[Accueil] [Remonter] [Intro 1] [Paper 2] [Paper 3] [Paper 4] [Paper 5] [Paper 6] [Paper 7] [Paper 8] [Paper 9] [Paper 10] [Paper 11] [Paper 12] [Paper 13] [Paper 14] [Paper 15] [Paper 16] [Paper 17] [Paper 18] [Paper 19] [Paper 20] [Paper 21] [Paper 22] [Paper 23] [Paper 24] [Paper 25] [Paper 26] [Paper 27] [Paper 28] [Paper 29] [Paper 30] [Paper 31] [Paper 32] [Paper 33] [Paper 34] [Paper 35] [Paper 36] [Paper 37] [Paper 38] [Paper 39] [Paper 40] [Paper 41] [Paper 42]

Rice in modern distribution in Italy : Factors of Competition and strategic Orientations

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Abstract

The study examines the strategies of rice marketing adopted by modern distribution in northern Italy. To this end, an investigation was carried out on 91 points of sale in the regions of Lombardy, Veneto and Friuli Venezia-Giulia. The points of sale were selected according to method of sale, size, territorial location, distribution group and retailer's name.

The study was carried out in three phases :

- a) descriptive analysis of the enterprises considered;
- b) multivariate analysis to identify the factors of differentiation in the enterprises marketing strategies;
- c) reclassification analysis to identify and characterise the strategic groupings.

The results of the research underline the strong orientation towards differentiation distinguishing the Italian market and the importance of variety, as a factor determining the policies of differentiation for white rice. They also show how, in terms of the space devoted to the different rice-based products and to packaging, demand has remained loyal to the more traditional typologies. Therefore, the innovative products, which are still in the initial phase of their life cycle, still have much scope for growth. As regards rice combined with other ingredients, the major limiting factor is one of technology, as for the moment the culinary performance of these products is not up to the standard of that of white rice.

The study has also shown the differentiated marketing approaches of the enterprises, which can be reduced to six strategic groupings (the characteristics of which are discussed in detail). Finally, it proposes a map positioning the enterprises according to three strategic variables : diversification, differentiation and orientation towards typical products.

Keywords

- Rice, Italian market, retailing, marketing strategies
- Italy

Introduction

Recent studies on rice consumption have attested a growth in demand in western Europe, both in the regions without a tradition of consumption and in those where rice already enjoyed a consolidated tradition (Chataigner, 1991; Berni, 1994). Behind this phenomenon lies the diversification of diet determined by economic and social changes (Belletti and Marescotti, 1996). In fact, the diversified occasions and functions of rice usage have provoked a strong segmentation of the market. The industry has reacted to this new scenario by technological innovation, making it possible not only to create new products (parboiled, instant rice, cooking rice combined with other ingredients, ready-made frozen products, puffed rice, rice-based puddings and desserts, biological products) but also to revive important culinary traditions (Berni et al., 1996). In this way the basic product has shown great flexibility and a capacity to adapt not only to various income brackets but also to the numerous different moments of consumption.

Moreover, modern distribution has achieved territorial penetration on a vast scale by adopting different methods of sale (Colla, 1992, 1994; Boccaletti et al., 1996). This has entailed a profound differentiation in buying patterns (both qualitative and quantitative), also in terms of the frequency and size of purchases. The contractual power of modern distribution has also been capable of effecting lowest-price and private-label strategies, thereby offering the consumer substantial advantages (Carmignano, 1992; Baccarani, 1993; Pellegrini, 1996; Pieri and Venturini, 1996; Department of Marketing, 1996).

Finally, another factor in the growth of rice consumption is promotional investment on the part of leader enterprises and, at local levels, small enterprises (Lugli, 1993; Sciarelli and Vona, 1995).

Taking these considerations as its starting point, the study proceeded to examine modern distribution. The selection took into account the methods of sale, the size, the geographical location, the distribution group, the retailer's name and the strategies adopted by distribution for marketing rice. The aim was to identify the strategies that seemed to respond most effectively to the evolution of demand.

The research had successive aim : first of all, to identify the main strategic groupings working in modern distribution; then to verify the hypothesis of correspondence between the groups identified on the basis of the strategic variables and the structural characteristics of the enterprises; and finally, using qualitative analysis, to position the groups thus identified within a multidimensional map summarising the strategic and structural variables.

Bearing these aims in mind, the two following sections give an account of the methodology used and offer a discussion of the results obtained. Finally, the conclusions discuss some of the main implications for the rice market emerging from the strategic behaviour of the distribution sector.

Materials and Methods

A questionnaire was conducted on a sample of 91 representative points of sale in northern Italy. Selection took into account their location, methods of sale, selling space, distribution group and the retailer's name (Agra, 1996, 1997).

As regards location, our attention focused on the north-eastern regions (Veneto and Friuli Venezia Giulia) and

Lombardy. In the case of Lombardy, our analysis concentrated on points of sale operating in the metropolitan area (in the provinces of Milan, Lodi and Como).

As regards methods of sale, the criteria for selecting the supermarkets favoured three provinces (Milan, Verona and Udine). Our attention focused on the best represented categories of selling space : 800-1,500 m2 in the case of Udine, 1,500-2,000 m2 in that of Verona and Milan. This choice took into account not only the link between the consumption model and the tradition of production (which was particularly marked inVerona) and the importance of rice in local diet (much more significant in Verona and Milan than in Udine), but also the tendency for consumers to perceive product innovation (which was highest inMilan and lowest in Udine, though also in relation to economic and social background).

As regards hypermarkets, since they are scarce in the North-East, it was considered advisable to analyse all the points of sale in the Veneto and Friuli Venezia-Giulia; in Lombardy, on the other hand, a representative sample was taken, according to distribution group and retailer's name.

The selection of discount houses took into account only the distribution group, given that it is generally identifiable with just one retailer's name. Within this method of sale, neither geographical location nor selling space constituted important aspects of differentiation.

As we see in Chart 1, which summarises the information collected in the questionnaire, the research examined seven typologies of rice-based product. For each, the following aspects were studied : positioning, space occupied, breadth and depth of assortment, prices. These variables were collected by direct observation inside the points of sale.

The methodology adopted for the statistical analysis of the information had three phases : :

- a) the processing of univariate statistics with the aim of providing a preliminary description of the enterprises considered;
- b) multivariate analysis, with the objective of evidencing the main factors of differentiation in the strategic objectives of the enterprises;
- c) reclassification analysis, to identify the strategic groupings and to check the hypothesis of correspondences between the structural characteristics of the points of sale and the strategies adopted.

With reference to point b), the method adopted was factor-analysis, using principal-axis factoring and considering only the variables describing the strategic choices of the distribution enterprises with regard to rice.
This phase had two specific aims :

a) to achieve an economy of description without loss of information;
b) to generate mutually exclusive variables of synthesis to be used in reclassification analysis.

As regards point c), a non-hierarchical technique of cluster-analysis (k-means cluster-analysis) was used to identify homogeneous typologies of enterprise on the basis of the marketing strategies adopted for rice. Subsequently, by resorting to discriminant analysis, we tested the degree of correspondence between the group classification thus obtained and the structural characteristics of each group (geographical location, method of sale, selling space, distribution group, retailer's name).

Chart 1 - Information collected by the questionnaire

Categories of rice-based products	*Product typologies*	*Variables assessed*
a) Uncombined cooking rice	1) white rice 2) parboiled white rice 3) instant rice 4) whole-grain rice 5) other types of special rice (basmati, thai, other fragrant rices)	- brand - variety - weight - package type - price - space occupied in linear metres - location within the point of sale - positioning on the shelves
b) Cooking rice already combined with other ingredients	1) risotto 2) rice soup 3) exotic typical dishes (paella, Chinese, Indian, Mexican and etc. dishes)	- brand - number of rice-other ingredients combinations - weight - package type - price - number of packages visible

		- location within the point of sale
c) Frozen rice-based ready-made dishes	1) risotto 2) paella 3) other dishes (rice croquettes)	- brand - number of rice-other ingredients combinations (with or without fish) - weight - package type - price - number of packages visible - location within the point of sale
d) Biological rice-based products	1) uncombined cooking rice (white and whole-grain) 2) other rice-based products (puffed rice, biscuits)	- brand - number of combinations - weight - package type - price - number of packages visible - location within the point of sale
e) Rice-based breakfast products	1) puffed rice 2) rice-based oven products (biscuits, cakes, crackers)	- brand - weight - package type - price - space occupied in linear metres - location within the point of sale - positioning on the shelves
f) Ready-made rice-based dishes at delicatessen counter	1) rice salads (with or without fish) 2) other dishes (rice croquettes, baked desserts)	- number of combinations - price per kilo
g) Rice-based desserts in the refrigeration section	1) rice with milk	- brand - number of combinations - weight - price - number of packages visible - location within the point of sale

Results and Discussion

Structure and rice marketing strategies in the enterprises examined

As we have seen, rice and rice-based products are characterised, in modern distribution, by a demand that is strongly diversified according to function and occasion of use. In the last few years, this "family" of commodities has been the centre of continuous innovations (in both process and product). These innovations have considerably broadened the competitive scenario for both producers and distributors, and have attempted to respond to the needs of ever new consumer segments. Apart from uncombined rice**, which dominates the market in terms of the number of brands and individual items and is rooted to aspects of tradition and typicity associated with innovative elements, our research has also identified six other typologies of rice-based produce : combined rice**, biological products, ready-made frozen products, ready-made dishes from the delicatessen counter, breakfast products and desserts from the refrigeration section (Tab. 1).

***Hereafter the term "uncombined rice" refers to cooking products in which rice is the sole component (white rice, parboiled white rice, instant rice, whole-grain rice and other special rices such as basmati). The term "combined rice" refers to cooking rice contained in packages mixed with other ingredients.*

With the exception of the desserts and delicatessen dishes, which are associated with the organisation of a counter with assisted sale within the sale point, all the others show a high level of penetration, particularly so in the cases of uncombined rice and rice combined with other ingredients.

Despite the high concentration of the sector, there is a marked differentiation in product typology. This is generally shown not only globally, by the total number of brands (c. 150) and individual items (over 750), but also at each sale point, where as many as 48 items are counted.

The importance of the risotto as a traditional first dish for the Italian consumer is easily understood if we observe that 4/5 of the items consist of combined and uncombined rice, which are essential everywhere in modern distribution supply (index of penetration 100%).

It is worth observing that the dietary habits of the Italians, their willingness to cook and the rich variety of fresh food products have substantially preserved the diffusion of uncombined rice, while the needs of modern society (less time available, smaller families, improved financial situations) have determined an increase in the use of rice already combined with other ingredients.

As regards uncombined rice, the flexibility of industrial production, i.e. its capacity to respond to the consumer's expectations from the points of view of both health and service content, is shown in Tab. 2: the index of penetration of parboiled rice is only slightly lower than that of white rice; that of instant rice is growing; and whole-grain rice is present in almost two-thirds of the points of sale. While it is true that leader and follower enterprises have a reasonably similar diffusion, it is worth noting that the supply of the leaders is very strongly diversified in almost all the product typologies, whereas the followers focus on white rice and, to a lesser extent, parboiled. It is interesting to note how even rice is becoming for modern distribution an instrument for generating consumer loyalty : the private label extends prominently as far as parboiled rice, allowing us to imagine new openings to satisfy the demands of health products. Vertical competition (between leader manufacturers and modern distribution) and horizontal competition (within distribution) are already fully developed as far as white rice is concerned, and becoming so in the case of parboiled.

The high concentration of the sector is clearly shown in Tab. 3. On average, there are less than four leader brands present, i.e. nearly always the same that dominate modern Italian distribution. The follower enterprises, of which there are many in Italy, are regional in diffusion. Their link with local traditions is shown by a greater attention to white rice and a lower differentiation among other rice typologies. Moreover, competition between the two groups of enterprises determines the lowest price strategy only for white rice and parboiled, precisely because the followers are generally not in a position to carry out the necessary investments in other rice typologies.

The following tables confirm the greater differentiation in supply of the large national enterprises. As regards white rice (Tab. 4), the number of items is high, which is explained by the great importance of variety, as a means of meeting the consumers' varied requirements (risottos and rice soups, rice salads, desserts, etc.). The index of penetration of the eight main varieties ranges from c. 50% to 91% (Tab. 5). The degree of differentiation, though it diminishes when we consider the private label, remains high given the importance of variety as a means of increasing consumer loyalty. Moreover the low degree of differentiation among the lowest prices is explained by the attempt to satisfy demand by speculating on a few low-prestige varieties.

Tab. 1 - Rice and rice-based products

Typologies of rice and rice-based product	index of penetration (%)	average no. of brands per points of sale (1)	average no. of items per points of sale (1)	total no. of brands	total no. of items
a) uncombined rice	100.0	7.0	22.0	89	630
b) combined rice	100.0	3.6	18.4	21	32
c) frozen ready-made dishes	75.8	1.6	1.9	16	25
d) biological products	82.4	2.0	2.9	12	25
e) breakfast products	96.7	1.9	3.1	23	38
f) ready-made delicatessen dishes	42.9	-	1.5	-	3
g) refrigerated desserts	24.2	1.1	1.1	5	5

(1) Values calculated only for the points of sale that present these typologies of rice.

Tab. 2 - Index of penetration of uncombined rice (%)

Typologies	leader brands	follower brands	private labels	lowest prices	Total
white rice	82.4	87.9	55.0	59.3	100.0
parboiled rice	84.6	35.2	36.3	18.7	91.2
instant rice	68.1	1.1	1.1	0.0	68.1
whole-grain rice	61.5	12.1	3.3	0.0	63.7
other typologies rice	25.3	4.4	0.0	0.0	27.5
Total	**93.4**	**89.0**	**57.1**	**60.4**	**100.0**

Tab. 3 - Number of brands of uncombined rice per point of sale (1)

Typologies	leader brands	follower brands	private labels	lowest prices	Total
white rice	2.4	2.6	1.0	1.2	5.5
parboiled rice	2.4	1.1	1.0	1.1	3.3
instant rice	1.9	1.0	1.0	0.0	2.0
whole-grain rice	1.6	1.1	1.0	0.0	1.8
other typologies rice	1.0	1.0	0.0	0.0	1.1
Total	**3.6**	**2.7**	**1.0**	**1.2**	**7.0**

(1) Averages calculated only for those points of sale in which the brand group is present.

Tab. 4 - Number of items of uncombined rice per brand group and point of sale (1)

Typologies	leader brands	follower brands	private labels	lowest prices	Total
white rice	8.1	6.1	4.4	2,4	15.8
parboiled rice	2.6	1.1	1.0	1.1	3.5
instant rice	1.9	1.0	1.0	0.0	2.0
whole-grain rice	1.6	1.1	1.0	0.0	1.8
other typologies rice	1.4	1.0	0.0	0.0	1.5
Total	**12.4**	**6.6**	**5.0**	**2.7**	**21.9**

(1) Averages calculated only for those points of sale in which the brand group is present.

Tab. 5 - Index of penetration, space occupied on the shelves and prices of uncombined white rice

Varietes of white rice	index of penetration (%)	average space occupied in linear metres	price per kilo		
			minimum	maximum	average
Comune	80.2	1.6	1,445	4,413	2,367
Padano	66.0	1.5	2,190	5,400	2,942
Vialone nano	79.1	3.2	2,390	6,440	3,951
Ariete	5.5	0.5	1,940	4,100	2,492
Loto	25.3	0.6	3,180	4,690	4,150
Ribe	60.4	1.6	1,950	4,267	2,953
Europa, Sant'Andrea	49.5	1.4	2,090	5,380	3,198
Roma	76.9	2.2	1,850	4,625	3,332
Arborio	91.2	3.6	2,250	4,588	3,622
Baldo	26.4	1.1	2,180	5,190	3,661
Carnaroli	72.5	1.1	4,450	7,215	5,895
Thaibonnet	5.5	0.7	1,950	3,290	2,627
not indicated	41.8	2.0	2,525	5,480	3,974

(1) Values calculated only for the points of sale that present these typologies of rice.

On the basis of the average space occupied by uncombined rice within the sale point (Tab. 6), we find confirmation of two of the main determinants of the Italian rice supply :

- a) the model of food consumption stressing the traditional use of white rice and, more recently, parboiled (to these are devoted almost 17 linear metres per point of sale, as against only 1 metre for the other typologies of uncombined rice);

- b) the interaction between the various protagonists - leader enterprises, follower enterprises, distributors - and, within each of these categories, between the individual brands (in which the private label clearly comes out strongest).

As a whole, the presence of the private label is slightly stronger than that of the followers and weaker than that of the leaders. As regards the space occupied by the individual brands, the private label prevails over all the others and takes up, on average, slightly under a quarter of the space available for uncombined rice.

These observations are confirmed by the positions occupied on the shelves. They are clearly better for the private label, which is given a low position in only a fifth of the cases (Tab. 7). Lowest prices, on the other hand, occupy an evidently unfavourable position, to prevent them from competing with the image of the private label. While the leader brands are more frequently in a central or high position, the individual items of the follower enterprises are more decisively directed towards the bottom and centre. Finally; it is worth remembering that the ends of shelves - often reserved for promotions - are used above all by the follower brands as a means for acquiring market space.

In Italy, the size of the packages is often dictated by a strong custom that takes into account a variety of consideration : not only family size, frequency of consumption and available storage space, but also the link with local production of the follower brands, which very often has high standards in terms of taste and bio-nutritional value (Tab. 8). Hence the one-kilo pack widely prevails over nearly all other types. Only in cases of costly exotic products, which cater to the interests of the more inquisitive consumers and are still in the launching phase, do the enterprises tend to adopt small packages. This complies with the strategy of differentiation adopted by the leader enterprises even for the typologies of white rice, parboiled, whole-grain and instant rice. The strong link with consumption traditions also explains the wide diffusion of packages of over 1 kg for white rice and, to a lesser extent, parboiled. In the case of white rice it is mainly the follower brands that cover the supply; in that of parboiled rice it is the leader brands that implement strategies of promotion (single package of two one-kilo cartons).

There is a considerable differentiation in the packaging for white and parboiled rice (Tab. 9). The carton and the plastic bag (non vacuum-packed) are the commonest packages for white rice. The carton is used above all by the leader and follower brands, for the more prestigious products. The plastic bag is mainly used in private labels and lowest prices, and, in the case of the follower brands, in the lower quality products. The vacuum-sealed carton is used almost exclusively by the leader brands, for the high content of service, it helps creating a particularly refined image and carries larger profit margins. The vacuum-sealed plastic bag, on the other hand, is used by the follower brands and by modern distribution, but in this case the package has a less refined image. Finally, the commonest package for white rice, the paper bag, is used exclusively by follower enterprises operating locally and producing typical products (Berni et al., 1996). As for the packages for parboiled rice, both the paper bag and the vacuum-sealed plastic bag are practically non-existent. The interest of manufacturers and distribution (private labels, above all, and lowest prices) is particularly directed towards the carton. Among the manufacturers only the leaders show some attention for the vacuum-sealed carton, which clearly requires high investments to improve the supply of the service-product and to capture shares of the market. The followers, on the other hand, manage to differentiate by using the vacuum-sealed plastic bag, which however, is also greatly used by the private labels and, above all, by lowest prices (i.e. as a strategy of the leader enterprises for penetrating the market through lower quality products).

As we saw above, the remaining typologies of rice are thinly spread and almost exclusively restricted to the leader enterprises, which can afford to be more attentive to new tendencies in consumption. In any case the current tendency is to use the carton or, to a lesser extent, the vacuum-sealed plastic bag.

Analysis of the prices of uncombined rice per type and per brand group (Fig. 1) shows, above all, the high cost of instant rice compared to the others. The prices of white rice are slightly lower than those of parboiled, while whole-grain rice occupies an intermediate position between parboiled and instant rice. In the case of instant rice such variability is explained by the small package size (often 500 g), meaning that the fixed costs bear more heavily on each product unit, and by a supply that is almost the exclusive preserve of a few leader enterprises that have strongly invested in advanced technology. We also note, however, the extremely wide range of prices applied by these enterprises (from a minimum of 3,000 lire/kg to a maximum of 9,000 lire/kg), a phenomenon closely linked to brand image and to the quality of the raw materials used. As regards whole-grain rice, the needs of conservation involve, as is known, greater investments in packaging (almost always vacuum-sealed cartons).

As regards white rice and parboiled rice, the average prices of the leader brands are considerably higher (at least 4,000/kg) than those of the other brand groups; lowest prices, on the other hand, are evidently very economical (c. 2,000 lire/kg); the prices of the follower brands and private labels occupy an intermediate position (c. 3,000 lire/kg) and tend not to differ significantly. On one hand, therefore, the leader brands evidently aim to position themselves on segments of consumption where product image is strongly rewarded; on the other hand, the private labels tend to avoid the strong competition exerted by the so-called 'lowest prices' (both those of the distribution enterprises and those of the manufacturers). In such a context, the main problems concern the follower brands, which have difficulty in adapting to the pace of innovation of the leader brands and, at the same time, are losing competitive power to the dealers' brands. This competitive picture is less pronounced in the case of instant rice and whole-grain rice : in the case of instant rice, the only brands operating are the leaders; in that of whole-grain rice, the presence of private labels and lowest prices is insignificant.

Finally, the price range of white rice for the follower brands, is much more pronounced than for the other groups. This can be explained by various consideration : strong differentiation in the variety of the supply (if we consider these enterprises as a group**), the different strategies for focusing on customers and products, and the high number of enterprises in this group, almost all of which operate at a regional level.

***See Tab 5 for an analysis of the prices of white rice for each variety.*

In Fig. 1, the average prices of the other typologies of uncombined rice are not shown because of the low number of brands represented. For such products, price levels (an average of 13,380 lire/kg) are distinctly higher than those of the preceding typologies, for various reason : recourse to small packages, the strong monopolistic power of the producers and the highly innovative character, for the Italian market, of the items proposed.

Tab. 6 - Space occupied (m) on the shelves by uncombined rice (1)

Typologies	leader brands	follower brands	private labels	lowest prices	Total
white rice	6.5	5.6	3.7	2.3	13.6
parboiled rice	2.7	1.1	0.8	0.2	3.4
instant rice	0.5	0.1	0.8	0.0	0.5
whole-grain rice	0.5	0.4	0.7	0.0	0.5
other typologies rice	0.4	0.4	0.0	0.0	0.4
Total	**8.9**	**6.0**	**4.0**	**2.5**	**17.5**

(1) Averages calculated only for those points of sale in which the brand group is present.

Tab. 7 - Positioning on the shelves of the brand groups for uncombined rice (%)

Position	leader brands	follower brands	private labels	lowest prices
high	92.9	56.7	48.2	27.3
central	81.2	79.0	75.1	38.2
low	64.7	80.2	23.1	63.6
end	1.2	11.1	0.0	0.0

(1) Frequencies calculated only for those points of sale in which the brand group is present.

Tab. 8 - Package size of uncombined rice (1)

Typologies	% of points of sale with the package in its range		
	< 1 kg	1 kg	> 1 kg
white rice	**13.2**	**98.9**	**59.3**
- leader brands	10.7	98.7	28.0
- follower brands	2.5	96.3	48.8
- private labels	0.0	100.0	10.0
- lowest prices	3,7	100.0	0.0
parboiled rice	**14,5**	**100.0**	**15.7**
- leader brands	15,6	97.4	16.9
- follower brands	0.0	100.0	0.0
- private labels	0.0	100.0	0.0
- lowest prices	0.0	100.0	0.0
instant rice	**80.6**	**56.5**	-
- leader brands	80.6	54.8	-
- follower brands	100.0	0.0	-
- private labels	0.0	100.0	-
- lowest prices	-	-	-
whole-grain rice	**19.0**	**98.3**	-
- leader brands	19.6	98.2	-
- follower brands	0.0	100.0	-
- private labels	0.0	100.0	-
- lowest prices	-	-	-
other typologies of rice	**96.0**	**12.0**	-
- leader brands	95.7	4.3	-
- follower brands	50.0	50.0	-
- private labels	-	-	-
- lowest prices	-	-	-

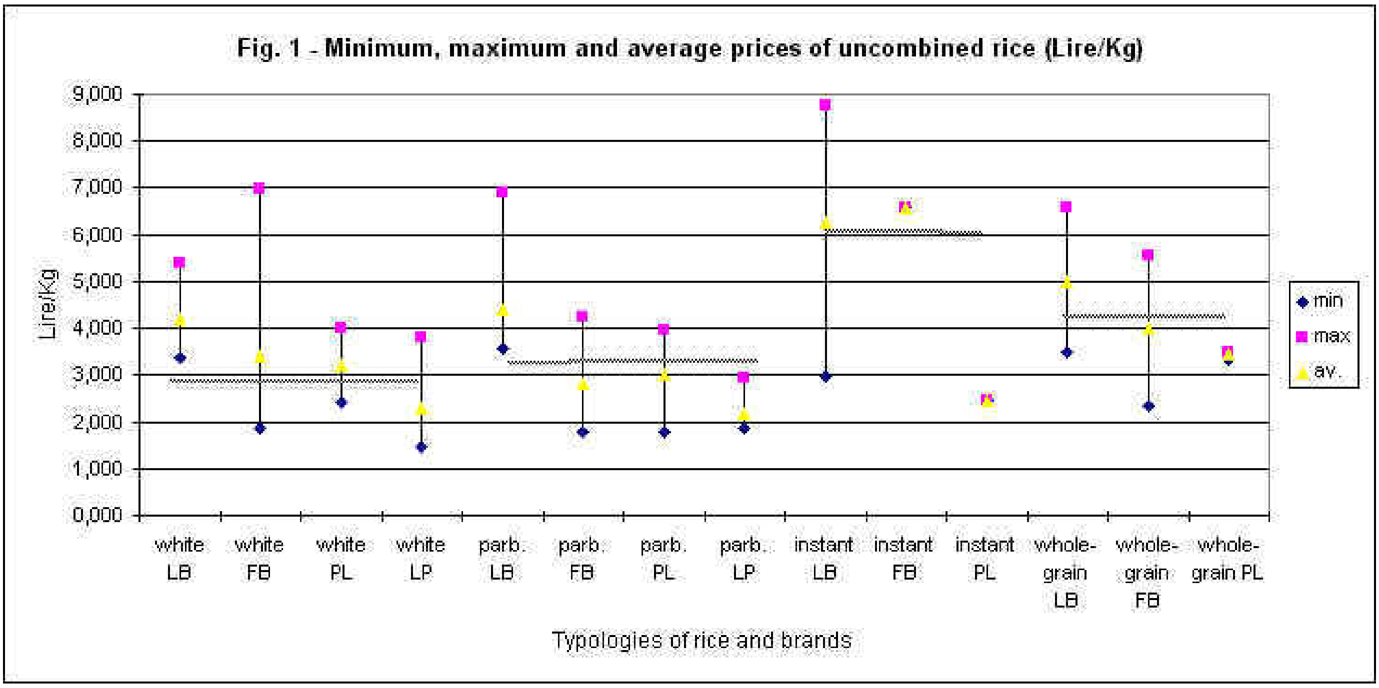
(1) Values calculated only for the points of sale that present these typologies of rice.

Tab. 9 - Package typologies for uncombined rice (1)

Typologies	% of points of sale with the package in its range				
	loose carton	vacuum-sealed carton	paper bag	loose plastic bag	vacuum-sealed plastic bag
white rice	**94.5**	**72.5**	**25.3**	**81.3**	**41.8**
- leader brands	89.3	84.0	0.0	13.3	6.7
- follower brands	80.0	11.3	27.5	62.5	23.8
- private labels	36.0	16.0	2.0	50.0	26.0
- lowest prices	20.4	1.9	1.9	81.5	1.9
parboiled rice	**94.0**	**44.6**	**1.2**	**38.6**	**2.4**
- leader brands	98.7	44.2	0.0	2.6	0.0
- follower brands	65.6	0.0	3.1	34.4	6.3
- private labels	45.5	12.1	0.0	42.4	0.0
- lowest prices	11.8	5.9	0.0	88.2	0.0
instant rice	**100.0**	**1.6**	**0.0**	**1.6**	**0.0**
- leader brands	100.0	0.0	0.0	0.0	0.0
- follower brands	0.0	100.0	0.0	0.0	0.0
- private labels	0.0	0.0	0.0	100.0	0.0
- lowest prices	-	-	-	-	-
whole-grain rice	**82.8**	**48.3**	**0.0**	**5.2**	**5.2**
- leader brands	82.1	48.2	0.0	0.0	0.0
- follower brands	27.3	27.3	0.0	27.3	27.3
- private labels	66.7	33.3	0.0	0.0	0.0
- lowest prices	-	-	-	-	-
other typologies of rice	**100.0**	**4.0**	**0.0**	**0.0**	**0.0**
- leader brands	100.0	0.0	0.0	0.0	0.0
- follower brands	75.0	25.0	0.0	0.0	0.0
- private labels	-	-	-	-	-
- lowest prices	-	-	-	-	-

(1) Values calculated only for the points of sale that present these typologies of rice and these brand groups.

Fig.1 - Minimum, maximum and average prices of uncombined rice (Lire/Kg)



LB = leader brands, FB = follower brands, PL = private labels, LP = lowest prices

As for the sector relating to rice combined with other ingredients, there is greater concentration than in the previous category, since barriers to entry - the need for high investments in R&D - play a fundamental role. Tab. 10 clearly shows the low number of brands per point of sale and the high index of penetration (as compared to the followers of the leader brands).

If we consider the product categories, we note the strong influence of the typical dietary model of northern Italy. The index of penetration of risotto (n.b. used as a first dish) is more than double that of the foreign dishes and four times higher than that of rice soup (Tab. 11). The high number of items per point of sale responds to the differentiated demand of a society still strongly influenced by regional cooking, one that has succeeded, by using variegated ingredients, in turning an apparently poor basic product into an extremely flexible one. The high number of packages is the concrete proof of the swift turnover on the shelves.

As for the exotic dishes, though they are still in the launching stage in Italy, they nonetheless already concern a wide sector of consumers interested in culinary novelties that are original and refined. These products are controlled by the manufacturing enterprises (and by two leader brands in particular : Uncle Ben's and Suzy Wan), beside which the followers present a higher number of items and packages. In order to attract the attention of consumers to these products, which as yet do not have a sufficient shelf turnover, the producers manage to obtain a separate selling space distinct from the shelves displaying all the other rice typologies.

Finally, rice soup is supplied by just one leader brand and has a low index of penetration, also because of the low consumer interest in rice within the context of the numerous soup items.

The price range of combined cooking rice (Tab. 12) shows high differentiation, above all owing to the presence of other ingredients. In the context of typologies using substantially similar products (risottos in bags), we observe, however, that the follower brands and private labels are forced to adopt aggressive price policies owing to the heavily oligopolistic character of the sector, in which a high share of the market is controlled by few leader enterprises. The strategy of price reduction also means the proposal of few items, that rarely include the ingredients required for very refined dishes.

The price differential among the various brands for exotic typical dishes (such as paella, Cantonese rice or Mexican rice) is less marked. This is due to the low competition characterising this segment deriving from the strongly innovative character of the products offered (which, for Italy, are in the initial phase of their life cycle).

Tab. 10 - Index of penetration and average number of brands for combined rice

Brand groups	index of penetration	average number of brands per point of sale (1)
- leader brands	92.3	3.4
- follower brands	28.0	1.3
- private labels	5.5	1.0
Total	**100.0**	**3.6**

(1) Values calculated only for the points of sale that present these typologies of rice.

Tab. 11 - Brands, items and number of combinations for combined rice

Categories of rice-based product	index of penetration	no. of items per point of sale (1)		no. of packages per point of sale (1)		
		average	total	minimum	maximum	average
risotto	**100.0**	**5.2**	**16.6**	**4**	**165**	**40**
- leader brands	92.3	5.4	17.2	4	165	42
- follower brands	14.3	3.1	3.1	2	18	7
- private labels	5.5	5.0	5.0	6	26	15
exotic typical products	**42.9**	**1.9**	**3.3**	**1**	**20**	**5**
- leader brands	33.0	1.1	2.2	1	7	4
- follower brands	22.0	3.0	3.2	1	20	5
- private labels	0.0	0.0	0.0	0	0	0
rice soup	26.4	1.0	1.0	1	1	1

(1) Values calculated only for the points of sale that present these typologies of rice.

Tab. 12 - Prices per package of combined rice

Categories of rice-based product	price per package		
	minimum	maximum	average
risotto	**1,490**	**3,110**	**2,290**
- leader brands	1,620	3,110	2,360
- follower brands	1,600	1,840	1,730
- private labels	1,490	1,980	1,870
exotic typical products	**3,280**	**9,490**	**5,900**
- leader brands	3,940	9,950	6,630
- follower brands	2,900	9,960	5,270
- private labels	-	-	-
risotto in box	1,600	8,990	3,290
rice soup	2,090	2,590	2,320

In modern distribution, frozen rice is an important element in differentiating the supply of frozen foods. In Italy, dietary traditions have clearly favoured the fish-rice combinations, presenting an index of penetration of such dishes that is quite high (70.3%) and largely controlled by leader enterprises (Tab. 13). The low number of brands per point of sale reflects the high concentration in a sector that has few items, given the high diversification of supply in the frozen foods section. In a context where the availability of refrigeration space is low, a key role is played by the preferential relationships between manufacturer and distribution enterprise, in which the latter finds it convenient to negotiate with suppliers that can provide the diversified requests of the market and satisfy the needs of prompt delivery. Paella and other dishes are still not widely available in frozen formats. As they have only relatively recently been introduced and as their launching phase is not yet terminated, the greater space open to competition allows the follower enterprises to exert a greater impact**.

***In this case we have decided not to analyse the prices, as the price is dependent above all on the ingredients required by the dish in question and on the strong differentiation in the modes of presentation ; furthermore, the package sizes are difficult to reduce to a unit of measurement that can be used for comparison.*

Tab. 13 - Brands, items and prices of frozen ready-made dishes

Categories of products	index of penetration	no. of brands (1)		no. of items (1)	
		average per point of sale	total	average per point of sale	total
first dishes with fish	**70.3**	**1.6**	**9**	**1.4**	**10**
- leader brands	68.1	1.4	3	1.2	4
- follower brands	16.5	1.2	6	1.1	6
paella	**19.8**	**1.2**	**5**	**1.2**	**5**
- leader brands	15.4	1.0	1	1.0	1
- follower brands	8.8	1.1	4	1.0	4
other types of dish	**24.2**	**1.5**	**9**	**1.2**	**10**
- leader brands	14.3	1.3	3	1.2	4
- follower brands	12.1	1.1	6	1.0	6

(1) Values calculated only for the points of sale that present these typologies of rice.

As it is well known, the biological sector in Italy is still at the beginning of its life cycle. Much of modern distribution is in a waiting phase, so the space reserved is inadequate. Biological rice has a high index of penetration as an ingredient for other, more complex, products (biscuits, puffed rice, etc.). At present the market is controlled by a limited number of leader brands (Céréal, Bjorg, Germinal), sometimes accompanied by followers (Tab. 14).

Regarding the prices of biological cooking rice, we observe that it is positioned at much higher levels than the uncombined rice, and that rewards the strong health content appreciated by an increasing segment of consumers. In fact, the minimum price (4,190 lire/kg) is higher than that of all the typologies considered in Fig. 1, while the maximum is in line with that of instant rice (the highest of all).

Tab. 14 - Brands, items and prices of biological rice-based products

Categories of products	index of penetration	no. of brands (1)		no. of items (1)		price per package	
		average per point of sale	total	average per point of sale	total	minimum	maximum
white and whole-grain rice	9.9	1.0	7	1.1	9	4,190	9,000
other rice-based products	82.4	1.9	8	2.7	16	1,350	4,820
Total	**82.4**	**2.0**	**12**	**2.9**	**25**	**1,350**	**9,000**

(1) Values calculated only for the points of sale that present these typologies of rice.

In the last few years, the rice-base breakfast products have expanded considerably on the strength of health and diet trends, favouring the consumption of cereal products. They can be basically reduced to two typologies : puffed rice and rice-based desserts and biscuits (Tab. 15). Puffed rice, which is mainly directed at children, has a much higher index of penetration, especially if considered on its own or without chocolate, without other cereals. There is high concentration in this sector, which is dominated by a single leader brand, with few items. Recently modern distribution, seeing the potential for development in this sector, has tried to initiate agreements for the marketing of this typology of product.

The price levels of this typology of product seem to repeat the same competitive picture already seen for combined rice : aggressive price policies are adopted by the follower brands and private labels, above all in the segment of puffed rice, in an attempt to erode the leader brand's market space (Tab. 16).

Tab. 15 - Index of penetration, brands and items of rice-based breakfast products

Categories of products	index of penetration	no. of brands (1)		no. of items (1)	
		average per point of sale	total	average per point of sale	total
ordinary jpuffed rice	90.1			1.1	10
chocolate puffed rice	81.3	2.8*	13*	1.1	12
puffed rice mixed with other cereals	37.4			1.0	4
cakes and biscuits	41.8	1.7	9	1.7	12
Total	**96.7**	**1.9**	**23**	**3.1**	**38**

(1) Values calculated only for the points of sale that present these typologies of rice.
* overall figure for the three types of puffed rice (index of penetration for puffed rice 95.6%)

Tab. 16 - Prices, positioning and space occupied on the shelves of rice-based breakfast products

Categories of products	price per package			positioning on shelves (%) (1)				space occupied in linear metres per point of sale
	minimum	maximum	average	high	central	low	end	
puffed rice	**2,490**	**5,960**	**4,450**	31.1	38.0	24.2	4.6	2.2
- leader brands	3,150	5,960	4,620	30.0	36.3	25.0	5.0	**2.0**
- follower brands	2,450	3,990	3,425	26.7	33.3	20.0	0.0	1.1
- private labels	2,590	3,890	3,650	4.4	6.6	0.0	0.0	1.0
ordinary puffed rice	2,490	5,320	4,300	28.1	24.4	14.7	2.4	0.8
chocolate puffed rice	2,490	5,500	4,415	27.1	33.8	20.3	4.1	1.0
puffed rice mixed with other cereals	3,690	5,960	5,360	20.6	35.3	14.7	5.9	1.0
cakes and biscuits	**1,740**	**3,890**	**2,900**	**57.9**	**44.7**	**24.2**	**0.0**	**1.0**
Total	**1,740**	**5,960**	**4,235**	**41.0**	**43.2**	**30.7**	**4.6**	**2.0**

(1) Values calculated only for the points of sale that present these typologies of rice and these brand groups.

Rice-based salads, including fish or other ingredients, occupy an important position in the dietary traditions of certain Mediterranean regions. As the pace of modern life has reduced opportunities for cooking, a new opening is that of the ready-to-eat foods at the delicatessen counter, where customer assistance makes it possible to promote the image of the point of sale. If we look at Tab. 17, this item has a low index of penetration owing to the small amount of space available at the diversified fresh-food counter. The supply, still limited to combinations with a strong seasonal element, determines a low index of penetration.

Tab. 17 - Ready-made rice dishes at the delicatessen counter

Categories of products	index of penetration	price per kilo	
		minimum	maximum
rice with fish	12.1	16,000	26,900
rice salad	34.1	11,400	22,000
other dishes	19.8	11,900	25,000
Total	**42.9**	**11,400**	**26,900**

Among the recent innovations involving milk and cheese products, we should mention rice with milk. It is an item at the beginning of the launching phase, as it is shown by the low index of penetration, a situation also determined, however, by a market segment where competition is very high owing to the strong presence of substitute products in the refrigeration section (Tab. 18).

Tab. 18 - Rice-based desserts in the refrigeration section

	index of penetration	number of brands (1)		number of items (1)		price per package		
		average per point of sale	total	average per point of sale	total	minimum	maximum	average
rice and milk	24.2	1.1	5	1.1	5	1,650	3,650	2,630

(1) Values calculated only for the points of sale that present these typologies of rice.

The main factors of differentiation among enterprises

In order to identify the main strategic orientations of modern distribution, factor analysis has been carried out on the basis of the variables of differentiation and the positioning of rice in the points of sale. Chart 2 lists and describes the variables included in the analysis.

The results of the factor analysis, using the principal-axis factoring method of factor extraction, are shown in Tabs. 19 and 20. Concerning Tab. 19 we can observe, following Kaiser (1960), that it is the first ten factors, with eigenvalues greater than one, that should be considered. However, on the basis of a graphic representation of the eigenvalues (Fig. 2), a more restrictive choice procedure (Fabbris, 1983), there are five factors (Harman, 1976), at most six (Cattell, 1966). It is worth noticing that by the first method the percentage of explained variance is 77%, by the second it is slightly over 60%. Fabbris (1983), however, proposes using the cumulated variance as a means of identifying the factors to be considered. To this end, he suggests 75% as an acceptable degree of explained variance, even though lower percentages are also tolerable. The criterion adopted here mediates between these three different methods and includes the first eight factors, which cover an overall variance of 70.4%.

The factor matrix, rotated by the Varimax method, as in Tab. 20, allows us to characterise the factors on the basis of the correlation coefficients between variables and factor axes. Before proceeding to an interpretative analysis of each factor, it is worth noticing, if we take into account the percentage of explained variance (Tab. 19), that the first two factors exert a decisive weight on the factor solution. It is sufficient to observe that they cover as much as 37.6% of the total variance, i.e. over half of the overall variance of the eight-factor solution.

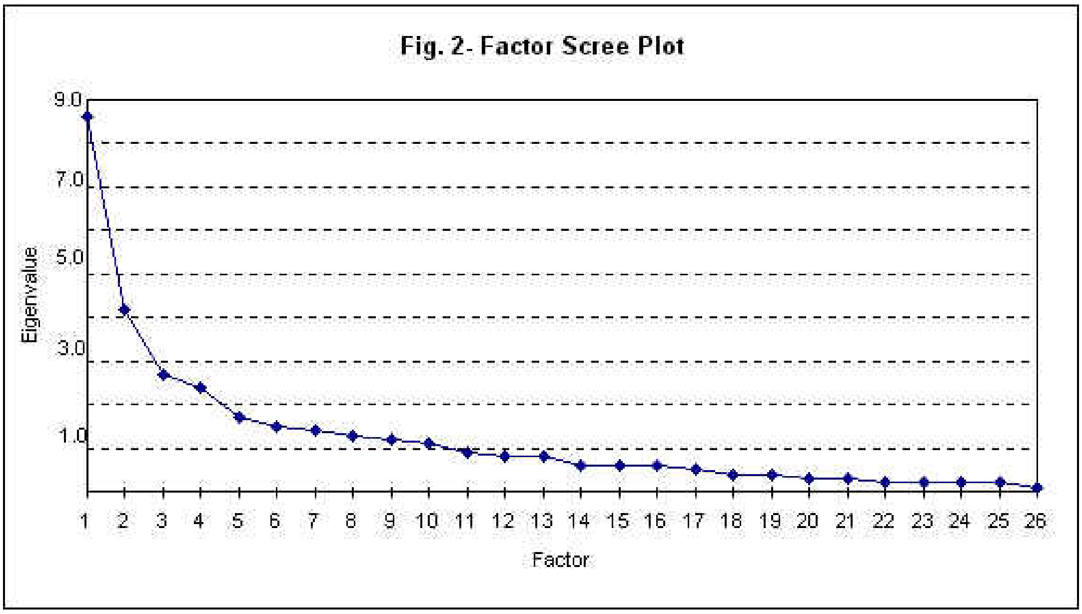
Chart 2 - Variables included in the factor analysis

Variables	Description
AMARCHE	average number of cooking rice brands
SPALE	% space occupied by leader brands over total space of uncombined rice
SPAFO	% space occupied by follower brands over total space of uncombined rice
SPAPL	% space occupied by private labels over total space of uncombined rice
ABIA	average number of white rice items
ABIAV	average number of white rice varieties
SPAARB	% space occupied by Arborio over total space of white rice
SPACOM	% space occupied by Comune over total space of white rice
SPARIB	% space occupied by Ribe over total space of white rice
SPAROM	% space occupied by Roma over total space of white rice
SPAVIA	% space occupied by Vialone nano over total space of white rice
SPALTRO	% space occupied by other less common varieties over total space of white rice
APB	average number of parboiled references
SPAPB	% space occupied by parboiled over total space of uncombined rice
SPAFOPB	% space occupied by follower brands for parboiled
SPALEPB	% space occupied by leader brands for parboiled
SPAPLPB	% space occupied by private labels for parboiled
RC	presence of instant rice (1=yes, 0=no)
ARC	average number of instant rice references
INT	presence of whole-grain rice (1=yes, 0=no)
AINT	average number of whole- grain rice references
ALTRO	average number of references for other rice typologies
BKMAR	average number of brands of rice combined with other ingredients
BKRREF	average number of risotto items
BKTIPREF	average number of items of exotic combined rice dishes
SURG	presence of frozen rice (1=yes, 0=no)
CREF	average number of frozen rice items
CREFPES	average number of frozen rice with fish items
CREFPAE	average number of frozen paella items
BIOL	presence of biological rice (1=yes, 0=no)
FREF	average number of biological rice items
EREF	average number of breakfast products items
GASTRON	presence of ready-made delicatessen dishes (1=yes, 0=no)
DESSERT	presence of dessert in the refrigeration section (1=yes, 0=no)

Tab. 19 - Results of factor analysis

variable	communality	factor	eigenvalue	percentage of variance	cumulated percentage
ABIA	0.888	1	8.618	25.3	25.3
ABIAV	0.915	2	4.174	12.3	37.6
AINT	0.808	3	2.719	8.0	45.6
ALTRO	0.645	4	2.436	7.2	52.8
AMARCHE	0.947	5	1.719	5.1	57.9
APB	0.846	6	1.538	4.5	62.4
ARC	0.793	7	1.396	4.1	66.5
BIOL	0.797	8	1.325	3.9	70.4
BKMAR	0.849	9	1.203	3.5	73.9
BKREF	0.742	10	1.061	3.1	77.0

Fig.2 - Factor Scree Plot



The first factor can be called Differentiation per typology of product (25.3% of the variance). It has strong positive correlations with the number of items and the number of brands for each of the less traditional typologies of rice, such as instant rices (ARC), whole-grain rice (AINT), combined rices such as paella, risottos and rice soups (BKTIPREF and BKMAR). Correlation coefficients that are positive, but much less so, characterise the degree of differentiation towards typologies of uncombined rice that are either established in the Italian model of consumption, such as white rice (ABIA and ABIAV) and parboiled white rice (APB), or are still in the initial phase of the product's life cycle, such as biological rice (FREF).

The second factor is Competition between leader and follower brands over uncombined rice (12.3% of the variance). At the extreme negative end of the axis we find the percentage of space occupied by the follower brands (SPAFO) and by the Vialone Nano variety (SPAVIA). This is explained by the dominant presence of moderate-sized enterprises or, in the case of Vialone Nano, of brands that enjoy local diffusion. Conversely, the variables most positively correlated to the factor axis are : the space occupied by leader brands (SPALE), the Roma variety (SPAROM) and the less widespread varieties in Italian habits of consumption (SPALTRO)**.

***This group includes the following varieties : Ariete, Loto, Europa-Sant-Andrea, Baldo, Thaibonnet and other unspecified rices that, as we have seen, occupy over all about 25% of the space devoted to uncombined rice.*

The third factor is Frozen rice (8% of the variance). The total number of items (CREF) and the number of items with fish (CREFPES) are the variables that most strongly characterise the factor at the positive end. Less strong, on the other hand, is the association with the binary variable SURG, which defines the presence (or otherwise) of frozen rice at the point of sale. From these results, we observe that it is over the degree of differentiation within the typology rather than over the actual presence (or otherwise) of the typology that the points of sale differ. Moreover, the breadth of the range is strictly linked to the number of items in the context of fish dishes.

The fourth factor is Biological rice (7.2% of the total variance). As distinct from the case of frozen rice, here it is the presence (or otherwise) of product typology (BIOL) that is directly correlated to the factor axis. The number of items (FREF) is also positively correlated to the factor, but less strongly. This seems to confirm the hypothesis that this product typology, which is still in the launching phase of its life cycle, finds space only at the retailers that are more optimistic about the future of this market.

The fifth factor is Parboiled rice (5.1% of the total variance). The percentage of overall space occupied by this typology (SPAPB) is the variable most strongly correlated to the factor axis. Much less conspicuous, on the other hand, is the correlation with the number of items (APB). This factor evidences, therefore, how differentiation between points of sale over parboiled rice (whose presence is by now consolidated) concentrates on space allocation.

The sixth factor is Variety differentiation and delicatessen dishes (4.5% of the total variance). Here only two variables have significant and positive correlation coefficients with the facto : the number of white rice varieties (ABIAV) and the presence of rice at the delicatessen counter in the points of sale (GASTRON). The former can be related to the peculiarities of the Italian market, in which the consumer identifies the characteristics of the product through variety as well as brand. This is a significant point, if we consider that the innovation is endogenous to the agricultural sector and constitutes one of the most important levers of differentiation, for manufacturers and retailers alike. However, the presence (or otherwise) of rice-based dishes at the delicatessen counter, common practice at nearly all the points of sale, seems to show how certain retailers have a greater ability at satisfying consumer segments strongly oriented towards products with a high service content.

The seventh factor is Private label (4.1% of the total variance). In this case the variables significantly characterising the factor are those defining the space occupied by the dealers' brand. The fact that the space occupied by private labels for parboiled rice (SPAPLPB) is a variable distinct from that of the overall space occupied by private labels (SPAPL) underlines the different strategic orientations of retail enterprises within a typology in which the dealer's brand is traditionally inconspicuous.

Finally, the eighth factor is Variety competition (3.9% of the total variance). At the extreme ends of the factor axis we find the space occupied by Arborio (SPAARB) and Vialone Nano (SPAVIA). On the one hand, this result stresses the strong interchangeability of the two varieties in the preparation of risottos. On the other, it establishes a strong link between traditions of production and local models of consumption, determining a different degree of differentiation in the product portfolio not only in accordance with the retailer's name and/or the strategic group to which the retailer belongs, but also in relation to the territory.

Tab. 20 - Rotated Factor Matrix

	Factor 1	Factor 2	Factor 3	Factor 4	Factor 5	Factor 6	Factor 7	Factor 8
ABIA	0.60	0.30	0.04	0.26	0.01	0.33	0.26	0.03
ABIAV	0.57	-0.17	-0.01	0.17	-0.01	0.52	0.13	-0.27
AINT	0.72	-0.01	0.14	-0.05	0.29	0.27	0.11	0.19
ALTRO	0.44	-0.03	0.07	0.08	-0.13	0.17	0.04	-0.17
AMARCHE	0.71	-0.16	0.07	0.20	0.02	0.48	0.07	-0.22
APB	0.53	0.03	0.04	0.33	0.51	0.08	0.05	-0.05
ARC	0.83	0.15	-0.03	0.15	0.06	-0.03	-0.05	-0.08
BIOL	0.32	0.06	0.19	0.74	0.12	0.09	-0.01	0.12
BKMAR	0.73	0.07	0.26	0.28	0.03	0.20	0.05	-0.15
BKRREF	0.34	0.21	0.25	0.35	0.14	0.18	-0.03	-0.00
BKTIPREF	0.79	-0.14	0.07	-0.06	0.06	-0.06	-0.09	0.06
CREF	0.19	0.13	0.76	-0.02	0.04	0.07	-0.01	0.05
CREFPAE	-0.05	0.15	0.29	-0.04	0.05	0.09	-0.04	0.10
CREFPES	0.13	0.08	0.87	0.10	-0.02	0.06	0.01	-0.03
DESSERT	0.17	0.31	0.16	0.17	0.15	-0.16	0.12	0.01
EREF	0.30	-0.22	0.16	0.19	0.03	0.35	-0.00	-0.26
FREF	0.54	-0.25	0.29	0.51	0.03	-0.02	-0.01	0.12
GASTRON	0.16	0.00	0.24	0.00	-0.04	0.52	0.10	0.13
INT	0.57	-0.04	0.06	-0.03	0.38	0.34	0.10	0.31
RC	0.62	0.18	-0.10	0.35	0.10	-0.01	-0.08	-0.02
SPAARB	-0.04	0.08	0.04	0.11	0.02	0.02	0.07	0.75
SPACOM	-0.19	-0.08	-0.08	-0.30	-0.20	-0.37	0.17	0.25
SPAFO	0.05	-0.81	0.02	0.16	-0.05	0.02	-0.14	-0.15
SPAFOPB	-0.03	-0.07	0.01	-0.00	0.05	-0.02	-0.02	0.01
SPALE	0.05	0.65	0.18	0.32	0.46	0.12	-0.24	0.01
SPALEPB	0.18	0.02	0.06	0.38	0.35	0.29	-0.41	-0.07
SPAPB	0.19	-0.06	0.04	0.08	0.86	-0.05	-0.12	-0.02
SPAPL	0.12	0.19	0.02	0.01	-0.18	0.21	0.66	0.15
SPAPLPB	-0.02	-0.04	0.09	-0.02	0.03	-0.04	0.88	-0.03
SPARIB	0.20	0.34	-0.30	-0.24	0.01	-0.09	-0.16	0.25
SPAROM	0.03	0.72	0.13	0.13	-0.26	-0.01	-0.01	0.18
SPAVIA	-0.00	-0.70	-0.02	0.04	0.14	0.17	-0.04	-0.61
SURG	0.05	0.24	0.68	0.21	0.11	0.15	0.10	0.06
SPALTRO	-0.10	0.62	0.18	0.02	0.02	0.04	0.03	-0.21

The strategic groupings

General Characteristics

With the objective of reducing the 91 points of sale to well-defined models of strategic behaviour, we carried out non-hierarchical cluster analysis, using as independent variables the results associated with the eight factor axes considered above. After considering the matrix of the distance between groups, the significance of the F test and the composition of the groups themselves, our choice fell on a six-group solution.

From an analysis of the distances between groups (Tab. 21), we observe that Group 1 is less differentiated than the other typologies, while Groups 2 and 4 seem to show the most pronounced specificity, even though the values fall within a rather restricted range (from a minimum of 2.16 to a maximum of 3.30).

The data shown in Tab. 22 allow us to identify the factors and characteristics associated with each factor distinguishing the various typologies. Limiting the analysis to the most significant average factor scores, we notice the following :

- 1) Factor F1, Differentiation per typology of product, has a positive value for Group 2, and negative values for Groups 4 and 5;
- 2) Factor F2, Competition between leader and follower brands over uncombined rice, has significant positive values (leader brands) for Groups 1 and 5, and negative values (follower brands) for Groups 2 and 3;
- 3) Factor F3, Frozen rice, has a high positive value for Group 2 and a lower positive value for Group 5; it has negative values for Group 3;
- 4) Factor F4, Biological rice, has a negative value for Group 4, and a positive value only for Group 3;
- 5) Factor F5, Parboiled rice, has a high positive value for Group 5, and a negative value for Group 4;
- 6) Factor F6, Variety differentiation and delicatessen dishes, has negative values for Groups 4 and 6, and positive values (though to a lesser extent) for Groups 1 and 3;
- 7) Factor F7, Private label, has a positive value for Group 4 and negative values for Groups 5 and 6;
- 8) Factor F8, Variety competition, has positive values for Groups 1 and 6 (presence of Arborio) against negative values for Groups 2, 3 and 5 (presence of Vialone Nano).

As the characterisation of typologies is based only on the variables describing retailers' rice strategies, it is worth discussing the results of the discriminant analysis before examining the individual groupings. The discriminant analysis subjected to verification the hypothesis of a correspondence between the typological classification thus obtained and the structural characteristics of the enterprises (geographical location, method of sale, selling space, distribution group and retailer's name).

It is worth pointing out that while a significant correlation between distribution group and retailer's name is easily conjectured, the existence of a relationship between enterprise groups and the other structural variables is not so obvious. Besides, this is justified by the fact that the retailer's name, as a discriminating variable, is practically indistinguishable from the individual point of sale, since as many as 63 retailers' names have been identified among the 91 retail outlets.

On this basis, Tabs. 23 and 24 summarise the statistics of the analysis, using geographical location, method of sale, and the respective distribution group or consortium as discriminating variables. What distinctly emerges is that geographical location and method of sale are the predominant structural characteristics. In fact, among the seven variables extracted by the stepwise procedure, the four variables with the greatest discriminating power were : the location of the points of sale in the provinces of Verona (VERO) and Lombardy (LOMB), and the use of the most modern methods of distribution, i.e. hypermarkets (V007) and discount houses (V009).

We should also stress the high degree of explained variance (73.4%) of the first two discriminant functions and the irrelevance of the fifth function, which is ignored because it contributes only 0.7% (Tab. 24). Above all, the correlation coefficients between the discriminant functions and the variables selected by stepwise analysis show the importance of geographical location in the first function (accounting for 40% of the variance alone). Within this category, the conflicting results distinguishing the province of Verona and those of Lombardy emphasise how the two areas are identified with consumption models that are strongly rooted in tradition and, in certain respects, alternative. It is above all the fact of belonging to particular distribution groups that characterises the second discriminant function, which accounts for just under 30% of the variance. The third function (17.1% variance) is strongly correlated with the discount method of sale, which is generally associated with smaller trading areas. The fourth function is most strongly correlated with the hypermarket (a variance of just under 9%).

The significance of these results is confirmed by the percentage of cases correctly classified on the basis of the five discriminant functions (67%).

Tab. 21 - Distances between Final Cluster Centres

	1	2	3	4	5	6
1	0.0000					
2	2.5657	0.0000				
3	2.1612	2.6775	0.0000			
4	2.5792	3.3044	2.8648	0.0000		
5	2.2843	3.1933	2.5491	3.1991	0.0000	
6	2.3398	3.0004	2.4256	2.9278	2.8673	0.0000

Tab. 22 - Cluster Centres

	Factor 1	Factor 2	Factor 3	Factor 4	Factor 5	Factor 6	Factor 7	Factor 8
1	-0.1206	0.7426	0.1753	0.1329	-0.4067	0.4250	-0.2036	0.4434
2	1.6478	-0.4669	1.0473	-0.2872	-0.3601	0.1274	-0.0271	-0.5230
3	-0.0001	-0.5923	-0.8133	0.4455	0.1930	0.4164	0.0620	-0.7267
4	-0.7135	0.0165	-0.0173	-0.9854	-0.5656	-0.7824	1.4848	0.0538
5	-0.6200	0.7245	0.5299	-0.1179	1.3038	-0.3080	-0.6364	-0.6193
6	0.0689	-0.8641	-0.2696	0.1623	0.3093	-0.8174	-0.4584	1.1766

Tab. 23 - Variables extracted from the discriminant analysis

Variables	Description	Wilks' Lambda	Sig.
VRAI	location in province of Verona	0.527	0.00
DISC	discount method of sale	0.372	0.00
LOMB	location in Lombardia	0.252	0.00
IPER	hypermarket method of sale	0.184	0.00
CONAD	Conad-group retailer	0.143	0.00
ITALMEC	Italmec-group retailer	0.115	0.00
COOP	Coop Italia-group retailer	0.097	0.00

Tab. 24 - Canonical discriminant functions and correlations between discriminating variables

Functions	Eingenvalue	percentage of variance	cumulated percentage of variance	correlations between discriminanting variables and canonical discriminant functions						
				VRAI	LOMB	CONAD	ITALMEC	DISC	IPER	COOP
1	1.4562	43.4	43.4	**0.61**	**-0.54**	0,17	0.07	-0,32	-0.02	-0.10
2	1.0031	29.9	73.4	0.55	-0.08	**-0.53**	**-0.23**	0.19	0.01	0,16
3	0.5726	17.1	90.5	-0.03	-0.51	0.42	0.18	**0.66**	-0.48	0,21
4	0.2967	8.9	99.3	-0.42	-0.18	-0.01	0.00	0.27	**0.77**	-0.04
5	0.0233	0.7	100.0	0.39	0.31	0.36	0.15	0.26	0.02	**-0,55**

From the results of reclassification analysis (cluster analysis and discriminant analysis), Tab. 25 summarises the main characteristics of the groupings, with reference to :

- 1) geographical location of the point of sale;
- 2) method of sale;
- 3) selling space;
- 4) degree of differentiation, index of penetration, space occupied and prices in relation to product typology, variety, brands and items.

The examination of these aspects allows us to delineate the strategic profiles of the six retail typologies listed below.

Group 1 - Hypermarkets and supermarkets with a strategy that is differentiated yet oriented towards traditional rices

This group includes 27 points of sale and comprises two formulas, hypermarkets and supermarkets, with a slight preponderance of the latter (55.6%) over the former (40.7%). From the territorial point of view, there is a strong concentration in the province of Milan, which accounts for all the hypermarkets of the group. This explains the large amount of space devoted to rice for cooking (21 linear metres on average), over half of it occupied by the leader manufacturers.

The presence of the leader manufacturers means less depth to the assortment (on average, there are 7 brands), though the number of items is high and the variety for white rice is reasonable. The commonest varieties are Arborio, a well established rice in the northern Italian traditions of consumption, followed by Roma, Ribe and other minor varieties; Vialone Nano occupies a subordinate position.

The penetration of the other typologies of rice for cooking is high, but the space devoted to them is restricted, with a clear preference for the leader brands. In particular, unlike other points of sale with similar structural characteristics, this group gives less prominence to parboiled rice.

All the other categories of rice-based product, and in particular the ready-made dishes at the delicatessen counter, have a high index of penetration.

Group 2 - Hypermarkets and large supermarkets differentiated even towards local typical rices

This group consists of 10 large points of sale (5 hypermarkets and 5 supermarkets) in the province of Verona. These enterprises show the highest level of differentiation with regard to both the breadth and depth of the supply. They include not only cooking rice, but also all the other typologies of rice-based product, with the highest choice in terms of brands and items.

Regarding cooking rice, there is a marked propensity to include innovative products in the assortment (parboiled, instant, whole-grain and fragrant rice). The number of items for innovative products is higher than in all the other groups.

Regarding the more traditional typology, i.e. white rice, we note a clear orientation towards differentiation : the product portfolio consists of as many as 22 items and 8 varieties and is furthermore characterised by a strong link with the tradition of production. Over a third of the space for white rice is occupied by the Vialone Nano variety (associated with a strong presence of follower brands). In this case the size of the points of sale and, hence, the greater space devoted to rice (an average of 24 metres) certainly contribute to the high degree of supply differentiation and the important role of local typical products. This is also confirmed by the high index of penetration of the frozen ready-made products and by the vast assortment of frozen products combined with fish.

Group 3 - Supermarkets with a strategy oriented towards traditional rice and local typical varieties

It consists of 21 points of sale, mostly medium-sized supermarkets located in the province of Verona.

This group is characterised by a low diversification in the supply of rice-based products. This aspect is particularly evident if we consider the low index of penetration of frozen ready-made products and (where present) the slender breadth to their assortment.

The product portfolio of cooking rice, which is fairly wide (especially considering the more restricted selling space), is associated with the supply of the territory in which these points of sale operate. In fact, there is a strong presence of follower brands offering mainly white rice alongside the leader brands. On average 7 varieties of white rice are found, though almost half the space for this typology is occupied by Vialone Nano.

As for the other typologies of uncombined rice (parboiled, instant, whole-grain and fragrant), the group predominantly resorts to the leader brands.

Group 4 - Points of sale oriented towards discount formulas

This group consists of 11 points of sale and has no specific geographical connotations. They either adopt discount formulas or are orientated towards discount (few items, lower prices, high presence of dealers' brands or lowest prices).

As regards cooking rice, the product portfolio is limited in terms of typologies, brands and items. Parboiled, instant and whole-grain are hardly present. As for white rice, almost two-thirds of the supply, which concentrates on the less prestigious varieties, is covered by private labels and, to an even greater extent, lowest prices. The predominant role of the private label also emerges in the other typologies of cooking rice. For example, where parboiled is present, it takes up almost two-thirds of the space occupied by this typology.

The 'discount' approach of these enterprises also emerges from the restricted supply of other rice-based products. The lack of attention to the consumers' demands for health products and the need for ad hoc organisation of the various sections with assisted sale explain the low index of penetration of biological products, ready-made delicatessen dishes and fresh desserts. As regards the other categories of combined rice, whose presence has by now become obligatory, their assortment is poorly differentiated, concentrating on the more traditional rice combinations through a limited number of brands and lowest prices.

Group 5 - Hypermarkets with global strategies

The 10 points of sale of this group are hypermarkets without clear geographical connotations.

Cooking rice has a fairly low number of brands, with the leader brands taking up almost four-fifths of the space. Their strong presence is explained by their capacity to satisfy the specific needs of these points of sale, for their products can be supplied promptly, in large quantities and with a guarantee of constant quality; to which we must add the advantages of a very wide product portfolio. This orientation is reflection in the differentiation of the assortment, with no single variety clearly prevailing over the others.

The large trading area makes it possible to enrich the supply with less traditional products. Preferential relationships with the leader enterprises and the needs of the consumer sectors targeted (low-frequency and large-volume purchasing, attention to products with a high service and price content) explain why a considerable amount of space is devoted to parboiled rice (with an evident concentration of leader brands).

Despite similarities with Groups 1 and 2 in other respects (selling space and method of sale), the diversification of the assortment towards other rice-based products is less accentuated. Again, the index of penetration is substantially the same, but the number of items and the number of brands are noticeably lower.

Group 6 - Supermarkets with a rather undifferentiated traditional supply

This group consists of 12 points of sale, mainly medium-to-small supermarkets operating in the region of Friuli Venezia-Giulia.

As regards cooking rice, these enterprises have few items, though the index of penetration is high for all the typologies. The product portfolio concentrates on a limited number of brands and items and also, in the case of white rice, on a low number of varieties, with a clear predominance of Arborio. A lot of space is devoted to the leader brands, which are present above all in the less traditional typologies (parboiled, instant, whole-grain). As for white rice, on the other hand, the follower brands that apply competitive prices have considerable importance.

The assortment of the other rice-based products is reasonably diversified, though the penetration of the ready-made delicatessen dishes is slight. This is because most of the points of sale are small and cannot permit a wide supply in the assisted sale section.

Tab. 25 - Characteristics of the strategic groupings

	Group 1 (no.=27)	***Group 2*** (no.=10)	***Group 3*** (no.=21)	***Group 4*** (no.=11)	***Group 5*** (no.=10)	***Group 6*** (no.=12)
Geografical location:						
- Verona	7.4%	80.0%	62.0%	-	-	8.3%
- other Veneto cities	-	10.0%	19.0%	27.2%	40.0%	16.7%
- Lombardia	66.7%	-	4.7%	36.4%	40.0%	-
- Friuli Venezia Giulia	25.9%	10.0%	14.3%	36.4%	20.0%	75.0%
Method of sale:						
- Hypermarket	40.7%	50.0%	23.8%	27.3%	100.0%	25.0%
- Supermarket	55.6%	50.0%	71.4%	18.2%	-	66.7%
- Discount	3.7%	-	4.8%	54.5%	-	8.3%
Average selling space devoted to food (m^2)	2,815	2,995	1,665	2,154	3,616	1,546
a) Uncombined rice						
average number of brands	7.0	11.2	8.3	3.8	5.3	5.4
space occupied (metres)	21.1	24.4	12.6	14.2	18.8	14.1
space occupied by leader brands	56.2%	35.0%	39.2%	18.8%	77.2%	32.2%
space occupied by follower brands	20.5%	42.4%	44.2%	15.8%	18.6%	55.0%
space occupied by private labels	16.2%	13.5%	8.6%	20.9%	1.7%	5.8%
space occupied by lowest prices	7.1%	9.1%	8.0%	44.5%	2.5%	7.0%
1) <u>White rice</u>						
average number of brands	5.8	8.3	6.7	3.4	3.8	3.6
average number of items	18.3	22.1	17.0	11.2	11.9	10.3
average number of varieties	5.3	8.3	6.6	3.0	3.8	3.6
space occupied by the varieties over the total space for white rice:						
- Comune	7.8%	6.2%	6.3%	21.1%	9.5%	16.4%
- Arborio	27.7%	17.6%	18.2%	19.7%	13.9%	33.7%
- Vialone nano	4.8%	38.6%	46.8%	17.8%	21.5%	16.3%
- Roma	16.5%	10.5%	4.8%	11,2%	10.2%	4.9%
- Ribe	10.9%	8.0%	4.6%	8.8%	7.6%	9.8%
- other minor varieties:	17.3%	11.0%	9.7%	13.2%	24.9%	4.0%
'- Thaibonnet	-	-	0.5%	2.6%	-	-
'- Padano	8.4%	3.5%	5.2%	5.2%	6.0%	7.5%
'- Europa e Sant'Andrea	6.4%	6.0%	2.8%	5.2%	5.6%	1.3%
- not indicated	7.8%	3.1%	3.2%	3.9%	5.0%	-
average price (Lire/kg)	3,710	3,602	3,530	2,858	3,751	3,242
2) <u>Parboiled rice</u>						
index of penetration	88.9%	100.0%	100.0%	63.65	100.0%	91.7%
average number of items	3.2	4.3	3.8	2.3	3.7	3.5
space occupied over the total for uncombined rice	13.0%	18.4%	18.9%	8.8%	31.1%	23.9%
space occupied by leader brands over the total devoted to parboiled	78.8%	68.4%	74.2%	21.1%	87.2%	81.1%
space occupied by private labels over the total devoted to parboiled	4.1%	8.7%	9.9%	65.95	1.3%	1.8%
space occupied by lowest prices over the total devoted to parboiled	2.4%	14.6%	6.8%	1.5%	-	3.5%
average price (Lire/kg)	4,105	3,611	3,744	3,345	4,415	3,983
3) <u>Instant rice</u>						
index of penetration	66.7%	100.0%	81.0%	27.3%	60.0%	66.7%
average number of items	1.8	3.2	1.8	1.0	1.5	2.5
average price (Lire/kg)	5,284	6,439	6,779	4,567	5,681	7,822
4) <u>Whole- grain rice</u>						
index of penetration	63.0%	100.0%	62.0%	36.4%	50.0%	75.0%
average number of items	1.8	2.6	1.8	1.2	1.8	1.4
average price (Lire/kg)	4,710	5,132	4,603	4,742	4,743	4,901
5) <u>Other typologies of rice</u>						
index of penetration	26.0%	70.0%	33.3%	18.2%	20.0%	-
average price (Lire/kg)	15,560	12,721	12,344	11,640	10,300	-
b) Combined rice with other ingredients						
average number of brands	3.6	5.9	3.5	2.3	3.4	3.2
[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]

Positioning in the strategic map

On the basis of the considerations advanced here, the similarities and differences between the groups can be summarised in terms of three large strategic variables :

- 1) degree of diversification, with reference to typologies of rice-based product other than cooking rice (cooking rice combined with other ingredients, frozen rice, biological rice-based products, breakfast products, fresh desserts and ready-made delicatessen dishes);
- 2) the degree of differentiation within uncombined rice, both in terms of the varieties of white rice and in relation to the other categories of uncombined rice in the product portfolio (parboiled, instant, whole-grain and others);
- 3) focus on local typical varieties.

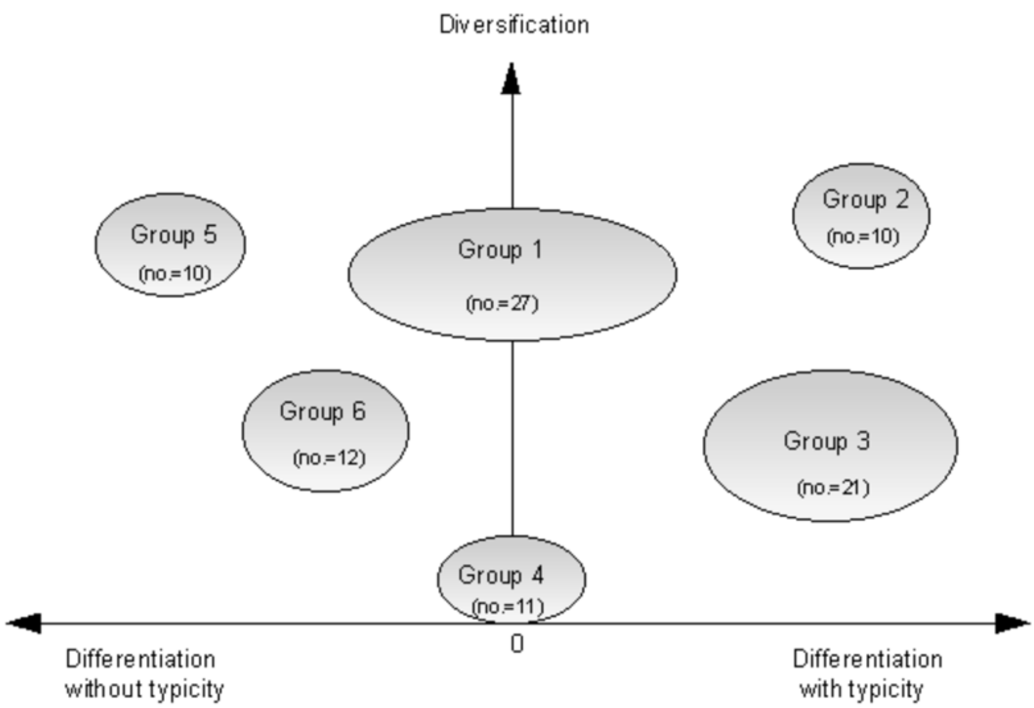
With reference to these three variables, the positioning of the six strategic groupings is shown in Fig. 3.

With regard to 'typicity', Groups 2 and 3 tend to be opposed to Group 5 and, to a lesser extent, Group 6. With regard to 'diversification', the large trading areas (Groups 1, 2 and 5) clearly distinguish themselves from both the more traditional methods of sale (Groups 3 and 6) and the outlets oriented towards the discount formula (Group 4). Group 4, however, distinguishes itself from Groups 3 and 6 both with respect to both 'typicity' and 'differentiation'.

Finally, it is worth underlining the particular positioning of Group 1: while its diversification strategies are similar to the large trading areas; with regard to typicity and diversification its strategies are comparable to the (sometimes conflicting) orientations of the other groups.

Fig.3 - Positioning map of the strategic groupings

Fig. 3 - Positioning map of the strategic groupings



Conclusions

The study shows that the retailers' rice marketing strategies are strongly oriented towards differentiation also in Italy. In fact, we have seen that over half the points of sale, which account for most of the selling space, are characterised by a marked diversification in the supply of the rice-based product typologies considered (uncombined rice and combined cooking rice, ready-made frozen products, biological products, breakfast food products, ready-made delicatessen dishes and desserts). Moreover, nearly all the points of sale show a strong propensity to differentiate within each typology : by brand and by number of items. A peculiar characteristic of the Italian market is the policy of differentiating white rice by variety (which explains the high number of items present in this typology).

On the other hand, comparative analysis of the indices of penetration and of the use of selling space shows that, despite the widespread presence of the more innovative rice-based products, the actual space devoted to them is still small. This supports the conjecture that the demand for rice on the Italian market still concentrates on the traditional typologies, towards which the marketing strategies of modern distribution are mainly directed. The link with tradition is also confirmed by the ways in which rice is present : almost exclusively the format used is the one-kilo pack, and significant recourse to vacuum-packaging is found only among the leader brands.

These results suggest that there are still many spaces to be occupied in this market, above all by some of the more innovative rice-based products still at the beginning of their life cycle (whole-grain rice, biological rice, ready-made frozen dishes, fresh rice desserts and ready-made delicatessen dishes). Furthermore, as regards cooking rice combined with other ingredients, the main problem is not so much that the market penetration is low as that the Italian consumer makes little use of it (in comparison with the traditional typologies, white and parboiled rice). Therefore, though the enterprises have made considerable progress in developing the service content of combined rice and in accentuating their ease of use, they have been unable to make these products competitive with the traditional rices (as far as culinary performance is concerned) and to give them a consolidated position in the Italian model of consumption.

While these are the main marketing orientations of modern rice distribution, the study also showed the existence of differentiated approaches on the part of the enterprises. In this regard, it identified six strategic groupings, positioned in accordance with three dimensions : diversification per product typology, differentiation within each typology, and attention to typical products. Three hierarchical factors, therefore, seem to determine the rice marketing strategy : key variables that enable the industries of production and processing to achieve a competitive advantages and to maintain it over the course of time. They are identifiable in enterprise (or group) policy, in the policies of the retailer within the group (differentiated in turn according to the method of sale) and in the link with the local traditions of production and consumption, with consequent diversification of the marketing policies of the retailer.

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