TECH FOOD EU-ASIA

ASIA INVEST PROGRAMME 2006-2007

ASIA INVEST PROJECT

"TECHFOOD EU-ASIA"

Market analysis of food technologies in Italy

December, 2007

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1. THE ITALIAN FOOD INDUSTRY – A SYNTHETIC ANALYSIS

Food industry stands out as a particularly important sector in the framework of the Italian productive system, both in terms of its sheer economic size and for the major role it plays in the country from a social, environmental and cultural point of view.

1.1 EMPLOYMENT AND TURNOVER

Food industry is the second manufacturing sector in Italy, after the metalworking industry. In its industrial stage, this sector employs 476,100 workers (9.5% of the whole industrial workforce), while the overall workforce in the agrofood sector amounts to about 2,500,000 employees.

Both in the whole sector and in its industrial stage, one can notice the extremely small size of enterprises: out of 35,000 enterprises (with 78,000 local units), only 20% have more than 9 employees, and only 200 of them count more than 50.

The small and medium enterprise system is usually made-up of family-run businesses, which are deeply rooted in their local environment and often form highly competitive industrial clusters, specialised in specific productive sectors; in particular, three major agrofood sectors can be identified:

- **the dairy sector**, with more than thirty kinds of cheese having obtained the Protected Designation of Origin label. In the dairy sector one can find six main industrial clusters in the Emilia-Romagna region (parmigiano reggiano), in the Campania region (mozzarella di bufala), in Tuscany (pecorino toscano), and moreover important niche productive sectors in Sicily (pecorino siciliano), in the Calabria region (caciocavallo Silano) and in Sardinia (fiore sardo).

- **the sausages and pork-meat preserved products sector,** with its outstanding ham productions in Parma and San Daniele del Friuli.

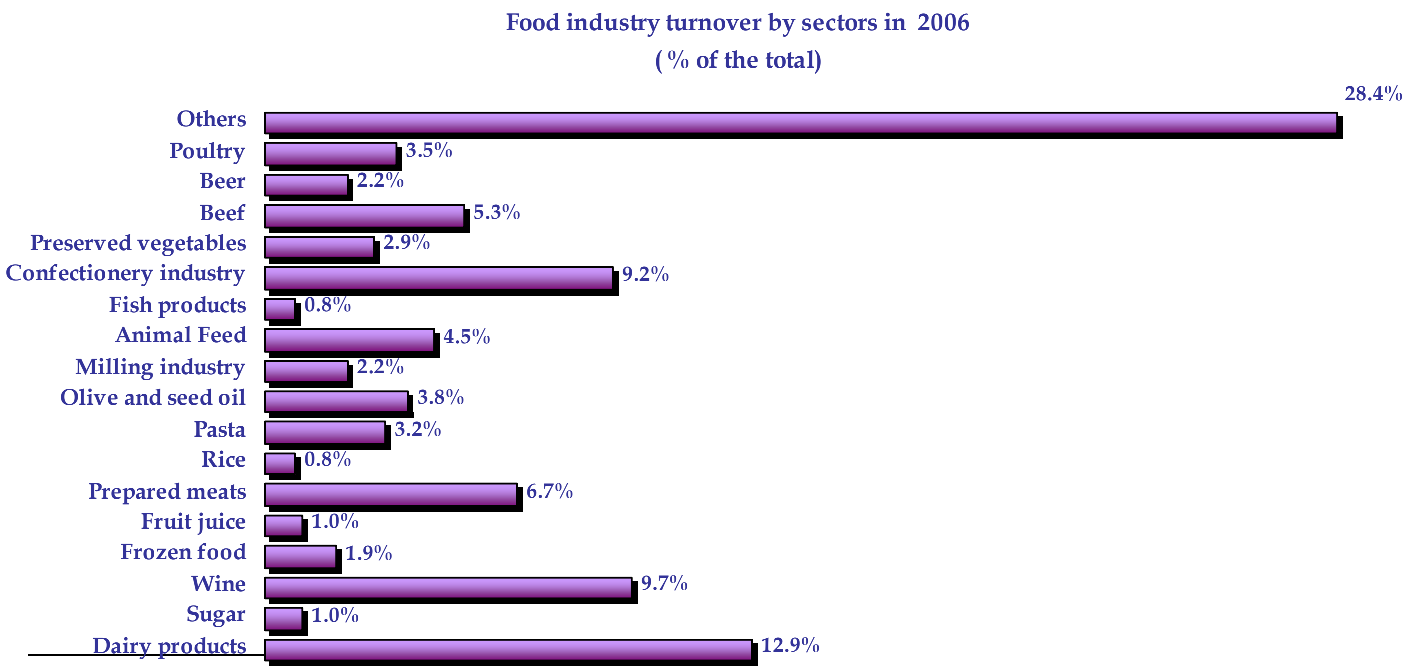
- **the tomato concentrate sector,** mainly in Campania (Salerno and Naples provinces) and in Emilia-Romagna (Piacenza and Parma provinces). These two regions account for more than 80% of the country's overall production of tomato concentrate.

In international competition, small size entails some important advantages: originality, speed, flexibility and care of details. On the other hand, there are some relevant drawbacks: fewer investments on brand-building, less R&D and less control on distribution channels.

In 2006, the food industry has reached a turnover of 110 billion euro, with a 2.8% increase as against 2005. The biggest turnover comes from the dairy sector (12.9% of the overall turnover), wine production (9.7%) and confectionery industry (9.2%).

Table 1: Food industry turnover by sectors in 2006 (million euro)

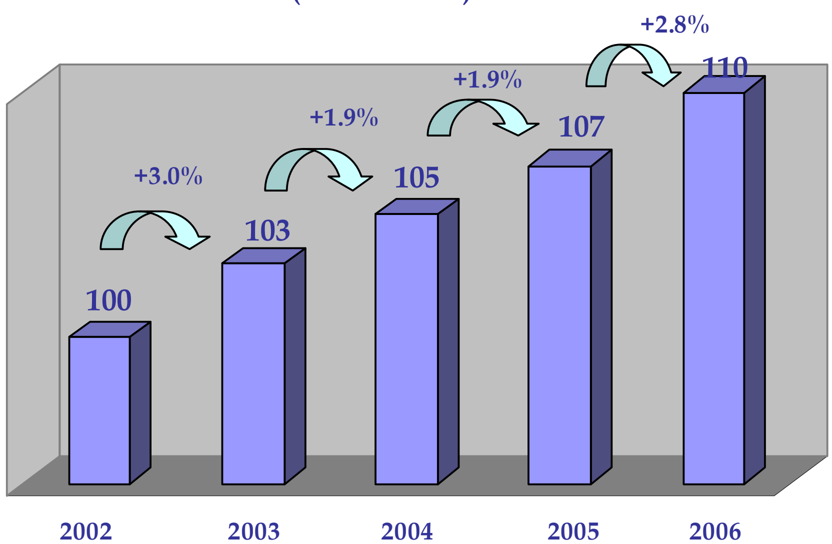
Food industry turnover by sectors in 2006 (million euro)		
Sector	Turnover (million euro)	% of overall turnover
Dairy products	14,200	12.9%
Confectionery industry	10,146	9.2%
Prepared meats	7,370	6.7%
Beef	5,800	5.3%
Animal Feed	4,950	4.5%
Poultry	3,900	3.5%
Pasta	3,519	3.2%
Preserved vegetables	3,220	2.9%
Olive and seed oil	4,200	3.8%
Milling industry	2,407	2.2%
Frozen food	2,100	1.9%
Wine	10,700	9.7%
Beer	2,450	2.2%
Sugar	1,100	1.0%
Fruit juice	1,060	1.0%
Rice	870	0.8%
Fish products	900	0.8%
Other sectors[1]	**31,108**	**28.3%**
TOTAL	**110,000**	**100.0%**



[1] Among which, children's and dietetic food 1,300 million euro, fizzy drinks 1,750, coffee 2,200, mineral water 2,200 million euro.

The year 2006 has registered a marked increase in the production of biscuits, bread and other bakery products (+2.7%), processing and transformation of fruit and vegetables (+3%), dairy production (+3.2%) and confectionery production (+2.3%). The drink sector is also on the increase, in particular as far as wine is concerned (+3.4%).

Trends in the overall Italian food industry turnover (billion euro)



1.2 DISTRIBUTION

At the end of 2006 the permanent retail network, operating mainly in the food sector, was made up of 194,205 units. In 2006 the overall number of businesses rose by 1.2% as against the previous year. In that period, non-specialised businesses rose by 3,585 units (+4.1%), while on the contrary specialised businesses fell by 640 units (-2.9 %). From a geographical point of view, the food retail network has registered a sharper increase in Central Italy, as against the other areas of the country.

Table 2 : Food shops in Italy, 2006

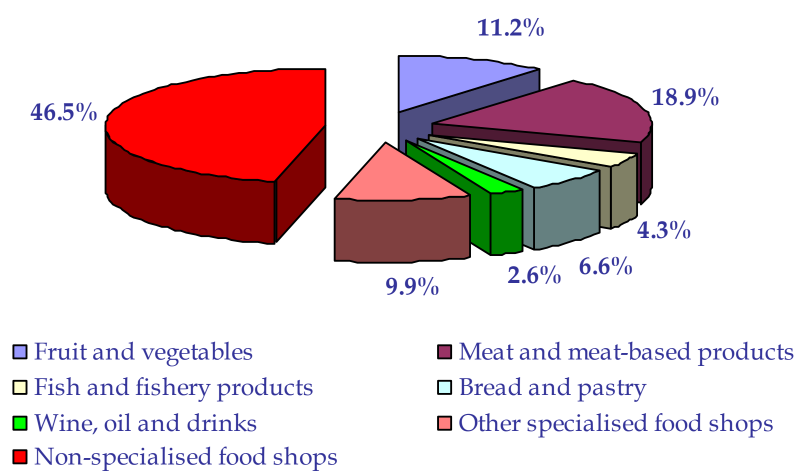
FOOD SHOPS IN 2006[1]								
	NORTH		CENTRE		SOUTH AND ISLANDS		ITALY	
	Number	%	Number	%	Number	%	Number	%
Fruit and vegetables	8,042	11.8%	4,382	12.6%	9,336	10.2%	21,760	11.2%

Meat and meat-based products	10,815	15.9%	5,972	17.1%	19,911	21.8%	36,698	18.9%
Fish and fishery products	1,556	2.3%	1,430	4.1%	5,377	5.9%	8,363	4.3%
Bread and pastry	6,009	8.8%	2,064	5.9%	4,747	5.2%	12,820	6.6%
Wine, oil and drinks	2,231	3.3%	1,139	3.3%	1,775	1.9%	5,145	2.6%
Other specialised food shops	6,696	9.8%	2,747	7.9%	9,706	10.7%	19,149	9.9%
Non-specialised food shops	32,863	48.2%	17,124	49.1%	40,283	44.2%	90,270	46.5%
Overall	**68,212**	**100.0%**	**34,858**	**100.0%**	**91,135**	**100.0%**	**194,205**	**100.0%**
% on the overall number of shops	23.1		22.8		27.7		25	
Density[2]	392		326		228		303	

[1] headquarters and local units
[2] inhabitants/food shop

The trade network of the food sector has similar structural features in the various areas of the country. It is thus possible to identify the three main categories of shops dealing with food products; there is a marked prevalence of non-specialised food shops (46.5% at national level), followed by shops selling meat and meat products (18.9%) and shops selling fruit and vegetables (11.2 %).

Food shops in Italy in 2006 (%)



In 2006 the food products permanent retail trade has registered a 1.5% increase in the value of sales; large retailers have enjoyed a much more marked increase (+1.8%) than small-sized enterprises (0.4%). On 1st January 2006, 8,181 supermarkets were recorded (+4.6% as against 2005), with an overall sales area which exceeds 7 million square meters and a workforce that counts almost 150,000 employees (with a 4.8% increase as against 2005). Hypermarkets are also on the increase: in 2006 they registered a strong growth (10.1%), reaching 459 units and an overall workforce of 76,000 employees.

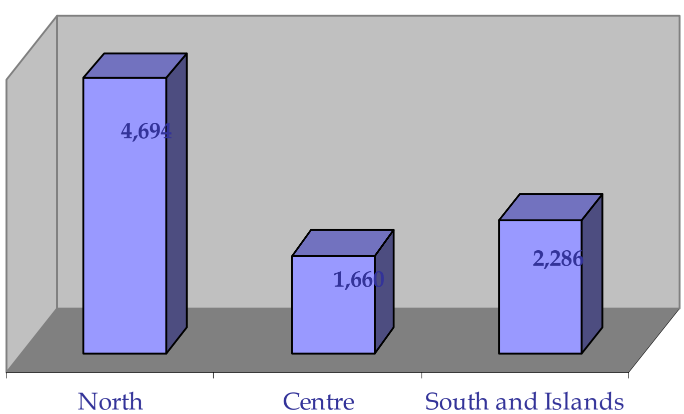
Table 3: Large food retailers by geographical areas, 2005[1]

LARGE FOOD RETAILERS BY GEOGRAPHICAL AREAS IN 2005[1]								
	OPERATIONAL UNITS		SALES AREA[2]		EMPLOYEES[2]		NUMBER OF UNITS PER 100,000 INHABITANTS	SALES AREA sq.m./1,000 INHABITANTS
	number	% var. 06/05	Sq.m.	% var. 06/05	number	% var. 06/05		
North	4,694	3.6	5,739,494	5.6	138,585	3.9	17.5	214.4
Centre	1,660	4	1,835,064	5.7	46,182	3.6	14.6	161.6
South and Islands	2,286	8.3	2,233,554	12.7	41,164	10.5	11	107.6
TOTAL	**8,640**	**4.9**	**9,808,112**	**7.2**	**225,931**	**5.0**	**14.7**	**166.6**

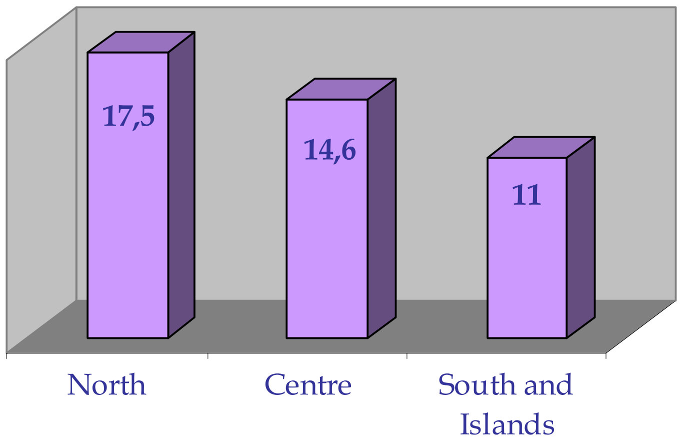
[1] Supermarkets and hypermarkets
[2] Areas and employees regarding both food and non-food departments

A particularly strong increase was registered in the South, where the number of supermarkets grew by 7.7%, while hypermarkets increased by 28.3%, with a subsequent growth of the overall sales area (+30.7%) and of the number of employees (+12.6%).

Large food retailers by geographical areas in 2005
(number of operational units)



Number of units per 100,000 inhabitants in 2005



1.3 FOOD CONSUMPTION

In 2006 the overall volume of food consumption increased by approximately 2.6%, while Italian households' expenses for food and drinks (including alcoholic drinks) rose by 4.2%, reaching an overall value of 139 billion euro.
When we consider the expense, the most important categories are meat (30.7 billion euro), bread and cereal products (25.1 billion euro), dairy products and eggs (17.8 billion euro), followed by vegetables, potatoes and fruit.

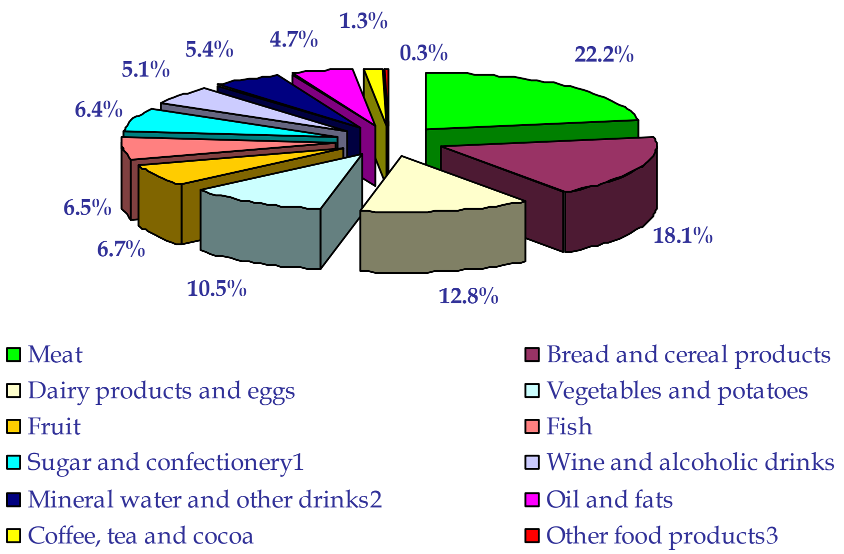
Table 4: Food consumption in Italy, 2006 data

FOOD CONSUMPTION IN 2006			
PRODUCTS	**% of food expense**	**Average annual rate of change (%) 2006/1996**	
		Quantity	**Prices**
Meat	22.2	0.8	1.7
Bread and cereal products	18.1	2.2	1.5
Dairy products and eggs	12.8	1.2	1.4
Vegetables and potatoes	10.5	0.5	2.6
Fruit	6.7	1.4	1.8
Fish	6.5	1	2.6
Sugar and confectionery[1]	6.4	1.3	1.8
Wine and alcoholic drinks	5.1	0.9	2.5
Mineral water and other drinks[2]	5.4	2.5	1.2
Oil and fats	4.7	0.6	1.5
Coffee, tea and cocoa	1.3	0.9	0.8
Other food products[3]	0.3	2.8	0.9
TOTAL	**100**	**1.2**	**1.7**

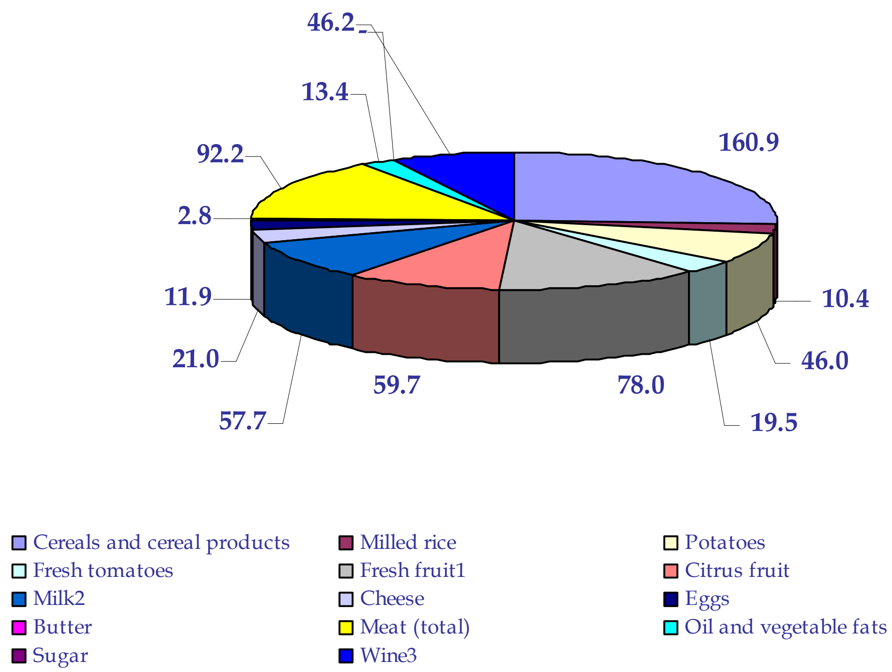
1 Jam and marmalade, honey, syrups, chocolate and pastry
2 Fizzy drinks, juices, etc.
3 Children's and dietetic food, spices, etc.

In 2006, the Italian households' average monthly expense for food and drinks amounted to 456 euro (no change as against 2005). Italian households' expense for food and drinks represents 19% of their overall monthly expense.

Food expense in 2006 (%)



Food consumption in Italy in 2005 (Kg per capita)



The following table provides a comparison (in volume) between food consumption in Italy and some other European countries.

Table 5: Food consumption in some EU countries (Kg per capita) in 2005

PRODUCTS	ITALY	GERMANY	GREECE	SPAIN	FRANCE	HUNGARY	POLAND
Cereals and cereal products	160.9	107.3	210.0	101.0	105.5	158.4	152.2
Milled rice	10.4	4.7	10.5	6.2	6.3	5.7	2.6
Potatoes	46.0	66.5	101.0	81.9	44.0	70.3	129.4
Fresh tomatoes	19.5	7.9	46.8	n.a.	14.0	6.7	7.6
Fresh fruit[1]	78.0	25.7	99.4	n.a.	40.1	35.4	18.1
Citrus fruit	59.7	44.5	66.7	n.a.	n.a.	13.7	16.3
Milk[2]	57.7	64.1	64.4	103.8	70.3	64.4	93.7
Cheese	21.0	20.4	25.6	10.1	23.5	6.1	12.8
Eggs	11.9	13.0	10.3	18.0	15.2	n.a.	11.7
Butter	2.8	6.4	0.8	1.0	7.8	0.8	3.5
Meat (total)	92.2	87.1	83.3	122.6	102.3	n.a.	79.1
Oil and vegetable fats	13.4	n.a.	48.6	33.3	12.9	n.a.	5.9
Sugar	-	37.4	29.0	29.0	36.5	33.9	39.8
Wine[3]	46.2	23.7	28.9	32.2	47.1	30.4	1.6

[1] *Apples, pears, peaches, table grapes*
[2] *Including other fresh products, not including cream.*
[3] *Litres per capita*

1.4 FOREIGN TRADE OF THE ITALIAN AGROINDUSTRIAL SECTOR

In 2006 the Italian agroindustrial system increased its export by 6.2%, while import grew by 5.2%. Thanks to these results, the trade balance outcome has improved by 13.3%; the balance, however, is still negative (-8,241 million euro). In 2006 Italian agrofood export amounted to 22,419 million euro, that is 6.9% of the country's overall export. EU is still the main trade partner both for agrofood export and agrofood import. Among the most important destination countries of Italian agrofood export one can find Germany (4,590 million euro), France and the United States, followed by the United Kingdom and Spain.

Table 6: Destination of Italian agrofood export in 2006 (million euro)

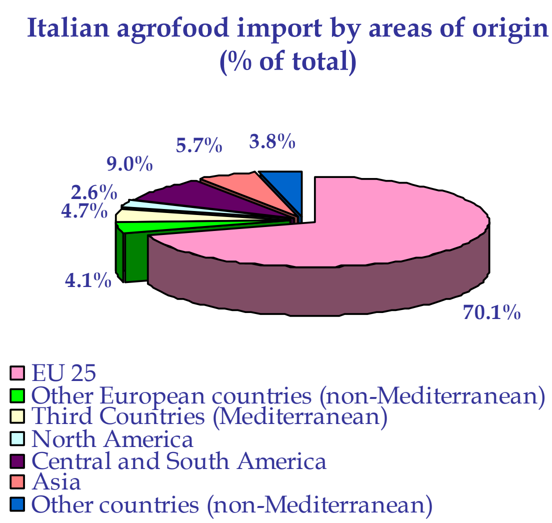
DESTINATION COUNTRY	MILLION EURO	%
EU 25	15,321	68.3%
Other European countries (non-Mediterranean)	2,053	9.2%
Third countries (Mediterranean)	419	1.9%
North America	2,729	12.2%
Central and South America	250	1.1%
Asia	1,032	4.6%
Other countries (non-Mediterranean)	615	2.7%
TOTAL	**22,419**	**100.0%**

With regard to export, the Italian competitive advantage is supported by traditional "made in Italy" products. Red and rosé wines, pasta, virgin and extra virgin olive oil, tomato concentrate, biscuits and pastry are well-known products, appreciated by foreign consumers as typically Italian, and as a symbol of high quality and safety.

In 2006 the Italian agrofood sector import amounted to 30,660 million euro, that is 8.8% of the country's overall import. The main supply markets are the European countries (EU 25), where Italy buys 70.1% of agrofood products. Our country's five main suppliers are France, Germany, Spain, The Netherlands and Austria.

Table 7: Origin of Italian agrofood import in 2006 (million euro)

COUNTRY OF ORIGIN	MILLION EURO	%
EU 25	21,495	70.1%
Other European countries (non-Mediterranean)	1,257	4.1%
Third Countries (Mediterranean)	1,436	4.7%
North America	787	2.6%
Central and South America	2,750	9.0%
Asia	1,757	5.7%
Other countries (non-Mediterranean)	1,178	3.8%
TOTAL	**30,660**	**100.0%**



Italian agrofood import consists mainly of pork and beef meat, virgin and extra virgin oil (Italy registers both a considerable inflow and outflow), frozen shellfish and breeding cattle.

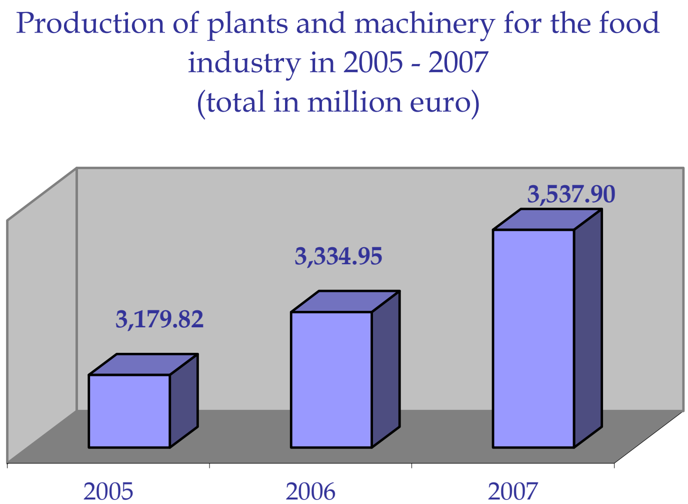
2. THE ITALIAN INDUSTRY OF PLANTS, MACHINERY AND EQUIPMENT FOR THE FOOD INDUSTRY

2.1. INTRODUCTION (A GENERAL SURVEY OF THE SECTOR)

The Italian industry of plants, machinery and equipment for food production, processing and preservation stands among the most important sectors of the whole metalworking industry (11% of the total) and employs about 18,000 workers. This industrial sector has a turnover of about 3,500 million euro and its export represents about 60 to 80% of the overall production. According to data, 60% of the 700 businesses operating in this sector are exporters, with an approximate 65% share of export on turnover. This industry can claim a high degree of excellence in terms of technological innovation and quality of products and services, but it can also play the role of **solution provider** for its customers. Thanks to these features of excellence, the Italian industry of machinery for the food sector has become a world leader.

2.1.1. Production of plants, machinery and equipment for the food industry

The analysis is based on the main types of machinery used in the food industry. The overall value of the production – that is the turnover of the industrial sector in question – registered a 4.9% growth in 2006 as against 2005, while a 6% growth is expected for the year 2007. This favourable production trend is linked to the increase in export, which confirms a strong orientation toward foreign markets in the Italian enterprises of this industry.



Within the global production value of the industry of plants and machinery for food industry, the two main sectors are those producing **refrigeration compressors and refrigeration equipment**: together they account for 41.2% of the overall production of this industry. The production of machinery and ovens for bread, biscuits and pastry which, with an overall value of almost 529 million euro, accounts for 16.5 % of the global value, ranks third.

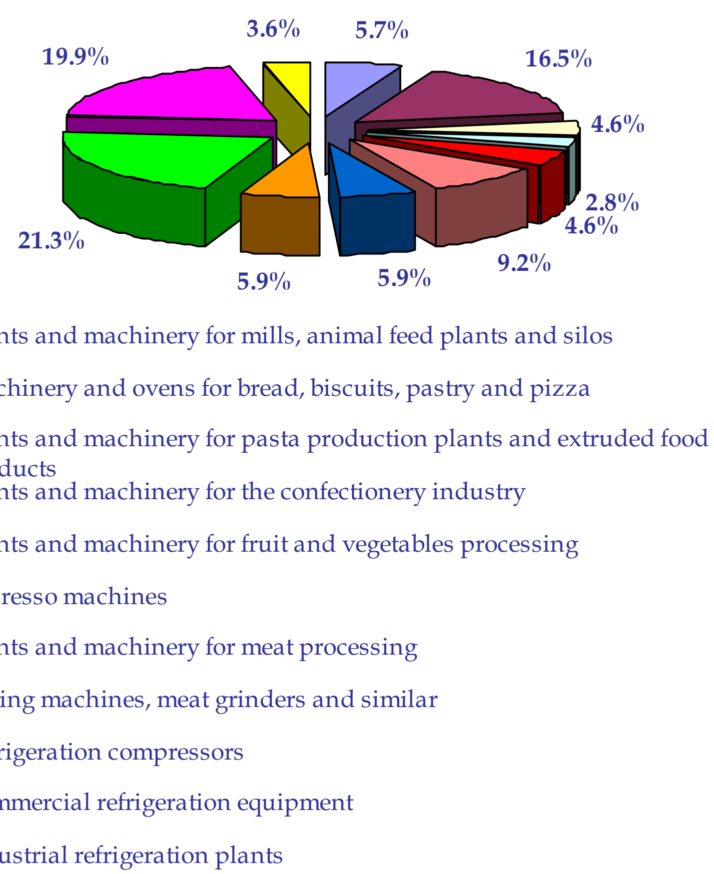
Forecasts for 2007 envisage an overall production growth of 6.1% as against 2006, reaching almost 3,538 million euro. The biggest production growth is envisaged in the sector producing plants and machinery for fruit and vegetables processing (18%). The recovery of this industry in 2006 was mainly due to investments in the "tomato machinery" sector (rise in tomato concentrate prices).

Table 8: Production of the main types of plants and machinery for the food industry in 2005 – 2007 (forecast) – values in euro

	2005 euro	2006 euro	2007 euro (forecast)	06/05 %	07/06 %
TOTAL	**3,179,816,000**	**3,334,950,000**	**3,537,900,000**	**4.9**	**6.1**
Plants and machinery for mills, animal feed plants and silos	155,600,000	190,000,000	210,000,000	22.1	10.5
Machinery and ovens for bread, biscuits, pastry and pizza	529,000,000	550,000,000	594,000,000	4.0	8.0
Plants and machinery for pasta production plants and extruded food products	137,516,000	154,650,000	168,500,000	12.5	9.0
Plants and machinery for the confectionery	87,000,000	94,000,000	103,400,000	8.0	10.0

industry					
Plants and machinery for fruit and vegetables processing	135,000,000	152,500,000	179,900,000	13.0	18.0
Espresso machines	287,000,000	307,100,000	323,400,000	7.0	5.3
Plants and machinery for meat processing	190,000,000	195,700,000	195,700,000	3.0	-
Slicing machines, meat grinders and similar	183,000,000	196,000,000	215,000,000	7.1	9.7
Refrigeration compressors	690,000,000	710,000,000	750,000,000	2.9	5.6
Commercial refrigeration equipment	670,000,000	675,000,000	680,000,000	0.7	0.7
Industrial refrigeration plants	115,700,000	120,000,000	128,000,000	3.7	6.7

Production of plants and machinery for the food industry, by sectors (% of overall production value), 2006 data



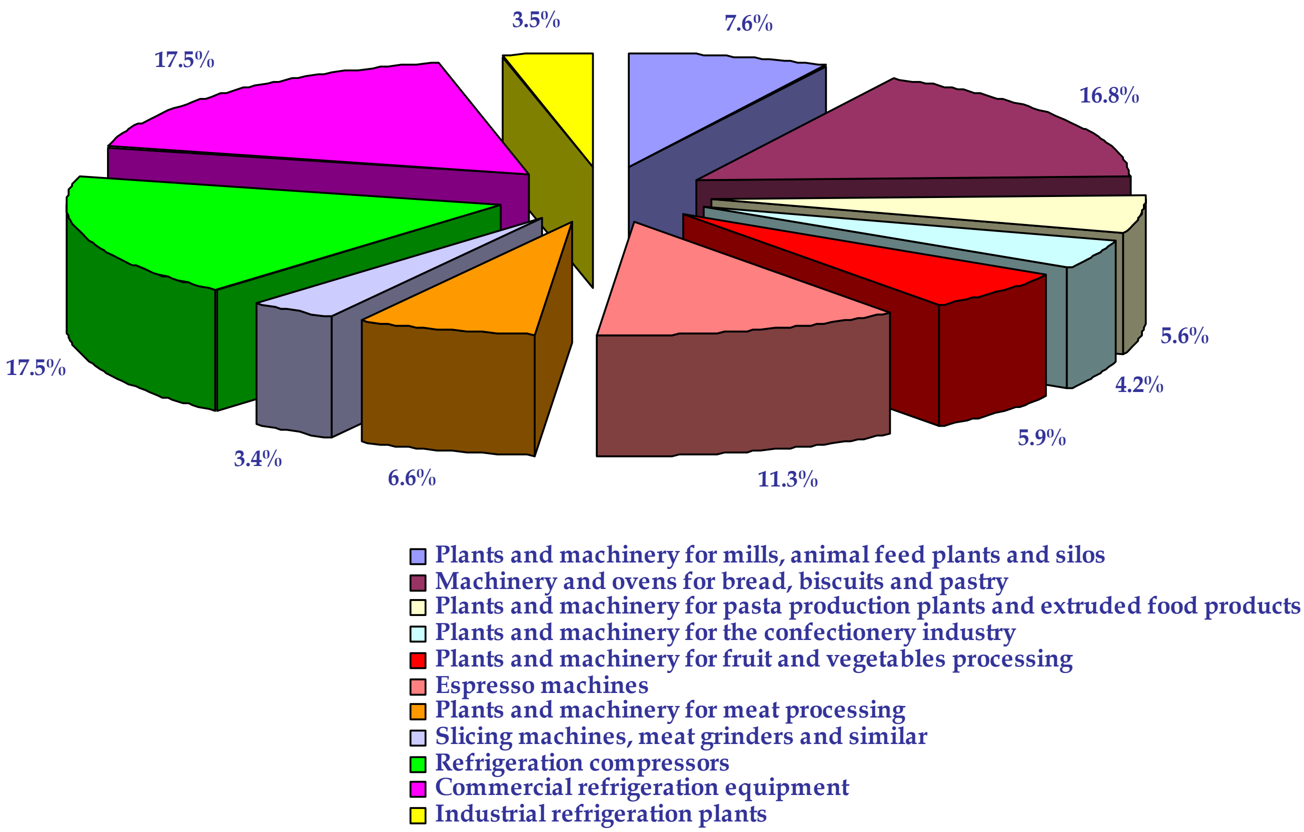
The Italian industry of plants and machinery for the food industry has long been the undisputed world leader, thanks most of all to the progress made in planning, building and implementing techniques, not to mention the continuing process of technological innovation.

Table 9: Export of the main types of plants and machinery for the food industry in 2006 (euro and % on total)

INDUSTRIAL SECTOR	% on total	Export value in euro
Plants and machinery for mills, animal feed plants and silos	7.6%	153,900,000
Machinery and ovens for bread, biscuits and pastry	16.8%	339,000,000
Plants and machinery for pasta production plants and extruded food products	5.6%	112,615,000
Plants and machinery for the confectionery industry	4.2%	85,500,000
Plants and machinery for fruit and vegetables processing	5.9%	120,200,000
Espresso machines	1.3%	229,000,000
Plants and machinery for meat processing	6.6%	133,900,000
Slicing machines, meat grinders and similar	3.4%	69,000,000
Refrigeration compressors	17.5%	355,000,000
Commercial refrigeration equipment	17.5%	355,000,000
Industrial refrigeration plants	3.5%	70,000,000
TOTAL – plants and machinery for the food industry	**100%**	**2,023,115,000**

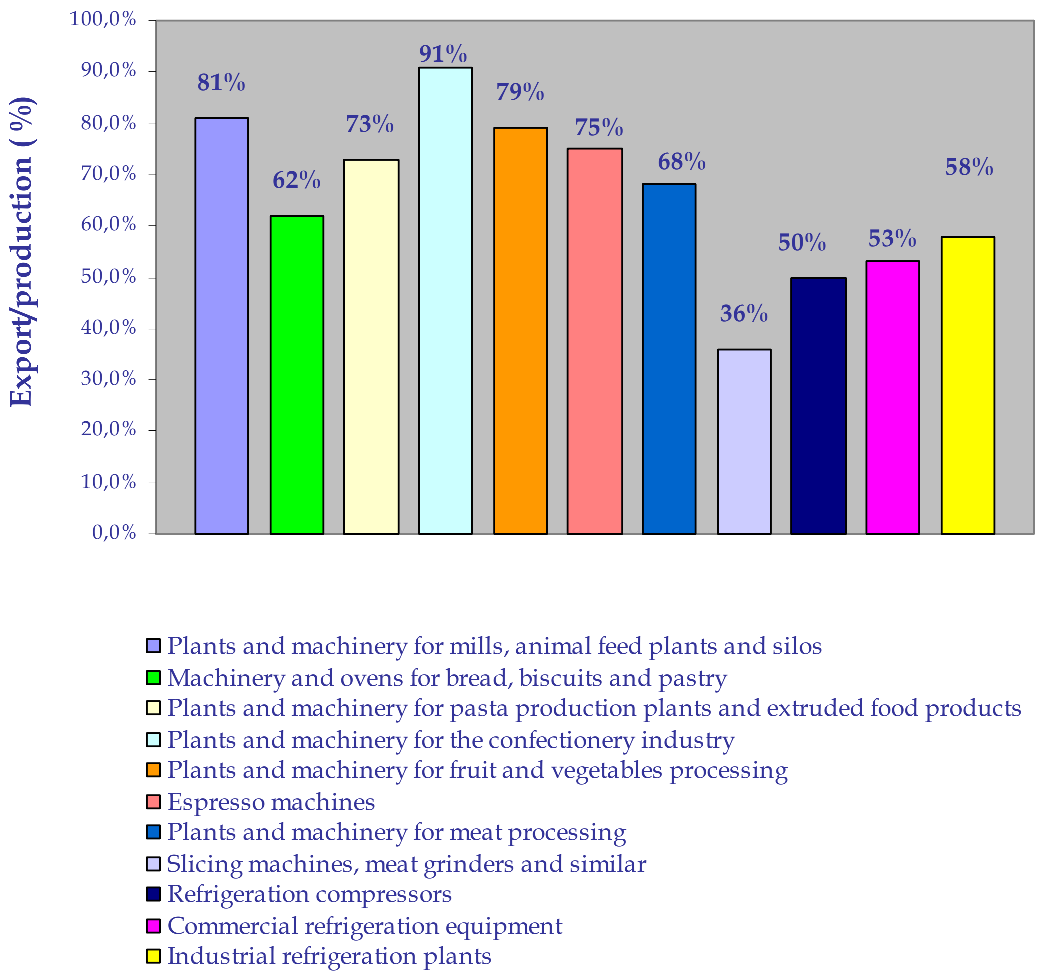
Export of plants and machinery for the food industry amounts to 60.67% of the overall production value, which confirms that this industrial sector is strongly export-oriented. 35% of the overall export value consists of refrigeration compressors and equipment (710 million euro), followed by export of machinery and ovens for bread, biscuits, pastry and pizza (16.8% of the overall export value).

Export of plants and machinery for the food industry
(% of the total)



The industrial sectors of machinery for the food industry vary in the degree of their export orientation. The industries with the highest export percentage within their overall production value are the following: plants and machinery for the confectionery industry (91%), plants and machinery for mills, animal feed plants and silos (81%) and machinery for fruit and vegetables processing (79% of the overall production value). These industrial sectors can claim the highest degree of export orientation, but together they amount only to 17.7% of the overall export value of the industry of plants and machinery for the food industry.

Export orientation of firms producing plants and machinery for the food industry (export/production in %), year 2006

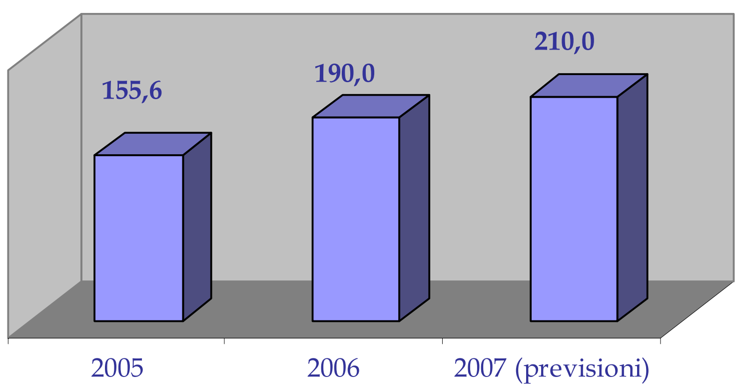


In the following chapters we shall analyse in details the specific features of the main food industry technologies.

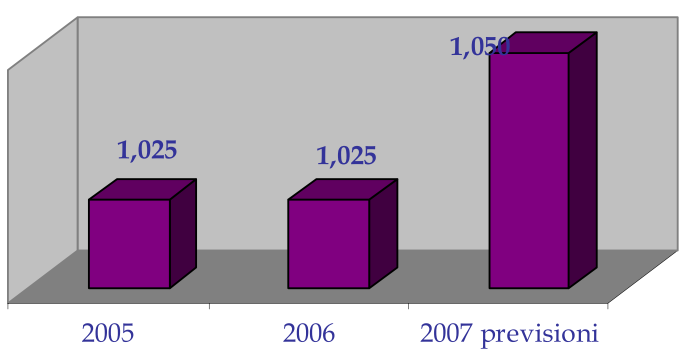
2.2. PLANTS AND MACHINERY FOR MILLS, ANIMAL FEED PLANTS AND SILOS[2]

The industry of plants and machinery for mills, animal feed plants and silos is characterized by a favourable trend in production values, with an average annual growth of 16.3% over the last two years (taking account of forecast values for 2007). In 2006 the sector of plants and machinery for mills, animal feed plants and silos registered a demand growth, together with a proportionally inadequate rise in prices (+3%). The overall value of revenues has shown an increase, thanks to the growing volume, but has actually fallen, because of the smaller profits generated by the sector. Employment in this industry seems stable, with a slight growth forecast for 2007 (2.4%).

Production of plants and machinery for mills, animal feed plants and silos in 2005 - 2007
(values in million euro)



Employment in the sector of plants and machinery for mills, animal feed plants and silos in 2005 - 2007
(units)



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[2] The data reported here refer to the following types of plants: wheat-, maize- and cereals grinding machines, storing plants, mechanical and pneumatic transports for cereals.

The overall export value of this sector amounts to 7.6% of the total export value, and to 5.7 of the overall production value of the whole food industry machinery sector. The industry of plants and machinery for mills, animal feed plants and silos is one of the most export-oriented sectors, 81% of its revenues coming from international markets. The most important export markets are Morocco, Saudi Arabia, the United States, Germany and Iran.

Export of plants and machinery for mills, animal feed plants and silos in 2005 - 2007
(values in million euro)

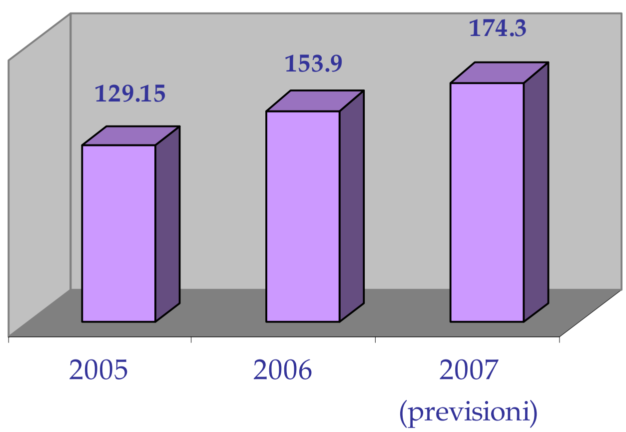
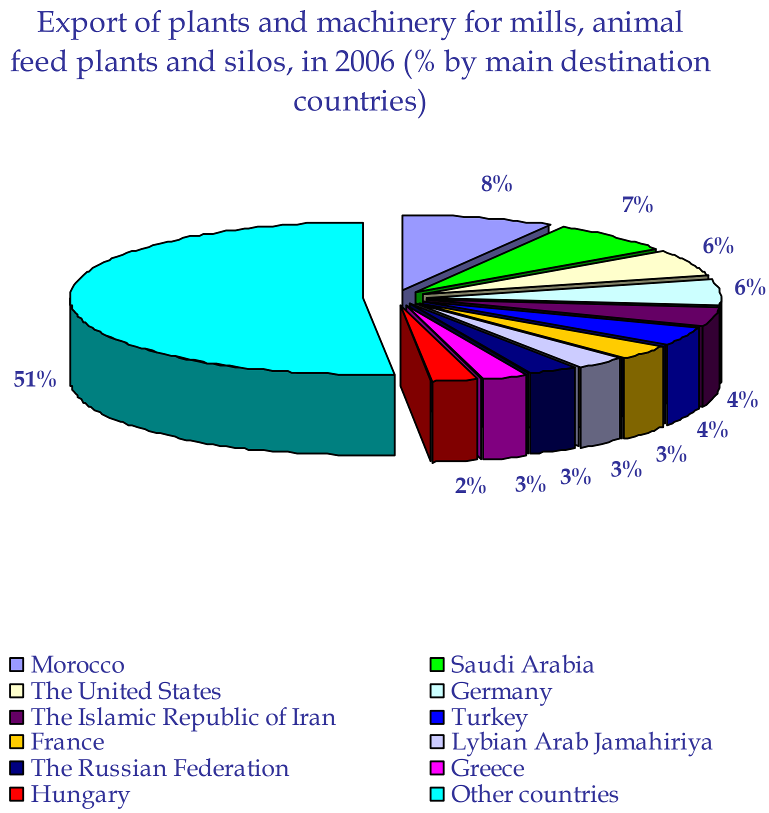


Table 10: Export of plants and machinery for mills, animal feed plants and silos, by main destination countries. Years 2005-2006, values in euro

Country	Export 2006	Export 2005
Morocco	12,332,750	6,436,982
Saudi Arabia	10,526,971	788,245
United States	8,970,180	7,694,025
Germany	8,321,597	7,452,164
Islamic Republic of Iran	5,807,378	10,201,701
Turkey	5,662,572	837,272
Other countries	102,278,552	95,739,611
TOTAL	**153,900,000**	**129,150,000**



In 2006 the import value of this industrial sector amounted to 17.4 million euro (24.6% less than the previous year). The main import market is Germany (21% of the overall import value), followed by Turkey (12%) and by the United Kingdom (11%).

Table 11: Import of plants and machinery for mills, animal feed plants and silos. Years 2005-2006, values in euro

Country	Import 2006	Import 2005
Germany	3,701,358	5,864,441
Turkey	2,006,588	3,765,139
The United Kingdom	1,897,647	3,834,722
Switzerland	1,399,556	28,152
Denmark	1,386,788	1,139,345
Spain	1,357,879	2,178,275
Other countries	5,645,750	6,007,572
TOTAL	**17,395,566**	**23,074,646**

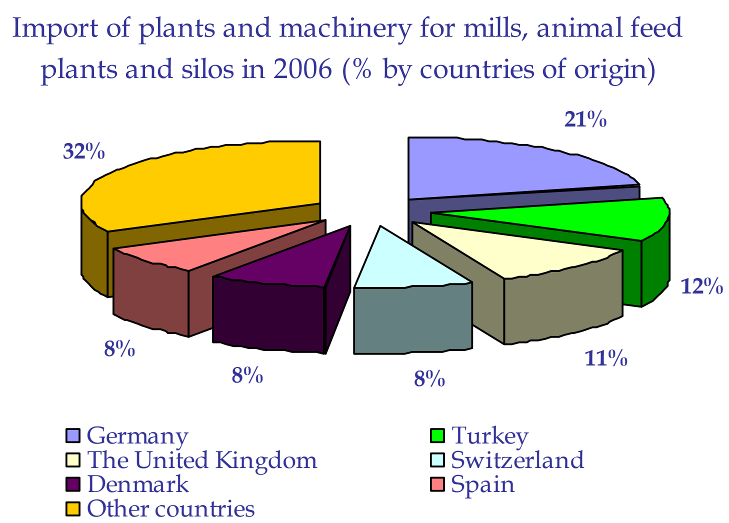


Table 12: Other important facts and figures

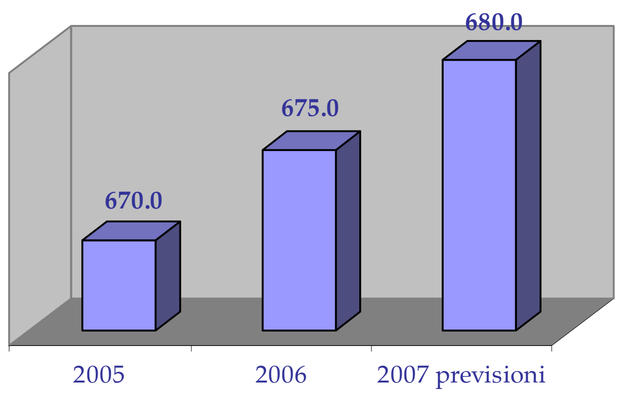
	Unit	2005	2006	2007 forecast
Export/production	%	83	81	83
Investments	**euro**	4,800,000	4,600,000	5,000,000
Plant usage	%	82	84	85
Prices	%	+4	+3	+6

For the year 2007 a stabilization of demand is expected, together with a rise in prices essentially proportional to the rise in raw material costs; it is believed that margins will remain unchanged as against 2006.

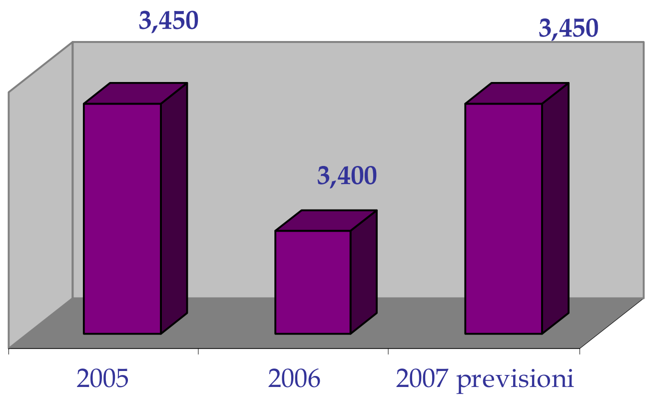
2.3. COMMERCIAL REFRIGERATION EQUIPMENT[3]

In 2006 the industrial sector of commercial refrigeration equipment has registered a slight growth in production values, mainly because of the increasing export towards European countries. This important industry generates 20% of the overall production of the food industry machinery sector, and almost 18% of the overall export value.

Production of commercial refrigeration equipment in 2005 - 2007 (million euro)



Employment in the sector of commercial refrigeration equipment in 2005- 2007 (units)



[3] The data reported here refer to the following types of plants: refrigerated merchandiser cases, undercounter refrigerators, cells and refrigerated displays in general.

In 2006 refrigeration equipment export reached 355 million euro, with a 1.5% growth as against the previous year. In the same period a slowdown was noticed in the sales on the markets using the US currency as a reference, mainly because of the euro appreciation against the dollar; for Italian producers, this makes competition more and more difficult. In these markets, small local producers are often favoured in spite of the technological level of their supply.

Export of commercial refrigeration equipment
in 2005 - 2007 (million euro)

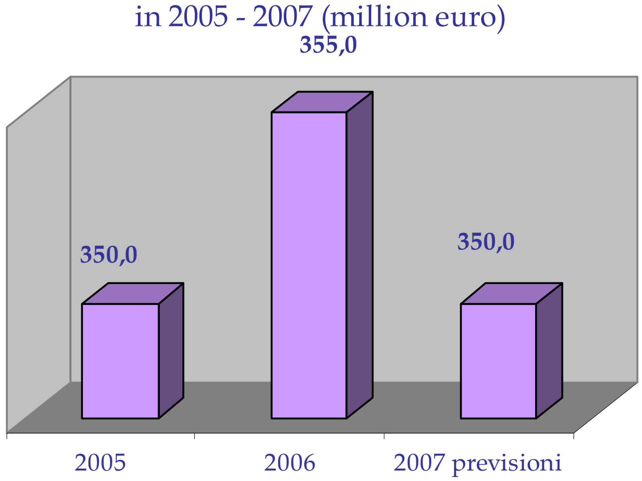
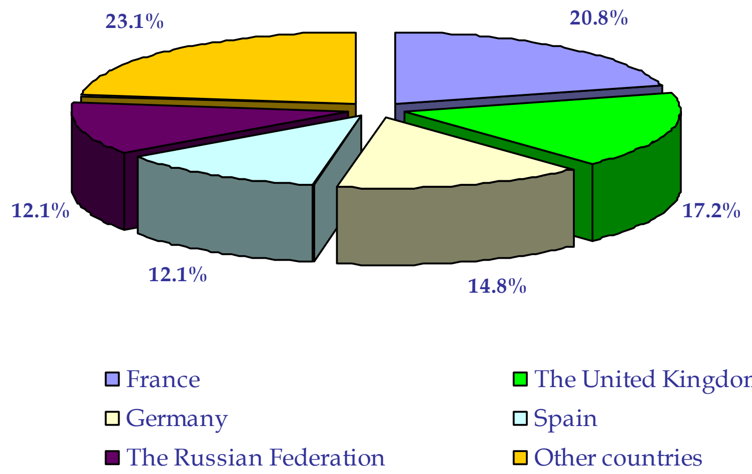


Table 13: Export of commercial refrigeration equipment by main destination countries. Years 2005-2006, values in euro

Country	Export 2006	Export 2005
France	73,811,862	54,410,200
The United Kingdom	60,919,241	46,385,652
Germany	52,573,919	35,224,209
Spain	42,985,917	34,193,622
The Russian Federation	42,842,728	30,654,579
Other countries	81,866,333	149,131,738
TOTAL	**355,000,000**	**350,000,000**

The main destination country of the refrigeration equipment industry is France, where Italian refrigeration equipment export amounts to 73.8 million euro (a 35.7% increase as against 2005); the United Kingdom ranks second, followed by Germany, where Italy exports 14.8% of the overall export value of this sector.

Export of commercial refrigeration equipment in 2006
(by destination countries)



In 2006, commercial refrigeration equipment increased by 51.4% as against 2005; this was mainly due to the growing import from Greece, which in 2006 amounted to 22.3% of the overall import value of the same year.

Table 14: Commercial refrigeration equipment by main countries of origin. Years 2005-2006, values in euro

Country	Import 2006	Import 2005
Greece	10,776,112	58,440
France	6,937,682	4,600,531
Romania	5,279,526	3,331,800
Austria	5,061,797	5,619,482
Turkey	3,444,999	1,524,166
Germany	3,409,233	4,969,360
Other countries	13,379,972	11,785,573
TOTAL	**48,289,321**	**31,889,352**

Import of commercial refrigeration equipment in 2006 (% by country of origin)

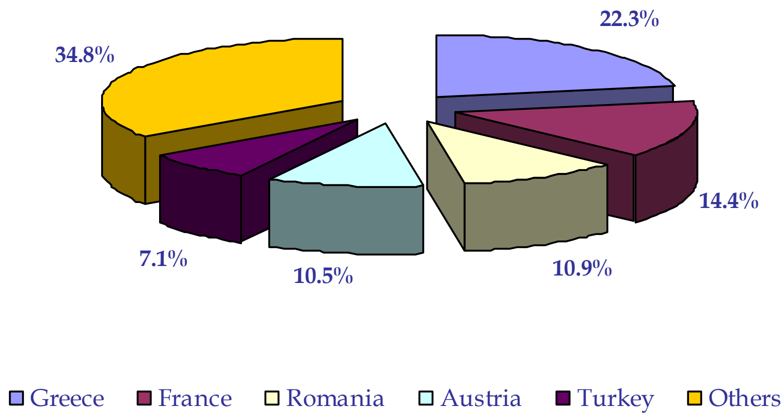


Table 15: Other important facts and figures

	Unit	2005	2006	2007 forecast
Export/production	%	52	53	52
Investments	**euro**	12,000,000	12,000,000	12,000,000
Plant usage	%	80	80	80
Prices	%	+2	+3	+4

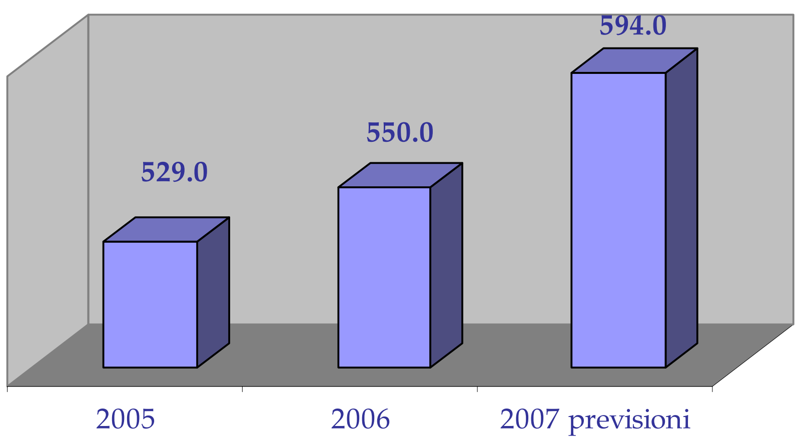
Over the last years prices have registered an increase mainly due to the growing costs of raw materials (sheet metal, copper, zinc and aluminium), which in this period have hit record prices.

2.4. MACHINERY AND OVENS FOR BREAD, BISCUITS, PASTRY AND PIZZA[4]

Machinery and ovens for bread, biscuits, pastry and pizza make up one of the most important sectors in the industry of machinery for food industry, within which they amount to 16.5% of the overall production value. Over the last two years the production trend has been favourable, even though 2006 results were slightly below expectations.

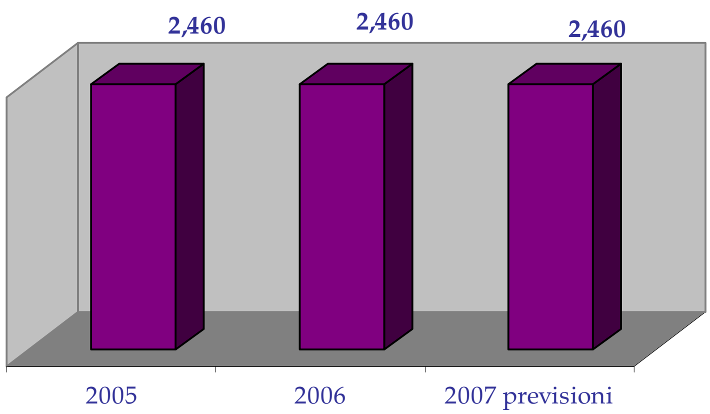
Recently the national market has not offered great opportunities, while the situation on international markets is decidedly brighter. Employment seems to be stable, and no major change is envisaged for 2007. Forecasts for 2007 are rather optimistic, estimating a production growth (approximately 8%) due in the first place to the increasing demand in American markets and some European markets.

Production of machinery and ovens for bread, biscuits, pastry and pizza in 2005-2007 (million euro)



[4] The data reported here refer to the following types of plants: machinery, plants and complete ovens for the production of bread, breadsticks, biscuits and pizza; fork-, diving arm- and automatic and semiautomatic spiral-kneading machines, dividers, moulders and long loaf moulders, rounders, automatic cylinders, baking ovens.

Employment in the sector of machinery and ovens for bread, biscuits, pastry and pizza in 2005-2007 (units)



Export of machinery and ovens for bread, biscuits, pastry and pizza in 2005-2007 (million euro)

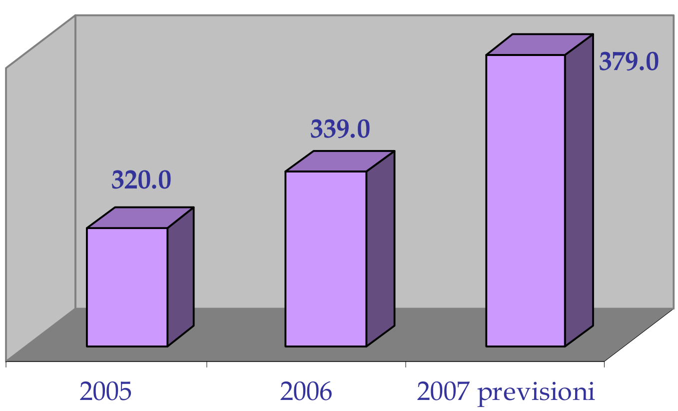


Table 16: Export of machinery and ovens for bread, biscuits, pastry and pizza by main destination countries. Years 2005-2006, values in euro

Country	Export 2006	Export 2005
France	37,431,019	35,829,262
Spain	25,959,838	31,233,445

Romania	23,338,287	11,604,757
The Russian Federation	21,646,504	14,857,325
The United States	18,935,595	20,203,749
Germany	13,464,667	17,322,412
The United Kingdom	13,342,865	20,381,315
Greece	9,808,313	11,161,696
Mexico	9,440,026	5,739,232
Other countries	165,632,886	151,666,807
TOTAL	**339,000,000**	**320,000,000**

The industry of machinery and ovens for bread, biscuits, pastry and pizza is the third most important sector within the industry of plants and machinery for the food industry, accounting for 16.8% of the overall export value of this industry. In 2006 the export of machinery and ovens for bread, biscuits, pastry and pizza reached 339 million euro, with a 6% increase as against the previous year. Among the main export markets one can find France, Spain, Romania, the Russian Federation and the United States; these countries make up a market offering good future opportunities to our industry.

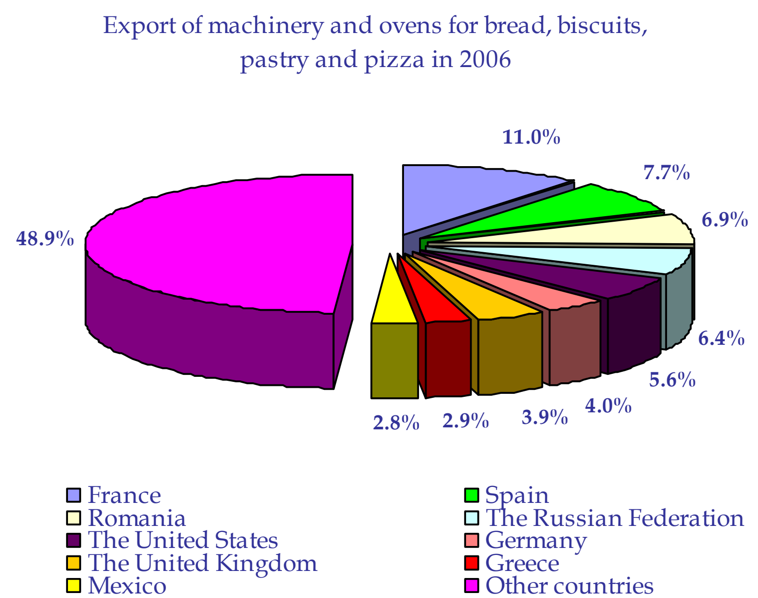


Table 17: Import of machinery and ovens for bread, biscuits, pastry and pizza by main country of origin. Years 2005-2006, values in euro

Country	Import 2006	Import 2005

Austria	4,649,375	2,496,528
Germany	4,532,805	3,678,704
France	3,044,663	4,075,022
People's Republic of China	2,087,174	1,064,597
Switzerland	1,501,951	1,427,975
Spain	939,258	950,138
Other countries	4,124,568	7,512,517
TOTAL	**20,879,794**	**21,205,481**

In 2006 import of machinery and ovens for bread, biscuits, pastry and pizza registered a slight decrease (1.5%). The most important supply markets were Austria, Germany and France; in 2006, moreover, import from the Chinese market was characterized by a major growth (96%).

Import of machinery and ovens for bread, biscuits, pastry and pizza in 2006

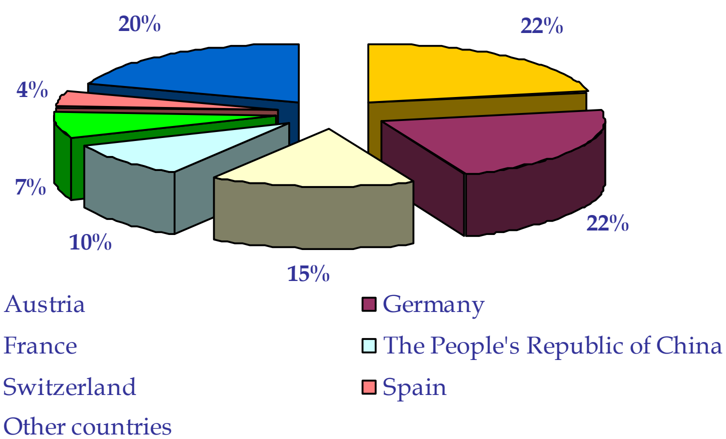


Table 18: Other important facts and figures

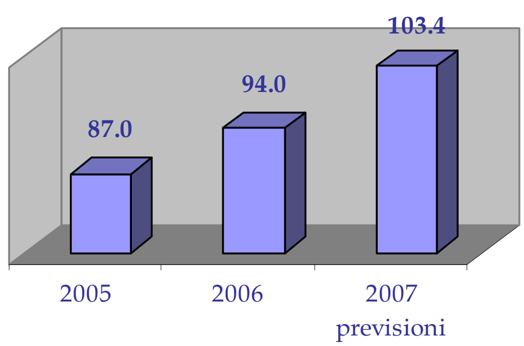
	Unit	2005	2006	2007 forecast
Export/production	%	60	62	64
Investments	**euro**	13,800,000	13,800,000	13,800,000
Plant usage	%	82	83	83
Prices	%	+3	+3	+3

2.5. PLANTS AND MACHINERY FOR THE CONFECTIONERY INDUSTRY[5]

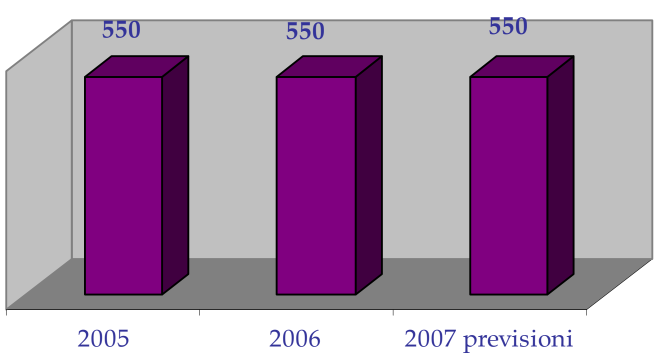
In 2006 the sector of plants and machinery for the confectionery industry generated a production value of 94 million euro (2.8% of the overall production value generated by the industry of plants and machinery for the food sector). This sector is therefore small, but its growth values exceed expectations.

2006 showed some signs of recovery, particularly in the sector of plants and machinery for cocoa-based products processing. On the contrary, the trend regarding plants and machinery for sugar-based products (where technology is more consolidated) seems less favourable.

Production of plants and machinery for the confectionery industry in 2005-2007 (million euro)



Employment in the sector of plants and machinery for the confectionery industry in 2005-2007 (units)



[5] The da … achinery for the product … plants for the mouldir …

The industrial sector of plants and machinery for the confectionery industry is strongly export-oriented, claiming the highest percentage of export value on production value (91%). The five main destination countries are the Russian Federation, Poland, Australia, France and Canada. In 2006 the sector increased its export by 8.2%, reaching an export value equal to 85.5 million euro. Prospects for 2007 appear even more promising.

Export of plants and machinery for the confectionery industry in 2005-2007 (million euro)

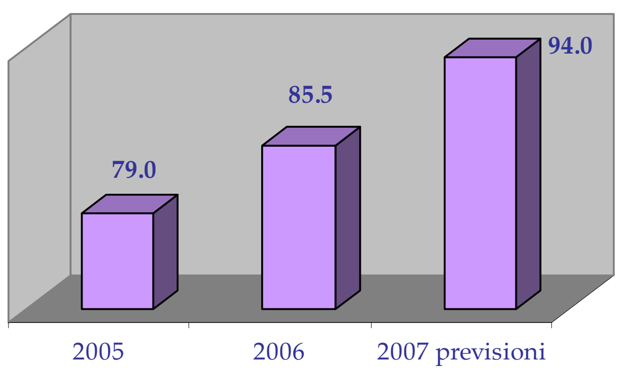


Table 19: Export of confectionery industry machinery by main destination countries. Years 2005-2006, values in euro

Country	Export 2006	Export 2005
The Russian Federation	11,135,937	3,633,526
Poland	6,949,553	11,672,542
Australia	4,034,931	496,187
France	4,007,438	2,478,953
Canada	3,969,914	1,394,163
Ukraine	3,590,489	936,152
Algeria	3,233,455	2,394,951
Germany	3,133,391	3,821,665

Serbia	2,659,676	80,274
Other countries	42,785,216	52,091,587
TOTAL	**85,500,000**	**79,000,000**

Export of confectionery industry machinery in 2006 (% by main destination countries).

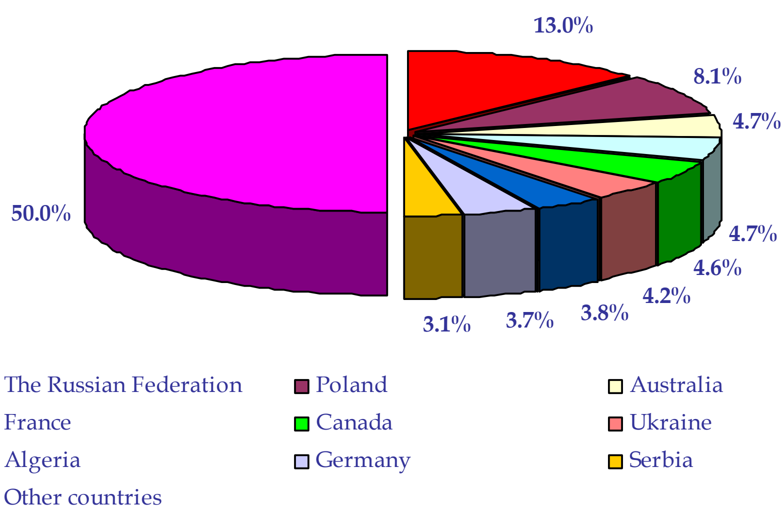


Table 20: Import of confectionery industry machinery by main country of destination. Years 2005-2006, values in euro

Country	Import 2006	Import 2005
Germany	4,687,577	2,228,940
Austria	2,467,600	6,617
The United States	800,222	33,938
Brazil	455,474	122,605
Spain	363,045	-
Poland	258,320	19,426
Other countries	1,243,488	5,408,289
TOTAL	**10,275,726**	**7,819,815**

This sector's import registered a 31.4% increase in 2006 as against 2005. The main supply markets are Germany, Austria and the United States, where the sector buys on the whole 77.4% of the overall imported value.

Import of confectionery industry machinery in 2006 (% by country of origin)

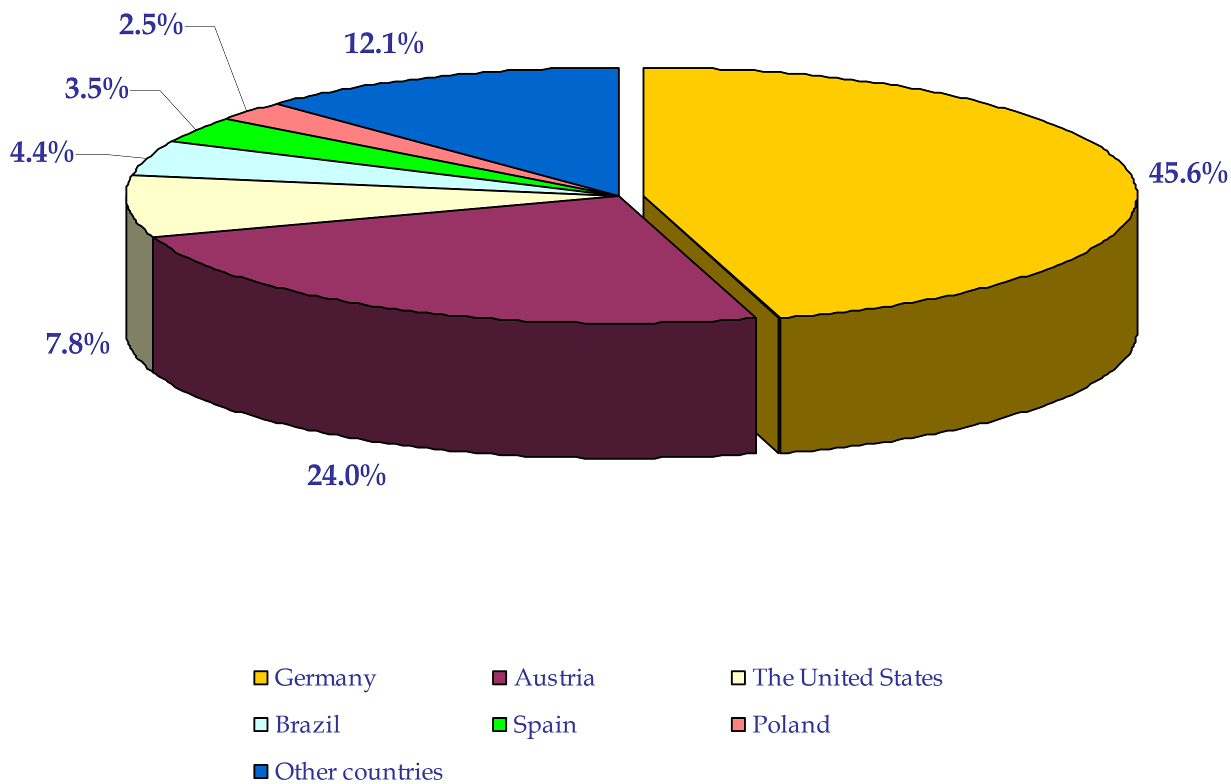


Table 21: Other important facts and figures

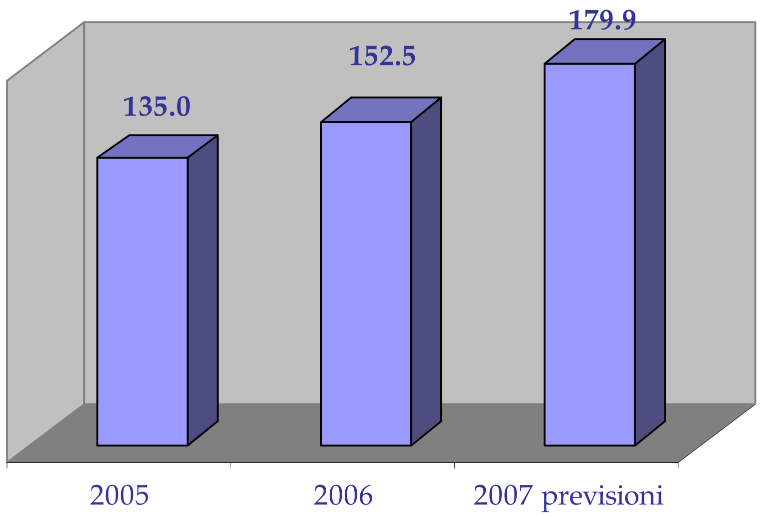
	Unit	2005	2006	2007 forecast
Export/production	%	91	91	91
Investments	**euro**	1,000,000	1,000,000	1,000,000
Plant usage	%	85	85	85
Prices	%	+2	+1	+4

2.6. PLANTS AND MACHINERY FOR FRUIT AND VEGETABLES PROCESSING[6]

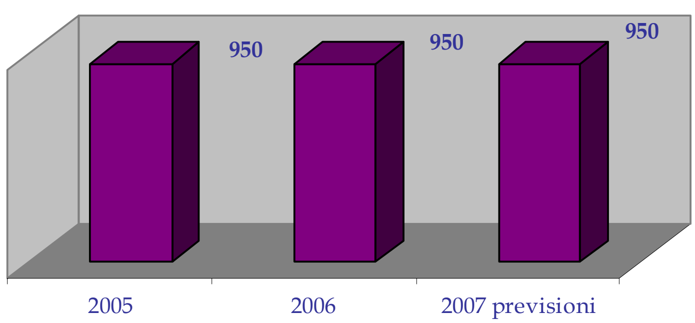
Plants and machinery for fruit and vegetables processing account for 4.6% of the overall production value of plants and machinery for the food industry. The production trend is positive, with a 13% growth in 2006 and even more promising forecasts for 2007 (+18%). The production recovery registered in 2006 (after a really difficult 2005) is mainly due to the growing investments in the "tomato plants and machinery" sector, favoured by the rise in tomato concentrate prices. A positive trend has also been observed in the "fruit processing plants and machinery" sector. The employment trend seems stable.

[6] The data reported here refer to the following types of plants: machinery for processing and transforming fruit and vegetables in solid and liquid food.

Production of plants and machinery for fruit and vegetables processing in 2005-2007 (million euro)



Employment in the sector of plants and machinery for fruit and vegetables processing in 2005-2007 (units)



The sector of plants and machinery for fruit and vegetables processing generates 79% of its turnover on international markets. The most important markets are China, some European markets (France, Spain, Greece, Germany) and Latin America (Chile in particular). The export trend is positive: export values grew by 14.5% in 2006 as against 2005, while a 18% growth is expected for 2007.

Export of plants and machinery for fruit and vegetable processing in 2005-2007 (million euro)

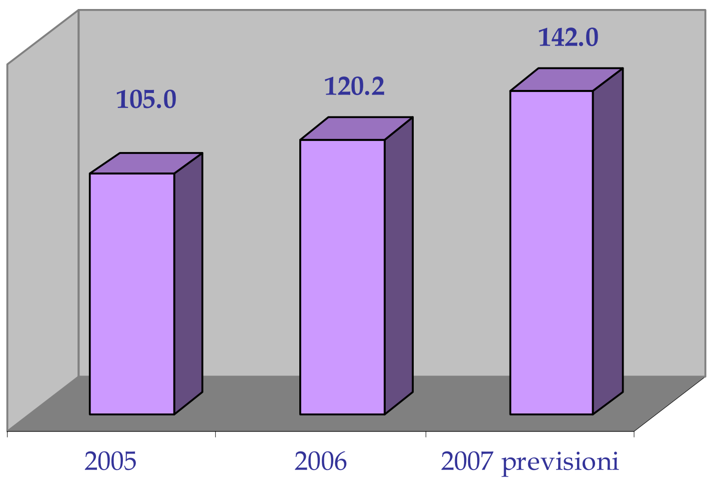
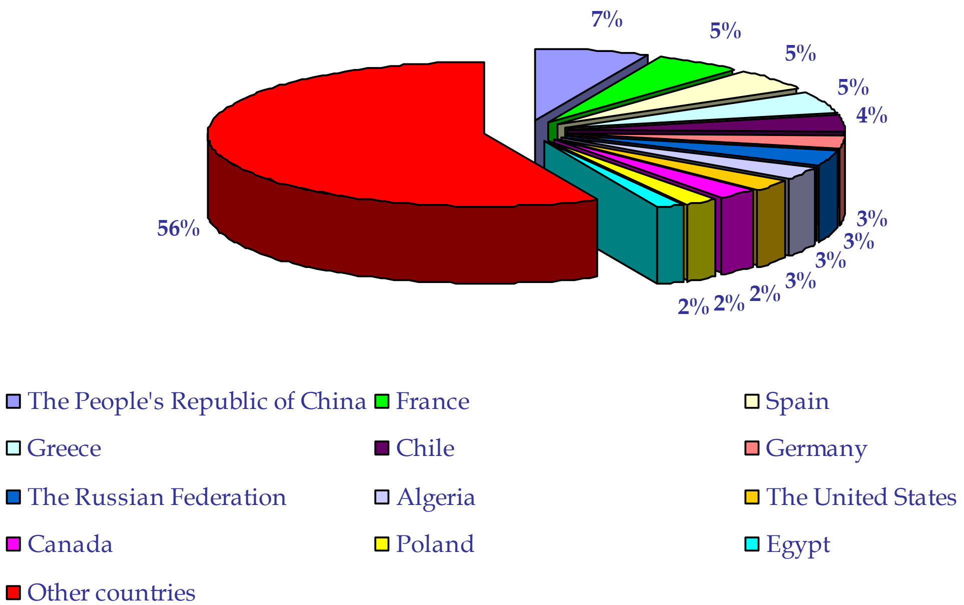


Table 22: Export of machinery for fruit and vegetables processing by main destination countries. Years 2005-2006, values in euro

Country	Export 2006	Export 2005
The People's Republic of China	7,924,291	5,429,908
France	6,222,798	5,766,358
Spain	6,049,004	7,562,667
Greece	5,881,411	2,817,606
Chile	4,234,443	636,865
Germany	3,860,301	2,580,051
The Russian Federation	3,764,236	855,658
Algeria	3,694,971	775,500
The United States	3,085,277	2,603,026
Canada	2,956,327	814,704
Poland	2,255,064	667,214
Egypt	2,204,072	2,349,524
Other countries	68,067,805	72,140,919

TOTAL	**120,200,000**	**105,000,000**

Export of plants and machinery for fruit and vegetable processing in 2006 (% by destination country)



In 2006, export of machinery for fruit and vegetables processing grew by 10% as against 2005: products for 4.8 million euro were bought on foreign markets. Import value amounts to 4% of the overall export value.

Table 23: Import of machinery for fruit and vegetables processing by main countries of origin. Years 2005-2006, values in euro

Country	Import 2006	Import 2005
The Netherlands	974,379	278,089
The United States	658,668	949,352
France	629,096	1,297,488
Australia	469,943	-
Germany	433,381	271,326
The United Kingdom	240,322	795,091
Other countries	1,432,831	779,080
TOTAL	**4,838,620**	**4,370,426**

Import of plants and machinery for fruit and vegetables processing (% by country of origin)

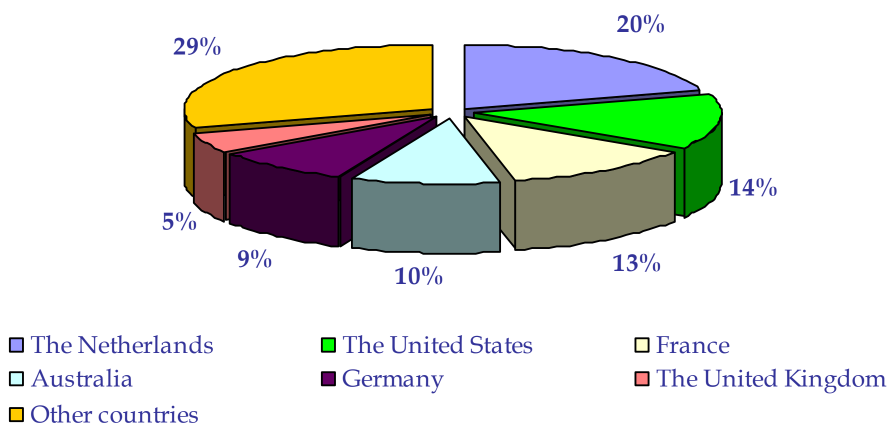


Table 24: Other important facts and figures

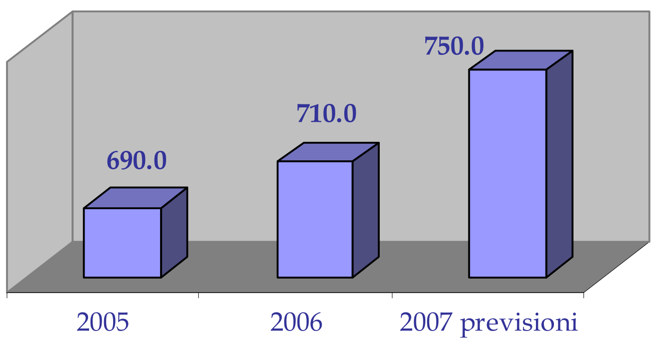
	Unit	2005	2006	2007 forecast
Export/production	%	78	79	79
Investments	**euro**	1,000,000	1,200,000	1,400,000
Plant Usage	%	70	76	80
Prices	%	-4	+3	+8

A 6%-10% rise in prices is expected for 2007, mainly to recover the marked growth in steel prices.

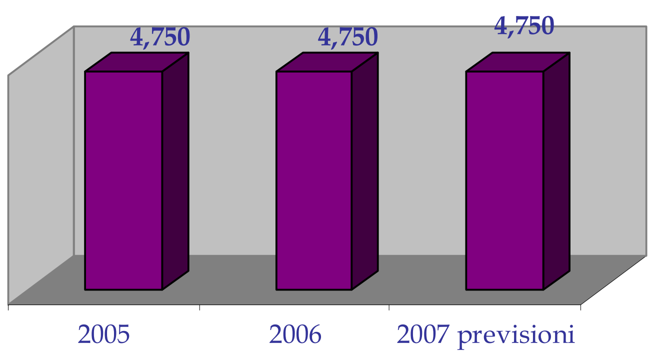
2.7. REFRIGERATION COMPRESSORS[7]

Refrigeration compressors production is one of the most important sectors of the industry of plants and machinery for the food industry, and it generates 21.3% of its overall production value. The 2006 production showed a positive trend and registered almost a 3% growth. Positive results have also been registered in the first months of 2007, in spite of the unfavourable time of the year. Expectations for the second part of the year are equally positive, and a 2.7% higher production growth, in comparison with the previous year, has been forecast.

Production of refrigeration compressors in 2005-2007 (million euro)



Employment in the sector of refrigeration compressors in 2005-2007 (units)



[7] The data reported here refer to the following types of plants: compressors in refrigeration plants, compression groups.

Notwithstanding these favourable results, the national market has shown a markedly uncertain trend in recent years; therefore the need has arisen to seek expansion on foreign markets rather than in Italy, thus splitting the risk of a downturn in the individual markets. The refrigeration compressors sector generates 17.5% of the overall export value within the industry of plants and machinery for the food sector, mostly on European markets (Germany, Spain, Hungary, France,…).

Export of refrigeration compressors in 2005-2007
(million euro)

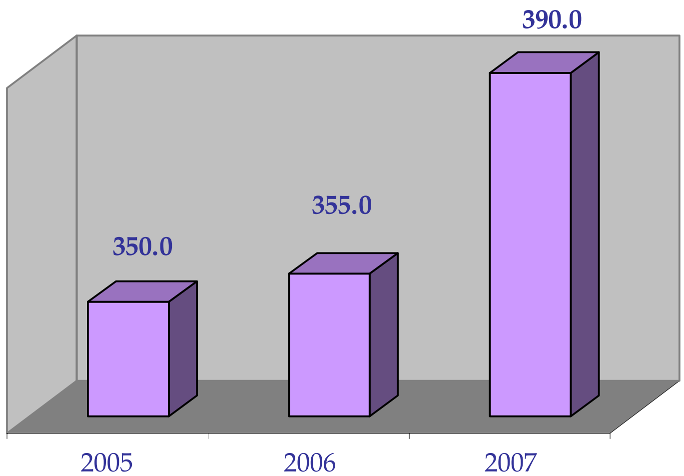
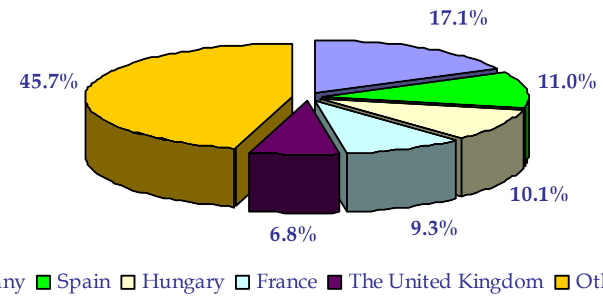


Table 25: Export of refrigeration compressors by main destination countries. Years 2005-2006, values in euro

Country	Export 2006	Export 2005
Germany	60,796,597	48,515,055
Spain	38,913,209	53,122,276
Hungary	35,866,625	31,548,202
France	33,062,410	19,152,738
The United Kingdom	24,267,564	24,119,649
Other countries	162,093,595	173,542,080
TOTAL	**355,000,000**	**350,000,000**

Export of refrigeration compressors in 2006 (% by destination country)

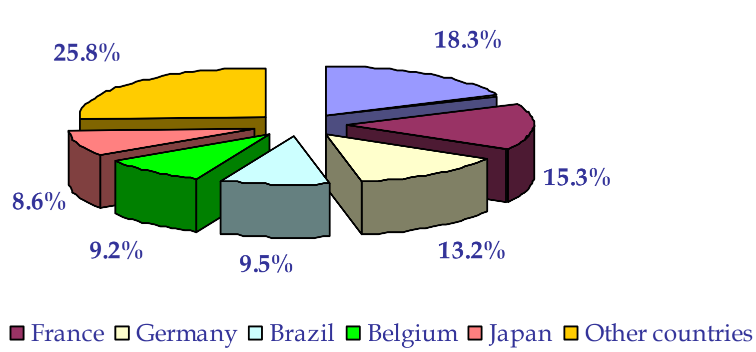


Import of the refrigeration compressors industry amounts to 495.8 million euro, with a 5.9% increase as against the previous year. The main supply markets are European countries (Slovakia, France, Germany), Brazil and Japan.

Table 26: Import of refrigeration compressors by main countries of origin. Years 2005-2006, values in euro

Country	Import 2006	Import 2005
Slovakia	90,759,367	82,588,469
France	76,003,098	68,505,814
Germany	65,608,227	58,906,371
Brazil	47,270,155	49,015,155
Belgium	45,568,376	42,371,698
Japan	42,549,057	30,410,858
Other countries	128,089,580	136,609,693
TOTAL	**495,847,860**	**468,408,058**

Import of refrigeration compressors in 2006



3. ISSUES RELATING TO THE PROTECTION OF INTELLECTUAL PROPERTY WITH A PARTICULAR FOCUS ON ECONOMIC COOPERATION WITH FAR EASTERN COUNTRIES.

In the framework of the internationalization of companies which is taking place at a global level, the Italian industrial system has reacted successfully to the global competition of foreign firms, especially Far Eastern firms, and is still one of the major players on the world market. The Italian economic growth is based mainly on the dynamism of its firms and on the Italian entrepreneurs' growing propensity to cross the national borders.

In 2006 Italian export registered an 11.9% rise in comparison with the previous year, recording its highest increases in Russia (+43.6%), China (+23.1%) and Turkey (+18.8). In 2006 Italian exporting firms amounted to almost 200,000, as against 183,000 exporting firms in 1996. Statistical data highlight that export to non-EU countries have registered significant increases in all economic sectors; in particular, the textile and clothing industry (+14.,7%), leather goods (+13.3%), wood and wood products (excluding furniture) (+20.6%), metals and metal products (+23.3%), machines and mechanical equipment (+12.7%), machines and precision equipment (+13.1%), other products of the manufacturing industry, including furniture (+36.8%).

Given the structure of the Italian industrial system, one must stress that the export propensity is not an exclusive feature of medium and large firms. Statistical data confirm that in non-EU markets, export of small Italian firms (counting less than 50 employees) accounts for 33.6% of the total export, as against 38.6% of medium firms and 27.8% of large firms. A similar situation can be observed also in the export structure of Eastern Asia.

In spite of the Italian economic success on the international markets, one should underline that the manufacturing sectors where Italy exhibits a high specialization degree (textile, tanning, shoe sectors, etc), have to bear the high competitive pressure exerted by the goods of emerging countries such as China, India and Vietnam. Therefore, the Italian products competitiveness is closely related with our firms' ability to promote and safeguard the specificity of Italian goods, which are characterized by intangible qualities such as creativity, innovation, image, style, etc… From a technical point of view, this issue falls within the framework of "industrial and intellectual property", acknowledged and safeguarded by national and international rules and regulations.

The success of Italian exporting firms depends also on the proper approach and management of their intangible assets through patents, trademarks, copyrights, models, design, domain names, etc.

Issues such as the protection of industrial property and the fight to counterfeiting must be tackled not only in the national markets, but also in the export markets, where our firms are looking for new channels of trade. Every market becomes a new area to learn about, without neglecting the rules and practices concerning industrial and intellectual property and the Institutions concerned.

The modern market economy, focusing on rapid trade exchange aimed at raising cash, fostered the uncontrolled growth of counterfeiting, paving the way to illegal trade. The development of counterfeit economy has weakened substantially the trust of "fair" economic operators, leading to a fall in investments with adverse consequences for employment. According to the world estimates about the counterfeit market, counterfeiting can no longer be considered a marginal factor, but rather a structural component of the world productive system.

Countering counterfeiting and piracy: a major challenge today for national governments, in order to restore the market transparency and fair competition.

In Italy, the national anti-counterfeiting strategy has devised a new tool, namely the High Commissioner for the fight against counterfeiting (Act 80/2005, known as "competitiveness decree"). The High Commissioner analyzes the causes of this phenomenon and puts forward new bills and more efficient regulations. In cooperation with the public bodies already involved in preventing and countering this phenomenon (police, customs officers, the judicial system and the other competent public authorities), the High Commissioner works out the response strategies and actions and aims at monitoring this phenomenon.

The High Commissioner operates also at an international level, to support the enforcement policies on the EU borders and to foster new agreements between our country and its main commercial partners, in order to strengthen the response tools. The High Commissioner is therefore an important instrument on the international scene, and contributes to strengthening our country's response to the emerging phenomenon of counterfeiting.

In April 2007 the "Anti-counterfeiting Desk" was set up, in cooperation with the Italian Institute for Foreign Trade (ICE); its main task is providing assistance to Italian firms abroad in their trademark and patent registration and in the protection of industrial and intellectual property. These Desks will operate in 14 countries (at first in 9 non-EU countries) and will carry out advisory and monitoring activity to protect the trademark and the indications of origin, providing firms with legal assistance in the fight against unfair competition. The Desks will operate according to the guidelines set by the High Commissioner and in keeping with the general trends of Italian foreign policy.

The High Commissioner shall analyze all requests submitted to the Desks and shall provide assistance to all the Italian firms abroad which need it. Moreover, the High Commissioner shall instruct firms on the way to deal with the various local bodies.

The countries involved in this initiative are China (with offices in Beijing, Shanghai, Hong Kong, Canton, as well as local correspondents), Russia, Taiwan, India, South Korea, Turkey, Vietnam, United Arab Emirates, Brazil. In these markets the need to safeguard Italian entrepreneurs from counterfeiting is a tangible and very serious challenge. The Anti-counterfeiting Desks will be located in ICE foreign representations; their main task will be providing firms with technical and legal assistance in the registration of trademarks and patents and in the fight against unfair competition.

Anti-counterfeiting Desks have been set up to tackle the Italian SMEs' problems, for they are facing a constant erosion of their market shares not only in Italy but especially abroad, because of the growing counterfeiting and unfair competition. Our small and medium size firms find it difficult to defend themselves, in particular on the foreign markets, where entrepreneurs are not sufficiently equipped to protect themselves.

China has set an example; Italy has signed a cooperation agreement with this country in the field of intellectual property, an agreement which has led to an intense activity in the following fields:

- The appeal systems, which aim at fighting against the rejections issued by the national patent offices and the protection granted to the rights of industrial property,
- The implementation of the Madrid system, concerning the international trademarks, the protection of designs and models and
- The cooperation for the dissemination of intellectual property among the SMEs of the two countries.

The results of such cooperation are definitely favourable and thanks to the Anti-counterfeiting Desks they are even more tangible and visible; moreover, Chinese authorities have guaranteed their full support to the Desks' future activities.

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