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AN OVERVIEW OF ITALIAN AGRICULTURE AND FOOD INDUSTRY

Paper submitted by the Italian National Statistical Institute (ISTAT)*

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An overview of Italian agriculture and food industry

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Abstract

In this paper agriculture and food industry will be analyzed by means of the main economic indicators. The first paragraph concerns economic account of resources and uses; paragraphs from 2 to 6 deal with output, intermediate consumption and value added at basic prices, gross fixed investments, employment, import – export trade, consumption, respectively. Finally, in paragraph 7, a study on employment through agriculture and industry and services censuses is treated.

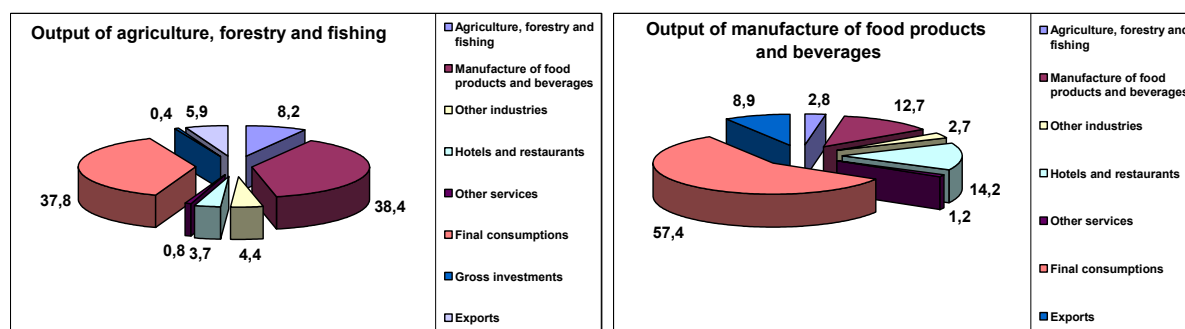
Par. 1: economic account of resources and uses

From the 2001 input-output accounts (in particular from account of uses) we can note that more than 38% of agriculture, forestry and fishing output ends in manufacturing of food products and beverages industry, almost the same quantity in final consumption, the 8,2% in agriculture and 5,9% in exports (Graphs 1).

With regard to the production of manufacture of food products and beverages, the 57,4% of it is for final consumption, the 14,2% for hotels and restaurant, 12,7% for reutilizations and 8,9% for exports.

Almost all the production of tobacco industry is for final consumption (except the 0,2% further processed and 0,2% exported).

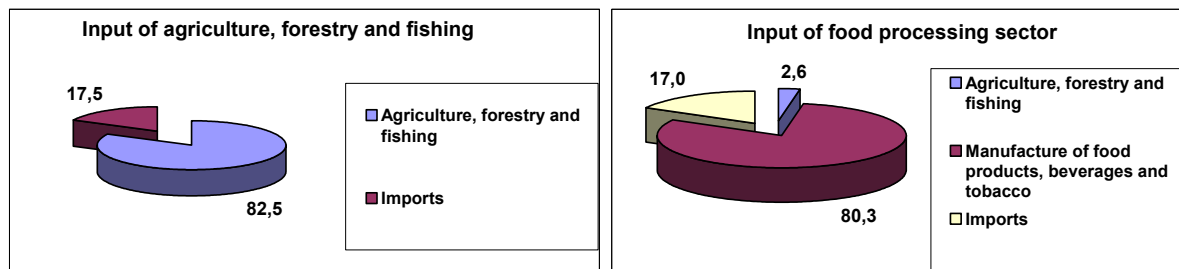
Graphs 1: Percentage distribution of destination of “manufacture of food products and beverages” and “agriculture, forestry and fishing” outputs – 2001 (value in purchase prices)



Concerning account of resources, we can observe that in 2001 most of the input of agriculture, forestry and fishing comes from the same sector (82,5%) and the 17,5% imported.

The 80,3% of food processing input comes from the same sector, i.e. it's material further processed, the 17,0% is imported and the 2,6% from agriculture, forestry and fishing (Graphs 2).

Graphs 2: Percentage distribution of origin of “manufacture of food products, beverages and tobacco” and “agriculture, forestry and fishing” inputs – 2001 (value in producer prices)



Par. 2: output, intermediate consumption and added value at basic prices

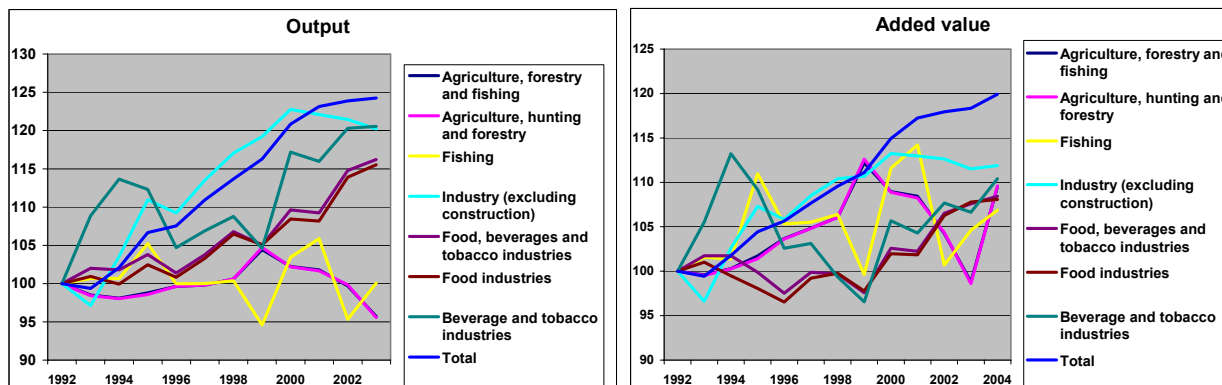
The growth of Italian economy, in terms of added value at constant values shows, from 2002, a slowing down in comparison to the period 1997-2001. In particular, for agriculture, forestry and fishing there is a negative rate of growth. Only in 2004 we can see an increase of 10,8% with respect to previous year and after four years of decreases (Graphs 3 and 4). The contribution of Agriculture to GDP has been of the 2,9% in 2004.

Output at basic prices of agriculture, forestry and fishing decreased from 2000, with a decrease of 4% in real terms in 2003. While intermediate consumption decreased of 1,6% in 2003, added value had an heavy drop. In the same year output increased of 1,2% in value, due to the prices increases (see Appendix 1 for implicit price deflators).

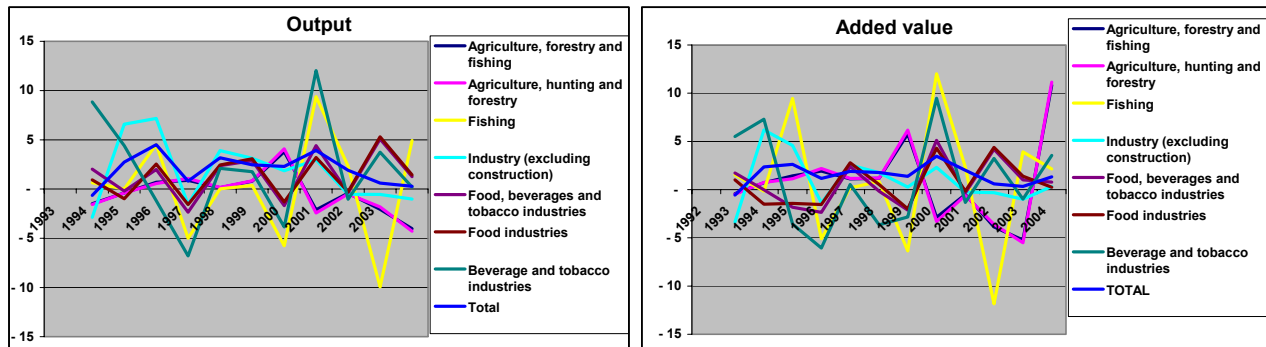
Industry growth rate was slightly negative in added value growth till 2003, with an increase of 0,3% in 2004. Food, beverages and tobacco industries in total, haven't had the same trend: after an increase of 4,2% in 2002, smaller rises. Most part of the added value of this sector, is given from food industry (more than 83%). The contribution of food, beverages and tobacco industries to GDP has been of the 2,0% in 2004.

From 2000, food, beverages and tobacco industries showed, in terms of output, a good performance in comparison to industry (excluding construction). In 2003 output increased of 1,3% in real terms, of 4% in value, due to increase of prices of goods and services to employ in the production process. Intermediate consumption increased in the same measure in real terms.

Graphs 3: indexes of output and value added at basic prices (basis 1992=100); years 1992 – 2003/4



Graph 4: output and added value at basic prices ; percentage variations compared with previous year



Par. 3: gross fixed investments

After increases of the investments in agriculture, forestry and fishing at the end of the nineties, in 2001 and 2003 decreases followed (in constant values) (Graph 5). Investments in agriculture concerns above all machinery (the 58% in 1999) and buildings (29%). The decrease in 2003 was 0,8% while in the whole economy was $-2,1\%$. Agriculture has contributed at the growth of the investments demand (for machinery, vehicles, buildings and other goods and services). In spite of the positive real trend at the end of the nineties, agriculture is losing weight on the total of the investments: from an incidence of 7,2% in 1976, in the nineties the weight was of about 4-5%, while in the period 2000-2003 the incidence was constant at 4,3%. The reasons of those decreases of investments in agriculture may be found in the Common Agricultural Policy that regulate the investments that could increase the productive capacity. Also environmental compatibility is another cause. Moreover, farms are always more inclined not to buy new machinery, but to use other businesses services.

Food, beverages and tobacco industries investments were the 9,9% of the investments in the industry (excluding construction) in 2001 (last year of national accounts figures) in which there has been an increase of 2,3% with respect to the previous year (Table 1). In the nineties there have been high increases of the investments in this sector and in the first half of the nineties it was one of the most considerable sector in terms of incidence on manufacturing industry total investments. The incidence of the investments of the sector decreased in the following years until 1999. From that year to 2001 there are signs of recovery.

Most of the investments in food processing industries regards machinery (the 74% in 1999).

Graph 5: gross fixed investments, constant values 1995; percentage variations compared to previous year

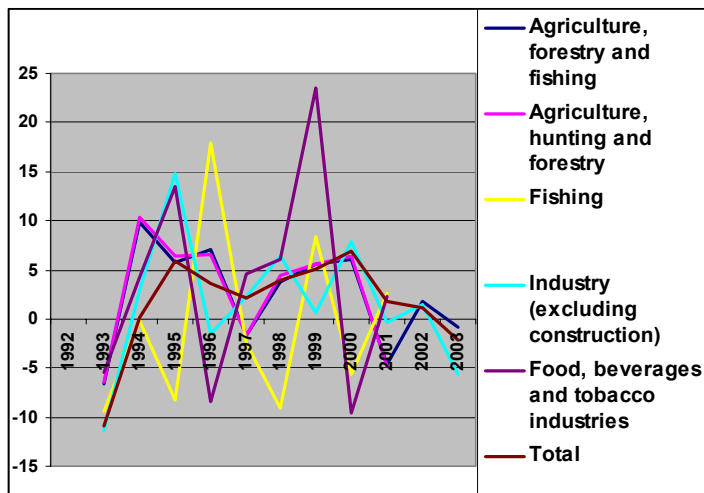


Table 1: gross fixed investments, variations 2001/2000, percentage distribution compared with the total

	Values 2001		% var 01/00		% distribution	
	constant values 1995	current values	constant values 1995	current values	constant values 1995	current values
Agriculture, forestry and fishing	9.058	9.999	-4,6	-2,9	4,3	4,2
Agriculture, hunting and forestry	8.711	9.613	-4,9	-3,1	4,1	4,0
Fishing	348	387	2,7	3,5	0,2	0,2
Industry (excluding construction)	53.671	60.128	-0,4	1,8	25,2	25,0
Food, beverages and tobacco	5.289	5.963	2,3	4,6	2,5	2,5
Total	213.121	240.564	1,9	4,2	100	100,0

Par. 4: employment (National Accounts)

After 2001 in which employment in agriculture increased of 1%, it decreased by 4,9% in number of employees in the following three years. This happened both for agriculture, hunting and forestry and above all for fishing.

Examining the total labour units (TLU), a slight increase took place in 2004 (0,4%), after many years of decline (Table 2). Fishing employment (in terms of TLU) decreased of 18% in the last three years.

In 2004, 51,8% of the employees in agriculture were subordinate workers and 48,2% were self-employed.

Last year, although employment in industry (excluding construction) decreased of 0,4%, for food, beverages and tobacco industries, it increased of 2,3% (+2,1% for food industries and +4,1% for beverage and tobacco industries). Employment in food, beverages and tobacco industries represented in 2004 the 9,6% of industrial employment; the employment in beverage and tobacco industries only the 9,9% of the food processing industries.

In 2004, 76% of the employees in food processing industries were subordinate workers and 24% were self-employed.

Also in terms of TLU the variation (04/03) of food processing sector is positive (+1,7%) while for total industry there was a decrease of 0,4%. Beverage and tobacco industries had an increase in terms of TLU of 3,7% due to the recovery of the domestic demand. The incidence of food processing sector in total industry was the 9,6%.

Table 2: employment, variations 2004/2003, percentage distribution

	2004 (in thousands)		% var 04/03		% distribution	
	Employees	TLU	Employees	TLU	Employees	TLU
Agriculture, forestry and fishing	1.078,6	1.277,0	- 0,1	0,4	4,4	5,2
Agriculture, hunting and forestry	1.044,7	1.228,5	- 0,1	0,6	4,3	5,0
Fishing	33,9	48,5	- 1,7	- 3,2	0,1	0,2
Industry (excluding construction)	5.357,7	5.208,7	- 0,4	- 0,4	21,9	21,3
Food, beverages and tobacco industries	515,4	499,4	2,3	1,7	2,1	2,0
Food industries	464,3	449,1	2,1	1,4	1,9	1,8
Beverage and tobacco industries	51,1	50,3	4,1	3,7	0,2	0,2
Total	24.496,0	24.429,5	0,9	0,8	100,0	100,0

Par. 5: import – export trade

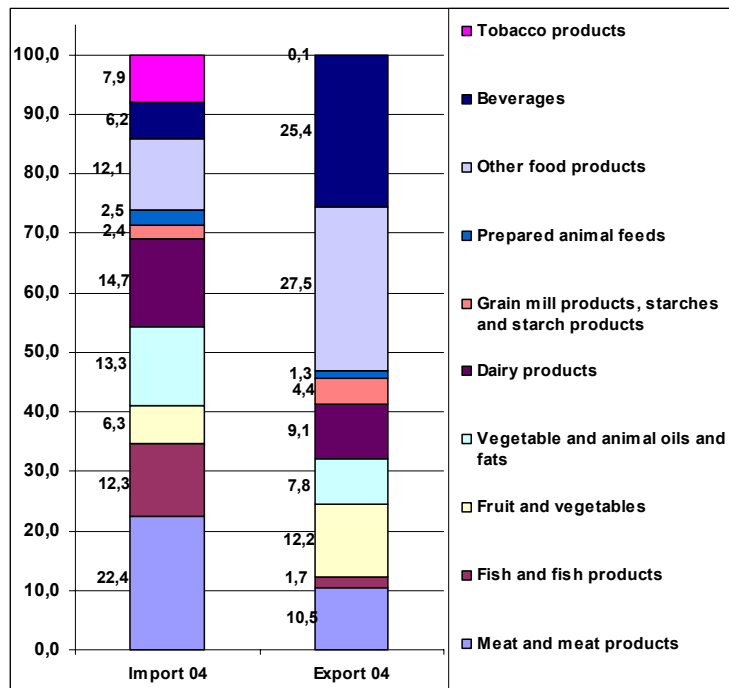
In the last five years agricultural products imports remained almost constant (a slight decrease of 0,6%), much more important for EU-25 imports (-4,4%), due above all to last year decrease. The same can be said for exports, but with decreases more important (Appendix 2).

For fishery in 2000-2004, imports grew of more than 13%, mostly fish farming products from EU-25 countries. Exports decreased of 9%, above all in EU-25.

After a decrease of 2,7% in 2003, last year manufacturing products exports value rose by 6,4%; in last five years a total increase of more than 6%. Imports, that in 2003 decreased of 1,1%, in 2004 rose by 7,1, +7,6% in last five years.

With regard to food products, beverages and tobacco, in last five years imports and exports values increased of 13,0% and 18,8% respectively (the last one even more remarkable for EU-25), increases totally due to food products and beverages. The incidence of exports of this sector on manufactured products, grew from 5,1% in 2000 to 5,7% in 2004. Almost 80% of imports comes from EU-25 while about 65% of export goes to EU-25.

Graph 6: percentage composition of food products, beverages and tobacco imports and exports for 2004.



Last year, most food products, beverages and tobacco imports were meat and meat products (22,4%) followed by dairy products (14,7%), vegetable and animal oils and fats (13,3%) and fish and fish products (12,3%). For export, other food products and beverages (Graph 6).

In 2004, for agriculture, hunting and forestry products, 36% of imports were cereals and other crops and 24% fruit, nuts, beverage and spice crops. The 51% of exports were fruit, nuts, beverage and spice crops and 31% vegetables, horticultural specialities and nursery products.

The decomposition of the dynamics of Italian trade exchanges in terms of quantities and unitary average values (UAV) (Table 3 and Graphs 7) shows that the variations of imports and exports values for agriculture and hunting products are caused above all by the changes of UAV. Only in 2002 variations have been caused by quantities exchanged.

For fishing and fish farming products, imports values variations are caused by quantities exchanged while for exports, both quantities and UAV are important.

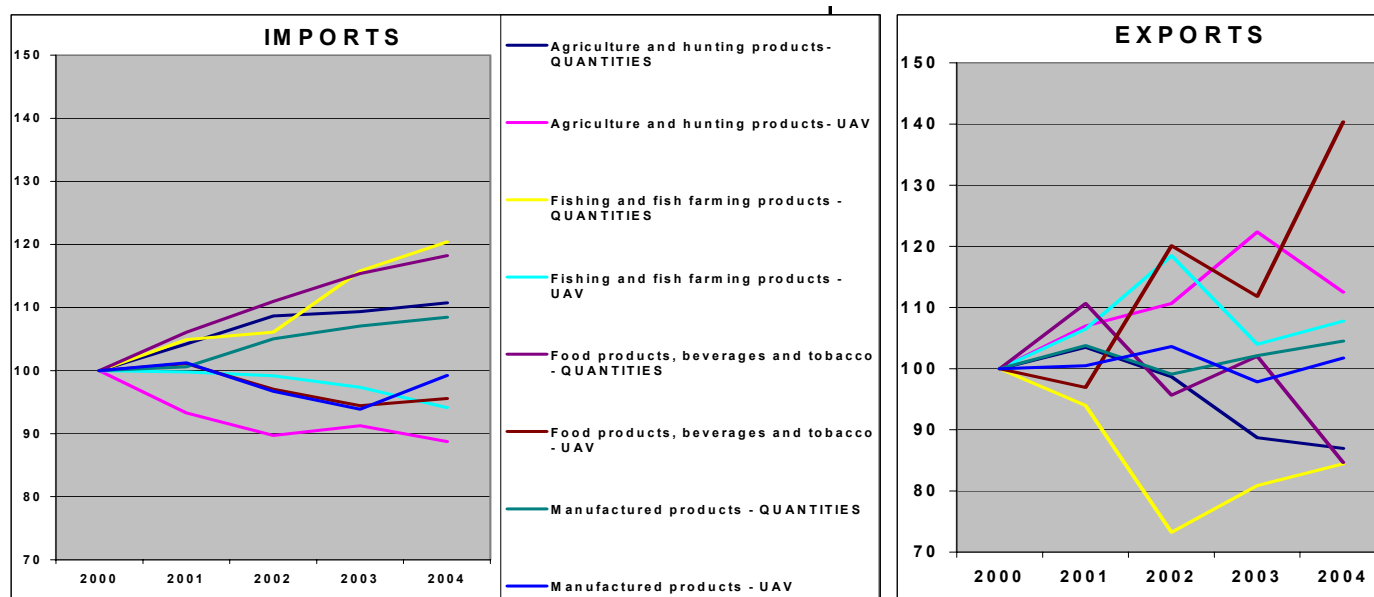
The same can be said for food products, beverages and tobacco, with the difference that last three years value exports variations are mainly caused by UAV variations while in 2001, quantities were more influential. All manufactured products imports variations are caused by UAV variations; for exports both UAV and quantities are important.

Table 3: unitary average values (UAV) and quantities indexes – years 2001-2004 (basis 2000=100)

	IMPORTS															
	2001				2002				2003				2004			
	quan	Var %	UAV	Var %	quan	Var %	UAV	Var %	quan	Var %	UAV	Var %	quan	Var %	UAV	Var %
Agriculture and hunting products	104,2	4,2	93,3	-6,7	108,7	4,3	89,7	-3,8	109,3	0,6	91,3	1,7	110,7	1,3	88,7	-2,8
Fishing and fish farming products	104,9	4,9	99,8	-0,2	106,1	1,1	99,2	-0,6	115,8	9,1	97,3	-1,8	120,4	4,0	94,1	-3,3
Food products, beverages and tobacco	106,1	6,1	101,1	1,1	110,9	4,6	97,1	-4,0	115,4	4,0	94,4	-2,7	118,2	2,5	95,6	1,2
Manufactured products	100,6	0,6	101,2	1,2	105,0	4,4	96,7	-4,4	107,1	1,9	93,9	-3,0	108,5	1,3	99,2	5,7

	EXPORTS															
	2001				2002				2003				2004			
	quan	Var %	UAV	Var %	quan	Var %	UAV	Var %	quan	Var %	UAV	Var %	quan	Var %	UAV	Var %
Agriculture and hunting products	103,5	3,5	106,9	6,9	98,7	-4,7	110,6	3,4	88,7	-10,1	122,4	10,6	87,0	-2,0	112,5	-8,0
Fishing and fish farming products	94,0	-6,0	106,5	6,5	73,2	-22,0	118,5	11,3	80,9	10,4	104,0	-12,3	84,4	4,4	107,8	3,7
Food products, beverages and tobacco	110,6	10,6	96,9	-3,1	95,7	-13,5	120,1	23,9	102,0	6,6	111,8	-6,9	84,7	-17,0	140,3	25,5
Manufactured products	103,8	3,8	100,5	0,5	99,1	-4,5	103,6	3,1	102,1	3,1	97,8	-5,6	104,5	2,3	101,7	4,0

Graphs 7: unitary average values (UAV) and quantities indexes – years 2001-2004 (basis 2000=100)



Par. 6: consumption

After the period of stagnation that followed the revival in consumption in 1996-2000, in 2003 and 2004 total households consumption grew by about 1,2% (Table 4); such increase remained below the disposable income rise due to precautionary behaviour concerning the future income trend. Food, beverages and tobacco consumption haven't had the same trend: last year there was a decrease of 0,9% (it didn't happen from 1996). For all the products (except bread and cereals (+0,8%), fish (+1,9%), milk, cheese and eggs (+0,6), other food products (+0,7%)) there has been a decrease, above all for fruit (-4,1%), sugar, jam, honey, syrups, chocolate and pastry (-3,0%), mineral water, sparkling drinks and juices (-2,9) and tobacco (-5,8%) (Graph 8). As regards the percentage incidence on total consumption expenditure, food, beverages and tobacco were the 20,5% of total consumption in 1992 and in 2004 they were only 17,3%, with a continuous decrease in that period.

Analyzing expenditure in current and in constant values, it can be observed that most of the variations of last years were due to inflation.

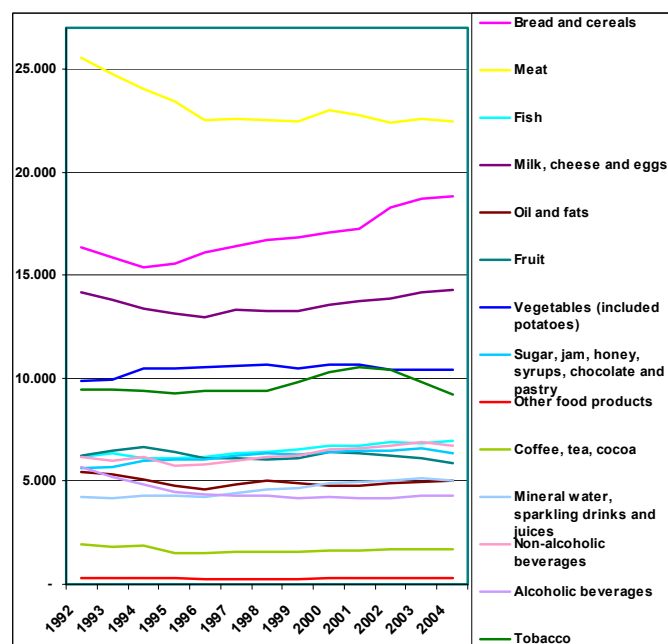
Food products and food, beverages and tobacco consumption (the first about the 80% of the second from 1992 to 2004) have had the same trend: a decrease from 1992 to 1996 and then a continuous rising; from 1996 till 2004 a total increase of +5,6% and 6,1% respectively.

Regard the percentage composition of the consumption, meat is the product that has more impact on food products households expenditure. In last years the percentage had a little decrease for the well-known animals diseases while the consumption of fruit and vegetables is increased.

Table 4: consumption expenditure of households for food products in millions of euro (2004)

	Values 2004		% var 04/03		% distribution	
	constant values 1995	current values	constant values 1995	current values	constant values 1995	current values
Bread and cereals	18.848	21.893	0,8	3,0	17,0	15,9
Meat	22.444	26.838	-0,7	1,7	20,3	19,5
Fish	6.969	8.959	1,9	3,7	6,3	6,5
Milk, cheese and eggs	14.260	16.904	0,6	2,4	12,9	12,3
Oil and fats	5.001	6.029	0,4	4,7	4,5	4,4
Fruit	5.871	7.887	-4,1	-0,6	5,3	5,7
Vegetables (included potatoes)	10.399	13.907	-0,2	1,5	9,4	10,1
Sugar, jam, honey, syrups, chocolate and pastry	6.382	7.822	-3,0	-0,3	5,8	5,7
Other food products	310	366	0,7	2,2	0,3	0,3
Food products	90.484	110.604	-0,3	2,1	81,7	80,2
Coffee, tea, cocoa	1.717	1.781	-0,2	0,5	1,6	1,3
Mineral water, sparkling drinks and juices	5.002	5.921	-2,9	-1,1	4,5	4,3
Non-alcoholic beverages	6.719	7.702	-2,2	-0,7	6,1	5,6
Alcoholic beverages	4.292	5.855	-0,3	2,9	3,9	4,2
Tobacco	9.223	13.758	-5,8	3,5	8,3	10,0
Food, beverages and tobacco	110.719	137.920	-0,9	2,1	100,0	100,0
Total consumptions	641.399	817.502	1,2	3,5		

Graph 8: trend in consumption expenditure of households for food products (constant values 1995), millions of euro



Par. 7: study on the employment through censuses

Besides national accounts figures, employment has been studied through the 8-th industrial census (October 2001) and the 5-th census of agriculture (October 2000).

In the first one, employment refers to October 2001 while in the second one, it is referred to the agrarian year corresponding to 1/11/1999 – 31/10/2000. The information surveyed concern, among all, the number of working days carried out in the farm. Such information regards both self-employed (i.e. the conductor and his family) and subordinate workers (i.e. the other farm labour force with regular or temporary contract). In order to obtain an homogeneous measure with industrial census, the working days have been transformed in labour contracts, i.e. in number of jobs. Such a transformation has been done through agricultural labour regulations on financing and on contractual working time. Labour contracts will be used as a proxy variable for employment.

Agricultural labour contracts have been estimated for October 2001 considering a combination of the agricultural labour force variation between the mean of the four previous October 2000 quarters and last quarter 2000 (Labour Force Survey), and the variation of the employment in agriculture from 2000 and 2001 (national accounts figures). Such combinations has been done for the 20 Italian regions (Nomenclature of Territorial Units for Statistics - NUTS 2) and for self-employed and subordinate workers and then has been applied to agricultural census to estimate 2001 figures.

Both industrial census and census of agriculture communes (NUTS - LAU 2) figures have been classified by Labour Force Survey degree of urbanization, with the following modalities:

- A densely populated area (at least 500 inhabitants/Km²);
- B intermediate urbanized area (between 100 and 499 inhabitants/Km²);
- C thinly populated area (less than 100 inhabitants/Km²).

The about 4.400.000 businesses local units of industrial census have been classified into “agriculture” and “agri food industry” according to groups in Appendix 3.

Codes are:

- 1 primary agriculture (from census of agriculture);
- 2 primary agriculture (from industrial census);
- 3 manufacture of food products, beverages and tobacco (from industrial census);
- 4 auxiliary suppliers (from industrial census);
- 5 services suppliers (from industrial census).

Final table is in Appendix 4, where code 0 represents all other sectors. For code 1, units are farms in October 2000, while for all other codes units are local units in October 2001.

Table 5: employment in agriculture and agri-food industry by degree of urbanization, as percentage in the sector and as percentage in the area (2001).

	A	B	C	Total
Agriculture	154.236	726.271	577.287	1.457.794
Agri-food	622.421	707.957	230.024	1.560.402
Total (sectors)	8.072.938	6.708.254	2.332.776	17.113.968

	A	B	C	Total
Agriculture	10,6	49,8	39,6	100,0
Agri-food	39,9	45,4	14,7	100,0
Total (sectors)	47,2	39,2	13,6	100,0

	A	B	C	Total
Agriculture	1,9	10,8	24,7	8,5
Agri-food	7,7	10,6	9,9	9,1
Total (sectors)	100,0	100,0	100,0	100,0

In 2001, agriculture and agri-food employment represented the 17,6% of the total of the employees: 8,5% agriculture and 9,1% agri food (Table 5).

48,3% of total agriculture and agri-food employment is relative to agriculture, with a range from 19,9% in densely populated area to 71,5% in thinly populated area.

The percentage of employment in agriculture is strictly correlated with the density of the population (of course) (Graphs 9). This is true both for labour in farms and in

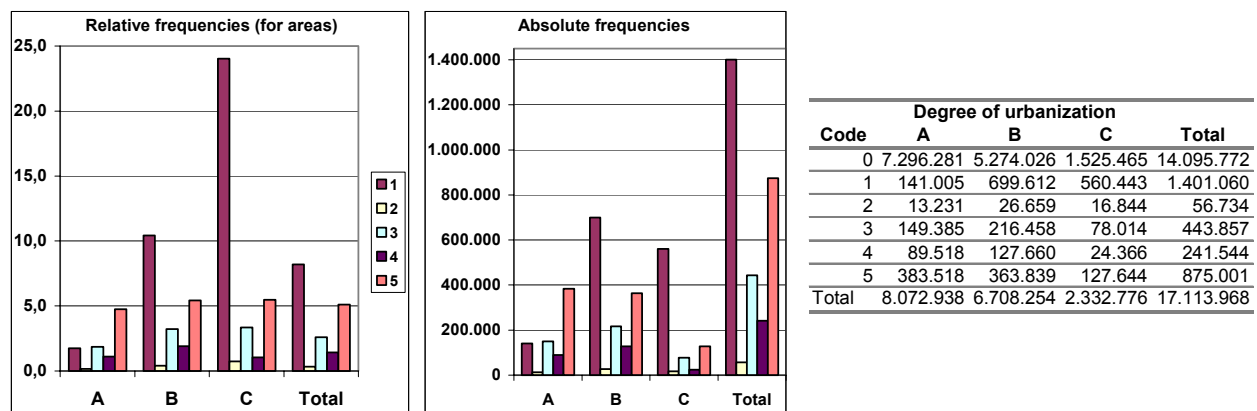
businesses, the second one much less important than the first one (only the 4%), though only the 24,7% of employment in thinly populated area is in agriculture. In absolute values the major part of agricultural employment is in intermediate urbanized areas.

In densely populated areas, the most part (49,4%) of the agriculture and agri food employment is in services industries (the 4,8% of the total) while in intermediate urbanized and thinly populated areas is in primary agriculture (the 50,6% and the 71,5% respectively).

The 49,8% of employment in primary agriculture is in intermediate urbanized areas and the 39,6% in thinly populated areas.

The 48,8% of employment in food manufacturing industries and the 52,9% in auxiliary suppliers are in intermediate urbanized areas. Services industries employment is mainly concentrated in densely populated and intermediate urbanized areas.

Graphs 9: employment by area and sector (2001)



Briefly analyzing regional figures (Appendix 4), three of the twenty Italian regions (Puglia, Campania e Sicilia) hold the 26,9% of the agricultural employment and three (Lombardia, Emilia-Romagna e Veneto) the 40,7% of agri-food employment. For food manufacturing employment, the last three regions have the 41,1% of the total. For auxiliary industries and for services industries, Lombardia has the 25,9% and the 16,4%, respectively.

APPENDIX 1

Output, added value, intermediate consumption of agriculture and food, beverages and tobacco industries

Agriculture, forestry and fishing	2003 (millions of euro)		Var 03/02	
	Constant values	Current values	Constant values	Current values
Output at basic prices	41.140	46.625	- 4,0	1,2
Intermediate consumption	13.840	15.654	- 1,6	0,7
Added value at basic prices	27.300	30.972	- 5,2	1,5
Added value / GDP	2,6	2,4		
Food, beverages and tobacco industries				
Output at basic prices	89.465	99.280	1,3	4,0
Intermediate consumption	69.030	72.763	1,3	3,4
Added value at basic prices	20.435	26.518	1,0	5,5
Added value / GDP	2,0	2,0		

Output, intermediate consumption and value added in Agriculture, forestry and fishing and in Food, beverages and tobacco industries; years 2001-2003; percentage variations compared with previous year

Agriculture, forestry and fishing	Quantities			Prices			Values		
	2001	2002	2003	2001	2002	2003	2001	2002	2003
Output	- 0,4	- 2,1	- 4,0	4,1	2,1	5,5	3,6	- 0,0	1,2
Intermediate consumption	- 0,2	1,8	- 1,6	4,3	0,5	2,3	4,1	2,3	0,7
Value added	- 0,5	- 3,9	- 5,2	3,9	2,8	7,1	3,4	- 1,2	1,5
Food, beverages and tobacco industries									
Output	-0,4	5,1	1,3	3,8	1,3	2,7	3,4	6,4	4,0
Intermediate consumption	-0,4	5,3	1,3	3,5	-0,2	2,1	3,1	5,1	3,4
Value added	-0,3	4,2	1,0	4,6	5,8	4,4	4,2	10,2	5,5

Value added at basic prices 1995 - millions of euro					
	2000	2001	2002	2003	2004
Agriculture, forestry and fishing	30.112	29.963	28.804	27.300	30.260
Agriculture, hunting and forestry	29.114	28.941	27.904	26.365	29.304
Fishing	998	1.021	900	936	956
Industry (excluding construction)	228.676	228.105	227.416	225.169	225.922
Food, beverages and tobacco industries	19.483	19.417	20.229	20.435	20.596
Food industries	16.211	16.188	16.895	17.134	17.177
Beverage and tobacco industries	3.272	3.229	3.334	3.301	3.418
Total value added at basis prices	955.865	975.076	980.927	984.206	997.196
GDP	1.015.077	1.032.985	1.036.945	1.039.581	1.052.308

Output at basic prices 1995 - millions of euro				
	2000	2001	2002	2003
Agriculture, forestry and fishing	43.948	43.766	42.862	41.140
Agriculture, hunting and forestry	42.642	42.430	41.659	39.878
Fishing	1.306	1.336	1.203	1.263
Industry (excluding construction)	736.643	732.746	728.793	721.416
Food, beverages and tobacco industries	84.406	84.087	88.356	89.465
Food industries	72.053	71.861	75.672	76.755
Beverage and tobacco industries	12.353	12.226	12.684	12.710
Total	1.950.423	1.987.533	1.999.660	2.005.476

APPENDIX 2

Agriculture and food industry imports and exports in values and quantities.

Values in millions of euro

	IMPORTS					EXPORTS				
	2000	2001	2002	2003	2004	2000	2001	2002	2003	2004
Agriculture, hunting products	7925,3	7739,1	7801,0	8028,3	7879,4	3563,6	3956,7	3904,4	3888,7	3498,6
<i>EU25</i>	4258,0	4031,5	4047,0	4451,2	4070,1	2997,8	3301,4	3239,1	3182,5	2844,3
Forestry products	641,2	590,0	550,6	518,7	537,6	114,4	114,5	110,6	104,1	100,4
<i>EU25</i>	343,5	300,2	300,1	276,5	283,9	91,9	91,3	88,6	83,9	78,3
Agriculture, hunting and forestry products	8566,6	8329,1	8351,7	8546,9	8417,0	3678,0	4071,2	4015,0	3992,8	3599,0
<i>EU25</i>	4601,5	4331,7	4347,1	4727,7	4354,0	3089,6	3392,8	3327,7	3266,3	2922,5
Fishing and fish farming products	661,3	692,3	695,8	745,4	749,4	179,7	179,8	156,0	151,1	163,6
<i>EU25</i>	527,1	549,0	559,6	603,3	591,4	163,5	162,2	132,9	130,8	135,9
Food products and beverages	15877,0	16953,4	17067,5	17388,1	17833,7	13048,6	13986,8	14982,5	14882,7	15507,9
<i>EU25</i>	12375,3	13012,2	13193,9	13618,3	13816,5	8452,7	9051,2	9699,3	9748,5	10169,0
Tobacco products	1257,5	1419,4	1382,6	1283,4	1525,8	17,3	22,3	27,3	20,8	16,8
<i>EU25</i>	1253,3	1418,0	1380,0	1282,0	1525,0	8,3	10,9	12,8	9,4	9,0
Food products, beverages and tobacco products	17134,5	18372,8	18450,1	18671,5	19359,5	13065,9	14009,0	15009,8	14903,6	15524,7
<i>EU25</i>	13628,6	14430,2	14573,9	14900,3	15341,5	8461,0	9062,1	9712,1	9757,9	10178,0
Manufactured products	217023,7	220983,1	220441,0	218089,7	233503,9	254679,1	265490,5	261520,1	254540,6	270779,9
<i>EU25</i>	145910,4	148571,3	148623,0	147447,3	155269,3	153100,4	157027,8	153908,3	152232,1	158544,0

Quantities in thousands of ton

	IMPORTS					EXPORTS				
	2000	2001	2002	2003	2004	2000	2001	2002	2003	2004
Agriculture, hunting products	14219,2	15458,5	16523,2	16815,6	16846,3	4765,4	4935,4	4705,1	4233,4	4143,4
<i>EU25</i>	8834,1	9108,2	7612,7	9162,2	8211,3	4112,2	4299,4	4067,1	3555,8	3442,2
Forestry products	5140,7	4716,2	4514,7	4351,7	4594,0	40,9	39,1	37,3	30,6	36,2
<i>EU25</i>	3462,1	3016,8	2999,0	2725,6	2759,5	26,7	24,9	24,7	20,5	26,7
Agriculture, hunting and forestry products	19359,8	20174,7	21037,9	21167,3	21440,3	4806,3	4974,5	4742,4	4264,0	4179,6
<i>EU25</i>	12296,2	12125,1	10611,8	11887,9	10970,8	4138,9	4324,3	4091,8	3576,4	3468,9
Fishing and fish farming products	150,8	158,3	160,1	174,7	181,6	71,7	67,3	52,5	58,0	60,5
<i>EU25</i>	128,8	132,9	134,9	151,9	149,7	67,6	62,5	47,1	53,4	54,9
Food products and beverages	14115,8	14973,0	15659,9	16296,9	16690,6	17577,8	19448,2	16812,0	17929,3	14874,0
<i>EU25</i>	9361,7	9495,9	9804,7	10404,5	10650,8	13113,4	15040,9	12167,7	13759,7	11044,6
Tobacco products	64,3	68,3	72,3	65,6	74,2	19,4	21,1	20,5	21,7	24,1
<i>EU25</i>	60,5	67,4	70,6	64,3	73,4	12,1	13,1	14,6	13,8	18,0
Food products, beverages and tobacco products	14180,1	15041,3	15732,1	16362,5	16764,7	17597,1	19469,3	16832,5	17951,0	14898,1
<i>EU25</i>	9422,2	9563,3	9875,3	10468,8	10724,3	13125,5	15054,0	12182,3	13773,5	11062,6
Manufactured products	125965,4	126721,5	132287,3	134861,7	136611,2	108609,0	112684,5	107638,2	110941,5	113500,8
<i>EU25</i>	70960,2	68221,6	69439,2	70308,7	71631,9	68400,1	71927,8	66763,1	71489,6	69217,7

APPENDIX 3

List of groups belonging to “agriculture” and “agri food industry”

Primary agriculture (codes 1-2)

<i>DESCRIPTION</i>	<i>GROUP</i>
Growing of cereals and other crops n.e.c.	01.11
Growing of cereals and other crops n.e.c.	01.11
Growing of vegetables, horticultural specialties and nursery products	01.12
Growing of fruit, nuts, beverage and spice crops	01.13
Farming of cattle, dairy farming	01.21
Farming of sheep, goats, horses, asses, mules and hinnies	01.22
Farming of swine	01.23
Farming of poultry	01.24
Other farming of animals (a part of)	01.25
Growing of crops combined with farming of animals (mixed farming)	01.30
Hunting, trapping and game propagation, including related service activities	01.50
Fishing	05.01
Fish farming	05.02
Mining of chemical and fertilizer minerals	14.30

Manufacture of food products, beverages and tobacco (code 3)

<i>DESCRIPTION</i>	<i>GROUP</i>
Production and preserving of meat	15.11
Production and preserving of poultrymeat	15.12
Production of meat and poultrymeat products	15.13
Processing and preserving of fish and fish products	15.20
Processing and preserving of potatoes	15.31
Manufacture of fruit and vegetable juice	15.32
Processing and preserving of fruit and vegetables n.e.c.	15.33
Manufacture of crude oils and fats	15.41
Manufacture of refined oils and fats	15.42
Manufacture of margarine and similar edible fats	15.43
Operation of dairies and cheese making	15.51
Manufacture of ice cream	15.52
Manufacture of grain mill products	15.61
Manufacture of starches and starch products	15.62
Manufacture of prepared pet foods	15.72
Manufacture of bread; manufacture of fresh pastry goods and cakes	15.81
Manufacture of rusks and biscuits; manufacture of preserved pastry goods and cakes	15.82
Manufacture of sugar	15.83
Manufacture of cocoa; chocolate and sugar confectionery	15.84
Manufacture of macaroni, noodles, couscous and similar farinaceous products	15.85
Processing of tea and coffee	15.86
Manufacture of condiments and seasonings	15.87
Manufacture of homogenized food preparations and dietetic food	15.88
Manufacture of other food products n.e.c.	15.89
Manufacture of distilled potable alcoholic beverages	15.91
Production of ethyl alcohol from fermented materials	15.92
Manufacture of wines	15.93
Manufacture of cider and other fruit wines	15.94
Manufacture of other non distilled fermented beverages	15.95
Manufacture of beer	15.96
Manufacture of malt	15.97
Production of mineral and soft drinks	15.98
Manufacture of tobacco products	16.00

Auxiliary suppliers (code 4)

<i>DESCRIPTION</i>	<i>GROUP</i>
Manufacture of prepared feeds for farm animals	15.71
Manufacture of cordage, rope, twine and netting	17.52
Manufacture of corrugated paper and paperboard and of containers of paper and paperboard	21.21
Manufacture of other articles of paper and paperboard n.e.c.	21.25
Manufacture of fertilizers and nitrogen compounds	24.15
Manufacture of pesticides and other agro-chemical products	24.20
Manufacture of plastic packing goods	25.22
Manufacture of hollow glass	26.13
Manufacture of light metal packaging	28.72
Manufacture of other general purpose machinery n.e.c.	29.24
Manufacture of agricultural tractors	29.31
Manufacture of other agricultural and forestry machinery	29.32
Manufacture of machinery for food, beverage and tobacco processing	29.53

Services suppliers (code 5)

<i>DESCRIPTION</i>	<i>GROUP</i>
Agricultural service activities; landscape gardening	01.41
Animal husbandry service activities, except veterinary activities	01.42
Agents involved in the sale of agricultural raw materials, live animals, textile raw materials and semi-finished goods	51.11
Agents involved in the sale of food, beverages and tobacco	51.17
Wholesale of grain, seeds and animal feeds	51.21
Wholesale of flowers and plants	51.22
Wholesale of live animals	51.23
Wholesale of unmanufactured tobacco	51.25
Wholesale of fruit and vegetables	51.31
Wholesale of meat and meat products	51.32
Wholesale of dairy produce, eggs and edible oils and fats	51.33
Wholesale of alcoholic and other beverages	51.34
Wholesale of tobacco products	51.35
Wholesale of sugar and chocolate and sugar confectionery	51.36
Wholesale of coffee, tea, cocoa and spices	51.37
Wholesale of other food, including fish, crustaceans and molluscs	51.38
Non specialized wholesale of food, beverages and tobacco	51.39
Retail sale in non-specialized stores with food, beverages or tobacco predominating	52.11
Retail sale of fruit and vegetables	52.21
Retail sale of meat and meat products	52.22
Retail sale of fish, crustaceans and molluscs	52.23
Retail sale of bread, cakes, flour confectionery and sugar confectionery	52.24
Retail sale of alcoholic and other beverages	52.25
Retail sale of tobacco products	52.26
Other retail sale of food, beverages and tobacco in specialized stores	52.27
Retail sale via stalls and markets (a part of)	52.62
Renting of agricultural machinery and equipment	71.31
Veterinary activities	85.20

APPENDIX 4

Agriculture and agri food industry: number of units and number of employees by Region, by degree of urbanization and by code.

Region	Degree of urbanization		Code						Total	
			0	1	2	3	4	5		
Abruzzo	A	N. units	26.782	5.999	180	483	122	1.822	102.723	
		Employees	89.903	3.583	791	2.462	794	5.190		
	B	N. units	41.352	46.155	249	1.266	256	3.648		198.932
		Employees	144.651	34.092	1.053	7.499	2.110	9.527		
	C	N. units	17.211	30.679	25	629	75	2.215		85.681
		Employees	58.513	19.154	61	3.205	787	3.961		
N. units - Abruzzo			85.345	82.833	454	2.378	453	7.685		
N. employees - Abruzzo			293.067	56.829	1.905	13.166	3.691	18.678		
Basilicata	B	N. units	8.845	6.414	2	167	24	790	38.145	
		Employees	33.419	1.755	5	832	119	2.015		
	C	N. units	22.220	75.508	20	884	93	2.834		104.034
		Employees	65.212	29.435	63	3.740	537	5.047		
N. units - Basilicata			31.065	81.922	22	1.051	117	3.624		
N. employees - Basilicata			98.631	31.190	68	4.572	656	7.062		
Calabria	A	N. units	23.582	8.596	8	474	56	2.443	84.257	
		Employees	73.201	3.451	90	1.672	193	5.650		
	B	N. units	39.079	83.552	76	1.559	116	5.299		154.024
		Employees	96.032	41.490	1.006	4.313	552	10.631		
	C	N. units	27.853	104.336	35	1.353	57	4.474		119.410
		Employees	52.956	55.450	356	3.467	227	6.954		
N. units - Calabria			90.514	196.484	119	3.386	229	12.216		
N. employees - Calabria			222.189	100.391	1.452	9.452	972	23.235		
Campania	A	N. units	203.871	64.594	134	4.387	871	24.894	759.133	
		Employees	640.725	40.420	1.677	23.124	6.962	46.225		
	B	N. units	47.155	104.700	79	1.773	170	6.735		198.181
		Employees	124.420	53.125	474	7.982	943	11.237		
	C	N. units	23.885	79.638	36	917	98	3.400		100.944
		Employees	56.246	35.322	164	3.107	935	5.170		
N. units - Campania			274.911	248.932	249	7.077	1.139	35.029		
N. employees - Campania			821.391	128.867	2.315	34.213	8.840	62.632		
Emilia-Romagna	A	N. units	137.944	7.886	292	1.801	985	7.732	587.483	
		Employees	517.999	8.920	652	17.676	13.728	28.508		
	B	N. units	176.479	63.993	610	4.194	2.324	13.070		862.549
		Employees	679.246	62.511	1.622	41.204	31.334	46.632		
	C	N. units	37.096	36.009	1.078	1.298	364	3.964		158.164
		Employees	107.176	29.128	2.583	8.311	2.435	8.531		
N. units - Emilia-Romagna			351.519	107.888	1.980	7.293	3.673	24.766		
N. employees - Emilia-Romagna			1.304.421	100.559	4.857	67.191	47.497	83.671		
Friuli-Venezia Giulia	A	N. units	25.956	1.085	41	298	52	1.907	110.239	
		Employees	100.245	860	163	2.454	355	6.162		
	B	N. units	47.705	24.473	657	705	347	3.350		243.599
		Employees	203.023	17.486	1.436	4.955	5.989	10.710		
	C	N. units	12.101	9.405	568	268	78	1.124		59.590
		Employees	43.203	9.394	1.079	1.824	1.031	3.059		
N. units - Friuli-Venezia Giulia			85.762	34.963	1.266	1.271	477	6.381		
N. employees - Friuli-Venezia Giulia			346.471	27.740	2.678	9.233	7.375	19.931		
Lazio	A	N. units	236.757	12.368	172	1.696	467	15.453	947.236	
		Employees	882.822	8.812	669	10.872	2.467	41.594		
	B	N. units	88.728	135.108	268	1.738	398	9.938		396.223
		Employees	294.903	64.191	844	9.843	3.336	23.106		
	C	N. units	21.773	67.190	62	597	80	2.913		92.440
		Employees	52.510	31.820	152	2.252	392	5.314		
N. units - Lazio			347.258	214.666	502	4.031	945	28.304		
N. employees - Lazio			1.230.235	104.823	1.665	22.967	6.195	70.014		

Region	Degree of urbanization		Code					Total	
			0	1	2	3	4		5
Liguria	A	N. units	81.284	13.998	203	1.394	201	7.543	314.065
		Employees	275.449	10.259	682	5.889	1.059	20.727	
	B	N. units	32.919	16.496	69	784	135	3.419	120.619
		Employees	90.079	15.325	345	3.129	1.346	10.395	
	C	N. units	6.302	13.772	18	238	23	899	26.610
		Employees	14.079	9.469	59	886	514	1.603	
N. units - Liguria			120.505	44.266	290	2.416	359	11.861	461.294
N. employees - Liguria			379.607	35.053	1.086	9.904	2.919	32.725	
Lombardia	A	N. units	545.334	12.506	109	4.496	3.936	24.972	2.525.915
		Employees	2.334.881	14.489	253	37.965	41.428	96.899	
	B	N. units	172.731	41.276	852	2.862	1.950	13.616	794.703
		Employees	662.532	46.192	1.264	26.332	19.273	39.110	
	C	N. units	34.040	21.085	359	732	254	3.642	141.957
		Employees	106.842	19.482	468	5.419	1.977	7.769	
N. units - Lombardia			752.105	74.867	1.320	8.090	6.140	42.230	3.462.575
N. employees - Lombardia			3.104.255	80.163	1.985	69.716	62.678	143.778	
Marche	A	N. units	34.028	3.764	432	468	144	2.372	128.574
		Employees	113.914	2.463	1.505	2.587	799	7.306	
	B	N. units	66.760	36.800	359	1.228	543	5.163	306.501
		Employees	257.825	20.124	1.023	6.756	6.199	14.574	
	C	N. units	19.815	25.999	76	521	144	1.873	86.974
		Employees	62.562	16.214	120	3.347	1.107	3.624	
N. units - Marche			120.603	66.563	867	2.217	831	9.408	522.049
N. employees - Marche			434.301	38.801	2.648	12.690	8.105	25.504	
Molise	A	N. units	3.824	1.219		78	7	339	13.684
		Employees	11.830	441		609	13	791	
	B	N. units	226	678		8	1	31	971
		Employees	513	344		17	1	96	
	C	N. units	14.179	32.076	59	570	65	1.950	65.175
		Employees	42.973	14.957	226	2.824	718	3.477	
N. units - Molise			18.229	33.973	59	656	73	2.320	79.830
N. employees - Molise			55.316	15.742	226	3.450	732	4.364	
Piemonte	A	N. units	130.308	2.344	15	1.366	674	8.377	596.258
		Employees	556.572	3.088	28	7.811	4.618	24.141	
	B	N. units	141.443	56.771	716	2.729	1.336	11.525	672.590
		Employees	559.861	44.593	1.158	21.877	12.052	33.049	
	C	N. units	50.132	61.850	841	1.396	566	5.486	228.615
		Employees	155.369	45.977	1.469	9.172	4.496	12.132	
N. units - Piemonte			321.883	120.965	1.572	5.491	2.576	25.388	1.497.463
N. employees - Piemonte			1.271.802	93.658	2.655	38.860	21.166	69.322	
Puglia	A	N. units	60.111	37.077	302	1.179	266	6.570	262.227
		Employees	225.517	12.521	2.841	5.274	1.747	14.327	
	B	N. units	131.400	264.060	422	4.032	724	15.795	517.112
		Employees	364.021	95.724	2.616	17.766	4.036	32.949	
	C	N. units	16.779	51.373	66	699	69	2.626	67.041
		Employees	34.608	25.201	568	1.987	350	4.327	
N. units - Puglia			208.290	352.510	790	5.910	1.059	24.991	846.380
N. employees - Puglia			624.146	133.446	6.025	25.027	6.133	51.603	
Sardegna	A	N. units	21.427	1.373	52	274	49	1.912	79.203
		Employees	70.564	491	492	1.552	166	5.938	
	B	N. units	20.853	17.375	112	414	75	2.426	88.749
		Employees	70.954	8.348	456	1.878	656	6.457	
	C	N. units	49.040	93.941	237	1.771	134	6.866	207.330
		Employees	127.305	55.263	2.244	7.153	808	14.557	
N. units - Sardegna			91.320	112.689	401	2.459	258	11.204	375.282
N. employees - Sardegna			268.823	64.102	3.192	10.583	1.630	26.952	

Region	Degree of urbanization		Code					Total	
			0	1	2	3	4		5
Sicilia	A	N. units	95.739	21.969	338	2.404	309	9.602	325.203
		Employees	281.274	8.920	1.746	7.972	1.519	23.772	
	B	N. units	95.894	175.033	874	3.555	471	12.056	
		Employees	243.906	55.627	5.875	12.032	2.256	25.976	
	C	N. units	35.636	168.344	239	1.599	111	5.171	
		Employees	74.007	48.050	1.239	4.079	504	8.864	
N. units - Sicilia			227.269	365.346	1.451	7.558	891	26.829	
N. employees - Sicilia			599.187	112.597	8.860	24.083	4.279	58.612	
Toscana	A	N. units	112.643	6.911	122	1.024	436	6.439	420.134
		Employees	388.061	4.756	477	5.188	2.273	19.379	
	B	N. units	143.064	66.971	385	1.979	870	9.914	
		Employees	491.014	38.286	1.015	11.576	8.215	30.391	
	C	N. units	53.925	65.990	748	1.209	339	5.094	
		Employees	160.442	45.776	2.437	7.219	3.301	11.820	
N. units - Toscana			309.632	139.872	1.255	4.212	1.645	21.447	
N. employees - Toscana			1.039.517	88.818	3.929	23.983	13.789	61.590	
Trentino-Alto Adige	A	N. units	20.381	2.977	59	148	77	1.278	98.160
		Employees	86.468	2.898	255	2.107	552	5.880	
	B	N. units	20.286	16.636	193	296	119	1.521	
		Employees	73.870	11.628	525	3.579	1.899	5.901	
	C	N. units	37.589	41.640	129	512	123	2.669	
		Employees	119.630	36.491	305	3.876	791	9.123	
N. units - Trentino-Alto Adige			78.256	61.253	381	956	319	5.468	
N. employees - Trentino-Alto Adige			279.968	51.017	1.085	9.562	3.242	20.904	
Umbria	B	N. units	39.952	22.619	20	661	212	3.021	165.550
		Employees	138.304	10.748	64	5.796	2.173	8.465	
	C	N. units	23.021	34.534	48	590	180	2.094	
		Employees	71.740	17.623	239	3.086	2.122	5.181	
N. units - Umbria			62.973	57.153	68	1.251	392	5.115	
N. employees - Umbria			210.044	28.371	303	8.882	4.295	13.646	
Valle d'Aosta	C	N. units	11.132	6.595	18	196	20	779	44.508
		Employees	35.850	4.894	40	970	427	2.327	
N. units - Valle d'Aosta			11.132	6.595	18	196	20	779	
N. employees - Valle d'Aosta			35.850	4.894	40	970	427	2.327	
Veneto	A	N. units	157.884	30.917	381	1.681	1.120	9.395	718.444
		Employees	646.856	14.633	910	14.171	10.845	31.029	
	B	N. units	188.194	142.757	2.134	3.140	2.105	13.995	
		Employees	745.453	78.023	5.878	29.092	25.171	42.618	
	C	N. units	23.464	17.411	1.232	429	131	1.971	
		Employees	84.242	11.343	2.972	2.090	907	4.804	
N. units - Veneto			369.542	191.085	3.747	5.250	3.356	25.361	
N. employees - Veneto			1.476.551	103.999	9.760	45.353	36.923	78.451	
N. units - ITALY			3.958.113	2.594.825	16.811	73.149	24.952	330.406	
N. employees - ITALY			14.095.772	1.401.060	56.734	443.857	241.544	875.001	

Degree of urbanization:

- A densely populated area (at least 500 inhabitants/Km²);
- B intermediate urbanized area (between 100 and 499 inhabitants/Km²);
- C thinly populated area (less than 100 inhabitants/Km²).

Codes:

- 1 Primary agriculture (from census of agriculture);
- 2 Primary agriculture (from census of industry and services);
- 3 Manufacture of food products, beverages and tobacco (from census of industry and services);
- 4 Auxiliary suppliers (from census of industry and services);
- 5 Services suppliers (from census of industry and services);
- 0 All other sectors.

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