8

The Italian Food Industry: Structure and Characteristics

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8.1 INTRODUCTION

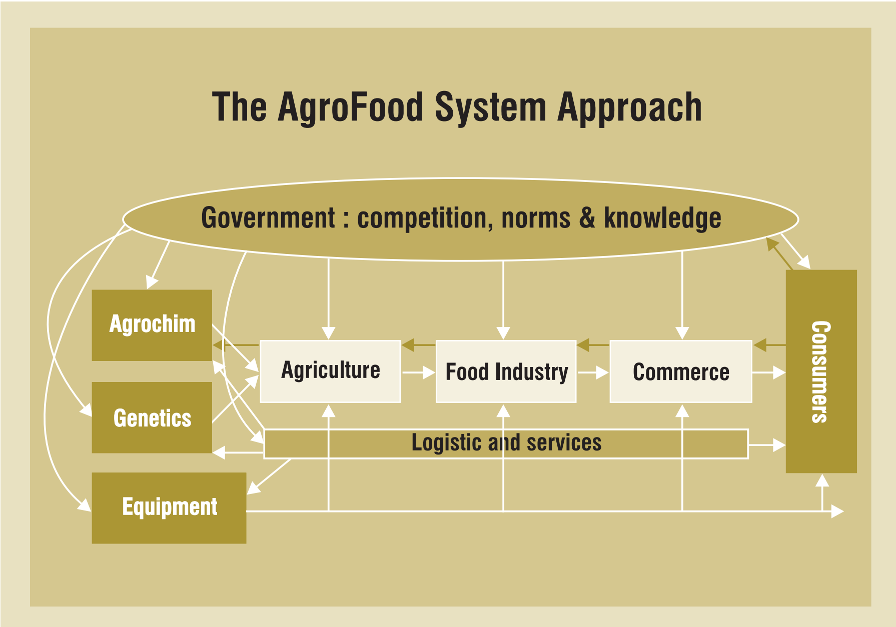
The Italian Food Industry is a fundamental part of the economic system and represents an important sector of the Italian manufacturing industry. In recent years the food industry has been affected by the process of decline and loss of competitiveness of Italian industry. In fact, in these last years the food industry has closely followed the changes of the whole of manufacturing industry, both as regards the levels of productivity, and levels of investment[1].

However, during the last decade the food industry has evidenced some contrasting (anti-cyclical) characteristics from the past. Specifically, this has been true not only for the regular growth of food consumption, but also for the constant and consistent development of its exports within the last decade. In these years, there has been a strong contraction of the exports of manufacturing industry (-4% during the 2003), while the food industry has shown less than half this reduction, or -1.9%.

1 Recent analysis and debate on the industrial decline in Italy are in Nardozzi G. *Miracolo e declino,* Ed. Laterza, 2004; Toniolo G., Visco V. *Declino economico dell' Italia,* Mondatori ed. 2004; Gallino L. *La scomparsa dell' Italia industriale,* Einaudi ed. 2003.

8.2 THE ITALIAN FOOD INDUSTRY AND ITS INTEGRATION

The food industry is generally characterized by a growing integration with the rest of the agri-food system and the food chain. The connections among agriculture, food industry and food distribution today create a general and integrated vision of the agri-food system. The relevance of the analysis of the agri-food system and the complex relationships between its components has been particularly developed by the numerous works of L. Malassis (1976, 1979). A recent diagram of the agri-food approach has been presented by J.L. Rastoin and Feillet (see below).



Source: Feiller (2002)

An evaluation of the economic value of the agro-food system in Italy has been carried out by the INEA (National Institute of Agricultural Economics). The main components of the agri-food system in Italy in 2002 have a total value added of over 196 billion euro, equal to 15.6% of the Italian GDP.

The main components are 30.8 billion euro of value added of agriculture (around 16% of the total), about 15.3 billion of agricultural intermediary goods (foods, fertilizers, etc.) and about 16.3 billion of agri-food investments (8.3%). The value added of the food industry is around 25 billion (12.7%), catering servises are more than 30.5 billion euro (15.5%) with over 67 billion euro for marketing and distribution, equal to over 33% of the total value of the agri-food system.

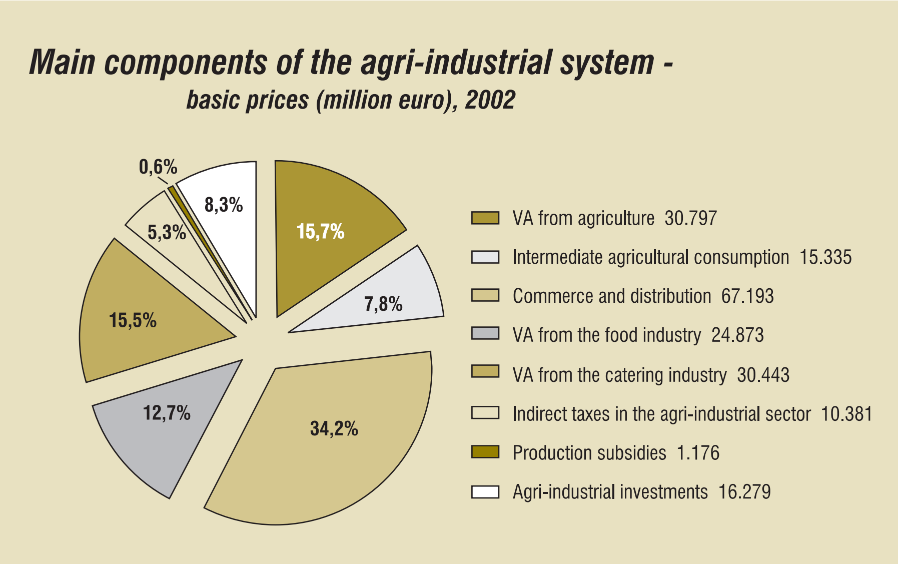


Figure 8.1 Main components of the agri-food system

Today's value of the different components of the Italian agri-food system is the result of major changes during the post second world war period. These changes have affected, in more marked ways, all the different components of the food chain. For example, in 1951 the value of the agricultural production was equal to over 75% of the value of the food consumptions of the Italian families, while today it is less than 40%.

8.3 THE STRUCTURAL CHANGES IN THE ITALIAN FOOD INDUSTRY

The Italian food industry has been involved in great structural changes, not only in the formation of important industrial groups, with a strong foreign presence, but also in the specialization and territorial concentration of small and medium size enterprises in agri-food districts. The Italian food industry, even if diffused on the whole national territory, is characterized by a strong concentration in the North, with 65% of the national total budget, while in the South it has a particular importance inside the weak industrial sector of southern regions.

The relationships between agriculture and the agri-food industry has progressively decreased because many of the activities of transformation are gradually being moved from the agricultural farms to the handcraft and industrial enterprises. Moreover in the last decades, the direct relationship between local agricultural production and its transformation is weakening not only due to the processes of territorial specialization of the same Italian agriculture, but also to the increase of integration and growing exchanges with other European agricultures.

Furthermore the Italian food industry, in many aspects, is approaching to the characteristics of the other industrial sectors of the Italian economy, which import row material to be transformed not only from the other European countries but also from the rest of the world.

The relationships between agriculture and the food industry could be highly influenced recently by the reform of the European agricultural politics (started in 1992 and revised in 2003) which, as is well known, will reduce the prices at production level for the main agricultural products, and therefore it could determine better conditions in favour of the use of the Italian and European production in the food industry.

Today the food industry must face other important changes that are particularly relevant and involve structural changes and rapid development of the logistical systems and major organized distribution. The growth of the large-scale retail trade in the last decade has caused a notable reduction of the old traditional distributive structure, based on very small shops, that often, in the past, have had a role of safeguarding and protecting the agri-food Italian system, from the strengthening competition of the other European countries.

The new phenomenon of integration of the productive process in the important «filiere» of the agri-food system in Italy, has been determined by the territorial rooting of some typical and traditional production and, simultaneously by the affirming of a flexible specialization among firms, generating the necessity of closer and clear relationships between the different actors and protagonists of the whole food chain.

The organizational aspects, that more often create relationships among agricultural production, transformers and great distribution, constitute the important factors to develop the competitiveness of Italian products on the national and European markets, to stimulate the capability to satisfy changes and differentiation of the models of consumption, especially in a situation of saturation of food consumption in terms of calorific support.

The structural changes of the food industry in Italy have been accompanied by a progressive growth of this industry in the past decades. The food industry has now reached a value of total production of over 98 million euros in 2002, with employment of over 482.000 workers, of which 342.000 are dependent workers.

The Italian food industry, according to Report in 2003 of ISMEA-Federalimentare represents, in terms of turnover, around 15% of the European total, and it follows in importance the German (17.6%), French (18.4%) and English (15.6%).

The food industry is not only characterized by the presence of very different sub-sectors which differ not only in their economic importance, but above all, in their firms and occupational structure.

The sub-sectors and “filières” of greatest importance in the Italian food industry are the milk-cheese sector (13.5% of food industry), confectionery (9.2%), the transformation of beef meats and pork meat (12.7%), followed by the sectors of poultry meats, feed, pasta-making and milling and vegetable preserves with about 3-5% of relative importance each. However, the Italian food industry is also characterized by the presence of numerous sub-sectors of lesser importance (olive oil, sugar, beer, juices and fruit drinks, frozen foods etc.), that often characterize some of the Italian regions.

In consideration of the strong concentration and territorial specialization of the single sub-sectors, to understand the reality of the Italian food industry, the development of the analyses at national and also at regional level (NUTS 2 level) are not enough. The analysis, at least in Italy, must be realised at a provincial level (NUTS 3) where the more important events take place.

8.3.1 The food industry and the recent Census of Industry and Services 2001

The reality of the Italian food industry results in a very complex structure both as regards sectorial composition, and the existing differences to territorial level.

The results of the last general Census of the Industry, Commerce and Services of 2001 (ISTAT), confirm the composite reality of the food industry and underline deep changes in comparison with the previous decades.

The structural evolution of the food industry has seen the maintenance of its relative importance inside the Italian manufacturing industry, where a real deindustrialisation process (in terms of number of firms and workers) occurred in the North-western part of the country, whereas a consolidation of food industry has been in the Northeast and especially in the Central regions.

The dimensional structure of the food industry in Italy has shown very limited changes in the 1990's even if the differences among the single sub-sectors are notable. In the next paragraphs we will examine the principal aspects of the structural evolution of the Italian food industry by using the general censuses of the industry from 1971 to 2001 but giving main relevance to the changes in the last decade. The detailed examination of the characteristics of the Italian food industry at territorial level (municipality) will however be considering the results of the 2001 industry census.

8.3.2 The structural and territorial evolution (1971-2001)

The food industry in Italy, according to the data of the Census of the Industry and Services 2001, has about 67,000 enterprises and 445,000 employees, which represent more than 7% of the total workers of the current manufacturing industry.

The most important region is Lombardia with over 8,200 local units of production (establishments) and 71,000 employees, followed by the Emilia Romagna with over 68,000 employees. In the South the region with the greatest number of local units is Sicily (7,600), but with a number of employees (24,000) lower than that of Campania (32,600). In the Centre-North regions there are over the 60% of the enterprises and almost 80% of the expected turnover of the Italian food industry.

The changes in number of employees and the local units of the Italian food industry during the last decades has followed the more general changes of the manufacturing industry, but with some important differences. According to the data of the censuses, from 1981 to 2001 the food industry has seen a considerable increase of the local units (establishments), but with a very modest reduction in the number of the employees. The Italian food industry has not contributed therefore in substantial way to that phenomenon of deindustrialisation noted during these last decades in other sectors of the manufacturing industry, particularly the textile and footwear industries. The process of deindustrialisation had no great impact in the food industry with a real reduction of workers only in North Western regions of Italy and less so in the Central regions. A substantial improvement of employment opportunities in the food industry occurred during the last decades in the North East and particularly in the Southern regions.

Examining the data of the recent general Censuses of the Industry, we could underline that, the local units in the food industry have shown a constant and consistent increase: + 11% from 1981-91 and + 9% from 1991 to 2001.

The increase of the number of the establishments, however, has not been uniform at regional level. In fact, while in the decade 1981-91 it increased in the Northeast and in the South (by around 15%), in the following decade (1991-2001) the increase has been particularly remarkable only in the South (+18%), while in the Northeast a notable reduction of the local units occurred (-1.2%). The increase of the local units in the last decade has also been remarkable in the Centre of Italy (+9%) and in the Northwest (+4.4%).

The employment reduction in the food industry has been modest in the last two decades (-1.3% from 1981-1991 and -2.6% from 1991 to 2001) and therefore much lower than in the rest of the manufacturing industry.

Moreover the reduction of employment is not uniform at regional level. Specifically, in 1991-2001 the greatest reduction has been in North-western and in the Centre of Italy (-5.8 and -5.9% respectively), while in the Northeast the reduction has been only 1.1% and in the South in contrast there has been a real increase of the employees in the food industry (+1.2%).

Table 8.1 Local units and employees in the Italian food industry from 1971 to 2001

Geographical division	1971	1981	1991	2001	71/81	81/91	91/01
	LOCAL UNITS				Variations %		
Northwest	10963	14848	15723	16411	35.4	5.9	4.4
Northeast	13343	13225	15151	14976	-0.9	14.6	-1.2
Centre	9414	10288	10807	11774	9.3	5.0	8.9
South	21750	22388	25833	30671	2.9	15.4	18.7
TOTAL	**55470**	**60749**	**67514**	**73832**	**9.6**	**11.1**	**9.4**
	EMPLOYEES				Variations %		
Northwest	132550	133692	129093	121666	0.9	-3.4	-5.8
Norteast	110835	129834	134450	132918	17.1	3.6	-1.1
Centre	61255	71978	71907	67661	17.5	-0.1	-5.9
South	105774	127012	120981	122404	20.1	-4.7	1.2
TOTAL	**410414**	**462516**	**456431**	**444649**	**12.7**	**-1.3**	**-2.6**

Source: ISTAT - General Censuses of Industry and Services (1971, 1981, 1991, 2001)

The Census results denote a significant change of the geography of the Italian food industry with a particular concentration of the number of the employees in the Northeast (30%) and especially in the Southern regions (27%).

The main differences in the structural characteristics of the Italian food industry are more evident at territorial level, both as regards distribution of the enterprises of larger size, and in the importance of the different sub-sectors. The changes at regional and provincial level are remarkable and even greater than those detectable among the wider areas of the country, because they are accompanied by a process of specialization of the principal sub-sectors that makes the food industry at territorial level very composite and diversified.

An important issue in understanding the reality of the Italian food industry concerns the modest average size of the enterprises and the local units. In fact, the average local unit employs just over six employees, but with lower sizes in the Southern regions which have less than 4 employees on average.

The presence of local units of production with less than 10 employees results compared, while those of greater size are still limited. Only 10% of the local units had more than 10 employees, but they employ 60% of the employees in the Italian food industry. An element that underlines a strong structural dichotomy of the Italian food industry is the distribution of the larger firms. The local units with more than 100 employees, according to the 2001 Census, number only 480 but they employ over 117,000 employees, more than a quarter of the total of the food industry. The prevailing location of the bigger local units is in the regions of North-western and North-stern part of Italy, where they represent about one-third of the workers of the food industry. However, in the Central regions, the importance of the local units of larger size is reduced to little more than 20% in terms of employees. In the Southern regions, the local units with more than 100 employees number only 81 and they employ less than 15% of total employees of the food industry.

A more careful reading of census data, shows that the great number of the local unities of smaller sizes, with handicraft structure, is determined mainly by the fact that in the food industry the sub-sector of “other alimentary products” (code 15.8 of the ISTAT classification) includes bread-making operations, confectioneries and other small activities (code 15.8.1), that alone represent almost 43% of the local units and about 23% of the employees of the food industry. The large majority of these local units and employees are in small enterprises with less than 10 employees and they heavily influence the average size of the firms of food industry[2].

2 The code 15.8 of manufacture of other alimentary products in the 2001 Census counted over 50,000 local unities and more than 220,000 employees, that are almost exactly half of all the employees of the Italian food industry. The most important subclass is 15.8.1, that includes confectioneries and bakeries and in 2001 it almost had 39,000 local units and about 128,000 employees. Almost all of the 15.8.1 local units have less than 10 employees. Among the other subclasses, we can find also important components of the food industry, like sugar refinery.

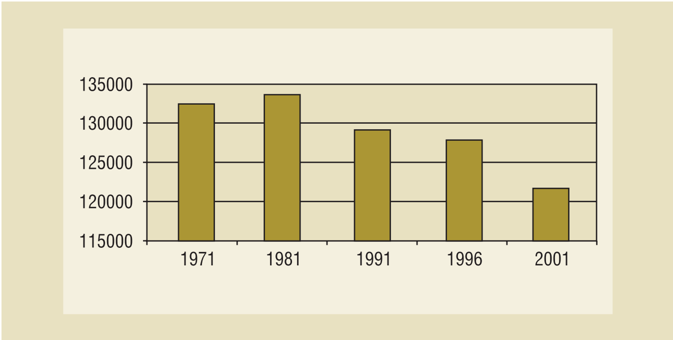


Figure 8.2 Italian Food Industry: Northwest employees in Local Units

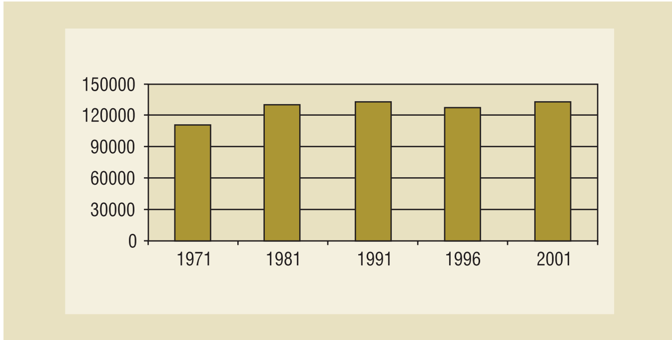


Figure 8.3 Italian Food Industry: Northeast employees in Local Units

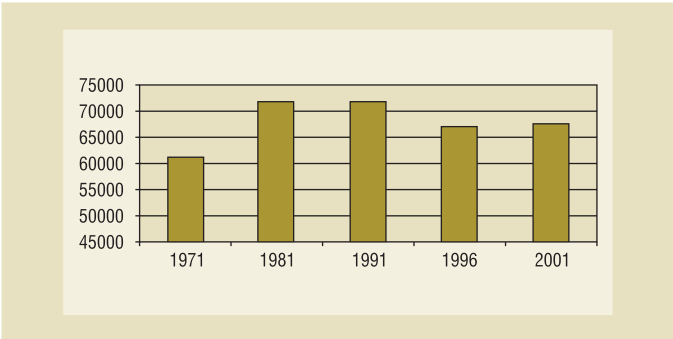


Figure 8.4 Italian Food Industry: Centre employees in Local Units

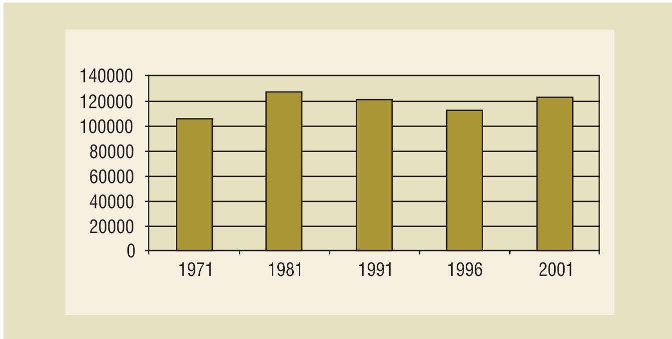


Figure 8.5 Italian Food Industry: South employees in Local Units

Table 8.2 Local units and employees in the food industry in 2001

Geographical dividion	1-9		10-19		20-49		50-99		100-499		>500		Total	
	L.U.	Empl.	L.U.	Empl.	L.U.	Empl.	L.U.	Empl.	L.U.	Empl.	L.U.	Empl.	L.U.	Empl.
Northwest	14561	41926	1003	13486	527	15470	161	10883	148	30607	10	9294	16410	121666
Northeast	12805	40224	1211	16179	592	17871	179	12430	173	31434	16	14780	14976	132918
Center	10601	30283	752	9854	312	9455	57	3853	46	8898	6	5318	11774	67661
South	28687	65927	1243	16384	532	15312	120	8078	78	14364	3	2339	30663	122404
TOTAL	66654	178360	4209	55903	1963	58108	517	35244	445	85303	35	31731	73823	444649

Source: ISTAT - General Censuses of Industry and Services (2001)

Table 8.3 Local units and employees in the food industry in 2001 (%)

Geographical dividion	1-9		10-19		20-49		50-99		100-499		>500		Total	
	L.U.	Empl.	L.U.	Empl.	L.U.	Empl.	L.U.	Empl.	L.U.	Empl.	L.U.	Empl.	L.U.	Empl.
Northwest	88.7	34.5	6.1	11.1	3.2	12.7	1.0	8.9	0.9	25.2	0.1	7.6	100.0	100.0
Northeast	85.5	30.3	8.1	12.2	4.0	13.4	1.2	9.4	1.2	23.6	0.1	11.1	100.0	100.0
Center	90.0	44.8	6.4	14.6	2.6	14.0	0.5	5.7	0.4	13.2	0.1	7.9	100.0	100.0
South	93.6	53.9	4.1	13.4	1.7	12.5	0.4	6.6	0.3	11.7	0.0	1.9	100.0	100.0
TOTAL	90.3	40.1	5.7	12.6	2.7	13.1	0.7	7.9	0.6	19.2	0.0	7.1	100.0	100.0

Source: ISTAT - General Censuses of Industry and Services (2001)

8.4 THE ENTERPRISES STRUCTURE OF THE ITALIAN FOOD INDUSTRY

The typology of the Italian food industry enterprises, shows the presence of on one hand, numerous individual enterprises, remarkable in numerical terms and also in terms of employment.

The number of individual enterprises has substantially remained the same in the last twenty years: at 37,000 in 1981 against 35,000 in 2001. In the individual enterprises however there has been a considerable reduction of employees, from 119,000 to only 89,000 in the same period.

Despite the significant reduction of employment in the small local units during the last twenty years, they still account for over half of the total enterprises, even if they employ less than 20% of the total employees of the food industry. These small individual enterprises have an average size of less than 2.5 employees.

The reduction of the individual enterprises has been accompanied by a consistent increase of the number of workers in type of family businesses (family business). In fact the persons societies have doubled, from little more than 10,000 in 1981 to almost 21,000 in 2001. The employees of these societies increased by 73,000 to over 101,000 in the same period, and in 2001 they represent 23% of the total of the food industry. The average size of these enterprises increased up to almost an average 5 of employees, more than double of those individuals.

The stakeholder companies (stakeholder company), that represent the main type of enterprises, in the last twenty years have considerably increased in their number although their occupational importance has not changed. In fact, the number of capital societies has increase by more than 3,500 in 1981 to almost 8,300 in 2001, with a strong increase especially in the course of the nineties. The number of employees of capital societies went down from over 217,000 in 1981 to 210,000 employees in 1991, and then recovered to 213,600 in 2001. The capital societies represent the most important part of the employment of the food industry with almost 49% of total employees. Their average size, over 25 employees per enterprise, is considerable if compared with that of the other types of enterprises.

Among the societies an important role is assumed by the cooperative enterprises that have faced a considerable restructuring during the last decades. In fact, their number has more than halved, from 4,800 units in

1981 to little more than 2,200 in 2001, while employment was reduced to a lesser extent from 55,000 to more than 43,000 employees. The restructuring of the food cooperative societies during the eighties caused a consistent reduction of their number, while in the 1990's there has been an employment reduction. In these terms the cooperative societies represent almost 10% of the employees of the food industry, and their average size is 20 employees per enterprise.

Table 8.4 Enterprises and employees of the food industry in Italy by type (1981-2001)

Italy	1981		1991		2001	
	Enterpr.	**Empl.**	**Enterpr.**	**Empl.**	**Enterpr.**	**Empl.**
Individual enterprise	36745	119007	36753	106795	35461	87627
Company of people	10277	73049	17034	94741	20901	101747
Company of capitals	3568	217557	5046	210949	8289	213600
Social cooperative	4804	55591	2875	50384	2206	43147
Other enterprise form	242	5254	195	3277	79	664
Total	**55636**	**470458**	**61903**	**466146**	**66936**	**446785**

Source: ISTAT - General Censuses of Industry and Services (1981, 1991, 2001)

Table 8.5 Enterprises and employees of the food industry in Italy by type (% 1981-2001)

Italy	1981		1991		2001	
	Enterpr.	**Empl.**	**Enterpr.**	**Empl.**	**Enterpr.**	**Empl.**
Individual enterprise	66	25.3	59.4	22.9	53	19.6
Company of people	18.5	15.5	27.5	20.3	31.2	22.8
Company of capitals	6.4	46.2	8.2	45.3	12.4	47.8
Social cooperative	8.6	11.8	4.6	10.1	3.3	9.7
Other enterprise form	0.4	1.1	0.3	0.7	0.1	0.1
Total	**100**	**100**	**100**	**100**	**100**	**100**

Source: ISTAT - General Censuses of Industry and Services (1981, 1991, 2001)

The typology of the enterprises of the food industry shows substantial differences among the four main geographical areas of Italy. As regards individual enterprises, they represent more than 64% of the units of the Southern regions, a value much greater the national average (53%). Similarly for employment percentage: 35% of the Southern employees work in individual enterprises, against 20% at national level and lower percentages in other areas.

The situation partially overturns reverses in the societies of people, where the percentage of such enterprises in the South, about 22%, is lower than the national average (31.2%), and in the other three areas where that value varies between 37 and 39% of enterprises.

A similar situation exists for the capital societies: the percentage of the enterprises belonging to this category are more or less the same in all the areas (between 11.1 and 12.6% of the number of enterprises), while differences are evident as regards the percentage of the employees, with over 60% of employee in Northwest regions, whereas in the South this percentage is only 35% of employees.

The cooperatives which have developed during the last two decades have suffered a strong reduction in numbers and employment. Their importance at national level is little more than 3% of enterprises and more than 9% of employees. They are mainly concentrated in the Northeast regions where they represent 6% of the food enterprises, but they account for more than 19% of employees.

Table 8.6 Enterprises and employees in the food industry by type and geographical division (2001)

Geographical division	Individual enterprise	Company of people	Company of capitals	Social cooperative	Other enterprise form	Total
	ENTERPRISES					
Northwest	7117	5489	1863	317	18	14804
Northeast	5368	5195	1945	791	17	13316
Centre	4867	4027	1343	248	14	10499
South	18109	6190	3138	850	30	28317
TOTAL	**35461**	**20901**	**8289**	**2206**	**79**	**66936**
	EMPLOYEES					
Northwest	18814	26877	79307	5882	177	131057
Northeast	15498	28183	64596	25562	76	133915
Centre	13212	19580	29705	4747	199	67443
South	40103	27107	39992	6956	212	114370
TOTAL	**87627**	**101747**	**213600**	**43147**	**664**	**446785**

Source: ISTAT - General Censuses of Industry and Services (2001)

Table 8.7 Enterprises and employees in the food industry by type and geographical division (% 2001)

Geographical division	Individual enterprise	Company of people	Company of capitals	Social cooperative	Other enterprise form	Total
	% on the total one of the enterprises					
Northwest	48.1	37.1	12.6	2.1	0.1	100
Northeast	40.3	39	14.6	5.9	0.1	100
Centre	46.4	38.4	12.8	2.4	0.1	100
South	64	21.9	11.1	3	0.1	100
TOTAL	**53**	**31.2**	**12.4**	**3.3**	**0.1**	**100**
	% on the total one of the employees					
Northwest	14.4	20.5	60.5	4.5	0.1	100
Northeast	11.6	21	48.2	19.1	0.1	100
Centre	19.6	29	44	7	0.3	100
South	35.1	23.7	35	6.1	0.2	100
TOTAL	**19.6**	**22.8**	**47.8**	**9.7**	**0.1**	**100**

Source: ISTAT - General Censuses of Industry and Services (2001)

8.5 EVOLUTION AND SPECIALIZATION OF THE SUB-SECTORS

In the last twenty years, the Italian food industry has seen a substantial increase of local firms, about 21%, but at the same time a 4% reduction in the number of employees. The different sub-sectors of the Italian food industry have had substantially different trends in the changes in the number of local units and employees.

The reduction has been very evident in the sub-sectors of grains and starchy products, where from 1981 to 2001 employment was substantially halved, from around 23,500 to 12,700. In this sub-sector the number of local units decreased sharply, from 5,500 in 1981 to only 2,203 in 2001. Another sub-sector that has suffered similar losses of local units and employees in percentage terms is that of oils and vegetable and animal fats. The employees of these sub-sectors have reduced by 34,000 to around 16,500, and the local units from 7,300 to 4,800 in the period 1981-2001.

The sub-sector of drinks and feed for animals, have seen a slow decrease during 1981-2001, both of the number of the local units and employees, but in a less marked way in comparison to the previous sub-sectors.

A different trend over time has been seen for the milk-cheese sub-sector industry with a lower decrease in the number of local units with an increase in employees from 50,000 to 52,500 (1981-2001). In the sub-sector of meat, in the last two decades, there has been a reduction in the number of local units but an increase in employees. In the sub-sectors of fish, fruit and vegetables the changes have been conflicting, and the number of local units has increased while that of employees has decreased.

The only sub-sector that has seen a growth in the number of the local units and the employees, is the other alimentary products, which has grown constantly from 1981 to the present. The local units of such sub-sector have increased by 28,000 to 50,500, and employees from 172,200 to 220,000 in the last twenty years.

The location and the specialization of the sub-sectors of the Italian food industry in 2001, as concerns the regions of the North Italy, shows a substantial equilibrium among the number of the local units and employees, with a small preponderance of the first in the Northwest and the second in the Northeast. Numbers have decreased in the Centre, where the local units are 23-28% less, and the employees are 50% fewer.

In the South are located 41% of the Italian local units but only 27.5% of employees. It is seen that in the South the average number of employees per unit are only four, much lower in comparison to the other areas, among which the Northwest has around 9 employees per local unit.

The southern regions primarily emerge in comparison to the other Italian regions in the importance of three sub-sectors: fish, fruit and vegetables, oils vegetable and animal fats. In these three sectors the Southern region has 71% of total local units and 49% of the employees of the whole country.

The Northeast, with 1,686 local units and 29,000 employees, is the main subsector for meat, while in the Northwest over 66,500 employees work in the sub-sector of other alimentary products, a larger number in respect of the other areas.

The deep structural differences of the sub-sectors in the Italian food industry are also shown by the average sizes of the local units. In fact, while the average size is about six employees in the food industry, the sub-sector of meat has an average of 13 employees per local unit and the sub-sector of the fruit and vegetables about 14 employees per unit. Other sub-sectors with greater average sizes are that of the milk-cheese industry (10 employees per local unit) and feed for animals (11 employees).

Table 8.8 Local Units and employees in the food industry for compartments in Italy (1981-2001)

Italy	1981		1991		2001	
	L.U.	Empl.	L.U.	Empl.	L.U.	Empl.
15.1 - Processed meat	5,636	55,857	4,385	57,994	4,454	58,264
15.2 - Fish products	425	10,982	474	8,863	490	6,708
15.3 - Processed fruit and vegetables	1,938	49,017	1,820	36,760	2,233	31,499
15.4 - Oils and fats	7,342	33,976	5,071	19,702	4,773	16,405
15.5 - Dairy products	6,059	49,904	4,847	49,018	4,817	52,542
15.6 - Grain mill products and starch products	5,529	23,440	2,895	14,634	2,203	12,711
15.7 - Animal feeds	894	12,361	725	10,337	787	9,045
15.8 - Other food products	27,939	172,216	43,302	212,486	50,525	220,091
15.9 - Beverages	4,987	54,763	3,995	46,667	3,550	37,384
TOTAL	**60,749**	**462,516**	**67,514**	**456,431**	**73,832**	**444,649**

Source: ISTAT - General Censuses of Industry and Services (1981, 1991, 2001)

Table 8.9 Food industry: employees and local units for compartment and areas 2001

Italy	Northwest		Northeast		Center		Midday	
	L.U.	Empl.	L.U.	Empl.	L.U.	Empl.	L.U.	Empl.
15.1 - Processed meat	1,118	14,740	1,686	28,851	719	7,723	931	6,950
15.2 - Fish products	58	1,207	66	1,241	82	752	284	3,508
15.3 - Processed fruit and vegetables	229	3,211	359	12,043	247	2,251	1,398	13,994
15.4 - Oils and fats	213	1,645	117	1,925	799	3,440	3,644	9,395
15.5 - Dairy products	866	17,261	1,378	13,268	467	7,679	2,106	14,334
15.6 - Grain mill products and starch products	476	3,937	496	3,730	404	2,076	827	2,968
15.7 - Animal feeds	240	2,735	240	3,267	117	1,488	190	1,555
15.8 - Other food products	12,493	66,540	9,689	56,551	8,459	36,897	19,884	60,103
15.9 - Beverages	718	10,390	945	10,042	480	5,355	1,407	9,597
TOTAL	**16,411**	**121,666**	**14,976**	**132,918**	**11,774**	**67,661**	**30,671**	**122,404**

Source: ISTAT - General Censuses of Industry and Services (2001)

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