THE TRIPLE BOTTOM LINE: WHAT IS THE IMPACT ON THE RETURNS TO AGRIBUSINESS STOCKS

by

Joshua D. Detre
Assistant Professor
Dept. of Agricultural Economics
127 Agricultural Administration Building
LSU Ag Center and Louisiana State University
Baton Rouge, LA 70803
Office: (225) 578-2367
Fax: (225) 578-2716
jdetre@agcenter.lsu.edu

Michael A. Gunderson
Assistant Professor
Food and Resource Economics Department
University of Florida
1181 McCarty Hall
Gainesville, FL 32611
Phone: (352) 392-1826 Ext. 301
Fax: (352) 846-0988
mag79@ufl.edu

THE TRIPLE BOTTOM LINE: WHAT IS THE IMPACT ON THE RETURNS TO AGRIBUSINESS STOCKS

Problem Statement

Sustainability has become a buzzword among businesses around the world looking to improve the public perception regarding their performance on measures other than profitability for shareholders. Items such as social responsibility, environmental concerns (going 'green'), and corporate governance are all issues of concern to various interest groups and consumers in general. In order to identify and track firms that are acting in a sustainable manner, the Dow Jones Company created the Dow Jones Sustainability Index in 2001. Investment managers around the world have adopted parts or all of the measures of this index to create and manage their own investment funds that are 'sustainable.' However, the stock market performance of agribusiness firms that have instituted a sustainability imitative has been a subject of limited research.

It is likely that food and agribusiness firms are under similar (or even additional pressure) to operate in a sustainable manner. With food being consumed by everyone and the large resource demands of agriculture production, no broad sector of the economy stands to benefit from sustainable production practices more than food and agribusiness firms. Food and beverage brands are among the recognized in the world (e.g. Coca-cola, Nestle, and Kraft) and input suppliers also have strong brands (John Deere, Caterpillar). The investments in these brands are likely to benefit from investments in sustainability. Therefore, while one might speculate that sustainable practices are at the expense of shareholder profits, it is also plausible that these investments can generate long-run payoffs that exceed their short-run costs. The Dow Jones

Sustainability Index evaluates and weights across three components: Economic, Social, and Environment (Table 1).

Table 1. Down Jones Sustainability Index Criteria and Weights

Dimension	Criteria	Weighting (%)
Economic	Codes of Conduct / Compliance / Corruption & Bribery	5.5
	Corporate Governance	6.0
	Risk & Crisis Management	6.0
	Industry Specific Criteria	Depends on Industry
Environment	Environmental Performance (Eco-Efficiency)	7.0
	Environmental Reporting*	3.0
	Industry Specific Criteria	Depends on Industry
Social	Corporate Citizenship/ Philanthropy	3.5
	Labor Practice Indicators	5.0
	Human Capital Development	5.5
	Social Reporting*	3.0
	Talent Attraction & Retention	5.5
	Industry Specific Criteria	Depends on Industry

Source: http://www.sustainability-index.com/07_htmle/assessment/criteria.html

Objectives

For these reasons, the primary objective of this research is to assess the short-run and long-run performance of food and agribusiness firms listed among the Dow Jones Sustainability Index (DJSI) relative to their non-DJSI peers. More specifically, we want to understand how the market revalues publicly traded agribusiness stocks after they announce a sustainability initiative. The focus will be on assessing the differences in stock and dividend performance when a food and agribusiness firm is part of the DJSI. The first hypothesis to be tested is that there are no short-term impacts on stock performance for firms added to the DJSI. The second hypothesis is there are no long-term impacts on stock performance for firms added to the DJSI.

Procedures

The data used in this study is available from Wharton Research Data Services and, in particular, the database available from the Center for Research in Security Prices and the Compustat Global Database. Firms will be classified as a food business or agribusiness based upon their primary SIC codes using the USDA's Economic Research Service listing of SIC codes involved in food and agriculture production and marketing. More than 300 firms are components of the DJ Sustainability Index including firms such as Kraft, Nestle, Carrefour, Novartis, and Bayer.

To evaluate the first hypothesis (short-run impacts), we follow the event study methodology proposed by Bosch and Eckard (1991). Announcement dates for these events will coincide with the first announcement by Dow Jones Company indicating the inclusion of the firm as a component. It will be compared against a market control as well as a food and agribusiness control group. From the announcement date, we analyze stock price movements 120 days prior and 300 days after the announcement date. Thus, cumulative abnormal returns for firms included are identified. Significant positive movements in market values would provide evidence that investors feel a sustainability initiative will enhance their wealth position.

To evaluate the second hypothesis, the firms' data will be compared over the entire period of existence on the DJSI (seven years) relative to a control group of non-DJSCI food and agribusiness firms. Information will be broken down into subsectors as well as geographic regions to more fully understand the differences across these firms.

Results

The review of literature on the effects of an agribusiness firm having a sustainability initiative on their share value is limited, thus an opportunity exists to contribute with original research.

Consequently, an empirical evaluation, which evaluates the reaction of an agribusiness firm's stock price to the announcement of a sustainability imitative, is an excellent starting point for beginning able to understand the economic impacts of such and imitative on agribusiness firm's value.

Conclusions

This research examines both the short-term and long-term impacts on stock price of an agribusiness firm being included in the DJSI. The preliminary results show that stock values of agribusinesses have reacted to these announcements. Typically, agribusinesses react on the date of the announcement with a significantly positive abnormal impact on agribusiness stock values. This result might reflect a short-term view by investors in the market, where investors were anticipating near-term increases in value. Another reason might be investors shifting their investments to these sectors of the economy because of the decreased variability in agribusiness sector returns. Although, we cannot comment as to how specific sustainability measures affect stock values of agribusiness firm, we do know that there is an impact in the financial markets when new information about a sustainability initiative is made public.

Moreover, the results of this study indicate the need for further research into understanding how corporate sustainability affects the value of agribusiness firms. An additional step would be to identify additional unique characteristics of agribusiness firms that make them more prone to be impacted by sustainability measures (e.g. size, location, and asset management characteristics) and therefore help predict and further understand how sustainability initiatives will affect the value of an agribusiness firm.

References

Bosch, J. and E.W. Eckard, Jr. 1991. "The Probability of Price Fixing: Evidence From Stock Market Reaction to Federal Indictments." *The Review of Economics and Statistics* 73:309-317.

Dow Jones Company, Dow Jones Sustainability Indexes, http://www.sustainability-index.com/07_htmle/assessment/criteria.html, Accessed September 2008.