The Modernization of Food Processing

1. The food-processing industry

Traditionally, thanks to the rich variety of its products (olive oil, wine, spirits, mineral water, pasta, rice, fruit, vegetable conserves, cheese, cured meats, etc.) the Italian food-processing industry enjoyed an eminent position in the domestic and international market.[1]

It did not emerge from the war unscathed. Many food-processing facilities had been destroyed or badly damaged, but reconstruction began immediately after the restoration of peace, in 1946.[2] By the early fifties, thanks to considerable effort and investment, prewar output levels had been regained in many sectors. Food and beverage production increased very substantially between 1950 and 1965, although not at the same pace in all sectors.

After its postwar recovery, the food industry was affected by the recessions of 1956-57 and 1960-61. Setting 1953 production equal to an index level of 100, output rose from 88.3 in 1950 to 178.4 in 1965. Beverages gained even more. Despite the downturn of 1953-56 and the recessions of 1958, 1961 and 1964-65, production rose from 109.6 in 1950 to 262.7 in 1964.[3]

In the course of this growth, which was spurred by the social and economic transformation of the country, both the food and the beverage industries significantly altered their structure. Firms with more than 500 workers increased in number from 39 in 1951 to 63 in 1961; those with between 100 and 500 workers, from 342 to 417; and those with 11 to 100 workers, from 3,517 to 4,198; meanwhile, companies with from 1 to 10 workers diminished in number from 65,998 to 47,640. In short, there was a movement towards larger firms, a shift of workers from firms in the smaller to the larger size categories. All size categories increased their work-force save those with 1 to 10 workers, which lost 21 per cent. Total employment in the industry increased from 413,762 to 435,163.[4]

The location of the food-processing industries was probably determined by two factors: the presence of large consumer markets and the ready availability of foodstuffs and farm products in the neighbouring areas. These factors presumably explain why the industry first arose and developed in Lombardy, with 924 factories; in Emilia, with 674; and in Campania, with 484. The growth of the industry was also due, however, to its satisfying a broad range of consumer needs. In fact, as late as the end of the sixties nearly half of Italians' private spending (46 per cent) went on food products; no estimates are available, however, concerning the share accounted for by the food-processing industry

[1] Maspronc, "Evolution and prospects of the Italian food industry", *Review*, XX, 3 (May 1966), p. 183.
[2] *Ibid.*, p. 186.
[3] *Ibid.*
[4] *Ibid.*, p. 184.

as against raw farm products. Food-processing required massive investment, which Alberto Masprone of Confindustria estimated in 1966 at no less than 830 billion lire. On the eve of the transition to the third stage of the Treaty of Rome for the formation of the Common Market, the industry needed not only further modernization and expansion of plants but also an acceleration of the process of concentration, even though existing plants did not always work to capacity, with utilization rates ranging from 37 per cent for the rice industry to 94 per cent for fruit juices. The fact is that these industries were very active in foreign trade, where competition increased steadily. Regardless of whether capacity utilization was high or low, a large part of output was always exported, and exports gradually expanded, though with downturns in 1952, 1955, and 1958-59. Exports rose from 93 billion lire in 1950 to over 187 billion in 1964. Exports of both food products and beverages (wine, spirits, etc.) increased; the former from 73 billion lire in 1950 to 126 billion in 1964 and the latter from 13 to 43 billion.[5] Exports were essential to further growth, and there was no hesitancy in urging that they be "encouraged and developed, expanding both the range of products to be sold abroad and the number of countries to which they are sold."[6] Success in the international marketplace demanded not only advanced technology but also adaptation to constantly changing tastes.

Continuous technological and organizational updating obviously necessitated large-scale investment in the preserves industries and in those of alcoholic and nonalcoholic beverages, oils, dairy products, pasta, sugar, frozen foods, and so on.[7] Not all these investment plans could be realized, however. Like the rest of the economy, the food-processing industry felt the impact of the union campaigns of the sixties and the costly wage agreements that derived from them at both industry and company level, not to mention the inflationary pressures following the 1973 oil shock, which the "sliding scale" agreement translated immediately into higher labour costs. Some sectors, furthermore, suffered from inadequate Italian output of the requisite inputs.[8] The industry responded vigorously, however, around the turn of the seventies, in a serious effort to reorganize, restructure and modernize in some sectors, improving product quality to reduce the price repercussions of higher labour costs. Thanks to these measures and to inflation, exports gradually increased, but the real stimulus to expansion came from domestic demand, which increased thanks to rising living standards and population growth.

The fastest growth was recorded by diet products, baby foods and frozen foods, a sector in which Italy was one of the EEC's leaders. Fruit and vegetable preserves, which depended on harvests, hence on the weather, alternated

[5] *Ibid.*, p. 187.
[6] *Ibid.*, p. 188.
[7] *Ibid.*, p. 189.
[8] B. Buitoni, "Situation and prospects of the Italian food industry", *Review*, XXVIII, 3 (May 1974), pp. 235-36.

between good years, such as 1972, and bad ones, such as 1973. But the performance of the rest of the industry, except for cheese and dairy products, was mediocre. Pasta manufacture struggled with an impressive array of difficulties: the shortage of domestic production of durum wheat, hence abnormal cost increases; the vagaries of the Common Agricultural Policy within the EEC; the presence of many tiny firms that were unfit to be in the market; obsolete and underutilized plants; unsustainable government-fixed prices; and a shift in demand from industrial dried pasta to artisanally produced fresh pasta.[9]

Between 1960 and 1976 there was a very substantial rise in Italian imports of fresh farm products, meats and other produce, such as cheese, milk, cream, and other dairy products, the demand for which outstripped domestic production. Thus, despite increased exports of preserved vegetables, some beverages, baked goods, etc., the sector ran a trade deficit. In 1974 the food industry registered a trade deficit of $5 billion, the bulk of it determined by imports of fresh food products.[10]

The fact is that domestic food processors could make use of only a small part of Italy's "agricultural, forestry and fisheries" products. No more than 17 per cent of agricultural resources, valued at 8,216 billion lire, went to the food-processing industry strictly speaking; and of this 17 per cent – a significant part was accounted for by the flour and pasta sector, and 1 per cent by vegetable preserving.[11] This did not prevent the continuing transformation of the industry's structure and work force. According to the 1971, census the number of companies dropped from 52,318 in 1961 to 45,000 in 1971. The number of workers also declined, from 435,163 to about 420,000, still accounting for 7.2 per cent of total employment in manufacturing.[12]

The process of concentration revealed by the 1961 census continued through the decade. In 1971 the 199 largest firms, just 0.4 per cent of the total, accounted for 35.3 per cent of the work force. In some sectors, concentration was very great. The four largest groups producing baby foods, frozen and dried foods, canned meat, breakfast cereals and cakes, margarine and yogurt, had market shares ranging from 85 to 93 per cent. Also concentrated, but not to this extent, were such other sectors as sugar, chocolate and ice cream. Here the four top producers held market shares ranging from 65 to 71 per cent. Somewhat over half their respective markets (from 53 to 63 per cent) were controlled by the top four producers of soft drinks, beer, edible oils, breadsticks etc., aperitifs and rice. Concentration was only moderate in such products as spirits, preserved vegetables, confectionery, freshly baked goods (except bread sticks), and canned fish, where the four leading producers accounted for between 36 and 45 per

[9] *Ibid.*, pp. 234-35.
[10] L. Sicca, "The food industry in Italy and its growth prospects", *Review*, XXXII. 2-3 (March-May 1978), pp. 128-29
[11] *Ibid.*, p. 131
[12] Masprone, "Evolution and prospects", p. 131.

cent of sales. Insignificant degrees of concentration (8 to 27 per cent) were still found with such products as cheese and butter, bread, wine, preserved milk, coffee and substitutes, cured meats, olive oil and pasta.[13]

2. Fruit and vegetable preserving

Products here were quite variegated, although not all branches were of equal importance. This sector included the processing of tomatoes and other vegetables and fruit, and the production of jam, fruit juices, bouillon cubes, prepared soups, ready-made sauces, and mixed conserves in which vegetables predominated. By far the most important was tomato-processing.[14] Tomato growing and processing expanded rapidly after the war. Compared with 56,000 hectares given over to tomato-growing in 1937, there were 96,000 in 1954, 109,000 in 1957 and 127,000 in 1965. That is, in less than 30 years acreage more than doubled and the tomato harvest more than tripled, from 1 million tons in 1937 to 3.2 million tons in 1965.[15]

Sensitive to weather conditions, tomato output varied in quality and quantity. The leading region was Campania, followed by Emilia-Romagna and Sicily. The highest yield per acre was in Emilia-Romagna, followed immediately by Campania. The canning industry took 55 per cent of the harvest and 5 per cent of the rest was exported; the remainder was sold on the domestic market and consumed fresh.

In 1966 the tomato-canning industry had 370 large, medium-sized and small factories, none working all the year round. Thirty of these had quite modest capacity and worked only in years when demand was exceptionally strong. The largest number were found in Campania (151), followed by Emilia-Romagna (106), Sicily (23), Tuscany (12), Marche (9), Umbria (8), and Calabria (6). Elsewhere there were just a few factories.[16] Tomato-processing yielded three main products: canned peeled tomatoes, concentrate and juice. The main product was canned tomatoes, whose output nearly doubled between 1958 and 1965 to 300,000 tons. Tomato-concentrate production declined from 170,000 to 120,000 tons, while the production of tomato juice rose modestly to 9,500 tons.[17] The overall value of output in 1965 was 55 billion lire, and more than half of this was exported.[18]

Of other canned vegetables, the most significant was peas, with a steadily growing output. This industry actually dated back to the XIXth century. Other

[13] Sicca, "The food industry", pp. 133-34.
[14] A. La Rocca, "The fruit and vegetable preserving industry in Italy", *Review*, XX, 3 (May 1966), pp. 192 *et seq.*
[15] *Ibid.*, pp. 192-93.
[16] *Ibid.*, p. 194.
[17] *Ibid.*
[18] The main export markets were the UK, the US, Switzerland, West Germany, the Benelux countries, Saudi Arabia, Japan, Nigeria, Canada, and Senegal. *Ibid.*, p. 196.

canned products were beans, boiled beans, peppers, asparagus, spinach, mushrooms, and soups. Cucumbers, green olives, onions, peppers, cauliflower, artichoke hearts, mixed antipasti, and the like were also preserved in oil, vinegar, or brine. Before the 1964 recession, exports of canned vegetables grew steadily to nearly 8 billion lire in 1964.[19] The same year, exports of fruit preserves, including jams and jellies, fruit juice, lemon and grape juice, amounted to 7 billion lire. The main markets were the United Kingdom and West Germany.[20] There was also a modest production of broth powders, cubes and extract, precooked soups, mixed meat and vegetable extracts.[21]

3. Wine

Wine production also increased notably both in quantity and in quality. Before the end of the Second World War, despite such peak production years as 1913, 1917, 1923 and 1928, output never exceeded 40 million hectolitres. In 1945 production was about 29 million hectolitres, but, with reconstruction, growth resumed and in 1950 output reached some 50 million hectolitres. From then on, except for dips in 1951, 1954 and 1957, production expanded steadily to 70 million hectolitres in 1962. Downturns came in 1963, 1966, 1968, and 1970-72, when production ranged from 64 to 71 million hectolitres, before peaking in 1973 at 77 million,[22] or nearly twice the 40 million hectolitres imagined by the negotiators of the stillborn Franco-Italian customs union of 1948-49.[23]

The increase in volume was made possible by the great improvement in vineyards for wine as well as table grapes. According to Vallarino Gancia, in fact, the main factor in the increased grape harvest was not the extension of surface area but the gain in per acre yields, especially in Sicily and Sardinia and other parts of the South, where new growing methods were introduced. On the demand side, production was stimulated by expanding domestic demand owing to population growth and higher living standards, and by increasing exports thanks to the Common Market, which liberalized trade with France, whereby millions of hectolitres of ordinary Italian wine flowed in to supplement local French production.[24]

By the early seventies, Italy's per capita wine consumption was stabilized at around 110 litres a year, less than the approximately 120 litres consumed by the average Frenchman but far higher than in the rest of the EEC, including West Germany, where the figures ranged from 6 to 41 litres.[25] These low levels of

[19] *Ibid.*, p. 198.
[20] *Ibid.*, pp. 199-200.
[21] *Ibid.*, p. 201.
[22] L. Vallarino Gancia, "Italy's production and consumption of wines, spirits and liqueurs", *Review*, XXVIII, 5 (September 1974), p. 422.
[23] *Ibid.*, p. 408.
[24] *Ibid.*, pp. 409-10.
[25] *Ibid.*, p. 424.

wine-drinking facilitated Italian exports, and not just to France but also to West Germany, Britain and the rest of the EEC, as well as to the United States.

Unsurprisingly, Italy had a sizable trade surplus in wine, amounting to 143 billion lire in 1972.[26] Exports would certainly have been even greater, had the European Community managed to cut the taxes on wines at least down to those on beer in such member countries as Britain, Ireland, Belgium and the Netherlands, and had France complied with a resolution of the European Parliament and abolished its wine tax. Vallarino Gancia argued that the Italian government should work actively for that goal, but he had little hope of immediate results. In the meantime, he explained, Italy's raising of VAT on whisky was a response to the British tax authorities' treatment of wine imports.

Italian wines were now vastly better in quality, thanks to improvements both in methods of grape growing and in winemaking itself. Growers' cooperatives now supplied some 30 per cent of all wine output, the rest being the work of single winemakers and of industrial and commercial firms that bought in their grapes. The latter aimed exclusively at quality wines, an area in which technical and organizational advances were palpable. The new tendency was for the entire production cycle, from grape-growing to the industrial production of the wine, to be concentrated in a single firm. At the same time, there were calls for joint ventures between agricultural and industrial companies. The conviction was that both forms of organization could lower costs, raise quality and diminish market risk.

To certify the reputation of Italy's finest wines in domestic and international markets, Law 930 of 12 July 1963 authorized the makers of wines produced in specified areas, provided they met certain quality standards, to use the appellation "DOC" *(denominazione d'origine controllata)*, a privilege that would later be recognized and adopted by Community regulation 817/70 establishing rules on the volume of wines produced in specified regions (VQPRD).

Until 1974 only 145 wines were so authorized, but the list was steadily lengthening in a process that would continue over the following years.

The making of sparkling and specialty wines also progressed. These wines, which seem to have originated in Piedmont around the mid-19th century, had traditionally had serious difficulties, especially fiscal problems, in that they were always considered luxury products. Quality improved enormously in the postwar period, with new production methods, in part because advancing living standards boosted demand and helped free these wines from overtaxation. Some quickly earned the DOC appellation, such as Moscato di Asti (made from muscatel grapes) and Prosecco di Conegliano (brewed from aromatic grapes). Production of speciality and sparkling wines expanded rapidly, from 420,000 hectolitres in 1969 to 450,000 in 1970, 490,000 in 1971, 510,000 in 1972 and 520,000 in 1973.[27]

[26] *Ibid*, p. 430.
[27] *Ibid.*, pp. 414-15.

Their success both in Italy and abroad, notably in France and the United States, was not enough, however, to cut into the trade gap in this sector[28] due to large-scale imports of French champagne.[29]

A large surplus was earned by exports of vermouth and aromatic wines such as Marsala, which was now of truly exceptional quality, Vernaccia di Oristano, Passito di Pantelleria, Moscato di Sorso-Sennori, and others.[30] In the area of spirits and liqueurs, however, the trade balance was regularly in deficit, despite the export success of alcoholic aperitifs and digestive beverages and grappa. Italy was a major consumer of whisky, imports of which rose from just over a billion lire in 1960 to over 20 billion in 1973, most of the growth coming after 1966.[31]

4. Meat packing

The Italian meat-packing industry comprised beef canning and the production of such cured-pork products as salami, hams, sausage, bologna sausage, pig's feet, cheeks and the like.[32] First developing between the wars, the meat-packing industry was damaged by the Second World War, owing in part to the destruction of livestock, but then recovered, though without any immediate strong growth. The prime reason was low meat consumption in Italy. As late as 1964, in per capita consumption of meat, Italy trailed virtually all the countries of Western Europe and North America, plus Argentina, Venezuela, Australia and New Zealand and was just barely ahead of Spain. Against annual per capita consumption of 108 kilos in New Zealand, 76 in the UK and 60 in West Germany, Italy registered just 28 kilos.[33]

Meanwhile, Italian beef output was not enough even to meet domestic requirements, so processing meant importing beef, putting the Italian industry at a disadvantage, not only because of additional transport costs and customs charges but also because supplies of the right cuts were not always reliable. Domestic pork output was generally sufficient, however, with imports amounting to no more than 10 per cent. However, pig farming was affected by frequent and sometimes very sharp price fluctuations.

There were two main divisions to the meat-packing industry, canned meats on the one hand and sausages, salami, etc. on the other. The beef-canning sector hinged on ten or so large firms operating on an industrial scale, with technically advanced and sufficiently large plants, quite different from the small-scale facilities

[28] *Ibid.*, p. 430.

[29] Champagne imports rose only modestly between 1960 and 1965 but launched into explosive growth in 1966, from a value of 2.3 billion lire in that year to 24 billion in 1973. *Ibid.*, p. 432.

[30] Production of this type of wine increased especially fast, from 625,000 hectolitres in 1969 to 630,000 in 1970, 640,000 in 1971, 690,000 in 1972 and 700,000 in 1973. *Ibid.*, p. 417.

[31] *Ibid.*, pp. 418-20, 430, 432.

[32] F. Vismara, "Situation and prospects of the meat packing industry", *Review*, XX, 3 (May 1966), p. 203.

[33] *Ibid.*, p. 204.

[34] *Ibid.*, p. 207.

found before the First World War.[34] Production covered domestic demand. Matters stood differently as regards pork-processing. Here, along with a hundred or so large, medium-sized and small firms operating on an industrial scale, there were some 5,000 artisanal enterprises, often family businesses, scattered throughout the country. The larger and smaller businesses differed substantially in such matters as health controls, taxation, tariffs and wages. These contrasts resulted in two health and hygiene laws in 1962 and 1964, which were still unapplied in 1966, however, for lack of the implementing regulations.[35]

Until 1964, thanks to the high quality and international reputation of many of Italy's cured pork products, exports held up well despite campaigns against eating fatty products. Exports declined from 1964 on, owing not only to steadily decreasing consumption of fats, which gradually fell from prime products to processing by-products, but also owing to the general increase in production costs. The prices of the cuts of beef needed by the packing industry rose 40 per cent between 1964 and 1965 and those of pork by 50 per cent; the cost of labour increased by over 50 per cent. Meanwhile there was a drop of 20 per cent in the price of pork-fat products (sausages and the like) and a rise of no more than 2 or 4 per cent for salami.[36] What is more, the recession of 1964-65 reduced consumption of the more costly foodstuffs, including packaged meats.

In the face of these circumstances, which had reduced not only profits but also domestic consumption and exports, in 1966 the president of the Italian Meat Packers Association, Francesco Vismara, stressed the need for government intervention, since meat-packing was an industry that involved both the agricultural and the manufacturing sectors; it affected not only foreign trade but also agriculture, livestock-raising, and industry, including the production of tins, graphics, etc. He called for a series of actions to improve livestock-raising, eliminate disparities between industry and artisanal firms in the sector, regulate meat-processing in technical terms, facilitate imports of raw materials by cutting tariffs, easing taxes, etc.[37]

5. The confectionery industry

Italy was a latecomer in beet-sugar production. The first sugar refinery dated back to 1835, but it failed. In 1861, when Germany was already a sugar exporter, while France, Denmark, Austria and Germany itself were driving for self-sufficiency, Italy still had no sugar producers. Serious plans for building a refinery began in 1870, but it was not until the move to a protectionist policy in 1887 that, behind high tariff barriers and despite the handicap of an excise tax instituted several years previously, the sugar-refining industry began to take root. Self-

[34] *Ibid.*, pp. 206-07.
[35] *Ibid.*, p. 209.
[36] *Ibid.*, pp. 209-10.

sufficiency was not attained until the 1930s at per capita consumption of 7 or 8 kilos a year, the lowest in Europe.[38]

After the Second World War per capita consumption grew rapidly. In 1958-60 it stood at 19.8 kilos a year and in 1963 at 24 kilos: a fourfold increase in 25 years. Nevertheless, Italy was still not up to European levels, although productive capacity was not badly out of line with that of the other EEC members.

The feedstock for the sugar industry was sugar beet, which accounted for 70 per cent of the final-product price. The government ordinarily fixed the prices of both beet and sugar, so that, if it aimed to encourage sugar consumption by a low-price policy, it caused perplexity and withdrawal from the sector on the part of beet-growers. The low prices for beet seriously limited the amount of land given over to its cultivation, which shrank from 305,000 hectares in 1959 to 240,000 in 1963 (a drop of 20 per cent in five years), while the harvest diminished by some 8.5 million tons. Sugar prices were thus no minor problem and producers did not fail to point out that, if prices became remunerative once again, beet-growing would again expand and, as in other countries, be mechanized.[39] Beet was grown in almost all regions, including Sicily and Sardinia where it had been unknown until the war. Between 1938 and 1963 the beet crop was redistributed among regions, and the share of output accounted for by northern Italy dropped from 87 to 75 per cent while that of the Centre held at around 8 per cent; that of the South (including Sicily and Sardinia) rose to 17 per cent.[40]

The sugar content of beet varied from year to year. In 1958, for instance, it averaged 16.16 per cent; in 1960, under 14 per cent. But the difference was also geographical, and the gap was widening. In 1960, the sugar beet of the Veneto and the Po Delta had an average sugar content of 12 per cent; that of central and southern Italy, 18 or 19 per cent. Yet beet of central and northern Europe was richer still in sugar content.[41] Another significant difference existed between the North and the South of Italy, however: in the Po Valley, a hectare of land produced 38 tons of beet; in the South, just 21.[42]

Combining agriculture and industry, sugar refining gave work to both farmers and workers. The beet harvest required 25,000 to 28,000 hands, and another 7,000 or 8,000 were employed in the refineries as production workers or technicians. Sugar was produced by 35 companies, including 4 farmers' cooperatives. These producers operated 76 refineries, most of them in the Po Valley, but some in central and southern Italy and in the major islands. In 1963 the largest refinery was capable of processing 2,000 tons of beet a day; others

[38] D. Borasio, "The sugar industry in Italy", *Review*, XVII, 5 (September 1963), p. 339.
[39] *Ibid.*, p. 344.
[40] *Ibid.* On the high taxes on sugar, see also A. Maiorano, "The Italian confectionery industry", *Review*, XVII, 5 (September 1963), pp. 347 *et seq.*
[41] *Ibid.*, p. 343.
[42] *Ibid.*, pp. 341-43.

had a capacity of just 1,000 tons. Overall, the industry's capacity was 170,000 tons a day.[43]

Sugar output rose from 900,000 tons in 1963 to 1,150,000 tons in 1963[44], 25 per cent of which was sold to the confectionery industry for pastries, jams, etc., to industries using molasses and molasses by-products, to distilleries, sparkling winemakers, makers of sodium glutamate, and so on.[45] By European standards, these food-industry users took a relatively small share of the output. Per capita consumption of industrial sweets and the like in Italy was scarcely half the EEC average, somewhat more than a third of that in the Netherlands and the UK.[46] Italian uses consisted in the main of baked goods (pastries, cakes, etc.). The consumption of cocoa and chocolate was modest in the extreme, as well as of candies and other sugar products.

It was believed that Italians' low consumption of industrial confectionery products depended in part on the tax on sugar, which remained high, even after the reduction of the excise tax by the EEC on 1 January 1960.[47] The tax in Italy was 8 per cent higher than in West Germany, 13 per cent higher than in the Netherlands, 28 per cent higher than in Belgium and 40 per cent higher than in France.[48] The limited use of cocoa and chocolate was also blamed on tariffs and taxes, which had increased 246-fold since the prewar period.[49]

Nevertheless, unlike other food sectors, the confectionery industry had a trade surplus that amounted to 5 billion lire in 1961 and 6 billion in 1962.[50] This was a small enough figure, though, and it was observed that the industry's growth would have to depend on domestic consumption.[51] In the years that followed, however, consumption did not grow much.

The confectionery industry was not exempt from the labour conflicts of the sixties, and like other sectors experienced significantly rising labour costs. Between 1968 and 1973 the incidence of labour costs on output prices increased from 21.5 to 27 per cent, while a rise in absenteeism and the loss of many man-hours to strikes intensified the difficulties.[52] Obviously, the cost increases also affected the industry's inputs. In 1973, for instance, the price of cocoa rose by 100 per cent, that of flour by 24 per cent, eggs by 73 per cent, powdered milk by 40 per cent, honey by 55 per cent, gum arabic by 217 per cent, raisins by 85 per cent. Packaging-material increased prices by between 30 and 80 per cent,

[43] *Ibid.*, p. 340.
[44] *Ibid.*, p. 339.
[45] *Ibid.*, p. 340.
[46] *Ibid.*, p. 345.
[47] *Ibid.*, p. 348.
[48] *Ibid.*
[49] *Ibid.*, pp. 350 *et seq.* [50] *Ibid.*, p. 354.
[51] M. Dufour, "Situation and prospects of the Italian confectionery industry", *Review*, XXIX, 2 (March 1975), p. 142.
[52] *Ibid.*, p. 146.

transport and distribution by 24 per cent.[53] Most seriously damaged by the higher prices, and denied all possibility of growth in consumption, were chocolate-based sweets, which "met with serious difficulties of penetration and ended by taking the form of a gift article", not a product for regular consumption.

After the recession of 1965-66, the production of cocoa and chocolate rose to 63,000 tons in 1967 and to 72,400 in 1968 but stagnated in 1969 and slipped to 71,600 tons in 1970. This was followed by a gradual rise over the next three years.[54] Production of candies rose very modestly but steadily, from 112,300 tons in 1967 to 143,000 tons in 1973. This expansion was due mainly to increased consumption of chewing gum, with massive advertising campaigns to launch new packages (cartons and the like) of traditional candies.[55]

Baked goods achieved more substantial growth. Expansion was faster for biscuits, crackers, and the like than for cakes and other leavened products. Production of the former rose from 176,000 tons in 1967 to 246,000 in 1973, while that of the latter rose from 64,000 to 100,000 tons.[56] At the same time, output of ice cream increased from 84,000 to 137,000 tons.[57]

The faster growth of leavened baked goods was explained by the severe compression of prices in this sectors, thanks in part to sharp competition, and to higher quality.[58] The success of the ice-cream industry was due to modern plants, an expanding distribution network, the steady introduction of novel products, and the widespread belief that ice cream was a useful addition to young people's diet.[59] Obviously the figures given here refer only to industrial products, not artisanal, which were also very common.

The limited growth of output of the confectionery industry as a whole reflected Italy's still low consumption by European standards. But it also reflected difficulties in international markets, in that rising prices severely undercut competitiveness, and the modest trade surplus that the industry ran in the early sixties narrowed steadily to turn into a deficit in 1974, imports finally overtaking exports.[60]

Despite this limited expansion, the confectionery industry followed the same trends as the Italian and international economy generally. It diversified internally, with a few large baked-goods companies and a plethora of medium-sized and small ones, and above all a myriad crypto-artisanal shops. The candy industry was based solely on a few large firms that could withstand the competition; the

[53] *Ibid.*
[54] *Ibid.*, p. 150.
[55] *Ibid.*, p. 149.
[56] *Ibid.*
[57] *Ibid.*, p. 151.
[58] *Ibid.*, p. 148.
[59] *Ibid.*, p. 150.
[60] *Ibid.*, p. 151.

chocolate sector underwent a process of concentration but a significant number of small local businesses remained; in the ice-cream industry, there were a few major industrial companies and a large number of tiny firms and artisanal producers. The confectionery industry overall comprised over 500 firms, 250 of which could be called industrial and 300 of which were family-style operations. The number of firms was considered too high by comparison with the industry's output or with the size of the work force, which came to 45,000, or 48,000 at seasonal peaks. An EEC survey in 1972 found that Italy was third in the ratio of manpower to output but ranked last in per capita productivity in the average-size firm. Concentration, as noted, was growing. The top four companies, with production worth 750 billion lire, accounted for 35 per cent of total sales, and the top ten producers covered 85 per cent of the cocoa and chocolate market, more than 80 per cent of ice cream sales, nearly 70 per cent of bakery sweets and 50 per cent of candies.

The transition from artisan-style production to industrial enterprises required large-scale investment, however, and such investment was severely restricted in the sixties by constantly falling profits and diminished self-financing. The consequence was a steady inflow of foreign and public capital. The publicly owned Bastogi corporation invested in Toseroni, while SME invested in Motta, then Alemagna, and later still in Alimont, of which Pavesi was a subsidiary. Foreign groups took controlling stakes in the ice-cream industry through Unilever (investing in Sages), Grace (Tanara) and Beatrice Food (Sanson). Foreign capital was present in other sectors as well: Nabisco acquired an interest in Saiwa, Lyons in Industrie Riunite del Panforte, General Biscuit in Guglielmone, General Foods in Elah; not to mention direct takeovers in Italy by subsidiaries of Nestlé, Suchard, Mars and Rowntree-Mackintosh, the takeover of IBP by Pepi, and the merger of Talmone and Maggiore into Venchi Unica,[61] before the latter was hit by the failure of the Sindona banking group.

[61] *Ibid.*, p. 143 *et seq.*