## The Future of Food Finance

HE WAY PEOPLE PRODUCE AND EAT food is changing in major ways, presenting both risks and opportunities to those invested in the sustenance sector.

Historically, much of our protein has come from animals, but producing just one pound of meat means feeding an animal up to 16 pounds of grains and other crops. The caloric conversion is weak too: According to a recent report produced in collaboration with the World Bank, even the most efficient sources of meat convert only around 11% of gross feed energy into human food.

As global population and per capita meat consumption have grown, this inefficient system has become overburdened. In 1950, the total number of farm animals in the U.S. was somewhere near 100 million; by 2007, that number was roughly 9.5 billion.

To accommodate the enormous demand, nearly all those animals were moved from farms to factories. According to Agriculture Department data, during the same period that the number of farm animals increased by 9,400%, the number of farmers producing those animals decreased by 60%. So many more animals being reared by so few farmers has come with consequences for consumers, animals, producers, and investors.

Take pig production. Over the last several decades, the vast majority of breeding pigs have been moved into "gestation crates," which are tiny cages that confine animals so tightly they can't even turn around. The cages are iron maidens for sows.

Not surprisingly, some consumers have responded with anger. "Cruel and senseless" is what the New York Times called the cages. "Torture on the farm," reported the American Conservative magazine.

This outcry has led major food companies to demand changes. More than 60 of the world's largest food retailers—McDonald's, Nestlé, Burger King, Oscar Mayer, Safeway, Kroger, Costco, and dozens more—have announced plans to eliminate gestation crates from their pork-supply chains. Addressing animal welfare in corporate responsibility programs is becoming the norm.

"Active concern about how we treat the world around us has moved from the left of center to the mainstream, and savvy businesses are playing a part," noted an editorial

in Nation's Restaurant News. "The growing number of animal-welfare-related commitments made by companies large and small reflect well-thought-out business strategies."

Studies of the food industry show that consumers favor policies to improve the treatment of farm animals. Citigroup, for example, has reported that "concerns over animal cruelty" can present "headline risks" to restaurant companies. The Food Marketing Institute recently reported that animal welfare now outranks all other social issues except employment practices.

Meat producers like Smithfield Foods and Cargill are responding. They're moving sows from gestation crates to open pens in which the animals can move and engage in more of their normal behaviors. But some producers, such as Hormel Foods and Seaboard, have disclosed no plans to meet these new customer expectations.

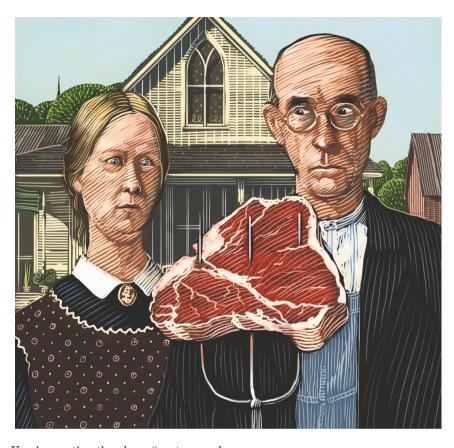
From an investment perspective, neglect of animal welfare is risky, at best. "The use of gestation crates," concluded Glass Lewis, "could place companies at a financial disadvantage." The World Bank's International Finance Corp. reported, "In the case of animal welfare, failure to keep pace with changing consumer expectations and market opportunities could put companies and their investors at a competitive disadvantage."

So what are major food retailers or protein producers to do? Experts have made it clear: If they abuse animals, they pay a price in the market. But a deeper, more long-term view of the risks and opportunities points clearly in one direction: toward a focus on plant-based proteins.

Restaurant chains such as Burger King and Denny's now offer veggie burgers. Alongside Oscar Mayer in Kraft Foods' portfolio is Boca, maker of vegetarian "meats."

"Trying Meatless Monday?" asks the label of one of Nestlé's Lean Cuisine brand items. "Meatless can still be full of goodness."

This sector is now a booming business. As Kleiner Perkins Caulfield Byers partner Randy Komisar recently told the New York Times, animal-welfare issues "represent big potential markets and strong opportunities for building great returns." His Silicon Valley venture-capital firm is investing heavily in the development of plant proteins, with



Komisar noting they have "venture-scale returns." Asian business magnate Li Ka-Shing has invested tens of millions of dollars in food companies that drive protein production away from animals and toward plants.

More consumers are embracing the new "three Rs:" Refining their diets by avoiding factory farmed products, while reducing the amount of meat they eat and replacing it with plant-based meals.

Many in the enterprise of food recognize that how we sustain ourselves today is vastly different than the way we did in decades past, and that we will change again in the near future. How a food company responds to that changing trajectory may cause it to sink or soar in the years ahead. ■

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