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How Consolidation can Affect Shareholder Value

Consolidation has been a way of business, particularly in the food and agriculture sectors, for up to 100 years, in some cases. In a period of industry stress such as is currently being experienced in the ethanol industry, it is important to step back and review what history teaches us about consolidation and what it could mean to the creation and destruction of shareholder value.

by Scott McDermott

The boom in ethanol over the past five years and subsequent stress over the past year are symptoms of a much bigger structurally changing world. Structural changes in global growth and energy, growing consensus on problems associated with greenhouse gas emissions and continued geopolitical volatility are causing some of the most dramatic changes the world has seen in the past century. These changes are driving technological innovation that will rival the societal impact of the internal combustion engine, electricity, and communication and entertainment equipment, although it is likely to manifest itself a little differently.

These structural changes will likely encompass new sources of nutrition and medicine; fuel for transportation, heat and power; innovations in the engines for transportation; new sources of heat and power; a revolution from producing waste to the reuse of resources and a whole new set of goods and support services. All of this will be driven from public policy, science and technology to public markets, industries and business commercialization.

The point of the discussion about structural change is to set the context that the current cycle in ethanol is one of the first cycles (boom and consolidation) in this very different world. This doesn't mean we can't use history to give us an indication of how things might unfold in the future but we should be conscious about mixing past fundamental market and economic lessons with new rules, challenges and opportunities that present themselves in the future.

Ethanol Margin Simulation at Different Installed Cost Levels

Time Period	Avg Margin \$/Gal	Avg Marg % \$/Gal	Avg Marg % \$2/Gal	Avg Marg % \$1/Gal	Avg Marg % \$0.50/Gal
1990-1993	\$0.07	2.4%	3.6%	7.2%	14.4%
1994-1996	(\$0.08)	-2.8%	-4.2%	-8.5%	-16.9%
1997-2000	\$0.05	1.5%	2.3%	4.6%	9.3%
2001-2005	\$0.29	9.7%	14.5%	29.0%	57.9%
2005-2007	\$0.83	27.5%	41.3%	82.5%	165.0%
2008-Current	\$0.20	6.7%	10.0%	20.0%	39.9%

Learn by Example

A review of some of the higher profile consolidation examples in the past 15 years gives a better understanding of how value was created and destroyed for shareholders. It is also important to discuss how the structural change may pose opportunity and risk. The first example is the consolidation of Aventine Renewable Energy Holdings Inc.'s core asset in Pekin, Ill. The 100 MMgy wet mill is one of the older plants in the ethanol industry and has had a number of owners over the years. In the mid-1990s, Williams BioEnergy, a subsidiary of The Williams Company Inc., purchased the corn wet-mill plant for \$167 million, or \$1.67 per installed gallon. The company upgraded the plant and also purchased a majority stake in a 30 MMgy dry-grind ethanol plant in Aurora, Neb.

In 2003, Williams sold the ethanol assets as well as other company assets after having financial problems related to the impact of its telecom-related losses and the shock wave from the government investigations into energy marketing and trading practices. The assets were sold for \$75 million, or approximately 57 cents per installed gallon, to Aventine, a company formed by Morgan Stanley Capital Partners to purchase Williams BioEnergy. Aventine was able to turn around and launch its initial public offering (IPO) in June 2006. The \$9.06 million share IPO raised nearly \$390 million (\$3.00 per installed gallon at the time of the IPO), which it used to pay down some debt and expand both locations a total of 107 million gallons.

In its December 2006 U.S. Securities and Exchange Commission 10-K filing, Aventine had a capacity of 150 MMgy and a total of \$408 million of debt and equity, or \$2.66 per installed gallon. If you include the full 107 million gallon expansion, Aventine was at \$1.64 per gallon of installed capacity. The IPO timing worked out well for the original investors.

Aventine recently filed for Chapter 11 Bankruptcy and at press time in mid-June was in the middle of restructuring.

Archer Daniels Midland Co. has been in the ethanol industry as part of its diversified agribusiness and food enterprise since ethanol's introduction as a fuel additive. Corn wet mills are the core of ADM's corn milling operations and the company is the largest corn wet milling company in the world. In 1997, ADM purchased 30 percent of the non-voting shares of Minnesota Corn Processors for \$120 million after MCP expanded production capacity and debt in the 2005-'06 corn price rally. MCP was a successful farmer cooperative that operated two corn wet mills in Minnesota and Nebraska. However, negative margins in ethanol were at or below 20 cents per gallon for a year, which drained capital from MCP and forced the bank to call the note.

In 1997, MCP had about \$672 million in assets and could grind about 126 million bushels of corn annually, which put the facility at just over \$2 on an ethanol gallon equivalent basis. In 2002, ADM paid \$382 million for the remaining interest in MCP, which was more than double the equity held by the original members and included assuming \$232 million in debt. If you convert corn grind-to-ethanol equivalent gallons, ADM's total purchase of MCP was just under \$1.50 per ethanol equivalent installed gallon. The timing worked out well for ADM because ethanol margins expanded dramatically in the following years; however, for ADM, the driving force behind the acquisition was probably more about consolidating the sweeteners industry.

The final company review is VeraSun Energy Corp., which was one of the first companies to build a large 100 MMgy dry-grind facility. The first plant was estimated to cost about \$1 per gallon, with following plants and plant acquisitions costing between \$1.80 and \$2.20 per installed gallon of capacity. The company's IPO in June 2006 raised a total of \$450 million with 230 million gallons of capacity in production. That was almost \$2 per installed gallon in equity. The VeraSun liquidation of ethanol assets to Valero Energy Corp. and term lenders (West LB AG, Dougherty Funding and AgStar Financial Services) ranged from 50 cents to 84 cents per installed gallon.

The most obvious lesson learned is buy low and sell high, but market timing is not as easy as it looks by these examples. The ethanol industry has always been a very volatile commodity industry, meaning companies are more likely to be successful and enhance shareholder value if they are low-cost providers on the commodity cost curve and can effectively manage margin risk. Again, these strategies are easy to talk about but much harder to execute effectively. Commodity markets are very difficult to manage, but one thing that a plant can control is plant efficiency and performance.

The top ethanol companies perform value at risk (VAR) calculations that tie market volatility and the outlook for margins to calculate working capital requirements and retained earnings for the business. In a commodity business such as ethanol, deep pockets can keep an ethanol plant in the game even if it is less cost competitive than some of its peers.

There were ethanol plants as recently as two or three quarters ago that were paying out dividends that put the plants at minimum working capital thresholds. The pressure on board members at some of the newer plants to distribute earnings exposed company leverage that did not show up on the balance sheet. In the exuberance to build and expand ethanol plants, some shareholders opted to borrow money to cover their investment. Conversely, the farmer-owned plants are on par with large commercial companies with deeper pockets because they understand the long-term commitment that is often required in commodity investments and have a track record of reinvesting in tough times to protect their investment.

Key Success Factors

Many people will point to scale as a key critical success factor; however, this review points out that although important, what is more critical to creating or destroying shareholder value is what you pay to buy or build the plant. There is no magic number necessarily; however, this assessment points to current plant values well below \$1 per gallon of capacity as being relatively low, and paying much above \$2 per installed gallon can be problematic if the plant does not have time and margins to pay down debt. The value of company scale may be less about the scale of the assets and more about the company's ability to hire talent to improve plant performance, participate in integrating or diversifying product and services, participate in research and development and investing in public relations and key political initiatives.

In the future, plants will need to position themselves for the structurally changing environment. Plants will need to make prudent business investments to strengthen balance sheets and improve plant efficiencies and

competitiveness because the markets may get worse. Other opportunities for plants to create and protect shareholder value are to make investments to diversify or vertically integrate the business, acquire plants if possible, maintain capital to weather challenging markets or merge. The important test for these business investments is to determine if they will produce tangible economic benefits and not spread the company too thin. An example of the value of business and product diversity is ADM. Its average annual operating margin volatility is 17 percent, compared to an average ethanol plant, which is closer to 70 percent. An example of the value of vertical integration is to review the combined ethanol production margins and ethanol blending margins. Only one out of the past eight years has had ethanol prices at a premium over conventional gas prices plus the blenders' credit, and that was due to the impact of hurricane Katrina and the banning of methyl tertiary ester butyl ester (MTBE) blended gasoline in Colonial and Plantation pipelines in 2006.

The final crucial action for plants to focus on is lowering greenhouse gas life cycles, diversifying energy sources and making progress on lowering resource intensity profile for water usage and air emissions such as carbon dioxide.

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