

## **Concentration in Agricultural Markets**

### **February 2002**

**Beef Packers:** Smithfield's recent foray into the beef packing business could lead to further concentration during the coming years. Smithfield was in a bidding war for IBP with Tyson, proving that they see the potential for future growth in this sector. Smithfield CEO, Joe Luter, III, explained, "we want to expand into case-ready processed (beef) to complement our pork products." (*Investor's Business Daily*, 8/9/01) Smithfield also recently pursued the purchase of Packerland, Inc., a large cow-slaughter company based in Wisconsin. Although the Packerland deal fell through, this shows that Smithfield is attempting to find its niche within a segment of the cattle industry that it can control. Vertical integration is also increasing in the beef sector; a new GIPSA report indicates 32% of all beef marketed in 1999 was under captive supply. (USDA/GIPSA, January 18, 2002)

**Pork Processing and Production:** Concentration in pork packing has increased greatly in the last 15 years, from 34% for the top four packers in 1989 to 59% today. Industry leader Smithfield, not appearing as one of the top packers until 1996, has restructured the industry following the broiler model, with significant acquisitions in both processing and sow production. The firm has commented that they don't see expanding their U.S. production operations in the near future. Instead, they are looking across the globe for strategic options. Smithfield is producing hogs in Mexico, Canada, Brazil, Poland and China. At their facility in Veracruz, Mexico, Smithfield is expecting to increase their 14,500 sows to 56,000 in the next few years. – (*Successful Farming*, "Pork Powerhouses, 2001) In December 2001, Smithfield entered into a joint venture with Artal Holland B.V. (AFG Company) a meat processor and distributor to Chinese retail and foodservice customers. (Company press release, 12/26/01)

**Animal Feed Plants:** ADM and AGP had a joint venture, Consolidated Nutrition, that played a large role in the feed business, particularly when ADM acquired Moorman's in the 1990s. Consolidated Nutrition also had a significant presence in pork production in Wyoming. ADM bought AGP's 50% interest in Consolidated Nutrition that it didn't already own, and AGP bought out the ADM's 50% interest in AGP. Thus, ADM and AGP appear to be dissolving a significant joint venture. (*Feedstuffs*, 6/11/01)

**Terminal Grain Handling Facilities/Corn and Soybean Exports:** An entire body of work could be written detailing all of the activity and impacts of these developments. The most striking is the incredibly high level of control by the top 3 companies in corn and soy exports. Of these, we know that Zen Noh is a relatively minor player, leaving only Cargill and ADM with the real control of all U.S. corn and soybean exports.

### ***Significant Developments in Terminal Grain Handling:***

- Although **Cenex Harvest States** has a significant amount of terminal capacity, **CHS** is not a major exporter. **CHS** has a joint venture with **Cargill**, Horizon Milling, and may have other relationships with the major exporters to handle their capacity.
- Cargill has the largest terminal capacity of any company in the U.S., with more than 40 million bushels of terminal capacity. Along with their domestic operations, **Cargill** has an export capacity of 23,902,000 bushels in Canada. In Argentina and Brazil, **Cargill** owns 24,618,033 bushels of export terminal capacity.
- **ADM** has effectively partnered with large farm cooperatives in the U.S. and Canada to expand their global reach. Here, **ADM** partners with Growmark, CountryMark, Riceland, and Goldkist and has a 5-year lease on Farmland's grain facilities and elevators. In Canada, **ADM** currently owns 19% of **Agricore United**, Canada's largest farmer cooperative. **Agricore United** has 24,126,840 bushels of terminal capacity, the largest capacity in Canada. **ADM** also operates significant operations in the Caribbean region.
- Terminal capacity can also be used for imports. DTN News Service reported during 2001 that **Smithfield** was building an import facility on the Carolina Coast. In the January, 2002, issue of World Grain Magazine, **Bunge** sees potential for importing soybeans, where they have a significant capacity for processing and value-added product development. With this structure, **Bunge** can purchase their soy from lower-cost producers at their operations in South America.

-- Source: 2002 Grain and Milling Annual

**Ethanol Production:** Ethanol production has decreased its concentration ratio during the last 20 years because more and more facilities are being built, most of them owned by farmer created, new generation closed cooperatives.

# CONCENTRATION OF AGRICULTURAL MARKETS

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CR4 is the concentration ratio (relative to 100%) of the top four firms in a specific food industry.

**BEEF PACKERS CR4 = 81%\***

	Historical CR4
	1990    1995    1998
1. Tyson (IBP Inc.)	72%
2. ConAgra Beef Companies	76%
3. Cargill (Excel Corporation)	79%
4. Farmland National Beef Pkg. Co.	

Source: \*USDA "Assessment of the Cattle and Hog Industries, 2000."  
 Note: Smithfield Foods is the 5<sup>th</sup> largest beef packer after a series of recent acquisitions.

**PORK PACKERS CR4 = 59%\***

	Historical CR4
	1987    1989    1990    1992**
1. Smithfield	37%
2. Tyson (IBP Inc.)	34%
3. ConAgra (Swift)	40%
4. Cargill (Excel)	44%

\*\*Packers & Stockyards Programs, GIPSA, USDA; February, 1996

Source: \*Feedstuffs Reference Issue (2001) and Tyson Annual Report (2001)  
 Note: Including Farmland Industries and Hormel foods creates a CR6=75%. (NYTimes, 1/7/99)

**PORK PRODUCTION CR4 = 46%\***

	Number of Sows In 2001**
1. Smithfield Foods	710,000
2. Premium Standard Farms (ContiGroup)	211,100
3. Seaboard Corporation	185,000
4. Triumph Pork Group***	140,000

Source: \*USDA Hog and Pig Report (October, 2001) \*\*Successful Farming (October 2001)  
 \*\*\* Farmland provides management and genetics.

**BROILERS CR4 = 50%\***

	Historical CR4
	1986    1990    1994    1998
1. Tyson Foods	35%
2. Gold Kist	44%
3. Pilgrim's Pride	46%
4. ConAgra	49%

Sources: \*Feedstuffs Reference Issue (2001) and Omaha World-Herald 9/3/00

**TURKEYS****CR4 = 45%\***

1. Hormel (Jennie-O Turkeys)
2. Butterball (ConAgra)
3. Cargill Turkeys
4. Pilgrim's Pride

Historical CR4				
1988	1990	1992	1994	1996
31%	33%	35%	38%	40%

Source: \*National Turkey Federation (2000)**ANIMAL FEED PLANTS****CR4 = 25%****ANNUAL CAPACITY**

1. Land O'Lakes Farmland Feed LLC/Purina Mills
2. Cargill Animal Nutrition (Nutrena)
3. ADM (Moorman's)
4. J.D. Heiskell & Co.

15.7 million tons  
8.0 million tons  
3.2 million tons  
2.8 million tons

Source: Feedstuffs Reference Issue (2001)**TERMINAL GRAIN HANDLING FACILITIES****CR4= 60%**

1. Cargill
2. Cenex Harvest States
3. ADM
4. General Mills

<u>Facility Capacity in bushels</u>	
Cargill	40,054,000
Cenex Harvest States	31,359,000
ADM	30,000,000
General Mills	17,369,000

Source: 2002 Grain and Milling Annual and [www.admworld.com](http://www.admworld.com)

Note: When #5 (Louis Dreyfus) and #6 (ConAgra: Peavey) are included, CR6 = 74%

**CORN EXPORTS****CR3 = 81%**

1. Cargill-Continental Grain
2. ADM
3. Zen Noh

Source: [farmindustrynews.com](http://farmindustrynews.com), March 2001**SOYBEAN EXPORTS****CR3 = 65%**

1. Cargill-Continental Grain
2. ADM
3. Zen Noh

Source: [farmindustrynews.com](http://farmindustrynews.com), March 2001

**FLOUR MILLING**

CR4 = 61%

1. ADM Milling
2. ConAgra
3. Cargill
4. General Mills

**Daily Milling Capacity in bushels**

ADM Milling	298,800
ConAgra	250,500
Cargill	222,000
General Mills	93,700

Historical CR4		
1982	1987	1990
40%	44%	61%

Source: 2002 Grain and Milling Annual

**SOYBEAN CRUSHING**

CR4 = 80%\*

1. ADM
2. Cargill
3. Bunge
4. AGP

Historical CR4		
1977	1982	1987
54%	61%	71%

Census of Manufacturing

Source: \*Feedstuffs (9/22/97)**ETHANOL PRODUCTION** CR4 = 49%\*

1. ADM
2. Minnesota Corn Processors\*\*
3. Williams Energy Services
4. Cargill

<u>mil.gal/year</u>	
ADM	950
MCP**	140
Williams	135
Cargill	110

Historical CR4		
1987	1995	1999
73%	73%	67%

Source: \*[www.ethanolrfa.org/prodcap.html](http://www.ethanolrfa.org/prodcap.html)[www.ethanolrfa.org/prodcap.html](http://www.ethanolrfa.org/prodcap.html)

Note: \*\*ADM has 50% equity stake.

**DAIRY PROCESSORS**

1. Dean Foods (Suiza Foods Corp).
2. Kraft Foods (Philip Morris)
3. Dairy Farmers of America
4. Land O'Lakes

<u>Annual Sales</u>	*
\$9,260 Million	
\$4,000 Million	
\$2,858 Million	
\$2,684 Million	

Source: \*Dairy Foods: Dairy Top 100 (2001)

Note: The Suiza-Dean Foods merger was approved in December, 2001, but with this approval, it appears more distance has been put between Dean Foods and the alliances that Suiza and Dean had with the farmer cooperatives (DFA and Land O'Lakes) than was apparent a year ago.

**FOOD RETAILING**

CR5 = 38%\*

1. Kroger Co.\*\*
2. Albertson's
3. Safeway
4. Wal-Mart\*\*
5. Ahold

**TOP 4 FOOD DISTRIBUTORS**

Supervalu  
Fleming  
C&S  
McLane

Directory of Wholesale Grocers (2001)

Source: \**Progressive Grocer Annual Report of the Gro*

\*\* Supercenter statistics reduced to include only traditional supermarket items.

Note: *Progressive Grocer* provides somewhat more conservative estimates than other sources. Other sources indicate CR5 as high as 50%.**WORLD'S TOP FOOD AND BEVERAGE COMPANIES 1999**

1. Nestle SA	\$41,422 million annual sales
2. Philip Morris Companies, Inc.	\$31,139 million
3. ConAgra Inc.	\$24,594 million
4. PepsiCo, Inc.	\$20,367 million
5. Unilever	\$20,310 million
6. The Coca-Cola Co.	\$19,805 million
7. Cargill, Inc.	\$17,143 million
8. Diageo PLC	\$16,419 million
9. Mars, Inc.	\$14,500 million
10. ADM	\$14,283 million

Source: Food Engineering (October 2000)**TOP 10 GLOBAL GROCERY RETAILERS:**

	<b><u>1999 Sales</u></b>	<b><u>Number of Countries</u></b>
1. Wal-Mart – USA	\$193,295,000,000	10
2. Carrefour – France	\$59,888,000,000	22
3. Ahold – Netherlands	\$49,000,000,000	24
4. Kroger – USA	\$49,000,000,000	1
5. Metro – Germany	\$43,371,000,000	21
6. Target – USA	\$36,903,000,000	1
7. Albertson's – USA	\$36,762,000,000	1
8. Rewe – Germany	\$34,854,000,000	6
9. Edeka – Germany	\$28,894,000,000	6
10. ITM – France	\$24,894,000,000	9

Source: Institute for Grocery Distribution (UK), [www.igd.com](http://www.igd.com).

Note: Sales figures reflect all sales of the company, not just food products. Thus, the rankings are somewhat skewed (e.g. Target which has relatively small food sales). However, large retailers are very involved in the grocery business as indicated above with Wal-Mart and Carrefour both leading in grocery sales as well as general retail sales.