

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%*

<ol style="list-style-type: none"> 1. Tyson (IBP Inc.) 2. ConAgra Beef Companies 3. Cargill (Excel Corporation) 4. Farmland National Beef Pkg. Co. 	<table style="margin-left: auto; margin-right: auto; border-collapse: collapse;"> <tr> <th colspan="3" style="text-align: center;">Historical CR4</th> </tr> <tr> <th style="text-align: center;">1990</th> <th style="text-align: center;">1995</th> <th style="text-align: center;">1998</th> </tr> <tr> <td style="text-align: center; border-top: 1px solid black;">72%</td> <td style="text-align: center; border-top: 1px solid black;">76%</td> <td style="text-align: center; border-top: 1px solid black;">79%</td> </tr> </table>	Historical CR4			1990	1995	1998	72%	76%	79%
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Source: *USDA "Assessment of the Cattle and Hog Industries, 2000."
 Note: Smithfield Foods is the 5th largest beef packer after a series of recent acquisitions.

PORK PACKERS CR4 = 59%*

<ol style="list-style-type: none"> 1. Smithfield 2. Tyson (IBP Inc.) 3. ConAgra (Swift) 4. Cargill (Excel) 	<table style="margin-left: auto; margin-right: auto; border-collapse: collapse;"> <tr> <th colspan="4" style="text-align: center;">Historical CR4</th> </tr> <tr> <th style="text-align: center;">1987</th> <th style="text-align: center;">1989</th> <th style="text-align: center;">1990</th> <th style="text-align: center;">1992**</th> </tr> <tr> <td style="text-align: center; border-top: 1px solid black;">37%</td> <td style="text-align: center; border-top: 1px solid black;">34%</td> <td style="text-align: center; border-top: 1px solid black;">40%</td> <td style="text-align: center; border-top: 1px solid black;">44%</td> </tr> </table> <p style="font-size: small; margin-top: 10px;">**Packers & Stockyards Programs, GIPSA, USDA; February, 1996</p>	Historical CR4				1987	1989	1990	1992**	37%	34%	40%	44%
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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%*

<ol style="list-style-type: none"> 1. Smithfield Foods 2. Premium Standard Farms (ContiGroup) 3. Seaboard Corporation 4. Triumph Pork Group*** 	<table style="margin-left: auto; margin-right: auto; border-collapse: collapse;"> <tr> <th colspan="2" style="text-align: center;">Number of Sows In 2001**</th> </tr> <tr> <td style="text-align: left;">Smithfield Foods</td> <td style="text-align: right;">710,000</td> </tr> <tr> <td style="text-align: left;">PSF</td> <td style="text-align: right;">211,100</td> </tr> <tr> <td style="text-align: left;">Seaboard</td> <td style="text-align: right;">185,000</td> </tr> <tr> <td style="text-align: left;">Triumph</td> <td style="text-align: right;">140,000</td> </tr> </table>	Number of Sows In 2001**		Smithfield Foods	710,000	PSF	211,100	Seaboard	185,000	Triumph	140,000
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Source: *USDA Hog and Pig Report (October, 2001) **Successful Farming (October 2001)
 *** Farmland provides management and genetics.

BROILERS CR4 = 50%*

<ol style="list-style-type: none"> 1. Tyson Foods 2. Gold Kist 3. Pilgrim's Pride 4. ConAgra 	<table style="margin-left: auto; margin-right: auto; border-collapse: collapse;"> <tr> <th colspan="4" style="text-align: center;">Historical CR4</th> </tr> <tr> <th style="text-align: center;">1986</th> <th style="text-align: center;">1990</th> <th style="text-align: center;">1994</th> <th style="text-align: center;">1998</th> </tr> <tr> <td style="text-align: center; border-top: 1px solid black;">35%</td> <td style="text-align: center; border-top: 1px solid black;">44%</td> <td style="text-align: center; border-top: 1px solid black;">46%</td> <td style="text-align: center; border-top: 1px solid black;">49%</td> </tr> </table>	Historical CR4				1986	1990	1994	1998	35%	44%	46%	49%
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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 | 15.7 million tons |
| 2. Cargill Animal Nutrition (Nutrena) | 8.0 million tons |
| 3. ADM (Moorman's) | 3.2 million tons |
| 4. J.D. Heiskell & Co. | 2.8 million tons |

Source: Feedstuffs Reference Issue (2001)

TERMINAL GRAIN HANDLING FACILITIES CR4= 60%

	Facility Capacity in bushels	
1. Cargill	Cargill	40,054,000
2. Cenex Harvest States	Cenex Harvest States	31,359,000
3. ADM	ADM	30,000,000
4. General Mills	General Mills	17,369,000

Source: 2002 Grain and Milling Annual and 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, March 2001

SOYBEAN EXPORTS CR3 = 65%

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

Source: farmindustrynews.com, March 2001

FLOUR MILLING**CR4 = 61%****Daily Milling Capacity in bushels**

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

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

	mil.gal/year	Historical CR4		
ADM	950	1987	1995	1999
MCP**	140	73%	73%	67%
Williams	135			
Cargill	110			

Source: *www.ethanolrfa.org/prodcap.htmlwww.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

Annual Sales *
\$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 Grocery Industry* (April 2001)

** 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:

	<u>1999 Sales</u>	<u>Number of Countries</u>
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.

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.