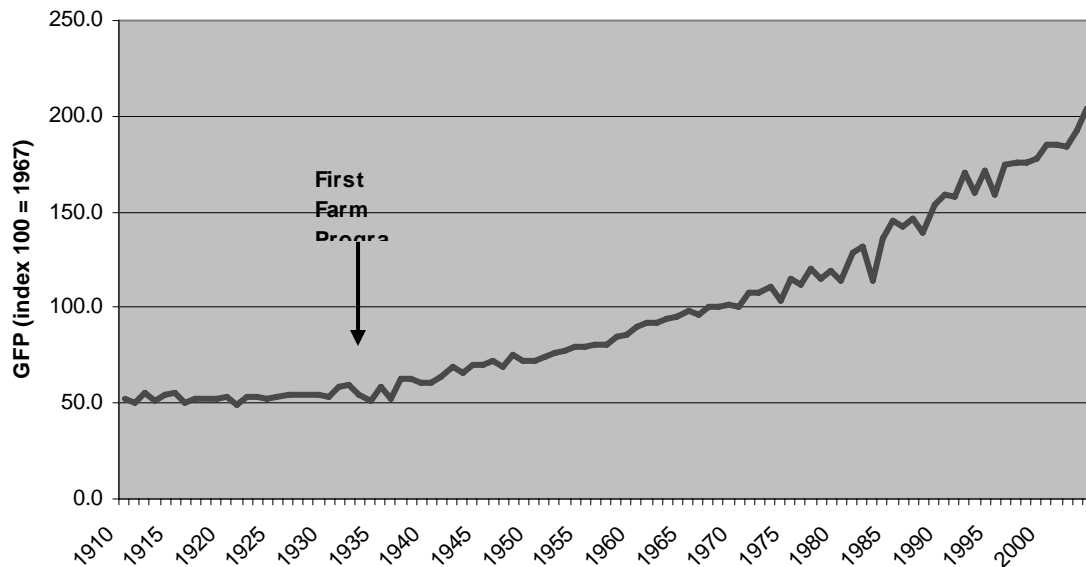


NAE Chapter 2B Figures, Tables and Boxes

Figure 2B.1: Evolution of global factor productivity in US agriculture 1910-2004

Figure 1: Evolution of global factor productivity in US agriculture 1910-2004



Source: Calculated from Debailleul (1989) and USDA

Figure 2B.2: Evolution of main commodities yields 1900-1999

Source: Debailleul (1989) and USDA

Figure 2: Evolution of main commodities yields 1900-1999 (index 100= 1933)

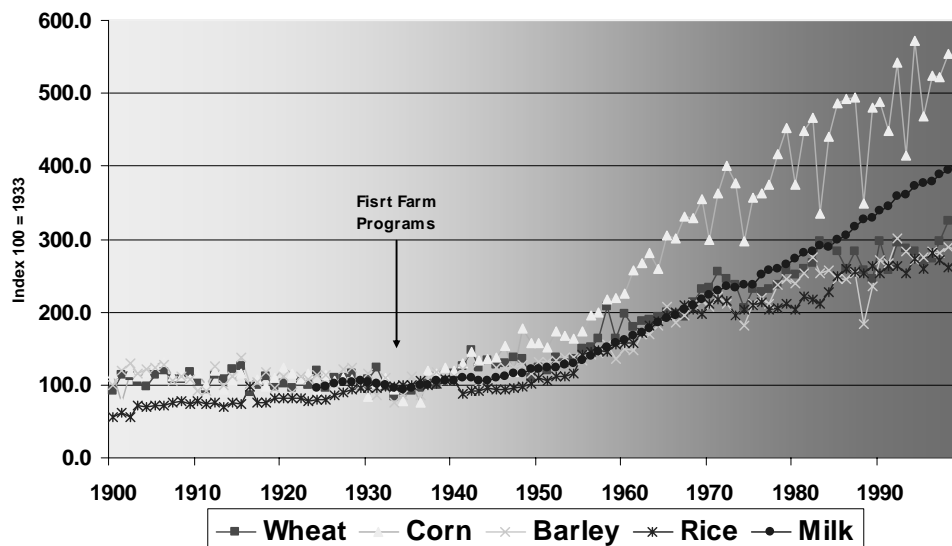


Figure 2B.3: The evolution of CAP expenditures

Figure 3: The evolution of CAP expenditures

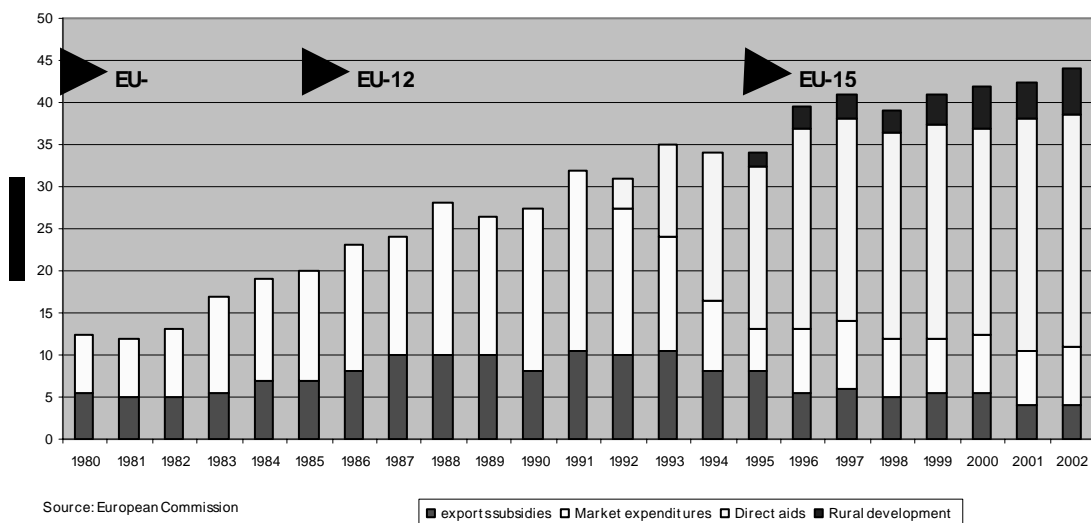


Table 2B.1: 100 years of structural change in U.S. agriculture

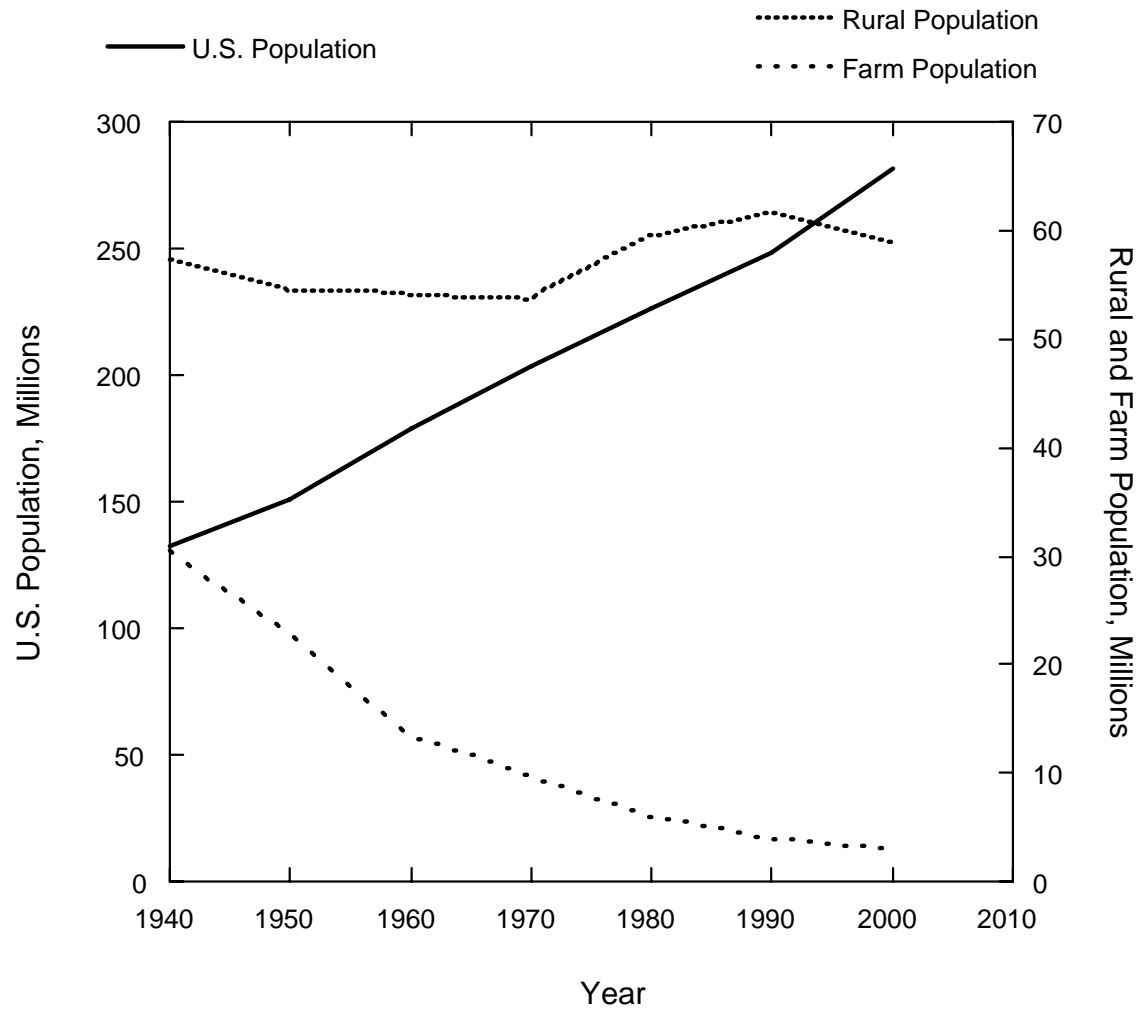
	1900	1930	1945	1970	2000/02
Number of farms (millions)	5.7	6.3	5.9	2.9	2.1
Average farm size (acres)	146	151	195	376	441
Average number of commodities produced per farm	5.1	4.5	4.6	2.7	1.3
Farm share of population (percent)	39	25	17	5	1
Rural share of population (percent)	60	44	36 (1950)	26	21
				percent	
Off-farm labor*	na	100 days	27	54	93

na=not available.

*1930, average number of days worked off-farm; 1945, percent of farmers working off-farm; 1970 and 2000/02, percent of households with off-farm income.

Sources: Dimitri and Effland, 2005.

Figure 2B.4: U.S. Population, total and rural



Insert Figure 2B.5, U.S. Total Farm Area, total cropland and total irrigated lands over time

Source: Census of Agriculture 2002 (and earlier years.)

National Agricultural Statistics Service, U.S. Department of Agriculture

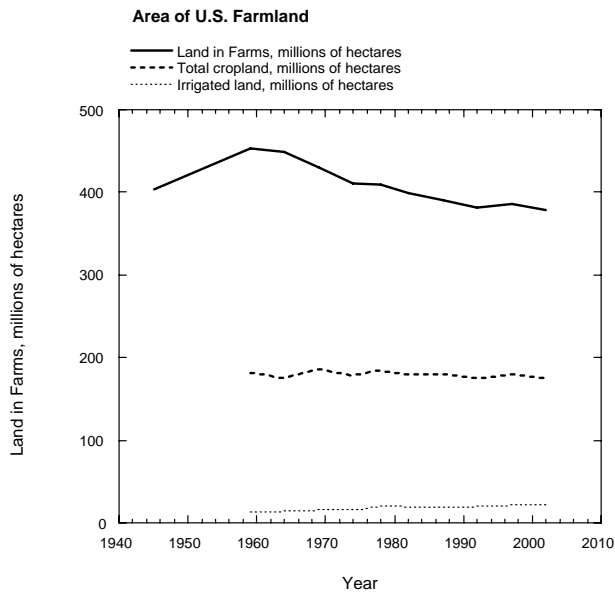


Figure 2B.6, Number of farms in the U.S

Source: Census of Agriculture 2002 (and earlier years.) National Agricultural Statistics Service, U.S. Department of Agriculture

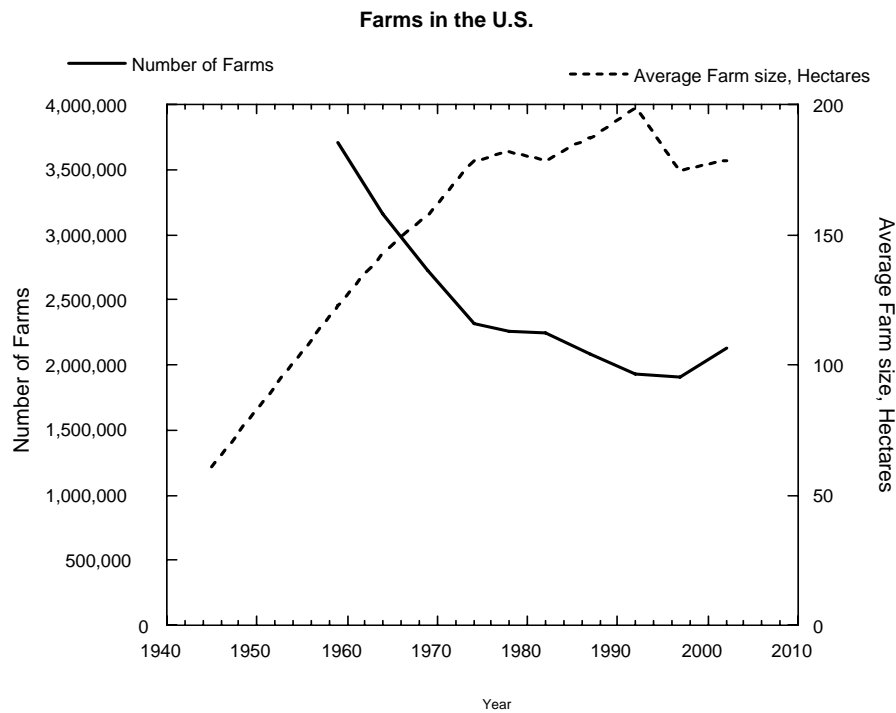
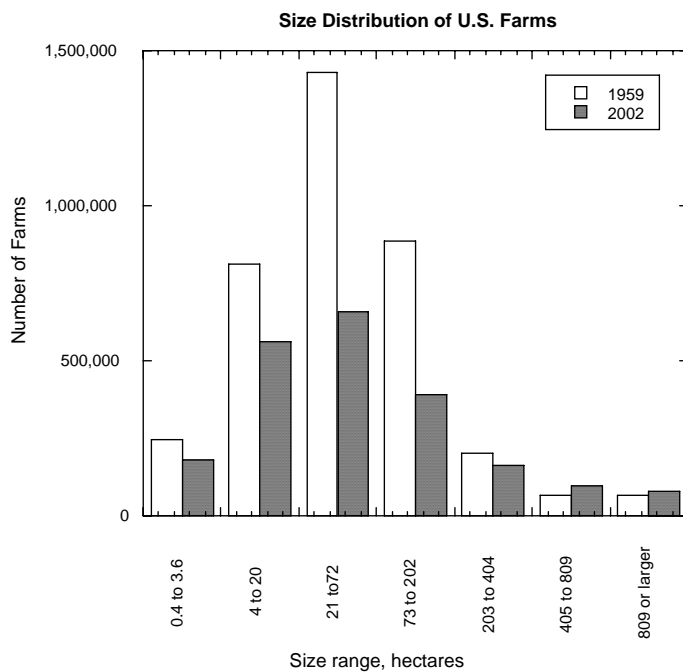


Figure 2B.7: Size Distribution of Us farms

Source: Census of Agriculture 2002 (and earlier years.) National Agricultural Statistics Service, U.S. Department of Agriculture



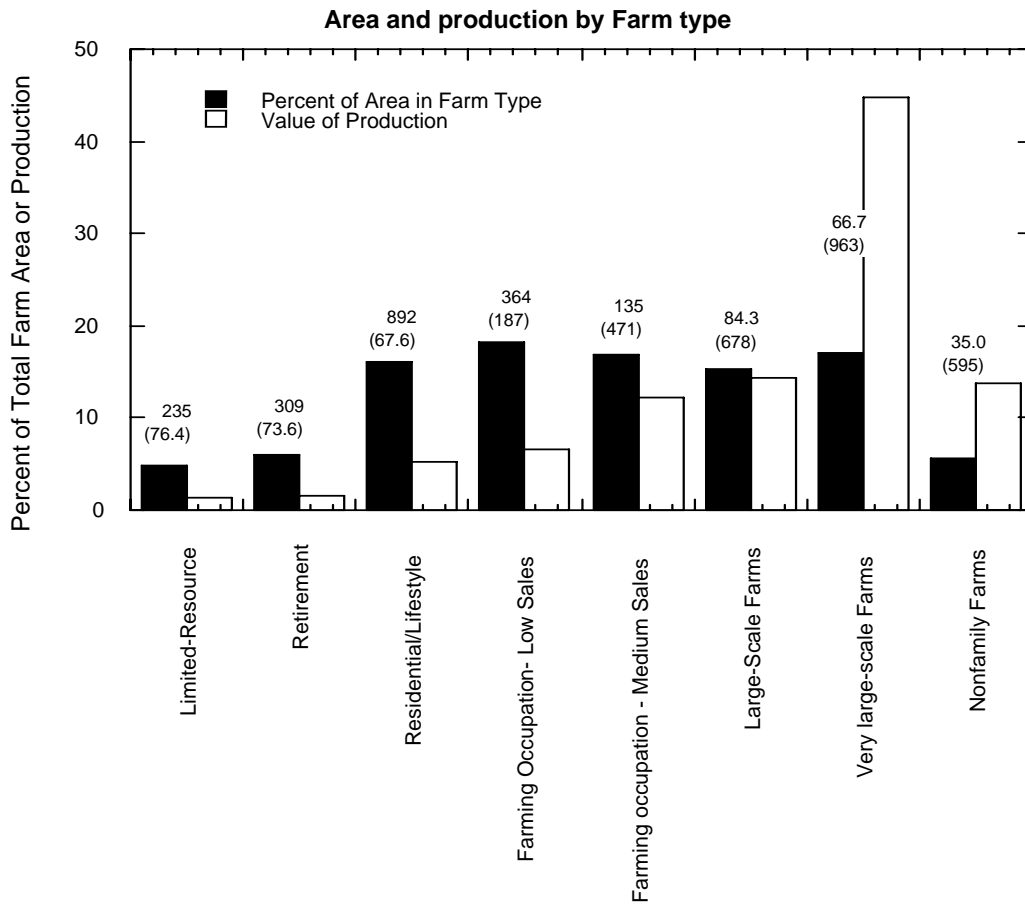


Figure 2B.8 Percent of US farmland area and percent of total U.S. farm production by type of farm in 2005

The numbers above each category are the number of farms (thousands) in this category and in brackets is the average size in hectares for the category. The categories are defined as: Limited Resource = small farms with operator household income below poverty level; Retirement = small farms whose operators report they are retired; Residential/Lifestyle = small farms whose operators report a major occupation other than farming; Farming occupation, Low-sales = sales less than \$100,000; Farming occupation, Medium-sales = sales between \$100,000 and \$249,999; Large family farms = Sales between \$250,000 and \$499,999; Very large family farms = sales of \$500,000 or more. Non-family farms = Farms organized as non-family corporations or cooperatives as well as farms operated by hired managers. Source: Hoppe and Banker, 2006.

Figure 2B.8 Agricultural sales categorized by value on farms in USA 2002

Source: Census of Agriculture, 2002. United States Department of Agriculture

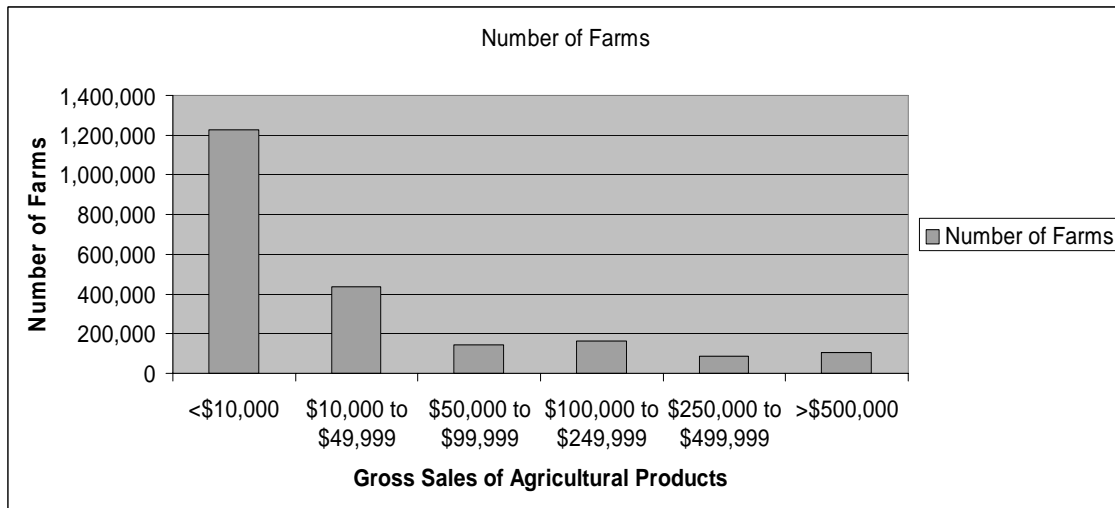


Figure 2B.9: Canadian population over time

Farm population figures include a small number of farmers which are in areas defined as urban. Source: Statistics Canada, Censuses of Agriculture (<http://www12.statcan.ca/english/census01/home/index.cfm>)

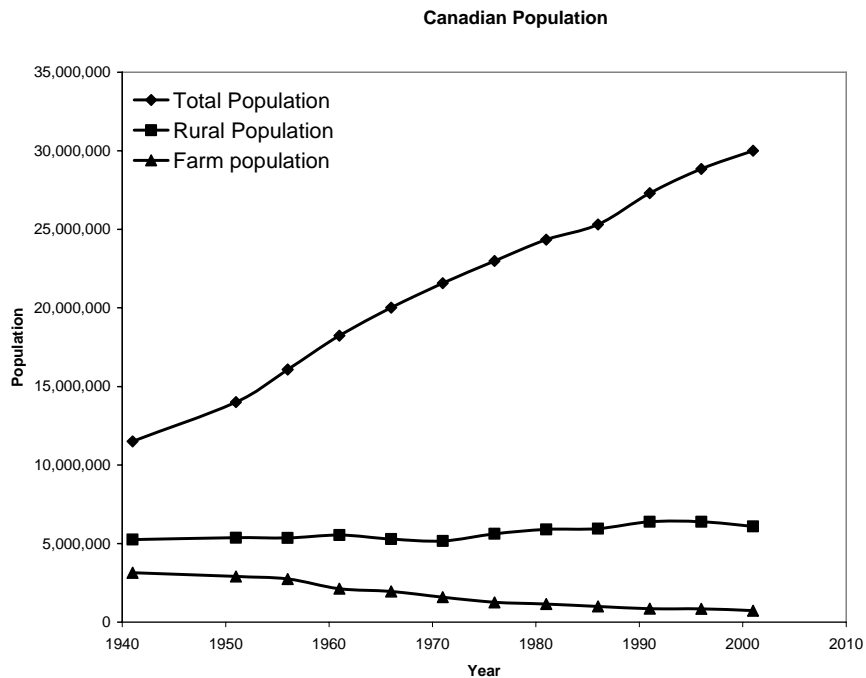


Figure 2B.11: Total amount of Canadian farmland and total croplands

Source: Statistics Canada, Censuses of Agriculture

(<http://www12.statcan.ca/english/census01/home/index.cfm>)

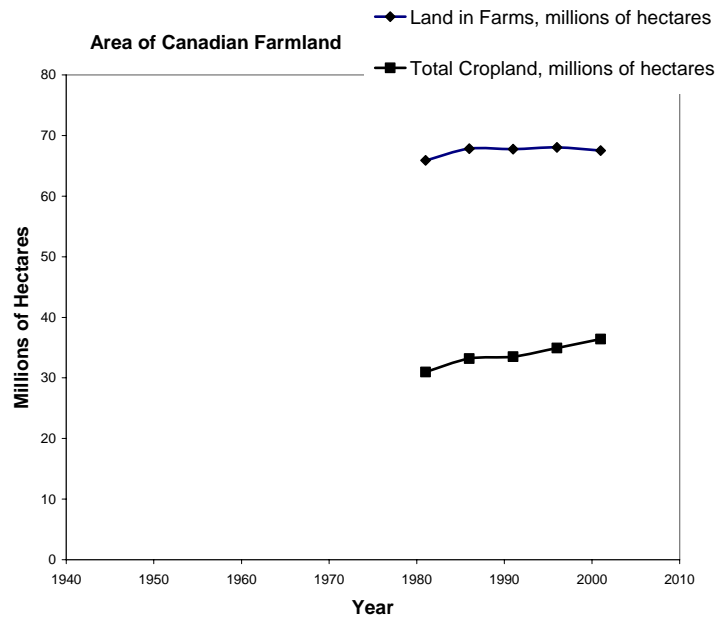


Figure 2B.12 Number of farms and size of farms over time

Source: Statistics Canada, Censuses of Agriculture

(<http://www12.statcan.ca/english/census01/home/index.cfm>)

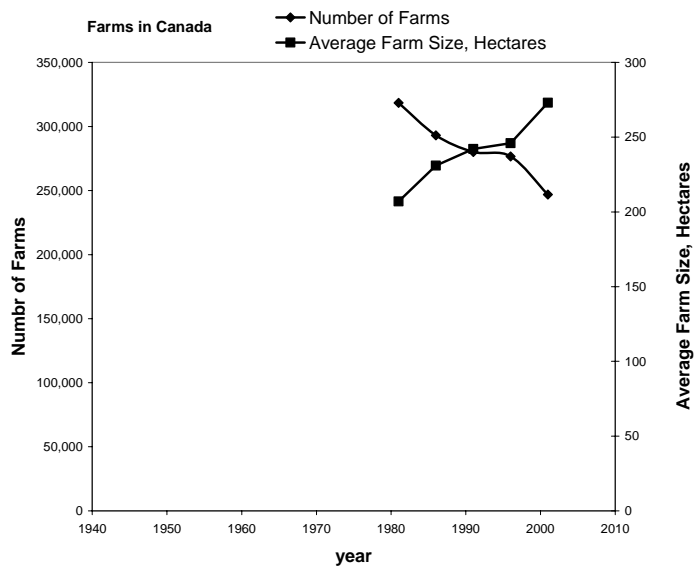


Figure 2B.13: Size distribution of Canadian farms in 2001
Source: Statistics Canada, Censuses of Agriculture
(<http://www12.statcan.ca/english/census01/home/index.cfm>)

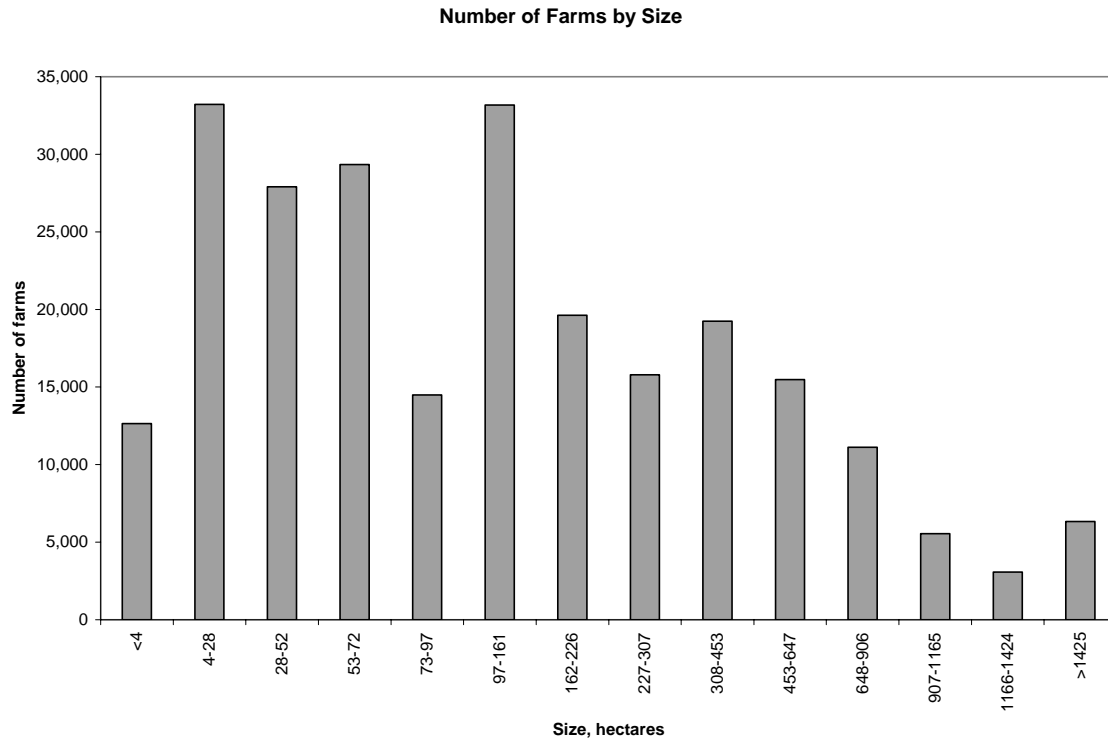


Figure 2B.14: Distribution of farm size by income and percentage of total Canadian gross farm receipts by income category

Calculated from data in: Statistics Canada, Censuses of Agriculture
(<http://www12.statcan.ca/english/census01/home/index.cfm>)

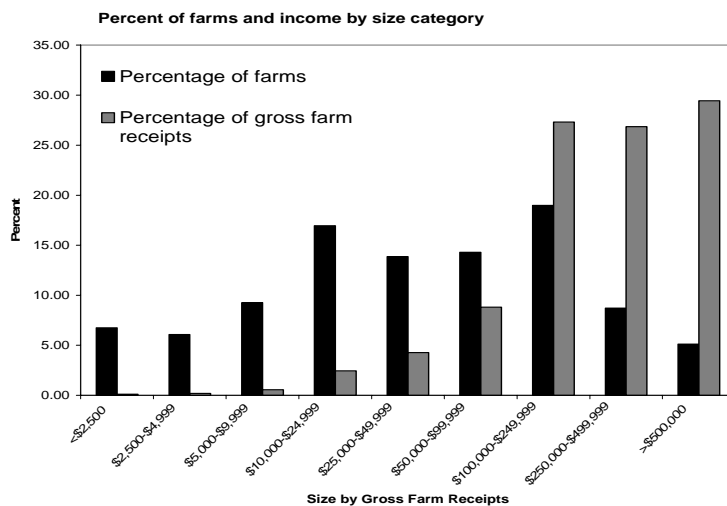


Figure 2B.15: Changes in the number of farms in W Germany 1949-2001
 Data source: www.bmelv-statistik.de (German government web site) 2006

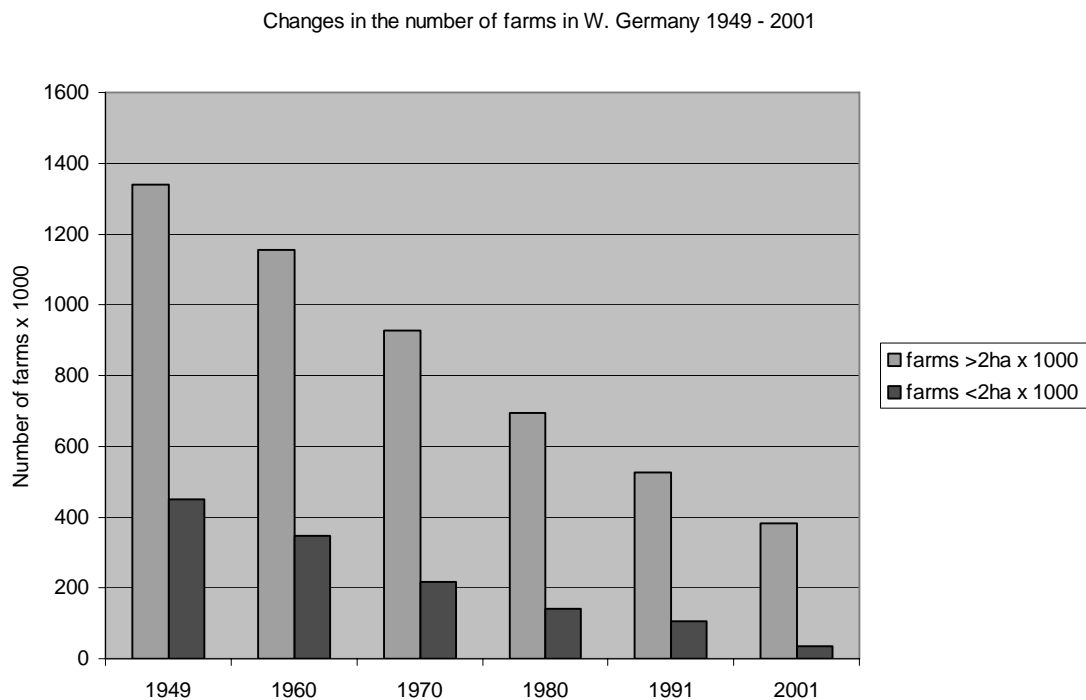


Figure 2B.16 Annual percentage changes in the size of the agricultural labor force in the EU
 – (expressed in AWU) based on Eurostat data

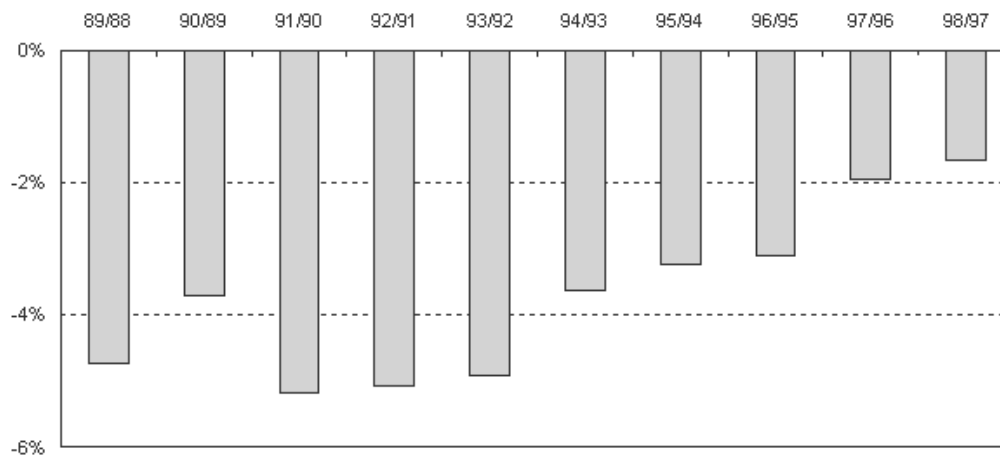


Figure 2B.17 Changes in the number of holdings (x1000) in several EU countries 1990-2003
Eurostat data source

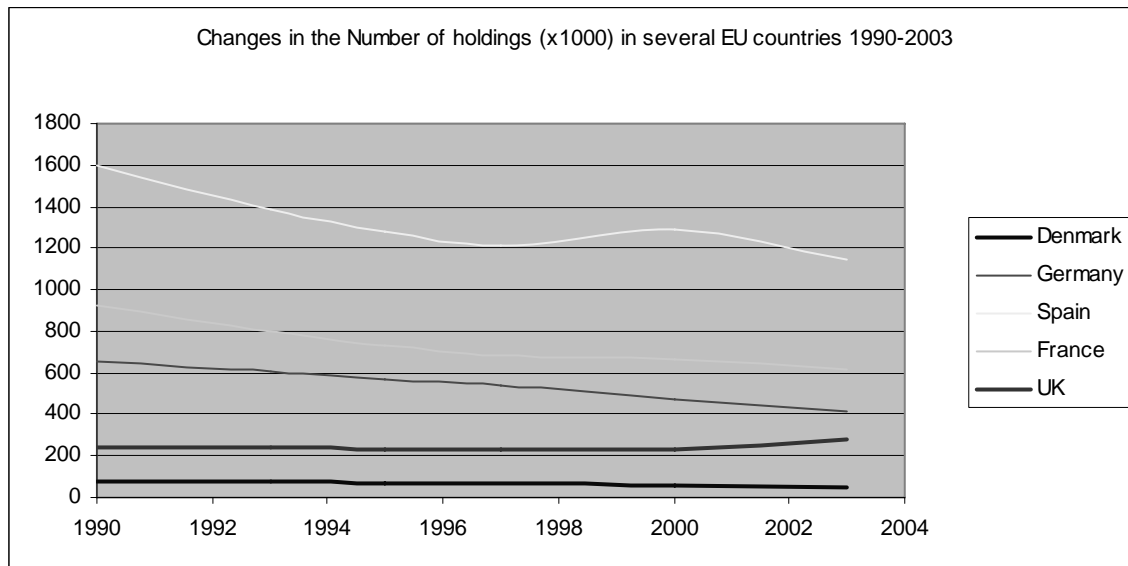


Figure 2B.18 Agriculture employment shares (percent) 1950 to 1990
Taken from Temple 2001 <http://www.efm.bris.ac.uk/www/ecjrw/abstracts/realloc21.pdf> accessed 3 July 2006

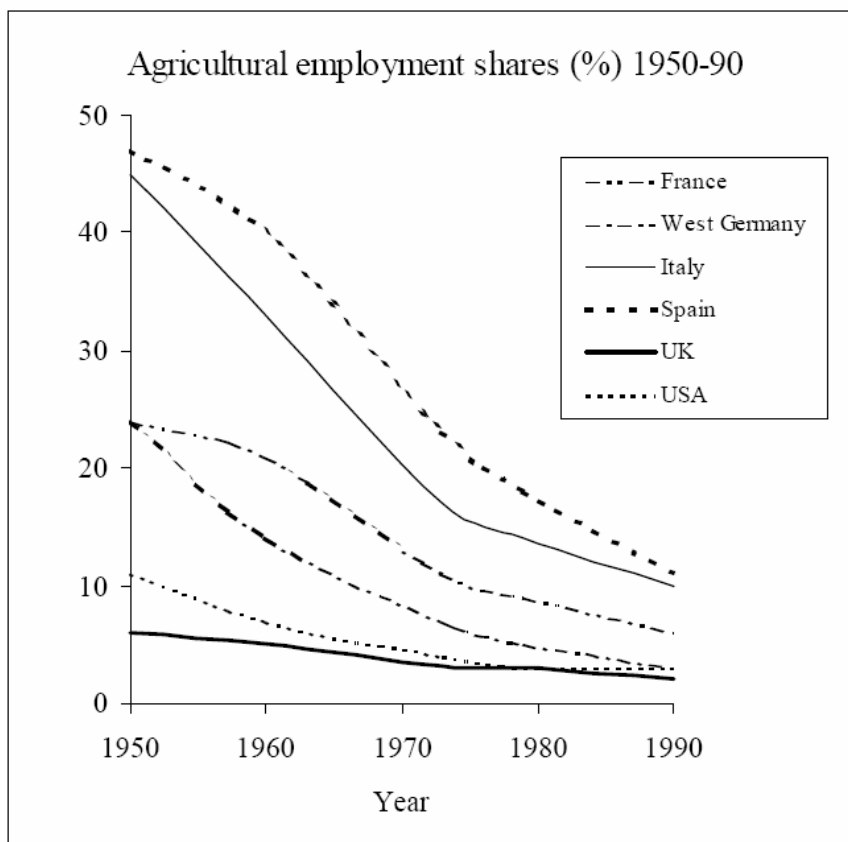


Figure 2B.19 Agricultural employment as a proportion of total employment, 1997 (percent)
based on Eurostat data

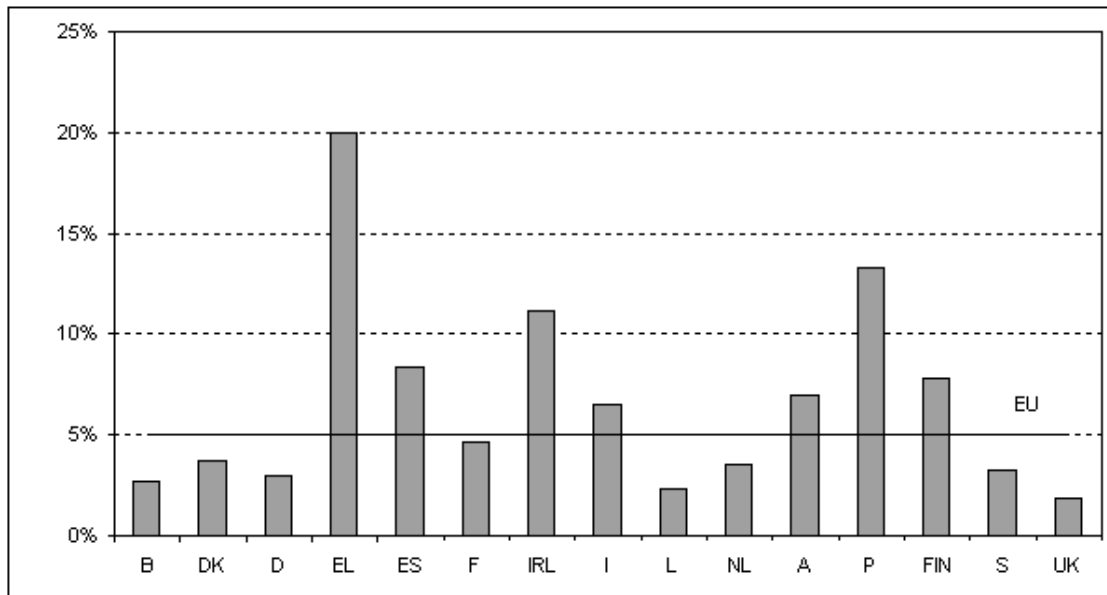
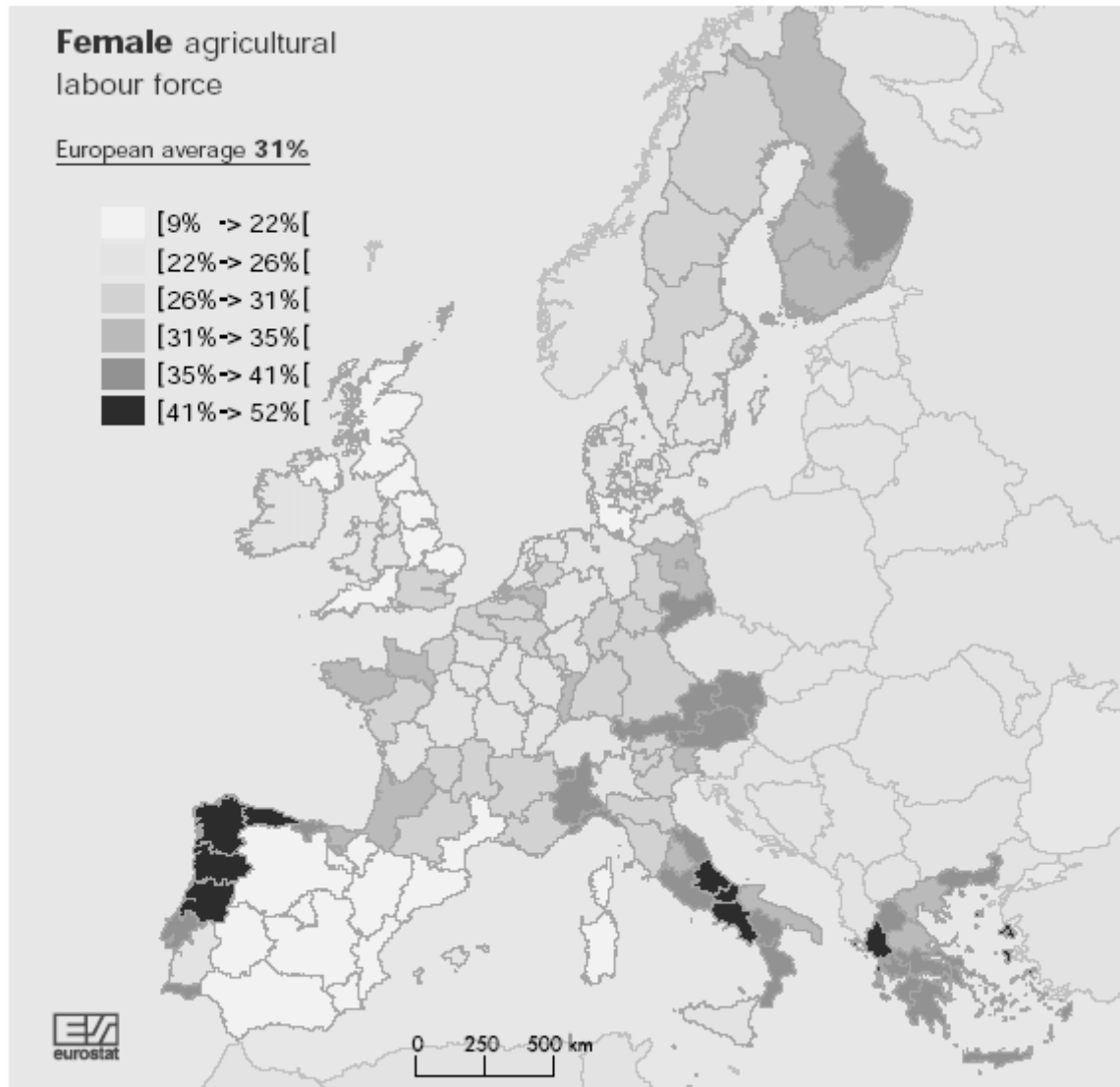


Figure 2B.20: Share of women in permanent agriculture workforce in 1997
 Taken from Agriculture the Spotlight on Women European Commission 2002.
http://ec.europa.eu/comm/agriculture/publi/women/spotlight/text_en.pdf



Maps: Eurostat — Source: Eurostat

Table 2B.2: Rates of participation in the labor force of women 40 to 44 years of age in various countries, 1950-1985 (percentage)

Source: Kornai, 1992, p. 207. Reported in Barr, 1994, table 7-3, p. 126.

Region and country	1950	1960	1970	1980	1985
<i>Central and Eastern Europe</i>					
Bulgaria	78.6	83.4	88.5	92.5	93.3
Czechoslovakia	52.3	67.3	79.9	91.3	92.4
German Democratic Republic	61.9	72.7	79.1	83.6	86.1
Hungary	29.0	51.8	69.4	83.2	84.7
Poland	66.4	69.1	79.5	83.1	85.1
Romania	75.8	76.4	79.5	83.2	84.7
USSR	66.8	77.9	93.2	96.9	96.8
<i>Northern Europe</i>	30.9	39.9	53.8	69.9	71.1
<i>Western Europe</i>	34.5	39.5	46.4	55.1	55.6
<i>Southern Europe</i>	22.4	25.3	29.7	35.7	37.1

Table 2B.3 Estimated seed sales and shares of U.S market for major field crops, 1997

Firm	Total Sales (Million \$)	Total Market Share (Percent)			
		Total	Corn	Soybean	Cotton
Pioneer Hi-Bred	1,178	33.6	42	19	0
Monsanto	541	15.4	14	19	11
Novartis	262	7.5	9	5	0
Delta Land & Pine	79	2.3	0	0	73
Mycogen	136	3.9	4	4	0
Golden Harvest	93	2.6	4	0	0
AgroEvo/Cargill	93	2.6	4	0	0
Others	1,121	32	23	53	16
Total	3,503	100	100	100	100

Source: Fernandez-Cornejo, 2004

Pioneer is now owned by DuPont. Monsanto acquired Delta Land & Pine and Mycogen is owned by Dow. AgroEvo has since evolved into Aventis and then was taken over by Bayer, while Novartis merged with ICI to become Syngenta.

Table 2B.4 Global seed and pesticide sales of major multinational firms 1999

Company	Seeds	Pesticides
	Million \$	
Syngenta (Novartis/AstraZeneca)	1,173	7,030
Aventis (Hoechst & Rhone Poulec)	135	4,582
DuPont (Pioneer)	1,835	2,309
Monsanto	600	3,230
Dow AgroSciences	220	2,132

Aventis was acquired by Bayer

Source: Fernandez-Cornejo, 2004

Table 2B.5 European pig slaughterhouses 2002

Company	EU market share	Head office
Danish Crown	10%	Denmark/NL
Best Meat*	8%	Holland
NFZ*	3%	Germany
Westfleisch	1.7%	Germany
Socopa	1.5%	France
Grampian	1.5%	UK
Cooperl	1.5%	France
Swedish Meats	1.4%	Sweden
Tönnies	1.3%	Germany
Nutreco	1.2%	Holland
CR4	24.2	

* Best Meat and NFZ had just merged. Source: Meat Processing Global, July 2003

Table 2B.6: Concentration in the U.S. Food Industry

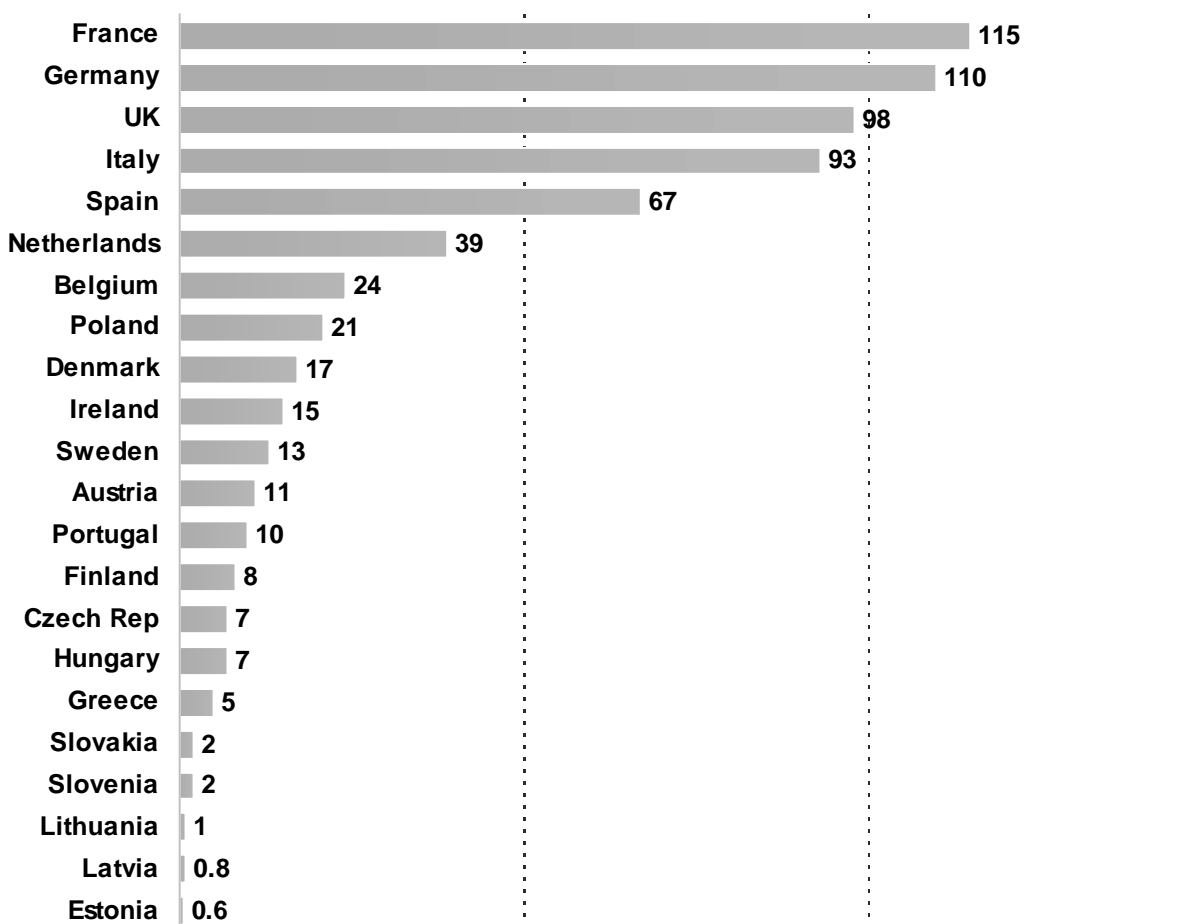
Commodity Market and Top Firms	2005 Concentration Ratio*	Historical CR4
Beef Packing (Tyson, Cargill Excel, Swift & Co, National Beef)	CR4=83.5%	CR4=72% (1990)
Pork Packing (Smithfield, Tyson, Swift & Co, Hormel)	CR4=64%	CR4=37% (1987)
Pork Production (Smithfield, Premium Standard Farms, Seaboard, Prestage Farms)	CR4=49%	n/a
Broilers (Tyson, Pilgrims' Pride, Gold Kist, Perdue)	CR4=56%	CR4=35% (1986)
Turkeys (Cargill, Hormel, ConAgra, Carolina Turkeys)	CR4=51%	CR4=31% (1988)
Animal Feed Plants (Land O'Lakes, Cargill, AMD, JD Heiskell & Co.)	CR4=34%	n/a
Flour Milling (Cargill/CHS, ADM, ConAgra, Cereal Food Processors)	CR4=63%	CR4=40% (1982)
Soybean Crushing (ADM, Bunge, Cargill)	CR3=71%	CR4=54% (1977)
Food Retailing (Wal-Mart, Kroger, Albertson's, Safeway, Ahold USA)	CR5=46%	CR5=24% (1997)

* Concentration Ratio refers to the market share that the top four firms (or three as in the case of soybean crushing, and five in the case of food retailing) control. Concentration Ratios are calculated using statistics reported in trade journals.
Source: *Hendrickson and Heffernan 2005*.

Table 2B.7: Selected Information about Concentration in the Canadian Agriculture and Food Industry

Commodity Market and Top Firms	Concentration Ratio*
Beef Packing (Cargill, Lakeside Packers [owned by Tyson], XL Foods)	CR3=75%
Durum Milling (ADM, Robin Hood Foods [owned by J.M. Smucker Co])	CR2=57%
Flour Milling (ADM, Robin Hood Foods [owned by J.M. Smucker Co])	CR2=66%

Figure 2B.21: EU-25 Food and drink sector 2001, value of production (EUR bn,)



Source: USDA-FAS

Table 2B.8: Top European food manufacturers, ranked by turnover in 2002

Manufacturer	Country	Sales (EUR bn)	
Nestlé	Switz	52.6	Cereal, Dairy, Beverages, Confectionery
Unilever	NL/UK	32.1	Dairy, beverages, dressings, frozen foods, cooking products
Diageo	UK	19.0	Alcoholic beverages, dough products
Danone	France	14.5	Dairy, beverages, biscuits and cereals
Cadbury Schweppes	UK	8.9	Beverages, confectionary
Heineken	NL	8.1	Alcoholic beverages
Parmalat	Italy	7.8	Dairy, gourmet, biscuits, beverages
Interbrew	Belgium	7.3	Alcoholic beverages
ABF	UK	7.1	Sugar, starches, baking products, meat, dairy
Tate & Lyle	UK	6.4	Sweeteners, starches
Lactalis	France	5.5	Dairy
Arla Foods	Denmark	5.0	Dairy
Sudzucker	Germany	4.8	Sugar

Source: CIAA

Table 2B.9 Distribution of the contract share of U.S. agricultural production by commodity and year, 1991-2003

Item	1991-93	2003
All commodities	28.9	39.1
Crops	24.7	30.8
Corn	11.4	14.3
Soybeans	10.1	14.0
Wheat	5.9	7.6
Sugar beets	91.1	95.5
Rice	19.7	51.8
Peanuts	47.5	53.3
Tobacco	0.3	54.8
Cotton	30.4	51.4
Fruit	na	68.1
Vegetables	na	42.7
Other crops	7.8	45.9
Livestock	32.8	47.4
Cattle	na	28.9
Hogs	na	57.3
Poultry and eggs	88.7	88.2
Dairy	36.8	50.6
Other livestock	0.2	7.6

Source: MacDonald and Korb 2006.

Table 2B.10 Cooperatives' shares of U.S. farm marketing, by selected commodity group, 1997-95]

Table 1— Cooperatives' shares of U.S. farm marketings, by selected commodity group, 1997-95

Commodity group	1997	1996	1995
	<i>Percent of U.S. cash receipts ¹</i>		
Milk and products ²	87	86	88
Grains and oilseeds	42	50	39
Cotton and cottonseed	38	33	37
Fruits and vegetables	19	19	21
Livestock and wool ³	12	13	12
All other ⁴	12	13	13
Total ⁵	31	34	32

¹ Estimates are rounded to the nearest whole percent. Selected data items were revised for 1996 and 1995.

² Co-ops' share of milk marketed was estimated to be 83 percent based on pounds of milk marketed by dairy cooperatives in a special study. The 87 percent, based on cash receipts, was reported in order to be consistent with estimates reported in previous years.

³ Includes mohair.

⁴ Includes poultry and eggs, dry edible beans and peas, nuts, rice, tobacco, sugarcane, sugar beets, honey and other miscellaneous marketings.

⁵ All farm commodities weighted by value.

Source: (Kraenzle 1998)

Table 2B.11 Market shares of agricultural co-operatives in the EU-15

Market shares (%)	Dairy	Fruit & vegetables	Meat	Farm inputs	Credit	Grain
Belgium	50	70-90	20-30			-
Denmark	93	20-25	66-93	64-59		87
Germany	55-60	60	30	50-60	-	-
Greece	20	12-51	5-30			49
Spain	35	15-40	20	-	-	20
France	49	35-50	27-88	50-60	-	75
Ireland	100	-	30-70	70		69
Italy	38	41	10-15	15	-	15
Luxembourg	80	-	25-30	75-95	-	70
Netherlands	82	70-96	35	40-50	84	
Austria	90	-	50	-	-	60
Portugal	83-90	35	-	-	-	-
Finland	94	-	68	40-60	34	-
Sweden	99	60	79-81	75	-	75
U.K.	98	35-45	20	20-25	-	20

Figure 2B.22 Turnover of farmer-controlled businesses as percentage of agricultural output

Source: EFPF

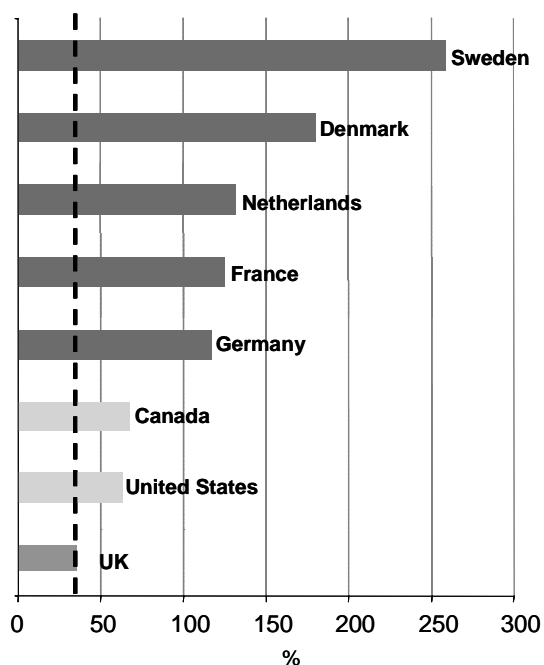


Figure 2B.23 The European Retail Market: Modern Grocery Distribution, 2003 (EUR billion)

Source: M+M PlanetRetail

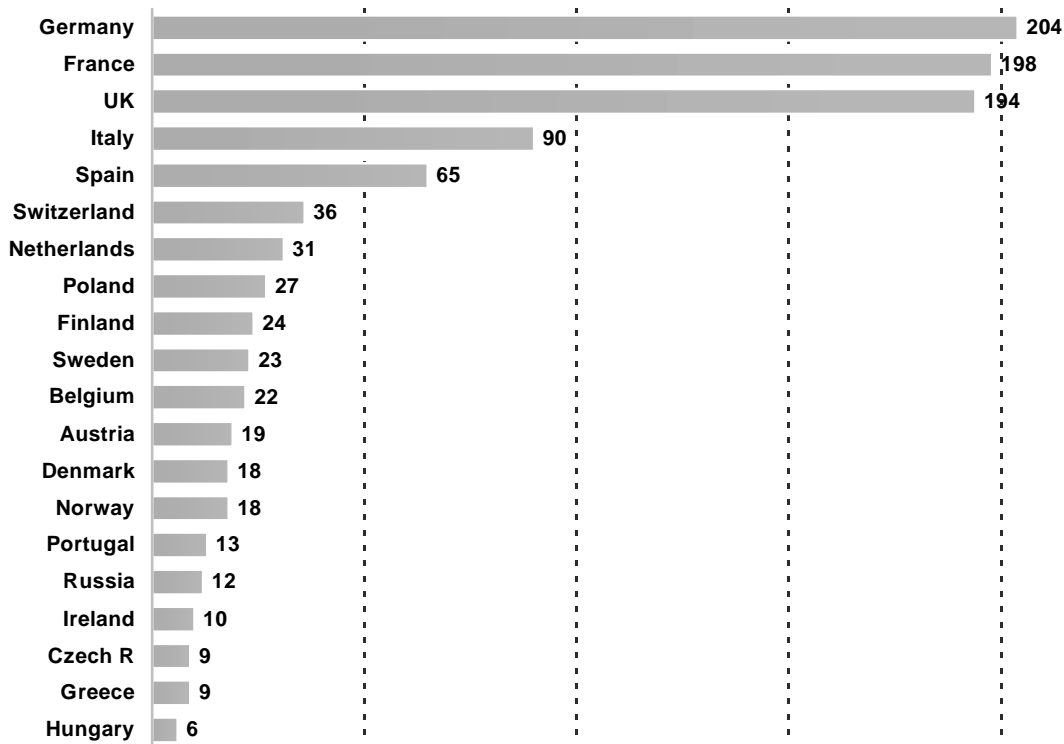


Table 2B.12. Sales and market shares of top retailers—Western Europe

	Origin	Market share 2003 (%)	Sales 2003 EUR bn	Sales 2008 EUR bn (est)
Carrefour	France	8.0	61.2	92.5
Metro	Germany	5.4	51.7	61.1
Tesco	UK	4.1	40.7	
Rewe	Germany	4.4	39.2	44.7
ITM Intermerché	France	4.1	33.1	38.6
Aldi	Germany	3.6	30.9	44.9
Others		70.7	619.5	814.7
Total Europe			876.3	
CR4		21.9		

Sources: M+M PlanetRetail, Lebensmittel Zeitung, EMD

Figure 2B.13 Penetration of large supermarkets around the world

Figure 2. Large Supermarket penetration vs. GDP per Capita

Source: Booz-Allen Hamilton, 2003

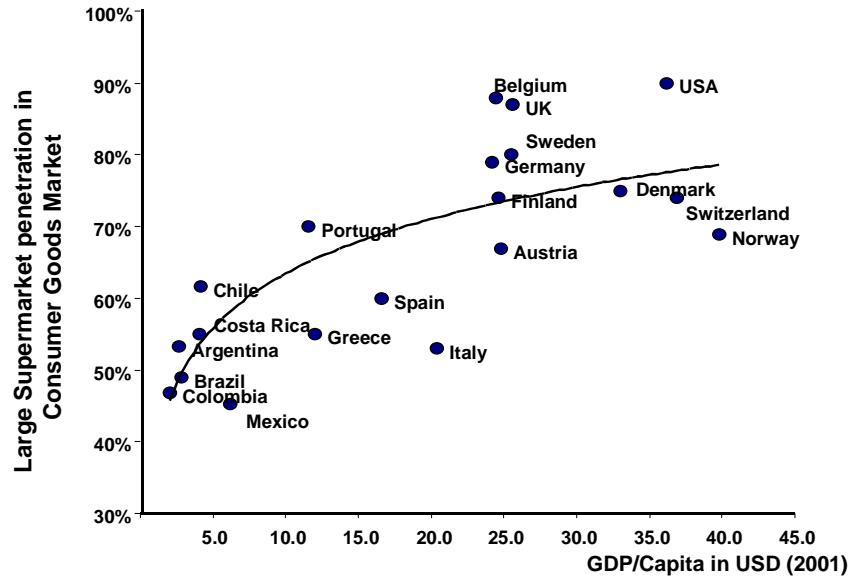


Table 2B.14: Market structure of retail in Western Europe, based on market shares of top 5 retailers, based on 1999 data (Dobson et al., 2001)

Country	Market structure
Austria	Asymmetric oligopoly
Belgium/Lux	Asymmetric oligopoly
Denmark	Duopoly
Finland	Duopoly
France	Asymmetric oligopoly
Germany	Symmetric oligopoly
Ireland	Asymmetric oligopoly
Italy	Unconcentrated
The Netherlands	Dominant firm
Portugal	Duopoly
Spain	Asymmetric oligopoly
Sweden	Dominant firm
UK	Asymmetric oligopoly

Table 2B.15: Top retailers across Europe--summary

Country	CR3	CR4	Top 3-4 firms
Austria			
Belgium/Lux			Carrefour, Delhaize Group, Colruyt, Aldi
Czech rep	30.1		Metro, Ahold, Schwartz
Denmark	78		FDB, Dansk Supermarkt, Supergros
Finland	79		Kesko, S Group
France	50.8	63.2	Carrefour, Intermarché, Leclerc, Casino
Germany	44.3	56.1 - 66.7	Metro, Rewe, Edeka/AVA, Aldi
Hungary	48.2	51	CBA, Tesco, Co-op Hungary, Metro, Reál Hungária
Ireland	54.7		Tesco, Dunnes Stores, Superquinn,
Italy	29.1	36.0	Coop Italia, Auchan, Carrefour, Conad
The Netherlands	62.6	82.6	Ahold, Casino, Sperwer, Makro
Norway	83		Norgesgruppen, Coop, Hakon
Poland	17.3		Metro, Jerónimo Martins, Tesco, Auchan
Portugal			
Romania		27.0	Metro, Rewe, Carrefour, Delhaize
Slovakia	24.4		Tesco, Metro, Rewe
Spain	53.8	62.5	El Corte Inglés, Carrefour, Marcadona Eroski,
Sweden	95		ICA/Ahold, Coop, Axfood
UK	42.3	49.3 - 76.5	Tesco, Asda-Wal-Mart, Sainsbury's, Morrisons

Compiled from M+M PlanetRetail, AC Nielsen, USDA-FAS

Table 2B.16: Outlook for Private Label in Europe (% sales)

	2000	2005	2010
Western Europe	20	26	30
of which			
Northern	25	29	32
Southern	12	18	25
Nordic	15	20	25
Central & Eastern Europe	1	4	7
World	15	19	23

Source: M+M PlanetRetail--based partly on AC Nielsen

Figure 2B.14: Value share of discounters as % of grocery sales

Source: AC Nielsen, 2004

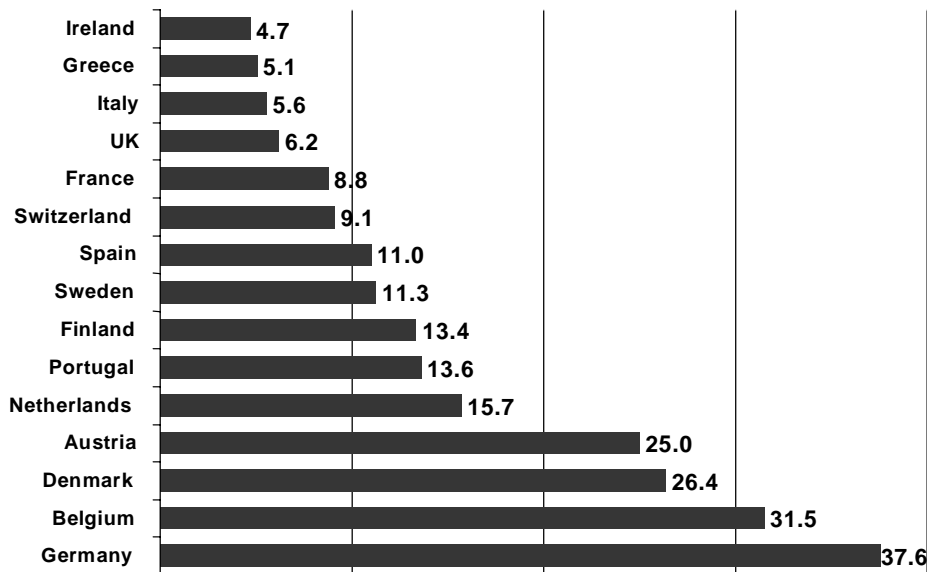


Table 2B.16: Concentration in the German grocery market

Position	Company	Sales in EUR (billion) 2004	Market share (%) 2003	Food share of sales in %
1	Metro Group (Real, Metro C+C, Kaufhof etc.)	32.52	15.8	43.3
2	Rewe Group	30.901	15.1	71.2
3	Edeka/AVA Group,	29.232	13.4	83.9
4	Aldi Group	22.000	11.8	80
5	Schwarz Group, (Lidl, Kaufland)	21.300*	10.6	79.8
6	Karstadt	14.170		5.8
7	Tengelmann Group (Plus, Tengelmann etc)	13.02	6.4	60
8	Spar AG	8.650*		94
9	Lekkerland-Tobaccoland	8.500*		72
10	Schlecker	5.400*		95
CR4			56.1-66.7	

Source: Lebensmittel Zeitung, M+M PlanetRetail

Table 2B.17: Concentration in the French grocery market, 2003

	Turnover (EUR million)	Market share (%)
Carrefour	46,470	23.5
ITM (Intermarché)	27,890	14.1
Leclerc	26,100	13.2
Casino	24,446	12.4
Auchan	20,206	10.2
CR4		63.2

Source: M+M PlanetRetail

Table 2B.18: Concentration in the UK grocery market, March 2005

	Market share Total Spend	Market share Grocery only
Tesco	30.2 %	29.6 %
Asda Wal-Mart	16.6 %	16.1 %
Sainsbury	16.1 %	17.3 %
Safeway + Morrisons	12.9 %	13.5 %
CR4	75.8	76.5

Source: AC Nielsen, 12 w/e 19 March 2005

Table 2B.19: Concentration in the Dutch grocery market, 2003

	Turnover (EUR million)	Market share (%)
Ahold	12,041	38.9
Casino	4,485	14.5
Sperwer	2,208	7.1
Makro/Metro	1,665	5.4
Sligro	1,533	4.9
Aldi	1,480	4.8
CR4		65.9

Source: M+M PlanetRetail

Table 2B.20: Concentration in the Spanish grocery market, 2003

	Turnover (EUR million)	Market share (%)
El Corte Inglés	15,910	24.3
Carrefour	12,130	18.5
Marcadona	7,220	11.0
Eroski	5,727	8.7
Auchan	4,157	6.4
Unide		4.1
CR4		62.5

Source: M+M PlanetRetail

Table 2B.21: Concentration in the Italian grocery market, 2003

	Turnover (EUR million)	Market share (%)
Coop Italia	11,244	12.5
Auchan/Rinascente	7,731	8.6
Carrefour	7,200	8.0
Conad	6,180	6.9
Esselunga	3,581	4.0
Metro	3,502	3.9
CR4		36.0

Table 2B.22: Concentration in the Belgian grocery market, 2003

	Turnover (EUR million)	Market share (%)
Carrefour	6,217	25.6
Delhaize Le Lion		17.2
Colruyt	4,035	13.3
Cora Delhaize		8.3
Aldi	1,610	7.7
Metro	1,649	7.2
CR4		64.4

Table 2B.23: Concentration ratio for the top three grocery retailers in the Irish market

Year	1983	1987	1994	1995	1998	2003
Concentration ratio CR3	44.3	56.1	52.2	52.1	54.3	54.7

Table 2B.24: Change in retail formats in Ireland, 1988-2002

Outlet Type	1988	1993	1998	2002	Change %
Multiples	149	160	157	190	+27.5
Symbol groups	1,134	1,015	1,152	1,300	+14.6
Independents	9,387	8,494	7,872	7,200	-23.3
Garages with shops	673	-	1,429		

Source: Henschion and McNyre (2004)

Table 2B.25: Top 5 grocery retailers in Romania, 2004

Company	No of stores	Sales area (sq. m)	Average sales area (sq. m)	Retail banner sales 2003 (US\$ million)	Market share (%)
Metro	23	100,400	4,365	1,026	16.7
Rewe	21	76,000	3,619	435	7.1
Carrefour	2	18,900	9,450	145	2.4
Delhaize Group	15	11,700	780	59	1.0
Concentration ratio CR4	61	207,000		1665	27.0
Other				4,496	73.0
Total				6,161	100.0

Source: M+M PlanetRetail

Table 2B.26: Top 5 retailers in Hungary, 2003

Company	Origin	No of stores 2003	Retail sales 2004 (EUR million)	Market share 2003 (%)
CBA	Hungary	2866	1,967	18
Tesco	UK	60	1,648	17
Co-op Hungary	Hungary	3575	1,422	8
Metro*	Germany	13	1,162	
Reál Hungária	Hungary	1998	954	8
Provera	Cora France/ Delhaize Belgium		866	
Spar	Austria	153	750	6
Auchan	France	8	722	
Tengelmann	Germany		606	
Rewe	Germany		515	
Other				16
Concentration ratio CR4				51

*Cash & Carry companies like Metro are registered as wholesalers thus are not part of the retail statistics of CSO

Table 2B.27: Top 10 retailers in Poland, 2003

Position	Company	Origin	Number of stores	Turnover 2003 in million EUR
1	Metro	Germany	83	2,629
2	Jerónimo Martins	Portugal	672	964
3	Tesco	UK	69	960
4	Auchan.	France	30	887
5	Ruch SA	Poland	3000	825
6	Carrefour	France	68	819
7	Casino (Géant).	France	150	751
8	Rewe.	Germany	36	572
9	Ahold	Netherlands	191	561
10	Milo S.A.	Germany/Poland	16	496
Concentration ratio CR4				

Source: Lebensmittel Zeitung

Table 2B.28: Food retailing in USA

Food retailing in USA CR5 = 46%*

Supermarket

1. Wal-Mart Stores
2. Kroger Co.
3. Albertsons, Inc.
4. Safeway, Inc.
5. Ahold USA, Inc.

Grocery Sales*

\$66.5 Billion
46.3 Billion
32.0 Billion
30.0 Billion
25.1 Billion

Historical CR5

1997 2001
24% 38%

Source: * *Progressive Grocer's Super 50* (5/1/04) *Progressive Grocer* reports only grocery sales from supermarkets, and does not report general merchandise, drug or convenience sales. In the 4/15/04 issue, it reported that total 2003 supermarket sales were \$432.8 billion in the US.

Table 2B.29: World's Top Grocery Retailers, 2004

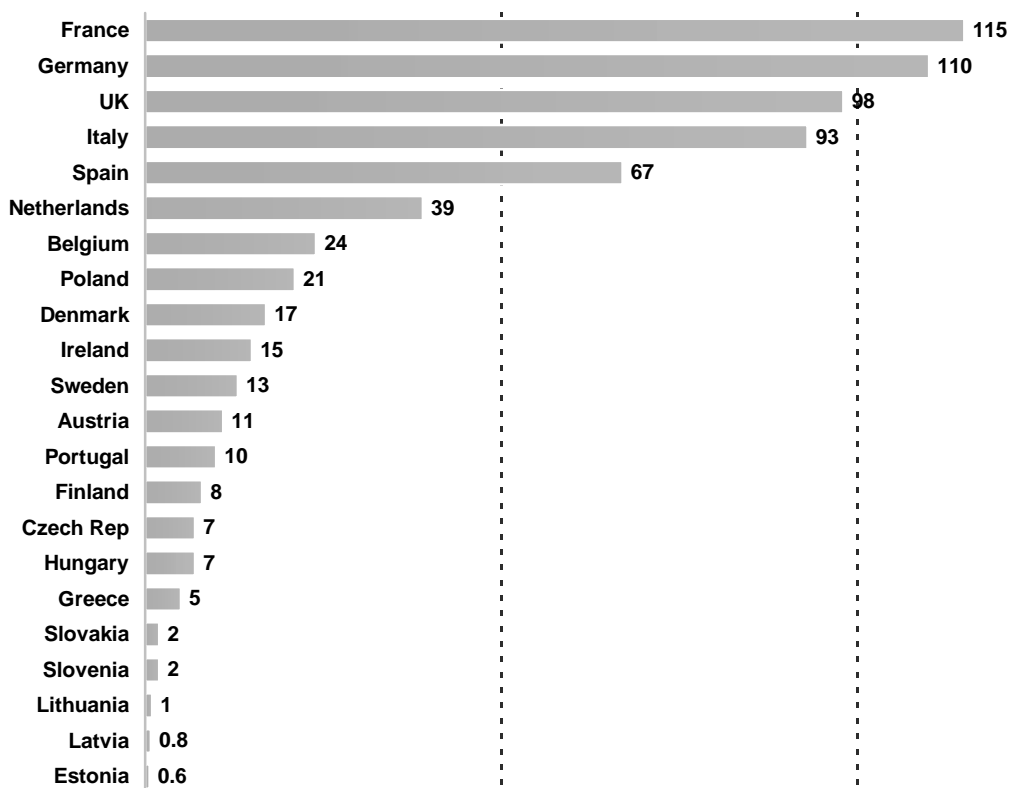
WORLD'S TOP GROCERY RETAILERS 2004

1.	Wal-Mart Stores (United States)	\$244.5 billion annual sales
2.	Carrefour (France)	\$64.7
3.	Ahold (The Netherlands)	\$59.2
4.	Kroger (United States)	\$51.8
5.	Metro (Germany)	\$48.5
6.	Tesco (United Kingdom)	\$39.5
7.	Costco (United States)	\$38.0
8.	Albertsons (United States)	\$35.6
9.	Rewe (Germany)	\$35.2
10.	Aldi (Germany)	\$33.7

Source: *Supermarket News* 12/29/03

Source: Hendrickson, Mary and William D. Heffernan. 2005. Concentration in Agricultural Markets. Department of Rural Sociology, University of Missouri. Retrieved from <http://www.foodcircles.missouri.edu/CRJanuary05.pdf>.

Figure 2B.26: EU-25 Food and drink sector 2001, value of production (EUR billion) estimates



Source: USDA-FAS

Table 2B.30: Top European food manufacturers, ranked by turnover in 2002

Manufacturer	Country	Sales (EUR billion)	
Nestlé	Switz	52.6	Cereal, Dairy, Beverages, Confectionery
Unilever	NL/UK	32.1	Dairy, beverages, dressings, frozen foods, cooking products
Diageo	UK	19.0	Alcoholic beverages, dough products
Danone	France	14.5	Dairy, beverages, biscuits and cereals
Cadbury Schweppes	UK	8.9	Beverages, confectionary
Heineken	NL	8.1	Alcoholic beverages
Parmalat	Italy	7.8	Dairy, gourmet, biscuits, beverages
Interbrew	Belgium	7.3	Alcoholic beverages
ABF	UK	7.1	Sugar, starches, baking products, meat, dairy
Tate & Lyle	UK	6.4	Sweeteners, starches
Lactilis	France	5.5	Dairy
Arla Foods	Denmark	5.0	Dairy
Sudzucker	Germany	4.8	Sugar

Source: CIAA

Table 2B.31: Top ten countries for ISO 14001 certificates

Japan	13,416
UK	5,460
China	5,064
Spain	4,860
Germany	4,144
USA	3,553
Sweden	3,404
Italy	3,006
France	2,344
Korea, Rep. of	1,495

Source: ISO (2003)

Table 2B.32: Top ten countries for ISO 9001:2000 certificates

China	96,715
Italy	64,120
UK	45,465
Japan	38,751
Spain	31,836
USA	30,294
Germany	23,598
Australia	19,975
France	15,073
Korea, Rep. Of	12,864

Source: ISO (2003)

Table 2B.33: Evolution of ISO 9000 certification in North America

	Dec. 2001		Dec. 2002		Dec. 2003	
North America	Total	Of which 9001:2000	Total	Of which 9001:2000	Total	Of which 9001:2000
Canada	11,635	704	12,371	2,125	11,759	8,454
Mexico	2,233	79	2,508	265	1,935	1,437
USA	37,026	1,104	38,927	4,587	41,571	30,294

Source: ISO (2003)

Table 2B.34: Evolution of ISO 9000 certification in some European countries

Europe	Dec. 2001		Dec. 2002		Dec. 2003	
	Total	Of which 9001:2000	Total	Of which 9001:2000	Total	Of which 9001:2000
Austria	4,000	700	4,094	1,879	3,204	2,809
Belgium	4,670	119	4,725	1,285	4,032	3,167
Czech Rep.	5,627	320	8,489	1,125	8,968	2,565
Denmark	2,163	36	1,900	447	1,195	935
Finland	1,870	282	1,872	643	2,058	1,861
France	20,919	2,194	19,870	6,529	18,007	15,073
Germany	41,629	2,338	35,802	10,811	24,889	23,598
Hungary	6,362	1,349	9,254	4,446	7,921	7,750
Ireland	3,700	248	2,845	494	1,645	1,132
Netherlands	12,745	750	13,198	2,803	10,309	9,917
Norway	1,703	75	1,344	405	1,188	1,171
Poland	2,622	232	3,091	914	4,127	3,216
Portugal	2,474	188	3,061	965	4,035	3,417
Romania	1,670	87	2,463	767	3,189	2,052
Russian Fed.	1,517	35	1,170	314	2,118	962
Spain	17,749	808	28,690	8,872	33,215	31,836
Sweden	4,652	145	4,039	833	3,262	3,107
Switzerland	8,605	1,931	10,299	5,060	9,063	8,300
Turkey	2,949	72	3,941	911	3,975	3,248
UK	66,760	8,501	60,960	9,301	49,151	45,465

Source: ISO (2003)

Table 2B.35: Protected Designation of Origin (PDO) / Protected Geographical Indication (PGI) in EU

Country	Category													Total
	Cheeses	Meat based products	Fresh meat	Fresh fish, molluscs and crustaceans	Other products of animal origin (eggs, honey, milk products excluding butter etc.)	Oils and fats / Olive oils	Table olives	Fruit, vegetables and cereals	Bread, pastry, cakes, confectionery, biscuits and other baker's wares	Beer	Other drinks	Non-food products and others	Other Annex I products (spices etc.)	
Belgium	1	2				1								4
Czech Republic										3				
Denmark	2							1						3
Germany	4	8	3	2		1		2	4	12	31			67
Estonia														
Greece	20			1	1	25	10	22	1			4		84
Spain	19	10			2	16		28	6				3	84
France	43	4	50	2	6	6	4	24	2		5	2		148
Ireland	1	1		1										3
Italy	31	28	2		3	37	2	45	2			3	2	155
Cyprus														
Latvia														
Lithuania														
Luxembourg		1	1		1	1								4
Hungary														
Malta														
Netherlands	4							2						6
Austria	6	2				1		2						11
Poland														
Portugal	12	21	25		10	5	1	19						93
Slovenia														
Slovakia														
Finland								1						1
Sweden	1								1					2
UK	11		7	3	1			1		3	3			29

Source: European Commission, 2006

Table 2B.36: Traditional Speciality Guaranteed (TSG) in EU

Cheeses	Meat based products	Fresh meat	Other products of animal origin (eggs, honey, milk products excluding butter etc.)	Bread, pastry, cakes, confectionery, biscuits and other baker's wares	Beer
Italy (1), Sweden (1)	Spain (1), Sweden (1)	UK (1)	Spain (1)	Spain (1), Finland (2)	Belgium (6), Finland (1)

Source: European Commission, 2006

Table 2B.37: European Organic Market 2003
Composition of the European Organic Market (FiBL Frick)

Germany	28%
Great Britain	15%
France	15%
Italy	13%
Switzerland	7%
Sweden	4%
Netherlands	4%
Denmark	3%
Austria	3%
Belgium	3%
Finland	2%
Spain	1%
Others	2%

Table 2B.38: EU market Countries clustered by stage of organic market development, 2001

Mature market Countries	Growth market countries	Emerging market countries
Austria Denmark Germany Switzerland United Kingdom	Finland Italy The Netherlands Sweden France Belgium United Kingdom	Czech Republic Greece Germany Ireland Slovenia Spain Norway Portugal

Source: OMIaRD, 2004 in CBI, 2005

Table 2B.39: European markets for organic food, sales in €million, share in % of total food sales, 2002-2003

	Retail sales (2003)	Average consumer spending in € (2003)	Share in total food sales (2002)	Annual growth (2002)
Total EU	11,000	-	-	-
Germany	3,100	38	2.2	5-10
UK	1,607	27	2.0	10-15
France	1,578	27	1.5	5-10
Italy	1,400	24	1.5	5-10
Switzerland	742	101	-	-
Sweden	420	47	2.0	10-15
The Netherlands	395	25	1.5	5-10
Denmark	339	51	2.7	0-5
Austria	323	40	2.5	5-10
Belgium	300	29	1.5	5-10
Finland	212	41	-	-
Spain	144	4	-	-
Greece	21	2	-	-
Hungary	18	2	-	-
Czech Republic	6	1	-	-
Other EU	395	-	-	-

Source: FiBL, 2005 in CBI, 2005

Table 2B.40: Fair Trade in Europe – data 2003-2004

Importing Organizations (n.)	200
Sales Outlets (n.)	
World shops	2,845
Supermarkets	56,700
Others	19,300
Total Sales Outlets	78,900
Paid Staff (n.)	
Importing Organizations	851
World shops Associations	107
Labeling Organizations	113
Total Paid Staff	1,071
Turnover (in 000 €)	
Importing Organizations	243,300
World shops, net retail value	103,100
Labeling organizations, net retail value	597,000
Education/PR/Marketing (in 000 €)	
Importing Organizations	11,400
World shops associations	1,700
Labeling organization	5,100
All World shops, net retail value, estimate (in 000 €)	120,000
All Fair Trade products net retail value, estimate (in 000 €)	660,000

Source: FINE (2006:9)

Table 2B.41: Biggest Fair Trade importers in Europe

Organization	County	Turnover financial year 2004 in €million
Gepa	Germany	39.7
CTM Altromercato	Italy	34.3
Cafédirect	UK	25.2
Fair Trade Organisatie	Netherlands	20.7
Traidcraft	UK	20.6
Oxfam Fairtrade	Belgium	15.5
Claro fair trade	Switzerland	11.5

Source: FINE (2006)

Table 2B.42: Fair Trade in Europe – data 2005

Country	Number of World shops	Number of supermarkets selling Fair Trade Products	Paid staff in Fair Trade Organizations	Number of licenses
Austria	100	2,000	49	23
Belgium	295	700	83	32
Denmark	6	1,000	5	9
Finland	25	3,000	32	17
France	165	10,000	85	74
Germany	800	23,000	203	87
Ireland	6	250	9	24
Italy	500	4,000	129	n.a.
Luxembourg	6	80	2	39
Netherlands	412	3,100	107	29
Norway	0	4,000	4	21
Portugal	9	n.a.	0	n.a.
Spain	95	n.a.	29	11
Sweden	35	n.a.	17	15
Switzerland	300	2,500	63	31
UK	100	3,100	246	178

Source: FINE (2006)

Table 2B.43: Fair Trade in Europe – additional data 2005

Country	Turnover Importing Organizations (in 000 €)	Turnover World shops (in 000 €)	Retail value Labeling Organizations (in 000 €)	Expenditure on PR, education and marketing (in 000 €)
Austria	12,805	7,460	15,781	699
Belgium	17,055	7,735	20,000	569
Denmark	780	282	12,000	527
Finland	300	794	7,700	300
France	9,474	9,300	69,000	1,473
Germany	55,035	20,000	58,000	2,486
Ireland	615	710	5,000	78
Italy	41,165	n.a.	20,000	210
Luxembourg	n.a.	800	2,000	108
Netherlands	20,643	30,340	35,000	749
Norway	0	0	4,540	108
Portugal	92	294	n.a.	7
Spain	7,897	12,262	n.a.	252
Sweden	2,188	728	5,480	87
Switzerland	15,655	1,980	136,028	656
UK	59,556	10,401	206,289	9,969

Source: FINE (2006)

Table 2B.44: US retail outlets selling labeled Fair Trade products

Year	Sales – US\$ m	Number of shops
1999	N/A	< 1,000
2000	51.3	3,000
2001	68.3	8,000
2002	104.5	12,000
2003	133.9	18,000
2004	N/A	>25,000

Source: TransFair USA (2004) and Fair Trade Foundation (2002, 2003) in Nicholls and Opal (2004:195)

Table 2B.45: Total Gross Sales in North America (US and Mexico) 2001- 2003

Year	Total Gross Sales Fair Trade Million US\$
2001	125.2
2002	180
2003	276.1

Source: The Fair Trade Foundation (2005)

Table 2B.46: Market shares of FT labeled coffee (%) in Europe, year 2005

United Kingdom	20
Switzerland	6
Austria	2.3
Denmark	2
Ireland	2
Belgium	1.7
Germany	1
Sweden	< 1
Norway	0.9
Finland	0.4
Luxembourg	3.3*
The Netherlands	2.7*
Italy	0.1*
France	0.1*

Source: FINE (2006:30) * data 2001 (EFTA, 2002)

Table 2B.47: European Market for Fair Trade coffee

Year	FT coffee (metric tons green)
1999	14,064
2000	14,354
2001	15,437
2002 est.	16,232
2003 est.	17,870
2004 est.	19,573

Source: Giovannucci and Koekoek (2003)

Table 2B.48: World Fair Trade Coffee Pounds Certified by Country

Country	Pounds Certified	%
Australia	33,056	
Belgium	3,728,154	6%
Canada	662,028	1%
Denmark	1,980,280	3%
Finland	39,683	
France	582,490	
Germany	8,985,140	15%
Italy	343,560	
Netherlands	18,488,847	30%
Norway	293,462	
Sweden	537,434	
Switzerland	620,930	
UK	6,354,875	10%
USA	18,663,806	31%
Total	61,313,745	

Source: TransFair USA (2005)

Table 2B.49: Total Gross Sales of Transfair USA (Coffee)

Year	Total Gross Sales, Million US\$
2001	85.6
2002	131
2003	208
2004	369

Source: The Fair Trade Foundation (2005)

Table 2B.50: Fair Trade coffee, US market share

Year	FT coffee market share
2000	0.2%
2001	0.4%
2002	0.6%
2003	1.0%
2004	1.8%

Source: TransFair USA (2005)

Table 2B.51: Market shares of FT labeled bananas (%) in Europe, year 2005

Switzerland	47
United Kingdom	5.5
Finland	5
Belgium	4
Austria	2.7
Sweden	< 1
Denmark	0.9
Norway	0.6
Ireland	0.5
The Netherlands	N/A
Luxembourg	N/A
Italy	N/A
Germany	N/A
France	N/A

Source: FINE (2006:30)

Table 2B.52: Food budget shares for some NAE countries

Country	Beverages, tobacco	Breads, cereals	Meat	Fish	Dairy	Fats, oils	Fruits, vegetables	Other foods	Total Food Expenditure
									% of total
	Percent of total food expenditures								Expenditures
Austria	23,72	13,45	20,98	1,64	11,29	3,80	14,10	11,01	13,53
Azerbaijan	2,89	39,02	14,40	1,07	5,64	10,22	13,04	13,72	73,51
Belgium	21,06	10,78	24,72	6,06	10,96	3,87	12,38	10,16	14,36
Bulgaria	12,35	17,07	19,68	0,81	13,94	3,49	24,78	7,89	30,70
Czech Republic	28,09	10,25	21,27	1,76	11,63	4,03	12,38	10,59	25,00
Denmark	28,81	8,93	20,38	2,04	11,12	2,16	11,93	14,65	14,02
Estonia	21,39	16,08	20,26	2,97	13,17	4,73	10,18	11,21	33,45
Finland	31,45	11,44	15,16	2,85	12,57	1,96	13,45	11,12	14,67
France	21,36	10,89	24,92	4,75	11,80	2,85	12,39	11,05	15,34
Germany	28,25	14,87	20,30	1,87	7,11	2,27	8,28	17,05	13,09
Greece	24,56	7,25	16,03	4,53	13,58	5,37	17,27	11,40	21,17
Hungary	23,58	10,91	20,48	0,77	12,76	4,73	12,67	14,09	22,54
Iceland	27,41	11,87	16,45	5,05	11,56	1,62	10,83	15,23	18,90
Ireland	37,33	9,51	16,38	1,97	10,09	2,74	13,42	8,56	16,59
Italy	16,18	11,32	23,58	5,40	13,90	3,86	19,14	6,61	16,59
Latvia	18,92	12,89	18,87	3,05	14,89	4,29	17,80	9,30	41,76
Lithuania	19,88	12,92	20,67	3,47	14,10	4,83	11,98	12,15	40,42
Luxembourg	43,12	8,88	18,30	2,26	7,83	1,88	11,64	6,09	17,08
Macedonia	15,61	18,10	19,35	2,11	12,36	5,31	18,45	8,70	34,73
Netherlands	24,00	12,36	18,67	2,16	12,61	2,21	15,72	12,27	13,29
Norway	29,99	7,70	16,35	4,85	12,79	1,52	11,06	15,73	15,98
Poland	26,53	10,33	21,24	1,55	8,35	3,44	14,49	14,07	30,65
Romania	13,47	14,62	24,34	0,80	12,82	5,71	20,61	7,63	45,26
Slovakia	25,44	10,04	20,56	1,68	13,86	4,57	13,43	10,40	32,06
Slovenia	24,13	10,08	22,13	1,90	11,41	2,98	17,21	10,16	21,34
Spain	17,70	12,47	23,98	10,32	11,60	4,77	13,82	5,35	17,52
Sweden	27,47	11,42	15,18	4,37	11,71	2,29	14,44	13,12	13,26
Switzerland	26,18	10,73	16,52	1,81	15,16	1,97	17,02	10,60	14,57
Turkey	9,47	20,34	13,55	1,01	12,84	8,42	23,23	11,14	32,60
United Kingdom	47,53	8,31	12,57	2,25	6,88	1,27	12,02	9,16	16,37
United States	28,71	11,39	19,58	1,19	8,59	1,77	14,66	14,11	9,73

Source: 1996 data (USDA, 2006)

Table 2B.53: Food and non-alcoholic beverages, at current prices: % of total household consumption expenditure

	1991	1994	1997	1999	2000	2001	2002
DK	14.1	13.8	13.4	12.8	12.8	12.9	12.6
D	14	12.7	12.2	11.9	11.9	12.3	12.1
F	16.1	15.1	14.8	14.3	14.2	14.4	n.a.
I	18.8	17.4	15.8	14.7	14.4	14.4	14.6
O	14.9	14	13.2	12.9	12.7	12.6	12.1
P	21.9	21.6	19.2	18.7	18.5	n.a.	n.a.
FIN	17	16.3	13.7	13	12.7	12.8	12.8
UK	12.4	11.4	10.7	10	9.7	9.7	n.a.

Source: Eurostat in CIIA (2005)

Table 2B.54: Household Consumption Expenditure in the EU-25 in 2003 (%)

Food and non-alcoholic beverages	13.1%
Alcoholic beverages, tobacco and narcotics	3.8%
Clothing and footwear	6.1%
Housing, water, electricity, gas and other fuels	21.5%
Furnishing, household equipment and routine maintenance of the house	6.6%
Health	3.5%
Transport	13.5%
Communications	2.8%
Recreation and culture	9.4%
Education	1%
Restaurants and hotels	9%
Miscellaneous goods and services	9.9%

Source: Eurostat (2005)

Table 2B.55: Household consumption expenditure in the EU-25 in 2002: food and non-alcoholic drinks (in % of total household consumption expenditure)

UK	9.7
Ireland	10.7
Netherlands	11.2
Austria	12.1
Germany	12.1
Denmark	12.6
Sweden	12.6
Finland	12.8
Belgium	13.6
France	14.5
Italy	14.6
Greece	15.8
Spain	15.9
Slovenia	17.2
Portugal	18.8
Czech Rep.	18.8
Hungary	19.4
Cyprus	19.6
Poland	19.9
Malta	20.4
Slovakia	22.1
Estonia	22.9
Latvia	25.5
Lithuania	31.3
EU-15	12.8
EU-25	13.2

Source: Eurostat in CIAA (2005)

Table 2B.56: Expenditure and calorie contribution of different food products in EU and US

	Total	Cereals	Fruits and vegetables	Meat	Dairy and eggs	Seafood	Total	Cereals	Fruits and vegetables	Meat	Dairy and eggs	Seafood
	1996 per capita calorie supply						2000 per capita calorie supply					
US	3,616	639	196	427	431	28	3,772	848	209	446	445	30
EU	3,401	838	208	431	362	42	3,487	864	218	441	365	44
	1996 per capita calorie expenditure (US\$)						2000 per capita calorie expenditure (US\$)					
US	1,543	247	179	307	176	77	1,745	274	202	337	202	89
EU	1,261	204	190	302	170	30	1,440	229	220	341	194	41

Source: FAO and Euromonitor in Gelhar and Regmi (2005)

Table 2B.57: Proportions of expenditures in real values (average of 1995 and 1999)

	Housing	Food	Furnishings	Education and leisure	Transport and communications	Clothing	Health
Western EU	19.24	18.45	6.81	12.03	12.73	5.45	8.54
Central and Eastern EU	24.66	22.06	3.43	17.42	8.61	3.46	10.89
Total	21.02	19.66	5.69	13.83	11.36	4.79	9.32

Source: Schenkel at al. (2005)

Table 2B.58: Index of relative price (GDP index for each country, 100)

	Food	Clothing	Housing	Furnishings	Transport and communications	Education and leisure	Health
Western EU	86.94	107.9	97.5	93.06	109.6	107.6	99.28
Central and Eastern EU	139.6	183.2	75.38	157.1	175.5	51.85	66.62

Source: Schenkel at al. (2005)

Table 2B.59: NAE food supply: energy, protein and fats per capita per day

	Western Europe			Eastern Europe			USA		
	Calories	Protein (g)	Fats (g)	Calories	Protein (g)	Fats (g)	Calories	Protein (g)	Fats (g)
1961	3001	87	106	3118	91	79	3100	92	138
2003	3535	109	149	3227	95	109	3900	112	178

Source: FAOSTAT data 2006 and ERS-USDA, Food consumption data system 2005

Table 2B.60: NAE food supply: energy, protein and fats per capita per day, standardized to Western Europe values in 1961 (= 100)

	Western Europe			Eastern Europe			USA		
	Calories	Protein	Fats	Calories	Protein	Fats	Calories	Protein	Fats
1961	100	100	100	104	105	75	103	106	130
2003	118	125	141	107	109	103	130	129	168

Table 2B.61: NAE food supply: % of energy, protein and fats from animal vs plant origin

	Western Europe			Eastern Europe		
	Calories % animal	Protein % Animal	Fats % animal	Calories % Animal	Protein % animal	Fats % animal
1961	29	51	64	23	36	73
2003	31	60	55	26	50	59

Source: FAOSTAT data 2006