will see positive influences on the market price of their stock.

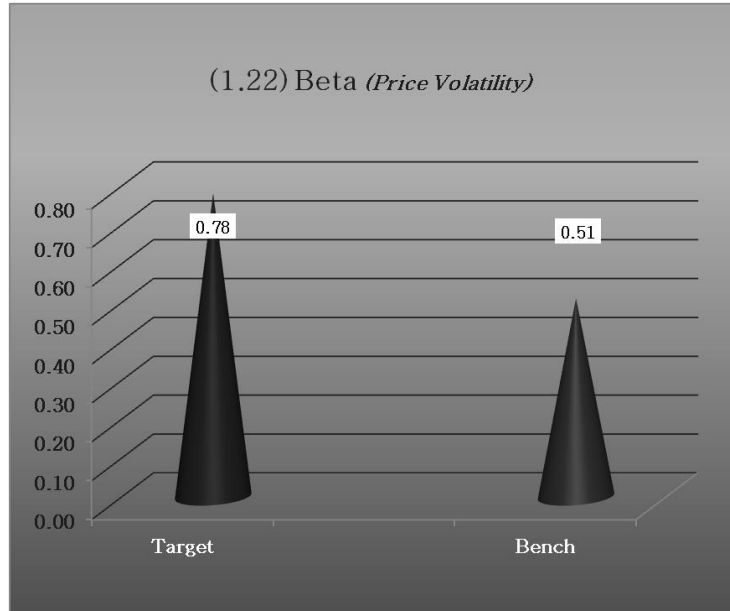
**H-3** A green firm in the beverage industry will experience an increasing price to earnings ratio.

### **Methodology**

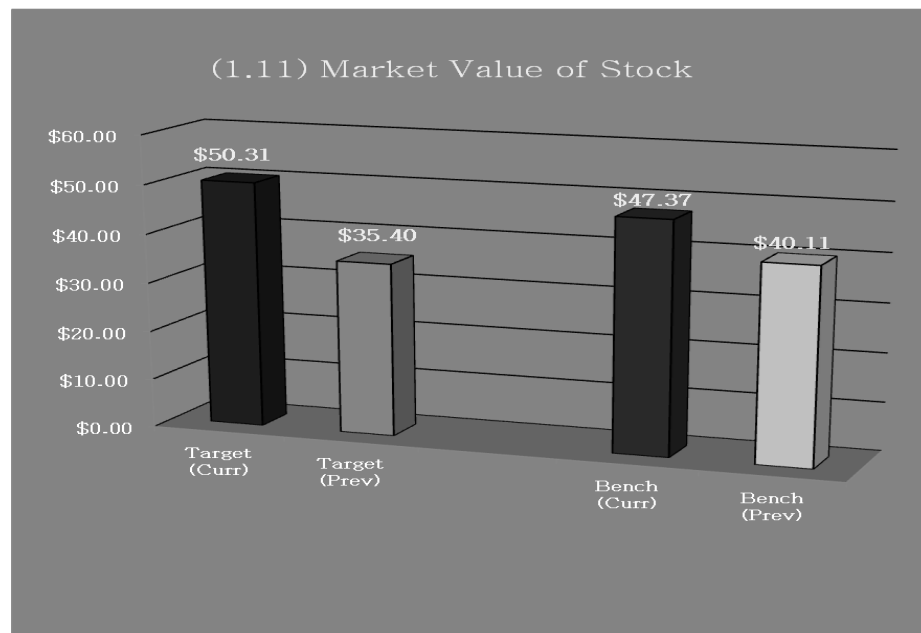
This study will be conducted by selecting two companies in the beverage service industry to compare and contrast. The first company, Starbucks is a company that has shown its commitment to going green. The second company, Tim Hortons, is a company that has not committed itself to limiting its environmental footprint. These two companies will be analyzed by using the Performance Scorecard to test the 3 hypotheses. This software will aid the process of drawing conclusions. Both of these companies are leaders in the coffee house industry. Starbucks leads the industry in the United States while Tim Hortons is the industry leader throughout Canada. The most recently published annual reports will be used. The 2012 annual report will be used for Starbucks and the 2011 annual report will be used for Tim Hortons.

## Results

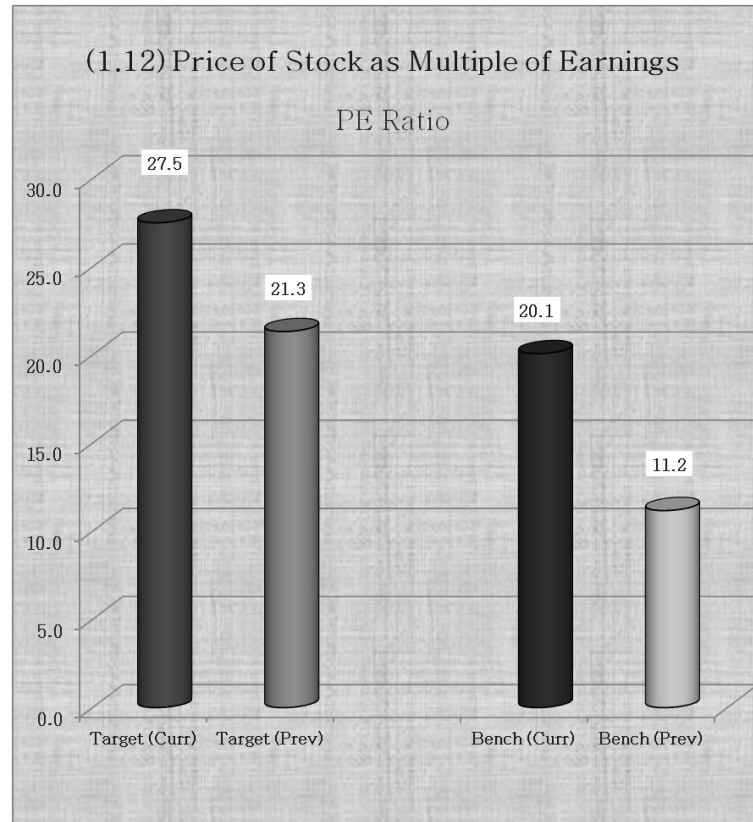
H-1 Hypothesis 1 predicted that a “greener” company would have less market volatility than the competitive firm was not supported. Starbucks has a beta coefficient of .78 and Tim Hortons has a beta coefficient of .51.



H-2 The second hypothesis predicted that a green company in the beverage industry will experience positive influences on their stock price. This was supported. The market price per share of Starbucks stock increased from \$35.40 at 2011 fiscal year end to \$50.31 2012 fiscal year end. This was a 42% change. Tim Hortons also saw their share price increase from \$40.11 to \$47.37. This was an 18% change.



H-3 The third hypothesis predicted that a green firm in the beverage industry will experience an increasing price to earnings ratio. This was also supported. Starbucks's PE ratio increased from 21.3 to 27.5 while Tim Hortons increased from 11.2 to 20.1. Over the past year, investors have been willing to pay more for a share in Starbucks's profits. Investors are also willing to pay \$7 more for each dollar of Starbucks earnings over that of Tim Hortons.



### Discussion (interpretation of findings)

Research has suggested that firms that practice socially responsible behavior perform better financially than companies that do not. Firms that are concerned about the environment in which they operate may signal to investors, consumers, and employees that the company and its products are more trustworthy than those of a competitor. To an investor, a company that is

concerned about the environment could suggest that the company will be concerned about being upfront and truthful with investors.

Hypothesis 1 was not supported. Starbucks has a beta coefficient of .78 and Tim Hortons has a beta coefficient of .51. This means that both investments are more stable than the market. However, Tim Hortons is significantly more stable than that of Starbucks. A beta of 1 indicates that the stock is expected to move with the market. An investment that is less stable or riskier than the market will have a beta greater than 1. It is important to note that a riskier stock has a potential for a greater return but also the potential for a greater loss should the market fall. A stock that is less risky or more stable will have a beta of less than 1. The return on investment is expected to be lower but this is only because the investment is more stable and less risky. Therefore, a company that appears to be trustworthy should be expected to be less volatile and risky. Less fluctuation in stock price shows that investors are committed to the long term goals and strategies of a company. Concern for the environment is not the only reason that would result in low volatility. Thus, a low volatility in Tim Hortons is not surprising. Although, the 1<sup>st</sup> hypothesis was not completely supported, both of these companies are less volatile than the market, meaning that they are more stable. Since many investors are concerned about the environment, it is not surprising that these investors are more aligned with the strategies and mission of a company that strives to protect the environment.

Hypothesis 2 was supported. The share price of Starbucks increased from \$35.40 to \$50.31. The increase in stock price is the result of an increased demand for the stock. As more investors demand the stock, the available supply decreases, causing the price to increase. Companies that are good corporate citizens could suggest that they are better prepared for the future. Responsible actions towards the environment may give the perception that the company

is responsible when it comes to developing a sustainable future for the company. Thus, investors will demand to own more shares of Starbucks stock, causing the price to increase. A leading corporate citizen will signal to investors that the company is straightforward.

The third hypothesis is also supported. Starbucks price to earnings ratio has increased from 21.3 to 27.5 while Tim Hortons increased from 11.2 to 20.1. The price to earnings ratio is calculated by dividing the price per share of stock by the earnings per share. Although both companies have seen large increases in their respective PE ratios, investors are still willing to pay a premium for each dollar of Starbucks earnings over that of Tim Hortons. This is because investors of Starbucks perceive a lower risk in their investment and are therefore willing to pay more, even though the return on the investment may be lower because of this. A safer investment offers less return. This makes sense since a green company may suggest that it is more trustworthy and therefore it appears to be a safer investment. Investors may feel that a company that has devoted itself to protecting the environment won't conceal a financial crisis. Also, a higher PE ratio may show that investors are willing to pay more for a stock that is committed to protecting the environment in exchange for a lower return on investment. Investors may be more willing to promote and invest in companies that are aligned with preserving the environment in which we all share.

Since 2008, Starbucks has shown that it is committed to going green. The company even publishes a yearly global responsibility report that highlights many environmental improvements. The company has outlined many goals ranging from energy consumption to waste reduction.

The company has taken many steps to reduce its energy consumption in company owned stores. In 2008, Starbucks set a goal to reduce energy consumption by 25% by 2013. Since

2008, the company has already reduced consumption by 7.5% (Starbucks Global Responsibility, 2011). Although the company still has a long way to go to meet this goal, this certainly is significant progress. The report indicates several ways that Starbucks has been and plans to further reduce energy consumption. The company has already replaced incandescent lighting with more efficient LED bulbs in over 7,000 stores. This change alone has been responsible for a large portion of the energy reduction. To cut consumption even further, Starbucks is working with suppliers to provide more efficient machines and appliances. When compared to Tim Hortons, their goal is to only reduce energy consumption by 10% in their corporate offices. This does not include any of their stores. But in 2011, the company actually saw a 6% increase in energy consumption (Sustainability and Responsibility, 2011). Clearly, Starbucks has committed itself to their goal.

To further reduce energy consumption, Starbucks has set the goal that all new company stores will be LEED certified. LEED is a third party organization that stands for Leadership in Energy and Environmental Design that verifies the efficiency of green buildings and structures (LEED). In 2011, the company fell short of their goal as only 75% of new stores were up to specification (Starbucks Global Responsibility Report). In fact, the company has taken this goal so seriously that the company now employs 80 LEED certified professionals who work on the development team. The report also indicates that Starbucks stores that meet LEED specifications have already seen an energy reduction of 30% and water reduction of 60%. When compared to the benchmark, Tim Hortons, the company has only 4 certified stores and plans to operate 30 by 2016 (2011 Sustainability and Responsibility). With Starbucks planning to open 3,000 stores in the Americas alone in the next 5 years, this number of potential LEED certified stores crushes Tim Horton's goal of 30 LEED certified stores by 2016. Thus, it is no surprise that Global

Green USA awarded Starbucks with the Sustainable Design Award for their leadership in green building (Starbucks Global Responsibility, 2011).

The company also supports the development of renewable of energy. By 2015, the company hopes to purchase all of its energy from renewable resources. As of 2011, the company currently purchases 50% of its energy from these resources (Starbucks Global Responsibility, 2011). As a result of this, Starbucks has been applauded by the EPA as one of the top ten private sector purchaser of green power. With the company's leadership, Starbucks has also been named to the U.S. EPA Green Power Partnership (Starbucks Global Responsibility Report).

With water shortages building up across the globe, conservation is necessary. By 2105, Starbucks hopes to reduce water consumption by 25% from 2008. As of the end of 2011, the company has already reduced consumption by 17.6% (Starbucks Global Responsibility Report). Often times people take for granted fresh water, but some scientists already believe that people are using water faster than it is naturally replenished (Dumaine, 2012). Tim Hortons also has a goal to reduce water consumption, but disappointingly, the goal only extends to its corporate offices.

Overall, Starbucks has gone above and beyond to reduce its carbon footprint. The company has been recognized by the EPA for its excellence in its commitment to going green. Starbucks clearly is a role model to any company when it comes to going green. Thus it is no surprise that Starbucks is less volatile than that of the market, has a higher price to earnings than the benchmark and had a positive influence on its stock price over the past year.

### **Limitations**

The limitation of this study is that only two companies are used when drawing these conclusions. This study can be enhanced by studying all publically traded companies that are



traded on the stock market and grouping them into green practicing and non green practicing categories. This larger sample would strengthen the significance of the results. There simply was not enough time for this study to analyze data on the entire market. In conclusion, it is recommended that this topic be researched further.

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