Meat Science 98 (2014) 556–560

Contents lists available at ScienceDirect

Meat Science

journal homepage: www.elsevier.com/locate/meatsci

The meat industry: Do we think and behave globally or locally?

K.E. Belk *, D.R. Woerner, R.J. Delmore, J.D. Tatum, H. Yang, J.N. Sofos

Center for Meat Safety and Quality, Department of Animal Sciences, Colorado State University, Fort Collins, CO 80523-1171, USA

ARTICLE INFO

Article history:
Received 26 March 2014
Received in revised form 28 May 2014
Accepted 29 May 2014
Available online 5 June 2014

Keywords:
Meat
Marketing
Local
Globalization
Community supported agriculture

ABSTRACT

For generations, those that produce livestock and meat generally felt that their country or geographical region (i.e., provenance) reflected a basis for product differentiation. This occurs to the extent that geography of production often is considered a "brand." For example, there exists "U.S. Grain-Fed Beef" or "Kobe Black Wagyu" or "Uruguayan Grass-Fed Lamb" or "Danish Pork." However, for most meat trade, industry has evolved beyond this. With the exception perhaps of farms onto which livestock are born, meat company's profits are not generally tied to geographical considerations. Most major companies (e.g., JBS, Marfrig, Tyson, Cargill, Danish Crown, Nippon Meat Packers, etc.) operate in multiple countries and represent to consumers the production of a number of locations. However, there also now exist entrepreneurial options for meat production and "local" sales, albeit at lesser volumes. This discussion explores "global" and "local" meat marketing options.

1. Introduction

Meat and poultry production has faced external detractors and social issues. However, quite frequently, the industry also eats itself from inside. At least in North America, nothing has instigated greater internal strife than has corporate expansion and market power among meat and poultry industry companies, particularly when production ideology is thrown in to the debate. In the U.S., since independent livestock producers began to file antitrust lawsuits against packing and retail companies during the 1960s and beyond (Justia US Law, 2014; Open Jurist, 2014), the concept of corporate expansion has been perceived negatively by many as indicative of greed. Frequently, such perceived greed was considered to be a threat to some livestock producers' "way of life" and livelihood. This paper reflects on the path and characteristics of meat industry integration, consolidation and globalization, and the current resulting business climate. In addition, it explores new options for "local" production possibilities, the antithesis of globalization, which sometimes includes even urban participants in the production chain.

2. Globalized meat marketing options

The phrase "paradigm shift" is used frequently, but nowhere is it perhaps more appropriate than when used to describe the integration and growth of companies in the global meat and poultry industry. For example, genetics for pork and birds have encircled the globe; today, a pig in Brazil may be genetically very similar to a pig in Iowa (Smith, 2002). Specifically, the pork and poultry industries of many countries are now so vertically integrated that live pig and bird production systems, for the most part, are controlled by the slaughter and processing segment of the industry from conception (or genetic formulation) until sold as a wholesale product; and sometimes even further into the supply chain. Frequently, the live animal/bird production system is owned and managed by independent families (USDA-ERS, 2014), but their management practices are dictated contractually by their customer—the corporate processor. Or, in some cases, preharvest management practices are dictated by a cooperative processor to which the family is a member/owner (Hansen & Lund, 2011; Heyder, Makus, & Theuvsen, 2011). Many of these same corporate and/or cooperative companies operate production systems in multiple countries, and may sell product to customers in many additional countries.

Sexton (2012) discussed the nature of competition in agricultural markets, stating that "As a profession, we have only begun to understand the implications of increasing product differentiation and vertical coordination among firms for market performance and distribution of benefits among participants." A list of "key trends in the structure of U.S. agricultural markets" was provided (Sexton, 2012) and included: (1) Concentration at both the retail and processing levels of the supply chain, showing an average increase among 15 food-manufacturing industries in 4-firm concentration ratios between 1982 and 2002 of 11%. (2) Product quality differentiation, stating that the "dimensions" around what consumers consider to be "quality" in food have changed, and now include things like implications of the use of the product on the environment, as one example of what constitutes quality. (3) Vertical coordination and control; increasing vertical controls through contracts and other means are "increasing rapidly in the U.S. and elsewhere, as is the degree of control exercised through them." The author concluded that "agricultural markets throughout the world have undergone a rather dramatic transformation … marked by consolidation and market

* Corresponding author. Tel.: +1 970 491 5826; fax: +1 970 491 0278.
E-mail address: keith.belk@colostate.edu (K.E. Belk).

http://dx.doi.org/10.1016/j.meatsci.2014.05.023
0309-1740/

domination by large processing, trading, and retailing firms, disappearance of traditional auction or spot markets for exchange of farm products, and their replacement by various forms of contracts and vertical control, and a growing emphasis on product differentiation and increasingly broad dimensions of product quality."

Only the beef industry, in most countries, has maintained some semblance of independence among market sectors although, today, there are even signs that beef industry independence may be cracking, at least in North America and Australia (e.g., JBS feeds, slaughters, and markets cattle and beef). Nonetheless, due probably to its historic ability to maintain independence among market sectors, perhaps that is why domestic consolidation of the beef industry has seemed more controversial and volatile than has similar and more extensive trends in other protein species; it is as much a cultural issue as a business issue in many places. In the U.S., and in addition to being a business, cattle ranching also serves as a "way of life" and is the mechanism for transfer of wealth from one generation to the next. Anything, perceived or real, that threatens this cattle ranching culture and structure has been met with fierce hostility.

Recent USDA Economic Research Service data, based on a 2012 Agricultural Census (USDA-ERS, 2014), suggested that 76%, 75%, 96%, and 81% of cattle, dairy, hogs/poultry/eggs, and other livestock productions, respectively, resulted from "family farms." Even by U.N. Food and Agriculture Organization (FAO) standards, over 50% of total U.S. cattle production was derived from family operations (USDA-ERS, 2014). Perhaps, at least for the beef cattle industry where vertical alliances have seemed to be less popular than the contractual growing that has permeated the pork and poultry industries, this disparity in scale and scope of livestock production companies (family farms) versus large corporate processing firms (packing and processing companies) created the basis for distrust and concerns about price control, which in turn led to antitrust lawsuits. In contrast, and even where a greater proportion of production is generated on family-owned farms, both pork and poultry producers have appeared to be more inclined to participate in contractual, process-controlled production supply chains than those of the cattle/beef industry.

Only those closest to the consumer (i.e., foodservice and retail) have not yet fully exerted control over the management of preharvest production. Even then, required upstream implementation of standards and specifications by the retail sector, like ISO-22000 or those benchmarked by the Global Food Safety Initiative, has impacted primary production. In part at least, the huge amount of vertical and horizontal integration that has occurred among production and processing sectors of the meat and poultry supply chain, frequently to include multiple species of livestock, poultry and processing operations, resulted from risk-management strategies and efforts to take advantage of economies of scale. It may only be a matter of time before the retail sector also weighs in, as many retail companies also now are global in scale and, as we know, very large; e.g., Walmart now operates >11,000 stores in 27 countries. Walmart's revenue in fiscal 2012 was $466 billion (Walmart, 2014). McDonald's has over 35,000 restaurants in over 100 countries (80% franchised; McDonald's, 2012) with over 24.6% of foodservice market share in the U.S. (Bloomberg, 2014); McDonald's serves over 69 million customers each day (McDonald's, 2012). Both Walmart and McDonald's already have implemented standards to control food safety and animal handling/welfare, so it would not be surprising for these types of companies to also begin to control other aspects of live animal and bird production.

According to Merriam-Webster's online dictionary, the term "globalization" was first used in 1951 and is defined as: "the act or process of globalizing; the state of being globalized; especially: the development of an increasingly integrated global economy marked especially by free trade, free flow of capital, and the tapping of cheaper foreign labor markets." Generally, the concept of globalization is associated with very large companies that buy, process, and sell products or services in multiple countries, and also operate under a range of legal systems. The ability of such companies to adopt a globalization strategy has escalated as bilateral and multilateral trade agreements were implemented since, really, the late 1970s—thereby increasing market access. Although a relatively new trend for most companies, this business platform was arguably first implemented during the late 1800s by the Vestey family in the U.K.; globalized production and processing of meat and other foods on at least three continents, along with refrigerated shipment (i.e., Blue Star Lines) of products for import, led the Vestey's to becoming the companions of royals and one of the wealthiest families in the U.K. (Vestey Foods Group, 2014; and other websites).

To become global, corporate expansions were necessary … so companies not only grew within their home country, via acquisitions and mergers, but also via similar acquisitions and mergers in other countries. It seems that, quite frequently, global expansion has been overlooked even while domestic expansion was of great concern to producers. Even as this paper is being developed, the Brazilian company Minerva has acquired an additional plant in Uruguay—the Carrasco slaughterhouse. The magnitude of these expansions could not have been foreseen in the 1980s or 1990s when individual producers were merely worried about domestic growth, but even now seem to go unnoticed much of the time. This trend is not unique to the agricultural sector; Microsoft, Apple, energy companies, etc., all have expanded globally in a similar fashion (Murphy, 2014).

Of course, the business concept of globalization did not really begin to polarize societies until (with some exceptions) the mid- to late-1990s when, for example, riots occurred in Seattle, WA in the U.S. during meetings of the World Trade Organization (Tizon, 1999). It was noteworthy that, at least in the case of the Seattle riots, the opposition came quite some time following the signing and ratification of the multilateral 1993 North American Free Trade Agreement (NAFTA) and the agreements resulting from the 1994 Uruguay Round of the General Agreement on Tariffs and Trade (GATT), which called for the subsequent formation of the World Trade Organization (WTO). Given the current trajectory for the meat industry, it appears that there will be no going back; globalization is here to stay barring unforeseen world calamities.

In the U.S., significant concern was expressed, particularly by producers during the 1980s and 1990s, about domestic consolidation within the industry (Purcell, 1990) and, as already described, particularly in the beef industry. During that period of time, substantial business consolidation occurred within the borders of the U.S., and Purcell (1990) reported that "four-firm concentration ratios in boxed beef production jumped from 51% in 1979 to 79% in 1988" for the beef industry, a much larger increase than that reported by Sexton (2012) as an average for 15 food industries between 1982 and 2002. The USDA-ERS (2005) reported, citing data obtained from Meat & Poultry Magazine, that the 10 largest U.S. meat and poultry companies in 1982 were (1) Iowa Beef Processors, (2) Armour & Co., (3) Swift & Co., (4) Wilson Foods, (5) John Morrel & Co., (6) Swift Independent Packing Co., (7) Oscar Mayer & Co., (8) MBPXL Corporation, (9) George A. Hormel & Co., and (10) Land O'Lakes. They also reported the same list for 2001, which was quite different; that top-10 list included: (1) Tyson Foods, Inc., (2) ConAgra Foods, (3) Excel Corporation/Cargill., (4) Smithfield Foods, Inc., (5) Farmland, (6) Sara Lee Packaged Meats, (7) Hormel Foods Corporation, (8) Oscar Mayer, (9) Perdue Farms, Inc., and (10) Pilgrim's Pride Corporation.

During the period studied by USDA-ERS (2005), the average size of plants increased, the output volume increased, and the total number of plants declined; this was attributed to implementation of technologies. Studies by Hansen and Lund (2011) and by Heyder et al. (2011) demonstrated similar tendencies, at least for multinational cooperative meat companies. In those studies, profitability increased as globalization strategies were implemented, plant sizes increased, company size increased, volume of production per plant was increased, numbers of total companies in Denmark declined, and concentration increased. In essence, market power and market share on both local and global